White House Office of National Drug Control Policy

Drug Policy Information Clearinghouse

STEROIDS

Facts and Figures

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INTRODUCTION

This information packet includes excerpts from selected Federal government, or Federally-sponsored publications that contain information on anabolic steroids. These data include prevalence of anabolic steroid use, health consequences, routes of administration, and anabolic steroid production and distribution. Information from the following publications is presented in this information packet:

Drugs of Abuse, 1996 Edition
National Household Survey on Drug Abuse, Main Findings 1994
The Monitoring the Future Study, Press Release December 18, 1997
National Survey Results on Drug Use from The Monitoring the Future Study, 1975-1995, Volume II, College Students and Young Adults
Youth Risk Behavior Surveillance--United States 1995
CEWG Epidemiologic Trends in Drug Abuse, Highlights and Executive Summary, June 1996
NIDA Research Report, Anabolic Steroids: A Threat to Mind and Body
Conference on the Impact of National Steroid Legislation in the United States, Proceedings
Adolescents Training and Learning to Avoid Steroids (ATLAS), press release.

Complete citations and ordering instructions for full copies of publications used in producing this information packet may be found on the last page.

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U.S. Department of Justice
Drug Enforcement Administration

Steroids

Anabolic steroid abuse has become a national concern. These drugs are used illicitly be weight lifters, body builders, long distance runners, cyclists and others who claim that these drugs give them a competitive advantage/or improve their physical appearance.

Once viewed as a problem associated only with professional athletes, recent reports estimate that 5 percent to 12 percent of male high school students and 1 percent of female students have used anabolic steroids by the time they were seniors. Concerns over a growing illicit market and prevalence of abuse combined with the possibility of harmful long-term effects of steroid use, led Congress in 1991 to place anabolic steroids into Schedule III of the Controlled substances Act (CSA).

The CSA defines anabolic steroids as any drug or hormonal substance chemically and pharmacologically related to testosterone (other than estrogens, progestins, and corticosteroids), that promotes muscle growth. Most illicit anabolic steroids are sold at gyms, competitions and through mail operations. For the most part, these substances are smuggled into this country. Those commonly encountered on the illicit market include: boldenone (Equipoise), ethlestrenol (Maxibolin), fluxoymesterone (Halotestin), methandriol, methandrostenolone (Dianabol), methyltestosterone, nandrolone (Durabolin, Deca-Durabolin), oxandrolone (Anavar), oxymetholone (Anadrol), stanozolol (Winstrol), testosterone and trenbolone (Finajet). In addition, a number of bogus or counterfeit products are sold as anabolic steroids.

A limited number of anabolic steroids have been approved for medical and veterinary use. The primary legitimate use of these drugs in humans is for the replacement of inadequate levels of testosterone resulting from a reduction or absence of functioning testes. In veterinary practice, anabolic steroids are used to promote feed efficiency and to improve weight gain, vigor and hair coat. They are also used in veterinary practice to treat anemia and counteract tissue breakdown during illness and trauma.

When used in combination with exercise training and high protein diet, anabolic steroids can promote increased size and strength of muscles, improve endurance and decrease recovery time between workouts. They are taken orally or by intramuscuclar injection. Users concerned about drug tolerance often take steroids on a schedule called a cycle. A cycle is a period of between 6 and 14 weeks of steroid use, followed by a period of abstinence or reduction in use. Additionally, users tend to "stack" the drugs, using multiple drugs concurrently. Although the benefits of these practices are unsubstantiated, most users feel that cycling and stacking enhance the efficiency of the drugs and limit their side effects.

Yet another mode of steroid use is "pyramiding" in which users slowly escalate steroid use (increasing the number of drugs used at one time and/or the dose and frequency of one or more steroids), reaching a peak amount at mid-cycle and gradually tapering the dose toward the end of the cycle. The escalation of steroid use can vary with different types of training. Body builders and weight lifters tend to escalate their dose to a much higher level than do long distance runners or swimmers.

The adverse effects of large doses of multiple anabolic steroids are not well established. However, there is increasing evidence of serious health problems associated with the abuse of these agents, including cardiovascular damage, liver damage, and damage to reproductive organs.

Physical side effects include elevated blood pressure and cholesterol levels, severe acne, premature balding, reduced

sexual function and testicular atrophy. In males, abnormal breast development (gynecomastia) can occur. In females, anabolic steroids have a masculinizing effect, resulting in more body hair, a deeper voice, smaller breasts and fewer menstrual cycles. Several of these effects are irreversible. In adolescents, abuse of these agents may prematurely stop the lengthening of bones, resulting in stunted growth.

The percentage receiving treatment by population density was generally highest among residents of small metro areas (1.2% for drug, 1.9% for alcohol, and 2.4% for any substance abuse treatment), and lowest among residents of nonmetro areas (.4% for drug, 1.1% for alcohol and any substance abuse treatment). Residents of the West were more likely to have received treatment for any substance abuse and specifically for alcohol abuse in the past year than residents of the Northeast and South (any substance abuse treatment, 3% versus 1.1% and 1.4%, respectively; alcohol abuse treatment, 2.5% versus 1% and 1.2%, respectively).

Table 11.5 shows that past-year users of cocaine were treated at higher rates than past-year users of marijuana (15% and 5%, respectively). For both drugs, the percentage receiving treatment for drug abuse generally increased with the frequency of drug use, although the differences did not reach statistical significance.

Table 11.6 shows that about 1.5% of past-year users of alcohol received treatment for alcohol abuse during the past year. The proportion receiving treatment for alcohol abuse increased from .8% among those who used alcohol less than once a month to 3% among those who used alcohol daily or more often.

Prevalence of Anabolic Steroid Use

About .5% of the surveyed population age 12 and older had ever used anabolic steroids in their lifetime (see Table 11.7). The level of lifetime steroid use was lower in the 35 and older age group (.2%) than in all other age groups (.7%, 1.1%, and 1.0% in the 12-17, 18-25, and 26-34 age groups, respectively). Steroid use was higher among males than among females (.9% and .2% respectively). Differences by race, ethnicity, population density, and region were not statistically significant.

Conclusion

This chapter covers four special topics: perceived risk of drug use; drug use, by family income, health insurance status, and welfare assistance; prevalence of drug and alcohol abuse treatment; and prevalence of anabolic steroid use. The primary findings were as follows:

- More than 84% of the survey population age 12 and over perceived "great risk" from regular use (use of the drug once or twice a week) of cocaine, PCP, or heroin. Smaller percentages perceived great risk from the regular use of other illicit drugs, and still smaller percentages perceived risk from regular use of marijuana, alcohol, and cigarettes.

- Overall, receipt of welfare assistance, lack of health insurance, and family income below $9,000 were associated with the highest prevalence of drug use.

- The percentage receiving substance abuse treatment was highest among adults age 26-34 and among males, corresponding to broad age and gender differences in rates of heavy substance use.

- About .5% of the surveyed population age 12 and older had ever used anabolic steroids in their lifetime. Lifetime steroid use was more common among males than among females.

Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *National Household Survey on Drug Abuse: Main Findings 1994*, 1996.

Table 11.7 Percentage Reporting Anabolic Steroid Use in Their Lifetime by Age Group and Demographic Characteristics: 1994

Demographic Characteristic	Use in Lifetime Anabolic Steroids
Total	0.5
Number of Users (in 1000s)	1,084
Age	
12-17	0.7
18-25	1.1
26-34	1.0
35+	0.2
Gender	
Male	0.9
Female	0.2
Race/Ethnicity[1]	
White	0.5
Black	0.6
Hispanic	0.5
Population Density	
Large metro	0.5
Small metro	0.6
Nonmetro	0.5
Region	
Northeast	0.5
North Central	0.6
South	0.6
West	0.3

Note: Due to improved survey procedures, these estimates are not comparable to previous year estimates and should not be used for trends with pre-1994 data.

[1] The category "other" for Race/Ethnicity is not included.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1994-B.

Table 11.1 Percentage Reporting Perceptions of Great Risk of Using Illicit Drugs, Alcohol, or Cigarettes, by Age Group: 1994

	Age Group (Years)				Total
Risk Behavior	**12-17**	**18-25**	**26-34**	**35+**	**%**
Unweighted N	(4,698)	(3,706)	(5,223)	(4,182)	(17,809)
Marijuana					
Smoke once or twice	31.3	21.0	23.1	43.4	35.6
Smoke occasionally[1]	32.4	24.0	28.9	48.0	39.8
Smoke regularly[2]	57.8	46.4	49.5	65.0	59.0
Cocaine					
Try once or twice	51.7	60.5	60.6	77.8	89.8
Use occasionally[1]	62.8	73.3	75.7	85.0	79.5
Use regularly[2]	83.3	88.8	90.8	92.9	91.0
Use "crack" occasionally[1]	85.2	82.1	87.6	90.8	86.3
PCP					
Try once or twice	44.8	55.1	66.0	78.7	69.8
Use regularly[2]	69.5	77.8	85.2	88.5	84.5
Heroin					
Try once or twice	49.4	66.5	75.3	84.8	77.0
Use regularly[2]	77.9	87.5	92.8	94.3	91.4
Anabolic Steroids					
Use occasionally[1]	51.2	56.6	65.7	75.8	68.9
Use regularly[2]	78.1	81.5	85.5	88.9	88.2
Alcohol					
One or two drinks nearly every day	26.3	25.4	26.1	29.7	28.3
Four or five drinks nearly every day	84.9	65.1	71.7	74.8	71.8
Five or more drinks once or twice a week	53.7	46.3	51.9	84.5	59.0
Cigarettes					
Smoke one or more packs per day	51.6	80.2	65.6	69.9	66.0

Note: Questions asked were: How much do you think people risk harming themselves physically and in other ways, when they do each of the following activities? Response choices were for each of 17 activities: (1)no risk, (2)slight risk, (3)moderate risk, and (4)great risk.

The unweighted Ns for each age group are smaller than those shown in Table 1.1 because of differing patterns of nonresponse to the risk questions across age groups.

Note: Due to improved survey procedures, these estimates are not comparable to previous year estimates and should not be used for trends with pre-1994 data.

[1] Once a month

[2] Once or twice a week

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1994-B.

TABLE 1a (cont.)

Trends in Lifetime Prevalence of Use of Various Drugs for Eighth, Tenth, and Twelfth Graders

	Lifetime								
	1991	1992	1993	1994	1995	1996	1997	'96–'97 change	'91–'97 change
Ice[a]									
8th Grade	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—
12th Grade	3.3	2.9	3.1	3.4	3.9	4.4	4.4	0.0	+1.1s
Barbiturates[a]									
8th Grade	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—
12th Grade	6.2	5.5	6.3	7.0	7.4	7.6	8.1	+0.5	+1.9sss
Tranquilizers[a]									
8th Grade	3.8	4.1	4.4	4.6	4.5	5.3	4.6	-0.5	+1.0ss
10th Grade	5.8	5.9	5.7	5.4	6.0	7.1	7.3	+0.2	+1.5ss
12th Grade	7.2	6.0	6.4	6.6	7.1	7.2	7.8	+0.6	+0.6
Alcohol[a]									
Any use									
8th Grade	70.1	69.3	57.1	—	—	—	—	—	—
			55.7	55.8	54.6	55.3	53.8	-1.5	-1.9[j]
10th Grade	69.6	62.3	50.8	—	—	—	—	—	—
			71.8	71.1	70.5	71.6	72.0	+0.2	+0.4[j]
12th Grade	88.0	81.5	87.0	—	—	—	—	—	—
			80.0	80.4	80.7	79.2	81.7	+2.5ss	+1.7[j]
Been Drunk[b]									
8th Grade	26.7	26.8	26.4	25.9	25.3	26.8	25.2	-1.6	-1.5
10th Grade	50.0	41.7	47.9	47.2	48.0	48.5	49.4	+0.9	-0.6
12th Grade	65.4	63.4	62.6	62.9	63.2	61.8	64.2	+2.4	-1.2
Cigarettes									
Any use									
8th Grade	44.0	45.2	46.3	46.1	46.4	49.2	47.3	-1.9	+3.3ss
10th Grade	56.1	53.5	56.3	56.9	57.6	61.2	60.2	-1.0	+5.1sss
12th Grade	63.1	61.8	61.9	62.0	64.2	63.5	65.4	+1.9	+2.3
Smokeless Tobacco[a]									
8th Grade	22.2	20.7	18.7	19.9	20.0	20.4	16.8	-3.6ss	-5.4sss
10th Grade	28.2	26.6	28.1	29.2	27.6	27.4	26.3	-1.1	-1.9
12th Grade	—	32.4	31.0	30.7	30.9	29.8	25.3	-4.5	-7.1s[k]
Steroids[b]									
8th Grade	1.9	1.7	1.6	2.0	2.0	1.8	1.8	0.0	-0.1
10th Grade	1.8	1.7	1.7	1.8	2.0	1.8	2.0	+0.2	+0.2
12th Grade	2.1	2.1	2.0	2.4	2.3	1.9	2.4	+0.5	+0.3

(Table continued on next page)

Source: *The Monitoring the Future Study*, The University of Michigan

TABLE 1b (cont.)

Trends in Annual and 30-Day Prevalence of Use of Various Drugs for Eighth, Tenth, and Twelfth Graders

	Annual									30-Day								
	1991	1992	1993	1994	1995	1996	1997	'96–'97 change	'91–'97 change	1991	1992	1993	1994	1995	1996	1997	'96–'97 change	'91–'97 change
Barbiturates[a]																		
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	3.4	2.8	3.4	4.1	4.7	4.9	5.1	+0.2	+1.7sss	1.4	1.1	1.3	1.7	2.2	2.1	2.1	0.0	+0.7sss
Tranquilizers[a]																		
8th Grade	1.8	2.0	2.1	2.4	2.7	3.3	2.9	-0.4	+1.1sss	0.8	0.8	0.9	1.1	1.2	1.5	1.2	-0.3s	+0.4ss
10th Grade	3.2	3.5	3.3	3.3	4.0	4.8	4.9	+0.3	+1.7sss	1.2	1.5	1.1	1.5	1.7	1.7	2.2	+0.5ss	+1.0sss
12th Grade	3.6	2.8	3.5	3.7	4.4	4.8	4.7	+0.1	+1.1sss	1.4	1.0	1.2	1.4	1.8	2.0	1.8	-0.2	+0.4s
Alcohol[b]																		
Any use																		
8th Grade	54.0	53.7	51.6	—	—	—	—	—	—	25.1	26.1	26.2	—	—	—	—	—	—
			45.4	46.8	45.3	45.5	45.5	-1.0	+0.1[f]			24.3	25.5	24.6	26.2	24.5	-1.7	+0.2[f]
10th Grade	72.3	70.2	69.3	—	—	—	—	—	—	42.8	39.9	41.5	—	—	—	—	—	—
			63.4	63.9	63.5	65.0	65.2	+0.2	+1.8[f]			38.2	39.2	38.8	40.4	40.1	-0.3	+1.9[f]
12th Grade	77.7	76.6	76.0	—	—	—	—	—	—	54.0	51.3	51.0	—	—	—	—	—	—
			72.7	73.0	73.7	72.5	74.8	+2.3s	+2.1[f]			46.6	50.1	51.3	50.8	52.7	+1.9	+4.1ss[f]
Been Drunk[b]																		
8th Grade	17.5	18.3	18.2	18.2	18.4	19.8	18.4	-1.4	+0.9	7.6	7.5	7.8	8.7	8.3	9.6	8.2	-1.4s	+0.6
10th Grade	40.1	37.0	37.8	38.0	38.5	40.1	40.7	+0.6	+0.6	20.5	18.1	19.8	20.3	20.8	21.3	22.4	+1.1	+1.9
12th Grade	52.7	50.3	49.6	51.7	52.5	51.9	53.2	+1.3	+0.5	31.6	29.9	28.9	30.8	33.2	31.3	34.2	+2.9	+2.6
Cigarettes																		
Any use																		
8th Grade	—	—	—	—	—	—	—	—	—	14.3	15.5	16.7	18.6	19.1	21.0	19.4	-1.6	+5.1sss
10th Grade	—	—	—	—	—	—	—	—	—	20.8	21.6	24.7	26.4	27.9	30.4	29.8	-0.6	+9.0sss
12th Grade	—	—	—	—	—	—	—	—	—	28.3	27.8	29.9	31.2	33.5	34.0	36.5	+2.5s	+8.2sss
Smokeless Tobacco[a]																		
8th Grade	—	—	—	—	—	—	—	—	—	6.9	7.0	6.8	7.7	7.1	7.1	5.5	-1.6s	-1.4
10th Grade	—	—	—	—	—	—	—	—	—	10.0	9.6	10.4	10.6	9.7	8.6	8.9	+0.3	-1.1
12th Grade	—	—	—	—	—	—	—	—	—	—	11.4	10.7	11.1	12.2	9.8	9.7	-0.1	-1.7[h]
Steroids[b]																		
8th Grade	1.0	1.1	0.9	1.2	1.0	0.9	1.0	+0.1	0.0	0.4	0.5	0.5	0.5	0.6	0.4	0.5	+0.1	+0.1
10th Grade	1.1	1.1	1.0	1.1	1.2	1.2	1.2	0.0	+0.1	0.6	0.5	0.5	0.6	0.6	0.5	0.7	+0.2s	+0.1
12th Grade	1.4	1.1	1.2	1.3	1.5	1.4	1.4	0.0	0.0	0.8	0.6	0.7	0.9	0.7	0.7	1.0	+0.3	+0.2

(Table continued on next page)

Source: *The Monitoring the Future Study*, The University of Michigan

TABLE 3

Long-Term Trends in Lifetime Prevalence of Use of Various Drugs for Twelfth Graders

	Percent ever used																						
	Class of 1976	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989	Class of 1990	Class of 1991	Class of 1992	Class of 1993	Class of 1994	Class of 1995	Class of 1996	Class of 1997	'96-'97 change
Approx. N =	*9400*	*15400*	*17100*	*17800*	*15500*	*15900*	*17500*	*17700*	*16300*	*15900*	*16000*	*15200*	*16300*	*16300*	*16700*	*15200*	*15000*	*15800*	*16300*	*15400*	*15400*	*14300*	*15400*	
Any Illicit Drug[a,b]	55.2	58.3	61.6	64.1	65.1	65.4	65.6	64.4	62.9	51.6	60.6	57.6	56.6	53.9	50.9	47.9	44.1	40.7	42.9	45.6	48.4	50.8	54.3	+3.5s
Any Illicit Drug Other Than Marijuana[a,b]	36.2	35.4	35.8	36.5	37.4	38.7	42.8	41.1	40.4	40.3	39.7	37.7	35.8	32.5	31.4	29.4	26.9	25.1	26.7	27.6	28.1	28.5	30.0	+1.5
Marijuana/Hashish	47.3	52.8	56.4	59.2	60.4	60.3	59.5	58.7	57.0	54.9	54.2	50.9	50.2	47.2	43.7	40.7	36.7	32.8	35.3	36.2	41.7	44.9	49.6	+4.7ss
Inhalants[c]	—	10.3	11.1	12.0	12.7	11.9	12.3	12.8	13.6	14.4	15.4	15.9	17.0	16.7	17.6	18.0	17.8	16.8	17.4	17.7	17.4	16.6	16.1	-0.5
Inhalants, Adjusted[c,d]	—	—	—	—	18.2	17.3	17.2	17.7	18.2	18.0	18.1	20.1	18.6	17.6	18.6	18.5	18.0	17.0	17.7	18.3	17.8	17.5	16.9	-0.6
Amyl/Butyl Nitrites[c,f]	—	—	—	—	11.1	11.1	10.1	9.8	8.4	8.1	7.9	8.6	4.7	3.2	3.3	2.1	1.6	1.6	1.4	1.7	1.5	1.8	2.0	+0.2
Hallucinogens	16.3	15.1	13.9	14.3	14.1	13.3	13.3	12.5	11.9	10.7	10.3	9.7	10.3	8.9	9.4	9.4	9.6	9.2	10.9	11.4	12.7	14.0	15.1	+1.1
Hallucinogens, Adjusted[d]	—	—	—	—	17.7	15.6	15.3	14.3	13.6	12.3	12.1	11.9	10.6	9.2	9.9	9.7	10.0	9.4	11.3	11.7	13.1	14.5	15.4	+0.9
LSD	11.3	11.0	9.6	9.7	9.5	9.3	9.8	9.6	8.9	8.0	7.5	7.2	8.4	7.7	8.3	8.7	8.8	8.6	10.3	10.5	11.7	12.6	13.6	+1.0
PCP[c,f]	—	—	—	—	12.8	9.6	7.8	6.0	5.6	5.0	4.9	4.8	3.0	2.9	3.9	2.8	2.9	2.4	2.9	2.8	2.7	4.0	3.9	-0.1
MDMA (Ecstasy)[c]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.1	6.9	+0.6
Cocaine	9.0	9.7	10.8	12.9	15.4	15.7	16.5	16.0	16.2	19.1	17.3	16.9	16.2	12.1	10.3	9.4	7.8	6.1	6.1	5.9	6.0	7.1	8.7	+1.6s
Crack[b]	—	—	—	—	—	—	—	—	—	—	—	—	5.4	4.8	4.7	3.5	3.1	2.6	2.6	3.0	3.0	3.3	3.9	+0.6s
Other Cocaine[i]	—	—	—	—	—	—	—	—	—	—	—	—	14.0	12.1	6.5	8.6	7.0	5.3	5.4	5.2	5.1	6.4	8.2	+1.8s
Heroin[j]	2.2	1.8	1.8	1.6	1.1	1.1	1.1	1.2	1.2	1.3	1.2	1.1	1.2	1.1	1.3	1.3	0.9	1.2	1.1	1.2	1.6	1.8	2.1	+0.3
Other Opiates[k]	9.0	9.6	10.3	9.9	10.1	9.8	10.1	9.6	9.4	9.7	10.2	9.0	9.2	8.6	8.3	8.3	8.6	6.1	6.4	6.6	7.2	8.2	9.7	+1.5ss
Stimulants[b,k]	22.3	22.6	23.0	22.9	24.2	26.4	32.2	27.9	26.9	27.9	26.2	23.4	21.6	19.8	19.1	17.5	15.4	13.9	15.1	15.7	16.3	16.3	16.5	+1.2
Crystal Meth. (Ice)[l]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.7	3.3	2.9	3.1	3.4	3.9	4.4	4.4	0.0
Sedatives[b,m]	18.2	17.7	17.4	16.0	14.8	14.9	16.0	15.2	14.4	13.3	11.8	10.4	8.7	7.8	7.4	7.5	6.7	6.1	6.4	7.3	7.6	8.2	8.7	+0.5
Barbiturates[b]	16.9	16.2	15.6	13.7	11.8	11.0	11.3	10.3	9.9	9.9	9.2	6.4	7.4	6.7	6.5	6.8	6.2	5.5	6.3	7.0	7.4	7.6	8.1	+0.5
Methaqualone[b,m]	8.1	7.8	8.5	7.9	8.3	9.5	10.6	10.7	10.1	8.3	6.7	5.2	4.0	3.3	2.7	2.3	1.3	1.6	0.8	1.4	1.2	2.0	1.7	-0.3
Tranquilizers[b]	17.0	16.8	18.0	17.0	16.3	15.2	14.7	14.0	13.3	12.4	11.9	10.9	10.9	9.4	7.6	7.2	7.2	6.0	6.4	6.6	7.1	7.2	7.8	+0.6
Alcohol[n]	90.4	91.9	92.5	93.1	93.0	93.2	92.6	92.6	92.6	92.6	92.2	91.3	92.2	92.0	90.7	89.5	88.0	87.5	87.0	—	—	—	—	—
																			80.0	80.4	80.7	79.2	81.7	+2.5ss
Been Drunk[i]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65.4	63.4	62.5	62.9	63.2	61.8	64.2	+2.4
Cigarettes	73.6	75.4	75.7	75.3	74.0	71.0	71.0	70.1	70.6	69.7	68.8	67.6	67.2	66.4	65.7	64.4	63.1	61.8	61.9	62.0	64.2	63.5	65.4	+1.9
Smokeless Tobacco[o,c]	—	—	—	—	—	—	—	—	—	—	—	31.4	32.2	30.4	29.2	—	—	32.4	31.0	30.7	30.9	29.8	25.3	-4.5
Steroids[i]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0	2.9	2.1	2.1	2.0	2.4	2.3	1.9	2.4	+0.5

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available.
SOURCE: The Monitoring the Future Study, the University of Michigan.

TABLE 4

Long-Term Trends in Annual Prevalence of Use of Various Drugs for Twelfth Graders

	Percent who used in last twelve months																							
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989	Class of 1990	Class of 1991	Class of 1992	Class of 1993	Class of 1994	Class of 1995	Class of 1996	Class of 1997	'96–'97 change
Approx. N =	*9400*	*15400*	*17100*	*17800*	*15500*	*15900*	*17500*	*17700*	*16300*	*15900*	*16000*	*15200*	*16300*	*16300*	*16700*	*15200*	*15000*	*15800*	*16300*	*15400*	*15400*	*14300*	*15400*	
Any Illicit Drug[a,b]	45.0	48.1	51.1	53.8	54.2	53.1	52.1	49.4	47.4	45.8	46.3	44.3	41.7	38.5	35.4	32.5	29.4	27.1	31.0	35.6	39.0	40.2	42.4	+2.2
Any Illicit Drug Other Than Marijuana[a,b]	26.2	25.4	26.0	27.1	28.2	30.4	34.0	30.1	28.4	28.0	27.4	25.9	24.1	21.1	20.0	17.9	16.2	14.9	17.1	18.0	19.4	19.8	20.7	+0.9
Marijuana/Hashish	40.0	44.5	47.6	50.2	50.8	48.8	46.1	44.3	42.3	40.0	40.6	38.8	38.3	33.1	29.6	27.0	23.9	21.9	26.0	30.7	34.7	35.8	38.5	+2.7
Inhalants[c]	—	3.0	3.7	4.1	5.4	4.6	4.1	4.5	4.3	5.1	5.7	6.1	8.9	6.5	5.9	6.9	5.6	6.2	7.0	7.7	8.0	7.6	6.7	-0.9
Inhalants, Adjusted[c,d]	—	—	—	—	8.9	7.9	6.1	6.6	6.2	7.2	7.5	8.9	8.1	7.1	6.9	7.5	6.9	6.4	7.4	8.2	8.4	8.5	7.3	-1.2s
Amyl/Butyl Nitrites[e,f]	—	—	—	—	6.5	5.7	3.7	3.6	3.8	4.0	4.0	4.7	2.6	1.7	1.7	1.4	0.9	0.5	0.9	1.1	1.1	1.6	1.2	-0.4
Hallucinogens	11.2	9.4	8.8	9.6	9.9	9.3	9.0	8.1	7.3	6.5	6.3	6.0	6.4	5.5	5.6	5.9	5.8	5.9	7.4	7.6	9.3	10.1	9.8	-0.3
Hallucinogens, Adjusted[d]	—	—	—	—	11.8	10.4	10.1	9.0	8.3	7.3	7.6	7.0	6.7	5.8	6.2	6.0	6.1	6.2	7.8	7.8	9.7	10.7	10.0	-0.7
LSD	7.2	6.4	6.5	6.3	6.8	6.5	6.5	6.1	5.4	4.7	4.4	4.5	5.2	4.8	4.9	5.4	5.2	5.6	6.8	6.9	8.4	8.8	8.4	-0.4
PCP[e,f]	—	—	—	—	7.0	4.4	3.2	2.2	2.6	2.3	2.9	2.4	1.3	1.2	2.4	1.2	1.4	1.4	1.4	1.6	1.8	2.6	2.3	-0.3
MDMA (Ecstasy)[f]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.6	4.0	-0.6
Cocaine	6.6	6.0	7.2	9.0	12.0	12.3	12.4	11.5	11.4	11.6	13.1	12.7	10.3	7.9	6.5	5.3	3.5	3.1	3.3	3.6	4.0	4.9	5.5	+0.6
Crack[h]	—	—	—	—	—	—	—	—	—	—	—	4.1	3.9	3.1	3.1	1.9	1.5	1.5	1.5	1.9	2.1	2.1	2.4	+0.3
Other Cocaine[i]	—	—	—	—	—	—	—	—	—	—	—	—	9.8	7.4	5.2	4.6	3.2	2.6	2.9	3.0	3.4	4.2	5.0	+0.8
Heroin[j]	1.0	0.8	0.8	0.8	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.5	0.6	0.5	0.6	0.5	0.4	0.6	0.5	0.6	1.1	1.0	1.2	+0.2
Other Opiates[k]	5.7	5.7	6.4	6.0	6.2	6.3	5.9	5.3	5.1	5.2	5.9	5.2	5.3	4.6	4.4	4.6	3.5	3.3	3.6	3.8	4.7	5.4	6.2	+0.8s
Stimulants[b,k]	16.2	15.8	16.3	17.1	18.3	20.8	26.0	20.3	17.9	17.7	15.8	13.4	12.2	10.9	10.8	9.1	8.2	7.1	8.4	9.4	9.3	9.5	10.2	+0.7
Crystal Meth. (Ice)[j]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.3	1.4	1.3	1.7	1.8	2.4	2.8	2.3	-0.5
Sedatives[b,m]	11.7	10.7	10.6	9.9	9.9	10.3	10.5	9.1	7.9	6.6	5.8	5.2	4.1	3.7	3.7	3.6	3.6	2.9	3.4	4.2	4.9	5.3	5.4	+0.1
Barbiturates[b]	10.7	9.6	9.3	8.1	7.5	6.8	6.6	5.5	5.2	4.9	4.6	4.2	3.6	3.2	3.3	3.4	3.4	2.8	3.4	4.1	4.7	4.9	5.1	+0.2
Methaqualone[b,m]	5.1	4.7	5.2	4.9	5.9	7.2	7.6	6.8	5.4	3.8	2.8	2.1	1.5	1.3	1.3	0.7	0.5	0.6	0.2	0.8	0.7	1.1	1.0	-0.1
Tranquilizers[b]	10.8	10.3	10.6	9.9	9.6	8.7	8.0	7.0	8.9	6.1	6.1	5.8	5.5	4.8	3.8	3.5	3.6	2.8	3.5	3.7	4.4	4.6	4.7	+0.1
Alcohol[n]	84.8	86.7	87.0	87.7	88.1	87.9	87.0	86.8	87.3	86.0	85.6	84.5	85.7	85.3	82.7	80.6	77.7	76.8	76.0	—	—	—	—	—
																			72.7	73.0	73.7	72.5	74.8	+2.3s
Been Drunk[i]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	52.7	50.3	49.6	51.7	52.5	51.0	53.2	+1.3
Cigarettes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smokeless Tobacco[o,p]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Steroids[i]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.9	1.7	1.4	1.1	1.2	1.3	1.5	1.4	1.4	0.0

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available. See Table 3 for relevant footnotes.
SOURCE: The Monitoring the Future Study, the University of Michigan.

TABLE 5

Long-Term Trends in Thirty-Day Prevalence of Use of Various Drugs for Twelfth Graders

	Percent who used in last thirty days																							
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989	Class of 1990	Class of 1991	Class of 1992	Class of 1993	Class of 1994	Class of 1995	Class of 1996	Class of 1997	'96–'97 change
Approx. N =	*9400*	*15400*	*17100*	*17800*	*15500*	*15900*	*17500*	*17700*	*16300*	*15900*	*16000*	*15200*	*16300*	*16300*	*16700*	*15200*	*15000*	*15800*	*16300*	*15400*	*15400*	*14300*	*15400*	
Any Illicit Drug[a,b]	30.7	34.2	37.6	38.9	38.9	37.2	36.9	32.5	30.5	29.2	29.7	27.1	24.7	21.3	19.7	17.2	16.4	14.4	18.3	21.9	23.8	24.6	26.2	+1.6
Any Illicit Drug Other Than Marijuana[a,b]	16.4	13.9	15.2	15.1	16.8	18.4	21.7	17.0	15.4	15.1	14.9	13.2	11.6	10.0	9.1	8.0	7.1	6.3	7.9	8.8	10.0	9.6	10.7	+1.2
Marijuana/Hashish	27.1	32.2	35.4	37.1	36.5	33.7	31.6	28.5	27.0	25.2	25.7	23.4	21.0	18.0	18.7	14.0	13.8	11.9	16.5	19.0	21.2	21.9	23.7	+1.8
Inhalants[f]	—	0.9	1.3	1.6	1.7	1.4	1.5	1.5	1.7	1.9	2.2	2.5	2.8	2.0	2.3	2.7	2.4	2.3	2.6	2.7	3.2	2.5	2.5	0.0
Inhalants, Adjusted[f,4]	—	—	—	—	3.2	2.7	2.5	2.5	2.5	2.6	3.0	3.2	3.5	3.0	2.7	2.9	2.6	2.6	2.8	2.9	3.5	2.9	2.9	0.0
Amyl/Butyl Nitrites[e,f]	—	—	—	—	2.4	1.8	1.4	1.1	1.4	1.4	1.6	1.3	1.3	0.6	0.8	0.6	0.4	0.3	0.6	0.4	0.4	0.7	0.7	0.0
Hallucinogens	4.7	3.4	4.1	3.9	4.0	3.7	3.7	3.4	2.8	2.6	2.5	2.5	2.5	2.2	2.2	2.2	2.2	2.1	2.7	3.1	4.4	3.5	3.9	+0.4
Hallucinogens, Adjusted[4]	—	—	—	—	5.3	4.4	4.5	4.1	3.5	3.2	3.8	3.5	2.8	2.3	2.9	2.3	2.4	2.3	3.3	3.2	4.6	3.8	4.1	+0.3
LSD	2.3	1.9	2.1	2.1	2.4	2.3	2.5	2.4	1.9	1.5	1.6	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.4	2.6	4.0	2.5	3.1	+0.6s
PCP[e,f]	—	—	—	—	2.4	1.4	1.4	1.0	1.3	1.0	1.6	1.3	0.6	0.3	1.4	0.4	0.5	0.6	1.0	0.7	0.8	1.3	0.7	-0.6
MDMA (Ecstasy)[f]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.0	1.6	-0.4
Cocaine	1.9	2.0	2.9	3.9	5.7	5.2	5.8	5.0	4.9	5.8	6.7	6.2	4.3	3.4	2.8	1.9	1.4	1.3	1.3	1.5	1.6	2.0	2.3	+0.3
Crack[h]	—	—	—	—	—	—	—	—	—	—	—	—	1.3	1.6	1.4	0.7	0.7	0.6	0.7	0.8	1.0	1.0	0.9	-0.1
Other Cocaine[f]	—	—	—	—	—	—	—	—	—	—	—	—	4.1	3.2	1.9	1.7	1.2	1.0	1.2	1.3	1.3	1.6	2.0	+0.4
Heroin[f]	0.4	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.6	0.5	0.6	0.0
Other Opiates[h]	2.1	2.0	2.8	2.1	2.4	2.4	2.1	1.8	1.8	1.8	2.3	2.0	1.8	1.6	1.6	1.5	1.1	1.2	1.3	1.5	1.8	2.0	2.3	+0.3
Stimulants[h,k]	8.5	7.7	8.8	8.7	9.9	12.1	15.8	10.7	8.9	8.3	6.8	5.5	5.2	4.6	4.2	3.7	3.2	2.8	3.7	4.0	4.0	4.1	4.8	+0.7s
Crystal Meth. (Ice)[f]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.6	0.0	0.5	0.6	0.7	1.1	1.1	0.8	-0.3
Sedatives[h,m]	5.4	4.5	5.1	4.2	4.4	4.8	4.6	3.4	3.0	2.3	2.4	2.2	1.7	1.4	1.6	1.4	1.5	1.2	1.3	1.8	2.3	2.3	2.1	-0.2
Barbiturates[h]	4.7	3.9	4.3	3.2	3.2	2.9	2.8	2.0	2.1	1.7	2.0	1.8	1.4	1.2	1.4	1.3	1.4	1.1	1.3	1.7	2.2	2.1	2.1	0.0
Methaqualone[h,m]	2.1	1.8	2.3	1.9	2.3	3.3	3.1	2.4	1.8	1.1	1.0	0.8	0.6	0.5	0.6	0.2	0.2	0.4	0.1	0.4	0.4	0.6	0.3	-0.3
Tranquilizers[h]	4.1	4.0	4.6	3.4	3.7	3.1	2.7	2.4	2.5	2.1	2.1	2.1	2.0	1.5	1.3	1.2	1.4	1.0	1.2	1.4	1.8	2.0	1.8	-0.2
Alcohol[n]	68.2	68.3	71.2	72.1	71.8	72.0	70.7	69.7	69.4	67.2	65.9	65.3	66.4	63.9	60.0	57.1	54.0	51.3	51.0	—	—	—	—	—
																			48.6	50.1	51.3	50.8	52.7	+1.9
Been Drunk[f]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.6	29.9	28.9	30.8	33.2	31.3	34.2	+2.9
Cigarettes	36.7	38.8	38.4	36.7	34.4	30.5	29.4	30.0	30.3	29.3	30.1	29.6	29.4	28.7	28.6	29.4	28.3	27.6	29.9	31.2	33.5	34.0	36.5	+2.5s
Smokeless Tobacco[e,o]	—	—	—	—	—	—	—	—	—	—	—	11.5	11.3	10.3	8.4	—	—	11.4	10.7	11.1	12.2	9.8	9.7	-0.1
Steroids[f]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.8	1.0	0.6	0.6	0.7	0.9	0.7	0.7	1.0	+0.3

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available. See Table 3 for relevant footnotes.
SOURCE: The Monitoring the Future Study, the University of Michigan.

TABLE 6

Long-Term Trends in Thirty-Day Prevalence of Daily Use of Various Drugs for Twelfth Graders

	Percent who used daily in last thirty days																							
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989	Class of 1990	Class of 1991	Class of 1992	Class of 1993	Class of 1994	Class of 1995	Class of 1996	Class of 1997	'96-'97 change
Approx. N =	*9400*	*15400*	*17100*	*17800*	*15500*	*15900*	*17500*	*17700*	*16300*	*15900*	*16000*	*15200*	*16300*	*16300*	*16700*	*15200*	*15000*	*15800*	*16300*	*15400*	*15400*	*14300*	*15400*	
Marijuana/Hashish	6.0	8.2	9.1	10.7	10.3	9.1	7.0	6.3	5.5	5.0	4.9	4.0	3.3	2.7	2.9	2.2	2.0	1.9	2.4	3.6	4.6	4.9	5.8	+0.9s
Inhalants[c]	—	*	*	0.1	*	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.1	-0.1
Inhalants, Adjusted[c,d]	—	—	—	—	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.3	0.3	0.3	0.6	0.2	0.2	—	—	0.4	0.2	-0.3s
Amyl/Butyl Nitrites[c,f]	—	—	—	—	*	0.1	0.1	0.0	0.2	0.1	0.3	0.5	0.3	0.1	0.3	0.1	0.2	0.1	0.1	0.2	0.2	0.4	0.1	-0.3s
Hallucinogens	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	*	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	+0.1s
Hallucinogens, Adjusted[d]	—	—	—	—	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.2	*	0.3	0.3	0.1	0.1	0.1	—	—	0.4	0.4	-0.1
LSD	*	*	*	*	*	*	0.1	*	0.1	0.1	0.1	*	0.1	*	*	0.1	0.1	0.1	0.1	0.1	0.1	*	0.2	+0.1s
PCP[c,f]	—	—	—	—	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.1	-0.2
MDMA (Ecstasy)[f]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0	0.1	+0.1
Cocaine	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.4	0.3	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	-0.1
Crack[h]	—	—	—	—	—	—	—	—	—	—	—	—	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0
Other Cocaine[i]	—	—	—	—	—	—	—	—	—	—	—	—	0.2	0.2	0.1	0.1	0.1	*	0.1	0.1	0.1	0.1	0.1	-0.1
Heroin[j]	0.1	*	*	*	*	*	*	*	0.1	*	*	*	*	*	0.1	*	*	*	*	*	0.1	0.1	0.1	-0.1
Other Opiates[k]	0.1	0.1	0.2	0.1	*	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	*	*	0.1	0.1	0.2	0.2	0.0
Stimulants[k,k]	0.5	0.4	0.5	0.5	0.6	0.7	1.2	0.7	0.8	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.0
Crystal Meth. (Ice)[l]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.1	0.1	0.1	0.1	*	0.1	0.1	0.1	0.0
Sedatives[k,m]	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	*	0.1	0.1	0.1	0.0
Barbiturates[k]	0.1	0.1	0.2	0.1	*	0.1	0.1	0.1	0.1	*	0.1	0.1	0.1	*	0.1	0.1	0.1	*	0.1	*	0.1	0.1	0.1	0.0
Methaqualone[k,m]	*	*	*	*	*	0.1	0.1	0.1	*	*	*	*	*	0.1	*	*	*	0.1	0.0	0.1	0.1	0.0	0.1	+0.1
Tranquilizers[k]	0.1	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	*	*	0.1	*	0.1	0.1	0.1	*	*	0.1	*	0.2	0.1	-0.1s
Alcohol																								
Daily[n]	5.7	5.6	6.1	5.7	6.9	6.0	6.0	5.7	5.5	4.8	5.0	4.8	4.8	4.2	4.2	3.7	3.6	3.4	2.5	—	—	—	—	—
																			3.4	2.9	3.5	3.7	3.9	+0.2
Been drunk daily[f]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.9	0.8	0.8	1.2	1.3	1.6	2.0	+0.4
5+ drinks in a row in last 2 weeks	36.8	37.1	39.4	40.3	41.2	41.2	41.4	40.5	40.8	38.7	36.7	36.8	37.6	34.7	33.0	32.2	29.8	27.9	27.5	28.2	29.8	30.2	31.3	+1.1
Cigarettes																								
Daily	26.9	28.8	28.8	27.6	25.4	21.3	20.3	21.1	21.2	18.7	19.6	18.7	18.7	18.1	18.9	19.1	18.6	17.2	19.0	19.4	21.6	22.2	24.6	+2.4s
Half-pack or more per day	17.9	19.2	19.4	18.8	16.5	14.3	13.6	14.2	13.8	12.3	12.5	11.4	11.4	10.6	11.2	11.3	10.7	10.0	10.9	11.2	12.4	13.0	14.3	+1.3
Smokeless Tobacco[o,p]	—	—	—	—	—	—	—	—	—	—	—	4.7	5.1	4.3	3.3	—	—	4.3	3.3	3.9	3.6	3.3	4.4	+1.0
Steroids[f]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.1	0.2	0.1	0.1	0.1	0.4	0.2	0.3	0.3	0.0

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available. '*' indicates less than .05 percent.
Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent classes is due to rounding error.
See Table 3 for relevant footnotes.
Daily use is defined as use on twenty or more occasions in the past thirty days except for 5+ drinks, cigarettes, and smokeless tobacco, for which actual daily use is measured.

SOURCE: The Monitoring the Future Study, the University of Michigan.

TABLE 7
Trends in Harmfulness of Drugs as Perceived by Eighth, Tenth, and Twelfth Graders, 1991–97

How much do you think people risk harming themselves (physically or in other ways), if they . . .	Percentage saying "great risk"*																							
	8th Grade								10th Grade								12th Grade							
	1991	1992	1993	1994	1995	1996	1997	'96–'97 change	1991	1992	1993	1994	1995	1996	1997	'96–'97 change	1991	1992	1993	1994	1995	1996	1997	'96–'97 change
Try marijuana once or twice	40.4	39.1	36.2	31.6	28.9	27.9	25.3	-2.6sss	30.0	31.9	29.7	24.4	21.5	20.0	18.8	-1.2	27.1	24.6	21.9	19.5	16.3	15.6	14.9	-0.7
Smoke marijuana occasionally	57.9	56.3	53.8	48.6	45.9	44.3	43.1	-1.2	48.6	48.9	46.1	38.9	35.4	32.8	31.9	-0.9	40.6	39.6	35.6	30.1	25.6	25.9	24.7	-1.2
Smoke marijuana regularly	83.8	82.0	79.6	74.3	73.0	70.9	72.7	+1.8	82.1	81.1	78.5	71.3	67.9	65.9	65.9	0.0	78.6	76.5	72.5	65.0	60.8	59.9	58.1	-1.8
Try inhalants once or twice[b]	35.9	37.0	36.5	37.9	38.4	40.8	40.1	-0.7	37.8	38.7	40.9	42.7	41.6	47.2	47.5	+0.3	—	—	—	—	—	—	—	—
Try inhalants regularly[b]	65.8	64.4	64.6	65.5	64.8	68.2	68.7	+0.5	69.8	67.9	69.6	71.5	71.8	75.8	74.5	-1.3	—	—	—	—	—	—	—	—
Take LSD once or twice[c]	—	—	42.1	38.3	36.7	36.5	37.0	+0.5	—	—	48.7	46.5	44.7	45.1	44.5	-0.6	46.6	42.3	39.5	38.8	36.4	36.2	34.7	-1.5
Take LSD regularly[c]	—	—	68.3	65.8	64.4	63.6	64.1	+0.5	—	—	78.9	75.9	76.6	75.3	73.8	-1.5	84.3	81.8	79.4	79.1	78.1	77.8	76.6	-1.2
Try crack once or twice[b]	62.8	61.2	57.2	54.4	50.8	51.0	49.9	-1.1	70.4	69.6	66.0	64.7	60.9	60.9	59.2	-1.7	60.8	62.4	57.6	58.4	54.6	56.0	54.0	-2.0
Take crack occasionally[b]	82.2	79.6	76.8	74.4	72.1	71.6	71.2	-0.4	87.4	86.4	84.4	83.1	81.2	80.3	78.7	-1.6	76.5	76.3	73.9	73.8	72.8	71.4	70.3	-1.1
Try cocaine powder once or twice[b]	55.5	54.1	50.7	48.4	44.9	45.2	45.0	-0.2	59.1	59.2	57.5	56.4	53.5	53.6	52.2	-1.4	53.0	57.1	53.2	55.4	52.0	53.2	51.4	-1.8
Take cocaine powder occasionally[b]	77.0	74.3	71.8	69.1	66.4	65.7	65.8	+0.1	82.2	80.1	79.1	77.8	76.5	75.0	73.9	-1.1	69.8	70.8	66.6	70.0	69.1	68.8	67.7	-1.1
Try heroin once or twice without using a needle[c]	—	—	—	—	60.1	61.3	63.0	+1.7	—	—	—	—	70.7	72.1	73.1	+1.0	—	—	—	—	55.6	58.6	60.5	+1.9
Take heroin occasionally without using a needle[c]	—	—	—	—	76.8	76.6	79.2	+2.6	—	—	—	—	85.1	85.8	86.5	+0.7	—	—	—	—	71.2	71.0	74.3	+3.3s
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	11.0	12.1	12.4	11.6	11.6	11.8	10.4	-1.4s	9.0	10.1	10.9	9.4	9.3	8.9	9.0	+0.1	9.1	8.6	8.2	7.6	5.9	7.3	6.7	-0.6
Take one or two drinks nearly every day	31.8	32.4	32.6	29.9	30.5	28.6	29.1	+0.5	36.1	36.8	35.9	32.5	31.7	31.2	31.8	+0.6	32.7	30.6	28.2	27.0	24.8	25.1	24.8	-0.3
Have five or more drinks once or twice each weekend	59.1	58.0	57.7	54.7	54.1	51.8	55.6	+3.8sss	54.7	55.9	54.9	52.9	52.0	50.0	51.8	+0.9	48.6	49.0	48.3	46.5	45.2	49.5	43.0	-8.5sss
Smoke one or more packs of cigarettes per day	51.8	50.8	52.7	50.8	49.8	50.4	52.6	+2.2	60.3	59.3	60.7	59.0	57.0	57.9	59.9	+2.0	69.4	69.2	69.5	67.6	65.6	68.2	68.7	+0.5
Use smokeless tobacco regularly	35.1	35.1	36.9	35.6	33.5	34.0	35.2	+1.2	40.3	39.6	44.2	42.2	38.2	41.0	42.2	+1.2	37.4	35.5	38.9	36.6	33.2	37.4	38.6	+1.2
Take steroids[d]	64.2	69.5	70.2	67.6	—	—	—	—	67.1	72.7	73.4	72.5	—	—	—	—	65.6	70.7	69.1	66.1	66.4	67.6	67.2	-0.4
Approx. N =	*17437*	*18662*	*18366*	*17394*	*17501*	*17926*	*18765*		*14719*	*14808*	*15298*	*15880*	*17006*	*15670*	*15640*		*2549*	*2684*	*2759*	*3591*	*2603*	*2449*	*2579*	

NOTES: Level of significance of difference between the two most recent classes: s =.05, ss =.01, sss =.001. '—' indicates data not available.
SOURCE: The Monitoring the Future Study, the University of Michigan.

*Answer alternatives were: (1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, (5) Can't say, drug unfamiliar.
[a] 8th and 10th grade: Data based in 1997 on two-thirds of N indicated due to changes in questionnaire forms.
[b] 8th and 10th grade: Data based on one of two forms in 1993–96; N is one-half of N indicated. Data based in 1997 on one-third of N indicated due to changes in questionnaire forms.
[c] 8th and 10th grade: Data based on two forms in 1991 and 1992. Data based on one of two forms in 1993 and 1994; N is one-half of N indicated.

TABLE 8

Long-Term Trends in Harmfulness of Drugs as Perceived by Twelfth Graders

How much do you think people risk harming themselves (physically or in other ways), if they . . .	Percentage saying "great risk"*																							
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989	Class of 1990	Class of 1991	Class of 1992	Class of 1993	Class of 1994	Class of 1995	Class of 1996	Class of 1997	'96–'97 change
Try marijuana once or twice	15.1	11.4	9.5	8.1	9.4	10.0	13.0	11.5	12.7	14.7	14.8	15.1	18.4	19.0	23.6	23.1	27.1	24.5	21.9	19.5	16.3	15.6	14.9	-0.7
Smoke marijuana occasionally	18.1	15.0	13.4	12.4	13.5	14.7	19.1	18.3	20.6	22.6	24.5	25.0	30.4	31.7	38.5	36.9	40.6	39.6	35.6	30.1	25.6	25.9	24.7	-1.2
Smoke marijuana regularly	43.3	38.6	36.4	34.9	42.0	50.4	57.6	60.4	62.8	66.9	70.4	71.3	73.5	77.0	77.5	77.8	78.6	76.5	72.5	65.0	60.8	59.9	58.1	-1.8
Try LSD once or twice	49.4	46.7	43.2	42.7	41.6	43.9	45.5	44.9	44.7	45.4	43.6	42.0	44.9	45.7	46.0	44.7	46.8	42.3	39.5	38.8	36.4	36.2	34.7	-1.5
Take LSD regularly	81.4	80.8	79.1	81.1	82.4	83.0	83.5	83.5	83.2	83.8	82.9	82.6	83.8	84.2	84.3	84.6	84.3	81.8	79.4	79.1	78.1	77.8	76.6	-1.2
Try PCP once or twice	—	—	—	—	—	—	—	—	—	—	—	—	55.6	58.8	56.6	55.2	61.7	64.8	50.8	51.5	49.1	51.0	48.8	-2.2
Try MDMA once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	33.8	—
Try cocaine once or twice	42.6	39.1	35.6	33.2	31.5	31.3	32.1	32.8	33.0	35.7	34.0	33.5	47.9	51.2	54.9	59.4	59.4	66.8	57.8	57.2	53.7	54.2	53.6	-0.6
Take cocaine occasionally	—	—	—	—	—	—	—	—	—	—	—	54.2	66.8	69.2	71.8	73.9	75.5	75.1	73.3	73.7	70.8	72.1	72.4	+0.3
Take cocaine regularly	73.1	72.3	68.2	68.2	69.5	69.2	71.2	73.0	74.3	78.8	79.0	82.2	88.5	89.2	90.2	91.1	90.4	90.2	90.1	89.3	87.9	88.3	87.1	-1.2
Try crack once or twice	—	—	—	—	—	—	—	—	—	—	—	—	57.0	62.1	62.9	64.3	60.8	62.4	57.6	58.4	54.8	56.0	54.0	-2.0
Take crack occasionally	—	—	—	—	—	—	—	—	—	—	—	—	70.4	73.2	75.3	80.4	76.5	76.3	73.9	73.8	72.8	71.4	70.3	-1.1
Take crack regularly	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.8	85.6	91.6	90.1	89.3	87.5	89.6	88.6	88.0	86.2	-1.8
Try cocaine powder once or twice	—	—	—	—	—	—	—	—	—	—	—	—	45.3	51.7	53.8	53.9	53.6	57.1	53.2	55.4	52.0	53.2	51.4	-1.8
Take cocaine powder occasionally	—	—	—	—	—	—	—	—	—	—	—	—	56.8	61.9	65.8	71.1	69.8	70.8	68.6	70.6	69.1	68.8	67.7	-1.1
Take cocaine powder regularly	—	—	—	—	—	—	—	—	—	—	—	—	81.4	82.9	83.9	90.2	88.9	88.4	87.0	88.6	87.8	86.8	86.0	-0.8
Try heroin once or twice	60.1	58.9	55.8	52.9	50.4	52.1	62.9	51.1	50.8	49.8	47.3	45.8	63.6	54.0	63.8	55.4	55.2	50.9	50.7	52.8	50.9	52.5	56.7	+4.2s
Take heroin occasionally	75.6	75.6	71.9	71.4	70.9	70.9	72.2	69.8	71.8	70.7	69.8	68.2	74.6	73.8	75.5	76.6	74.9	74.2	72.0	72.1	71.0	74.8	76.3	+1.5
Take heroin regularly	87.2	88.6	86.1	86.6	87.5	86.2	87.5	86.0	86.1	87.2	86.0	87.1	88.7	88.8	89.6	90.2	89.6	89.2	88.3	88.0	87.2	89.5	88.9	-0.6
Try amphetamines once or twice	35.4	33.4	30.8	29.9	29.7	29.7	26.4	25.3	24.7	25.4	25.2	25.1	29.1	29.6	32.8	32.2	30.3	32.6	31.3	31.4	28.8	30.8	31.0	+0.2
Take amphetamines regularly	69.0	67.3	66.6	67.1	69.9	69.1	66.1	64.7	64.8	67.1	67.2	67.3	69.4	69.8	71.2	71.2	74.1	72.4	69.9	67.0	66.9	66.8	66.0	-0.8
Try crystal meth. (ice) once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	61.6	61.9	57.6	58.3	54.4	55.3	54.4	-0.9
Try barbiturates once or twice	34.8	32.5	31.2	31.3	30.7	30.9	28.4	27.5	27.0	27.4	26.1	26.4	30.9	29.7	32.2	32.4	35.1	32.2	29.2	29.9	26.3	29.1	26.9	-2.2
Take barbiturates regularly	69.1	67.7	68.6	68.4	71.6	72.2	69.9	67.6	67.7	68.5	68.3	67.2	69.4	69.8	70.5	70.2	70.5	70.2	66.1	63.3	61.6	60.4	56.8	-3.6s
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	5.3	4.8	4.1	3.4	4.1	3.8	4.6	3.5	4.2	4.6	5.0	4.6	6.2	6.0	6.0	8.3	9.1	8.8	8.2	7.6	5.9	7.3	6.7	-0.6
Take one or two drinks nearly every day	21.5	21.2	18.5	19.6	22.8	20.3	21.6	21.6	21.6	23.0	24.4	25.1	26.2	27.3	28.5	31.3	32.7	30.6	28.2	27.0	24.8	25.1	24.8	-0.3
Take four or five drinks nearly every day	63.5	61.0	62.9	63.1	66.2	65.7	64.5	65.5	66.8	68.4	69.8	66.5	69.7	68.5	69.8	70.9	69.5	70.5	67.8	66.2	62.8	65.6	63.0	-2.6
Have five or more drinks once or twice each weekend	37.8	37.0	34.7	34.5	34.9	35.9	36.3	36.0	38.6	41.7	43.0	39.1	41.9	42.6	44.0	47.1	48.6	49.0	48.3	46.5	45.2	49.5	43.0	-6.5sss
Smoke one or more packs of cigarettes per day	51.3	56.4	58.4	59.0	63.0	63.7	63.3	60.5	61.2	63.8	66.5	66.0	68.6	68.0	67.2	68.2	69.4	69.2	69.5	67.6	65.6	68.2	68.7	+0.5
Use smokeless tobacco regularly	—	—	—	—	—	—	—	—	—	—	—	25.8	30.0	33.2	32.9	34.2	37.4	35.5	38.9	36.6	33.2	37.4	38.6	+1.2
Take steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	63.6	69.9	65.6	70.7	69.1	66.1	66.4	67.6	67.2	-0.4
Approx. N =	*2804*	*2918*	*3052*	*3770*	*3250*	*3234*	*3604*	*3557*	*3305*	*3262*	*3250*	*3020*	*3315*	*3276*	*2796*	*2553*	*2549*	*2684*	*2759*	*2591*	*2603*	*2449*	*2579*	

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available.
SOURCE: The Monitoring the Future Study, the University of Michigan.

*Answer alternatives were: (1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, and (5) Can't say, drug unfamiliar.

TABLE 9
Trends in Disapproval of Drug Use by Eighth, Tenth, and Twelfth Graders, 1991–97

Percent who "disapprove" or "strongly disapprove"[a]

Do you disapprove of people who . . .	8th Grade 1991	1992	1993	1994	1995	1996	1997	'96–'97 change	10th Grade 1991	1992	1993	1994	1995	1996	1997	'96–'97 change	12th Grade[b] 1991	1992	1993	1994	1995	1996	1997	'96–'97 change
Try marijuana once or twice	84.6	82.1	79.2	72.9	70.7	67.5	67.6	+0.1	74.6	74.8	70.3	62.4	59.8	55.5	54.1	-1.4	68.7	69.9	63.3	57.6	56.7	52.5	51.0	-1.5
Smoke marijuana occasionally	89.5	88.1	85.7	80.9	79.7	76.5	78.1	+1.6s	83.7	83.6	79.4	72.3	70.0	66.9	66.2	-0.7	79.4	79.7	75.5	68.9	65.7	62.9	63.2	+0.3
Smoke marijuana regularly	92.1	90.8	88.9	85.3	85.1	82.8	84.6	+1.8s	90.4	90.0	87.4	82.2	81.1	79.7	79.7	0.0	89.3	90.1	87.6	82.3	81.9	80.0	78.8	-1.2
Try inhalants once or twice[c]	84.9	84.0	82.5	81.6	81.8	82.9	84.1	+1.2	85.2	85.6	84.8	84.9	84.5	86.0	85.9	+0.9	—	—	—	—	—	—	—	—
Take inhalants regularly[c]	90.6	90.0	88.9	88.1	88.8	89.3	90.3	+1.0	91.0	91.5	90.9	91.0	90.9	91.7	91.7	0.0	—	—	—	—	—	—	—	—
Try LSD once or twice[d]	—	—	77.1	75.2	71.6	70.9	72.1	+1.2	—	—	82.1	79.3	77.9	76.8	76.6	-0.2	90.1	88.1	85.9	82.5	81.1	79.6	80.5	+0.9
Take LSD regularly[d]	—	—	79.8	78.4	75.8	75.3	76.3	+1.0	—	—	86.8	85.6	84.8	84.5	83.4	-1.1	96.4	95.5	95.8	94.3	92.5	93.2	92.9	-0.3
Try crack once or twice[e]	91.7	90.7	89.1	86.9	85.9	85.0	85.7	+0.7	92.5	92.5	91.4	89.9	88.7	88.2	87.4	-0.8	92.1	93.1	89.9	89.5	91.4	87.4	87.0	-0.4
Take crack occasionally[e]	93.3	92.5	91.7	89.9	89.8	89.3	90.3	+1.0	94.3	94.4	93.6	92.5	91.7	91.9	91.0	-0.9	94.2	95.0	92.8	92.8	94.0	91.2	91.3	+0.1
Try cocaine powder once or twice[e]	91.2	89.6	88.5	86.1	85.3	83.9	85.1	+1.2	90.8	91.1	90.0	88.1	86.8	86.1	85.1	-1.0	88.0	89.4	88.6	87.1	88.3	83.1	83.0	-0.1
Take cocaine powder occasionally[e]	93.1	92.4	91.6	89.7	89.7	88.7	90.1	+1.4s	94.0	94.0	93.2	92.1	91.4	91.1	90.4	-0.7	93.0	93.4	91.2	91.0	92.7	89.7	89.3	-0.4
Try heroin once or twice without using a needle[d]	—	—	—	—	85.8	85.0	87.7	+2.7ss	—	—	—	—	89.7	89.5	89.1	-0.4	—	—	—	—	92.9	90.8	92.3	+1.5
Take heroin occasionally without using a needle[d]	—	—	—	—	88.5	87.7	90.1	+2.4ss	—	—	—	—	91.6	91.7	91.4	-0.3	—	—	—	—	94.7	93.2	94.4	+1.2
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	51.7	52.2	50.9	47.8	48.0	45.5	45.7	+0.2	37.6	39.9	38.5	36.5	36.1	34.2	33.7	-0.5	29.8	33.0	30.1	28.4	27.3	26.5	26.1	-0.4
Take one or two drinks nearly every day	82.2	81.0	79.6	76.7	75.9	74.1	76.6	+2.5ss	81.7	81.7	78.6	75.2	75.4	73.8	75.4	+1.6	78.5	75.9	77.8	73.1	73.3	70.8	70.0	-0.8
Have five or more drinks once or twice each weekend	85.2	83.9	83.3	80.7	80.7	79.1	81.3	+2.2ss	76.7	77.8	74.7	72.3	72.2	70.7	70.2	-0.5	67.4	70.7	70.1	65.1	66.7	64.7	65.0	+0.3
Smoke one or more packs of cigarettes per day	82.8	82.3	80.6	78.4	78.6	77.3	80.3	+3.0sss	79.4	77.8	75.5	73.9	73.2	71.6	73.8	+2.2s	71.4	73.5	70.6	69.8	68.2	67.2	67.1	-0.1
Use smokeless tobacco regularly	79.1	77.2	77.1	75.1	74.0	74.1	76.5	+2.4ss	75.4	74.6	73.8	71.2	71.0	71.0	72.3	+1.3	—	—	—	—	—	—	—	—
Take steroids[a]	89.8	90.3	89.9	87.9	—	—	—	—	90.0	91.0	91.2	90.8	—	—	—	—	90.5	92.1	92.1	91.9	91.0	91.7	91.4	-0.3
Approx. N =	*17390*	*18503*	*18435*	*17429*	*17560*	*17998*	*18765*		*14750*	*14774*	*15334*	*15891*	*17016*	*15686*	*15627*		*2547*	*2645*	*2723*	*2588*	*2603*	*2399*	*2601*	

NOTES: Level of significance of difference between the two most recent classes: s =.05, ss =.01, sss =.001. '—' indicates data not available.
SOURCE: The Monitoring the Future Study, the University of Michigan.

[a]Answer alternatives were: (1) Don't disapprove, (2) Disapprove, (3) Strongly disapprove. For 8th and 10th grades, there was another category—"Can't say, drug unfamiliar"—which was included in the calculation of these percentages.

[b]The twelfth grade questions ask about people who are 18 or older.

[c]8th and 10th grade: Data based in 1997 on two-thirds of N indicated due to changes in questionnaire forms.

[d]8th and 10th grade: Data based on one of two forms in 1993–96; N is one-half of N indicated. Data based in 1997 on one-third of N indicated due to changes in questionnaire forms.

[e]8th and 10th grade: Data based on two forms in 1991 and 1992 and on one of two forms in 1993 and 1994; N is one-half of N indicated.

TABLE 10

Long-Term Trends in Disapproval of Drug Use by Twelfth Graders

Do you disapprove of people (who are 18 or older) doing each of the following?	Percentage "disapproving"*																						
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989	Class of 1990	Class of 1991	Class of 1992	Class of 1993	Class of 1994	Class of 1995	Class of 1996	Class of 1997	'96–'97 change
Try marijuana once or twice	47.0	38.4	33.4	33.4	34.2	39.0	40.0	45.5	46.3	49.3	51.4	54.6	56.6	60.8	64.6	67.8	68.7	69.9	63.3	57.6	56.7	52.5	51.0	-1.5
Smoke marijuana occasionally	54.8	47.9	44.3	43.5	45.3	49.7	52.6	59.1	60.7	63.5	65.8	69.0	71.6	74.0	77.2	80.5	79.4	79.7	75.5	68.9	66.7	62.9	63.2	+0.3
Smoke marijuana regularly	71.9	69.5	65.5	67.5	69.2	74.6	77.4	80.6	82.5	84.7	85.5	86.6	89.2	89.3	89.8	91.0	89.3	90.1	87.6	82.3	81.9	80.0	78.8	-1.2
Try LSD once or twice	82.8	84.6	83.9	85.4	86.6	87.3	86.4	88.8	89.1	88.9	89.5	89.2	91.6	89.8	89.7	89.8	90.1	88.1	85.9	82.5	81.1	79.6	80.5	+0.9
Take LSD regularly	94.1	95.3	95.8	95.4	96.9	96.7	96.8	96.7	97.0	96.8	97.0	96.6	97.8	96.4	96.4	96.3	96.4	95.6	95.8	94.3	92.5	93.2	92.9	-0.3
Try MDMA once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	82.2	—
Try cocaine once or twice	81.3	82.4	79.1	77.0	74.7	75.3	74.6	76.6	77.0	79.7	79.3	80.2	87.3	89.1	90.5	91.5	93.6	93.0	92.7	91.6	90.3	90.0	88.0	-2.0
Take cocaine regularly	93.3	93.9	92.1	91.9	90.8	91.1	90.7	91.5	93.2	94.5	93.8	94.3	96.7	98.2	96.4	96.7	97.3	96.9	97.5	96.6	96.1	95.6	96.0	+0.4
Try crack once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	92.3	92.1	93.1	89.9	89.5	91.4	87.4	87.0	-0.4
Take crack occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.3	94.2	95.0	92.8	92.8	94.0	91.2	91.3	+0.1
Take crack regularly	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.9	95.0	95.5	93.4	93.1	94.1	93.0	92.3	-0.7
Try coke powder once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	87.9	88.0	89.4	86.6	87.1	88.3	83.1	83.0	-0.1
Take coke powder occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	92.1	93.0	93.4	91.2	91.0	92.7	89.7	89.3	-0.4
Take coke powder regularly	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.7	94.4	94.3	93.0	92.5	93.8	92.9	91.5	-1.4
Try heroin once or twice	91.5	92.6	92.5	92.0	93.4	93.5	93.5	94.6	94.3	94.0	94.0	93.3	96.2	95.0	95.4	95.1	96.0	94.9	94.4	93.2	92.8	92.1	92.3	+0.2
Take heroin occasionally	94.8	96.0	96.0	96.4	96.8	96.7	97.2	96.9	96.9	97.1	96.8	96.6	97.9	96.9	97.2	96.7	97.3	96.8	97.0	96.2	95.7	95.0	95.4	+0.4
Take heroin regularly	96.7	97.5	97.2	97.8	97.9	97.6	97.8	97.5	97.7	98.0	97.6	97.6	98.1	97.2	97.4	97.5	97.8	97.2	97.5	97.1	96.4	96.3	96.4	+0.1
Try amphetamines once or twice	74.8	75.1	74.2	74.8	75.1	75.4	71.1	72.0	72.3	72.8	74.9	76.5	80.7	82.5	83.3	85.3	86.5	86.9	84.2	81.3	82.2	79.9	81.3	+1.4
Take amphetamines regularly	92.1	92.8	92.5	93.5	94.4	93.0	91.7	92.0	92.6	93.6	93.3	93.5	95.4	94.2	94.2	95.5	96.0	95.6	96.0	94.1	94.3	93.5	94.3	+0.8
Try barbiturates once or twice	77.7	81.3	81.1	82.4	84.0	83.9	82.4	84.4	83.1	84.1	84.9	86.8	89.6	89.4	89.3	90.5	90.6	90.3	89.7	87.5	87.3	84.9	86.4	+1.5
Take barbiturates regularly	93.3	93.6	93.0	94.3	95.2	95.4	94.2	94.4	95.1	95.1	95.5	94.9	96.4	95.5	95.3	96.4	97.1	96.6	97.0	96.1	95.2	94.8	95.3	+0.5
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	21.6	18.2	15.6	16.6	15.8	16.0	17.2	18.2	18.4	17.4	20.3	20.9	21.4	22.6	27.3	29.4	29.8	33.0	30.1	28.4	27.3	26.5	26.1	-0.4
Take one or two drinks nearly every day	67.6	68.9	66.8	67.7	68.3	69.0	69.1	69.9	68.9	72.9	70.9	72.8	74.2	75.0	76.5	77.9	76.5	75.9	77.8	73.1	73.3	70.8	70.0	-0.8
Take four or five drinks nearly every day	88.7	90.7	88.4	90.2	91.7	90.8	91.8	90.9	90.0	91.0	92.0	91.4	92.2	92.8	91.6	91.9	90.6	90.8	90.6	89.8	88.8	89.4	88.6	-0.8
Have five or more drinks once or twice each weekend	60.3	58.6	57.4	56.2	56.7	55.6	55.5	68.8	56.6	59.6	60.4	62.4	62.0	66.3	66.6	68.9	67.4	70.7	70.1	65.1	66.7	64.7	65.0	+0.3
Smoke one or more packs of cigarettes per day	67.5	65.9	66.4	67.0	70.3	70.8	69.9	69.4	70.8	73.0	72.3	75.4	74.3	73.1	72.4	72.8	71.4	73.5	70.6	69.8	68.2	67.2	67.1	-0.1
Take steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90.8	90.5	92.1	92.1	91.9	91.0	91.7	91.4	-0.3
Approx. N =	*2677*	*2957*	*3085*	*3686*	*3221*	*3261*	*3610*	*3651*	*3341*	*3254*	*3265*	*3113*	*3302*	*3311*	*2799*	*2566*	*2547*	*2645*	*2723*	*2588*	*2603*	*2399*	*2601*	

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available.
SOURCE: The Monitoring the Future Study, the University of Michigan.

*Answer alternatives were: (1) Don't disapprove, (2) Disapprove, and (3) Strongly disapprove. Percentages are shown for categories (2) and (3) combined.
†The 1975 question asked about people who are "20 or older."

TABLE 11

Trends in Perceived Availability of Drugs
Eighth, Tenth, and Twelfth Graders, 1992–97

How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?	Percent saying "fairly easy" or "very easy" to get[a]																				
	8th Grade							10th Grade							12th Grade						
	1992	1993	1994	1995	1996	1997	'96–'97 change	1992	1993	1994	1995	1996	1997	'96–'97 change	1992	1993	1994	1995	1996	1997	'96–'97 change
Marijuana	42.3	43.8	49.9	52.4	54.8	54.2	-0.6	65.2	69.4	75.0	78.1	81.1	80.5	-0.6	82.7	83.0	85.5	86.5	88.7	89.6	+0.9
LSD	21.5	21.8	21.8	23.5	23.8	22.7	-0.9	33.6	35.8	36.1	39.8	41.0	38.3	-2.7ss	44.5	49.2	50.8	53.8	51.3	50.7	-0.6
PCP[b]	18.0	18.5	17.7	19.0	19.6	19.2	-0.4	23.7	23.4	23.8	24.7	26.6	24.8	-2.0	31.7	31.7	31.4	31.0	30.5	30.0	-0.5
Crack	25.6	25.9	26.9	28.7	27.9	27.5	-0.4	33.7	33.0	34.2	34.6	36.4	36.0	-0.4	43.5	43.8	40.5	41.9	40.7	40.6	-0.1
Cocaine Powder	25.7	25.9	26.4	27.8	27.2	26.9	-0.3	35.0	34.1	34.5	35.3	36.9	37.1	+0.2	46.0	45.4	43.7	43.8	44.4	43.3	-1.1
Heroin	19.7	19.8	19.4	21.1	20.6	19.8	-0.8	24.3	24.3	24.7	24.8	24.8	24.4	-0.4	34.9	33.7	34.1	35.1	32.2	33.8	+1.6
Other Opiates[b]	19.8	19.0	18.3	20.3	20.0	20.6	+0.6	26.9	24.9	26.9	27.8	29.4	29.0	-0.4	37.1	37.5	38.0	39.8	40.0	38.9	-1.1
Amphetamines	32.2	31.4	31.0	33.4	32.6	30.6	-2.0s	43.4	45.4	46.6	47.7	47.2	44.6	-2.6ss	58.8	61.5	62.0	62.8	59.4	59.8	+0.4
Crystal Meth. (Ice)[b]	16.0	15.1	14.1	16.0	16.3	15.7	-0.6	18.8	16.4	17.8	20.7	22.6	22.9	+0.3	26.0	26.6	25.6	27.0	26.9	27.6	+0.7
Barbiturates	27.4	26.1	25.3	26.5	25.8	24.4	-1.2	38.0	38.8	38.3	38.6	38.1	35.6	-2.5ss	44.0	44.5	43.3	42.3	41.4	40.0	-1.4
Tranquilizers	22.9	21.4	20.4	21.3	20.4	19.6	-0.8	31.6	30.5	29.8	30.6	30.3	28.7	-1.6	40.9	41.1	39.2	37.8	36.0	35.4	-0.6
Alcohol	76.2	73.9	74.5	74.9	75.3	74.9	-0.4	88.6	88.9	89.8	89.7	90.4	89.0	-1.4ss	—	—	—	—	—	—	—
Cigarettes	77.8	75.5	76.1	76.4	76.9	76.0	-0.9	89.1	89.4	90.3	90.7	91.3	89.6	-1.7sss	—	—	—	—	—	—	—
Steroids	24.0	22.7	23.1	23.8	24.1	23.6	-0.5	37.6	33.6	33.6	34.8	34.8	34.2	-0.6	46.8	44.8	42.9	45.5	40.3	41.7	+1.4
Approx. N =	*8355*	*16775*	*16119*	*15496*	*16318*	*16482*		*7014*	*14652*	*15192*	*16209*	*14887*	*14856*		*2586*	*2670*	*2526*	*2552*	*2340*	*2517*	

NOTES: Level of significance of difference between the two years: s =.05, ss =.01, sss =.001. '—' indicates data not available.
SOURCE: The Monitoring the Future Study, the University of Michigan.

[a]Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, (5) Very easy. For 8th and 10th grades, there was another category—"Can't say, drug unfamiliar"—which was included in the calculation of these percentages.
[b]8th and 10th grade only: Data based on one of two forms; N is one-half of N indicated in 1993–97.

TABLE 12

Long-Term Trends in Perceived Availability of Drugs, Twelfth Graders

How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?	Percent saying "fairly easy" or "very easy" to get*																							
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989	Class of 1990	Class of 1991	Class of 1992	Class of 1993	Class of 1994	Class of 1995	Class of 1996	Class of 1997	'96–'97 change
Marijuana	87.8	87.4	87.9	87.8	90.1	89.0	89.2	88.5	86.2	84.6	85.5	86.2	84.8	85.0	84.3	84.4	83.3	82.7	83.0	85.5	88.5	88.7	89.6	+0.9
Amyl/Butyl Nitrites	—	—	—	—	—	—	—	—	—	—	—	—	23.9	25.9	26.8	24.4	22.7	25.9	25.9	26.7	26.0	23.9	23.8	-0.1
LSD	46.2	37.4	34.5	32.2	34.2	35.3	35.0	34.2	30.9	30.6	30.5	28.5	31.4	33.3	38.3	40.7	39.5	44.5	49.2	50.6	63.8	51.3	50.7	-0.6
Some other psychedelic	47.8	35.7	33.8	33.8	34.6	35.0	32.7	30.6	28.6	26.6	26.1	24.9	25.0	26.2	28.2	28.3	28.0	29.9	33.5	33.8	35.8	33.9	33.9	0.0
PCP	—	—	—	—	—	—	—	—	—	—	—	—	22.8	24.9	28.9	27.7	27.6	31.7	31.7	31.4	31.0	30.5	30.0	-0.5
MDMA (Ecstasy)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.7	22.0	22.1	24.2	28.1	31.2	34.2	36.9	38.8	+1.9
Cocaine	37.0	34.0	33.0	37.8	45.5	47.9	47.5	47.4	43.1	45.0	48.9	51.5	54.2	55.0	58.7	54.5	51.0	52.7	48.5	48.6	47.7	48.1	48.6	+0.4
Crack	—	—	—	—	—	—	—	—	—	—	—	—	41.1	42.1	47.0	42.4	39.9	43.5	43.6	40.5	41.9	40.7	40.6	-0.1
Cocaine powder	—	—	—	—	—	—	—	—	—	—	—	—	52.9	50.3	53.7	49.0	46.0	48.0	45.4	43.7	43.8	44.4	43.3	-1.1
Heroin	24.2	18.4	17.9	15.4	18.9	21.2	19.2	20.8	19.3	19.9	21.0	22.0	23.7	28.0	31.4	31.9	30.6	34.9	33.7	34.1	35.1	32.2	33.8	+1.6
Some other narcotic (including methadone)	34.5	26.9	27.8	26.1	28.7	29.4	29.6	30.4	30.0	32.1	33.1	32.2	33.0	35.8	38.3	38.1	34.6	37.1	37.5	38.0	39.8	40.0	38.9	-1.1
Amphetamines	67.8	61.8	58.1	58.5	59.9	61.3	69.5	70.8	68.5	68.2	66.4	64.3	64.5	63.9	64.3	59.7	57.3	58.8	61.5	62.0	62.8	59.4	59.8	+0.4
Crystal meth. (ice)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24.1	24.3	26.0	26.6	25.6	27.0	26.9	27.6	+0.7
Barbiturates	60.0	54.4	52.4	50.6	49.8	49.1	54.9	55.2	52.5	51.9	51.3	48.3	48.2	47.8	48.4	45.9	42.4	44.0	44.5	43.3	42.3	41.4	40.0	-1.4
Tranquilizers	71.8	65.5	64.9	64.3	61.4	59.1	60.8	58.9	55.3	54.5	54.7	51.2	48.6	49.1	45.3	44.7	40.8	40.9	41.1	39.2	37.8	36.0	35.4	-0.6
Steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	46.7	46.8	44.6	42.9	45.5	40.3	41.7	+1.4
Approx. N =	*2627*	*2865*	*3065*	*3598*	*3172*	*3240*	*3578*	*3602*	*3385*	*3269*	*3274*	*3077*	*3271*	*3231*	*2806*	*2549*	*2476*	*2586*	*2670*	*2526*	*2552*	*2340*	*2517*	

NOTES: Level of significance of difference between the two most recent classes: * = .05, ** = .01, *** = .001. '—' indicates data not available.
SOURCE: The Monitoring the Future Study, the University of Michigan.

*Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, and (5) Very easy.

TABLE 1 (cont.)

Trends in Prevalence of Various Drugs for Five Populations: Eighth, Tenth, and Twelfth Graders, College Students, and Young Adults (Ages 19-28)

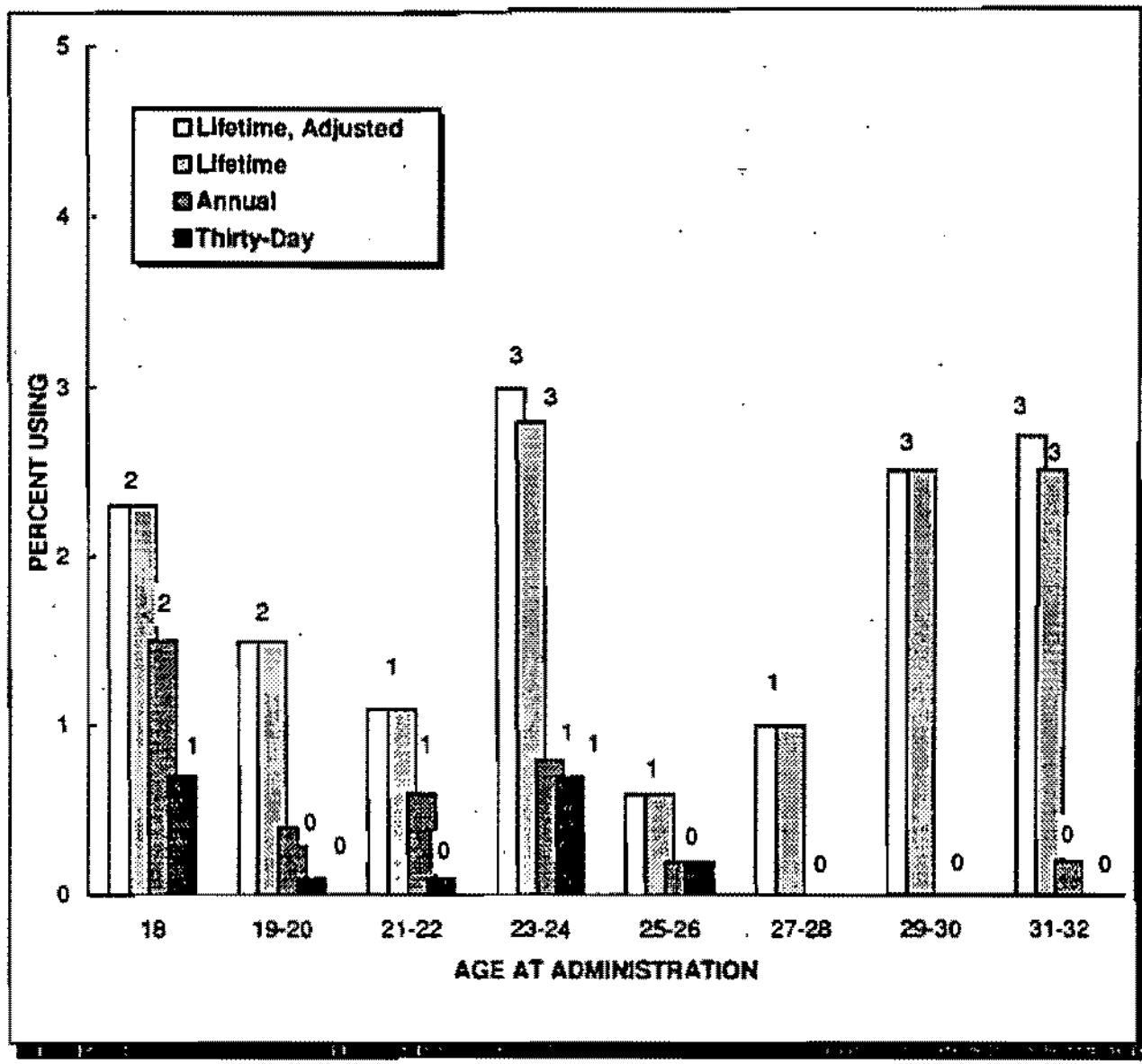
	Lifetime						Annual						30-Day						Daily					
	1991	1992	1993	1994	1995	'94-'95 change	1991	1992	1993	1994	1995	'94-'95 change	1991	1992	1993	1994	1995	'94-'95 change	1991	1992	1993	1994	1995	'94-'95 change
Alcohol[1]																								
Any use																								
8th Grade	70.1	69.3	67.1	—	—	—	64.0	63.7	61.6	—	—	—	25.1	28.1	26.2	—	—	—	0.6	0.8	0.8	—	—	—
			65.7	65.8	64.5	-1.3			48.4	46.8	45.3	-1.5			24.3	25.6	24.6	-0.9			1.0	1.0	0.7	-0.3s
10th Grade	83.8	82.3	80.6	—	—	—	72.3	70.2	69.3	—	—	—	42.8	39.9	41.6	—	—	—	1.3	1.2	1.6	—	—	—
			71.6	71.1	70.6	-0.6			63.4	63.9	63.5	-0.4			38.2	39.2	38.8	-0.4			1.8	1.7	1.7	0.0
12th Grade	88.0	87.5	87.0	—	—	—	77.7	76.6	76.0	—	—	—	54.0	51.3	51.0	—	—	—	3.6	3.4	2.5	—	—	—
			80.0	80.4	80.7	+0.3			72.7	73.0	73.7	+0.7			48.8	50.1	51.3	+1.2			3.4	2.9	3.5	+0.6xx
College Students	93.8	91.8	89.3	88.2	88.5	+0.3	85.5	86.0	85.1	82.7	83.3	+0.4	74.7	71.4	70.1	67.8	67.5	-0.3	4.1	3.7	3.9	3.7	3.0	-0.7
Young Adults	94.1	93.4	92.1	91.2	91.6	+0.4	86.9	86.2	85.3	83.7	84.7	+1.0	70.6	69.0	68.3	67.7	68.1	+0.4	4.9	4.6	4.5	3.9	3.9	0.0
5+ drinks in last 2 weeks																								
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.9	13.4	13.5	14.5	14.5	0.0
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.9	22.1	23.0	23.6	24.0	+0.4
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29.8	27.9	27.5	28.2	29.8	+1.6
College Students	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	42.5	41.4	40.2	40.2	38.6	-1.6
Young Adults	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	34.7	34.2	34.4	33.7	32.6	-1.1
Been Drunk[1]																								
8th Grade	26.7	25.5	26.4	25.0	25.3	-0.6	17.5	18.3	18.2	18.2	18.4	+0.2	7.6	7.5	7.8	8.1	8.3	-0.4	0.1	0.1	0.2	0.3	0.2	0.0
10th Grade	50.0	47.7	47.9	47.2	46.9	-0.3	40.1	37.0	37.8	38.0	38.5	+0.5	20.6	18.1	19.8	20.3	20.8	+0.5	0.2	0.3	0.4	0.4	0.6	+0.2s
12th Grade	65.4	63.4	62.5	62.9	63.2	+0.3	52.7	50.1	49.6	51.7	52.6	+0.8	31.8	29.9	28.9	30.8	33.2	+2.4	0.9	0.8	0.9	1.2	1.3	+0.1
College Students	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Young Adults	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cigarettes																								
Any use																								
8th Grade	44.0	45.2	45.3	46.1	46.4	+0.3	—	—	—	—	—	—	14.3	16.6	15.7	16.6	19.1	+0.5	7.2	7.0	8.3	8.8	9.3	+0.5
10th Grade	65.1	63.6	66.3	66.9	67.6	+0.7	—	—	—	—	—	—	20.8	21.5	24.7	26.4	27.9	+2.6xx	12.6	12.3	14.2	14.8	16.3	+1.7x
12th Grade	63.1	61.8	61.9	62.0	64.2	+2.2s	—	—	—	—	—	—	26.3	27.8	29.9	31.2	33.5	+2.3s	18.5	17.2	19.0	19.4	21.6	+2.2s
College Students	—	—	—	—	—	—	36.0	37.3	38.8	37.6	39.3	+1.6	23.2	23.5	24.6	23.6	26.8	+3.3s	13.8	14.1	15.2	13.2	15.8	+2.6s
Young Adults	—	—	—	—	—	—	37.1	37.9	37.6	38.3	38.8	+0.5	26.2	25.3	25.0	26.0	29.2	+1.3	21.7	20.9	20.8	20.7	21.2	+0.5
1/2 pack+/day																								
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.1	2.9	3.5	3.6	3.4	-0.2
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.6	6.0	7.0	7.6	8.3	+0.7
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.7	10.0	10.9	11.2	12.4	+1.2
College Students	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.0	8.9	8.9	8.0	10.2	+2.2s
Young Adults	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.0	15.7	15.5	15.3	15.7	+0.4
Smokeless Tobacco[1]																								
8th Grade	22.2	20.7	19.7	19.9	20.0	+0.1	—	—	—	—	—	—	6.9	7.0	6.6	7.2	7.1	-0.6	1.6	1.8	1.5	1.9	1.2	-0.7
10th Grade	28.2	26.8	28.1	29.2	27.6	-1.6	10.0	9.5	10.4	10.5	9.7	-0.8	—	11.4	10.7	11.1	12.2	+1.1	3.3	3.0	3.3	3.0	2.7	-0.3
12th Grade	—	32.4	31.0	30.7	30.9	+0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	4.3	3.3	3.9	3.5	-0.4
College Students	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Young Adults	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Steroids[1]																								
8th Grade	1.9	1.7	1.6	2.0	2.0	0.0	1.0	1.1	0.9	1.2	1.0	-0.2	0.4	0.6	0.5	0.5	0.6	+0.1	*	*	0.1	*	*	0.0
10th Grade	1.5	1.7	1.7	1.6	2.0	+0.2	1.3	1.1	1.0	1.1	1.2	+0.1	0.8	0.6	0.5	0.6	0.6	0.0	0.1	*	*	0.1	0.1	0.0
12th Grade	2.1	2.1	2.0	2.4	2.3	-0.1	1.4	1.1	1.2	1.3	1.5	+0.2	0.8	0.6	0.7	0.9	0.7	-0.2	0.1	0.1	0.1	0.4	0.2	-0.2
College Students	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Young Adults	1.7	1.9	1.5	1.3	1.5	+0.2	0.5	0.4	0.3	0.4	0.5	+0.1	0.2	0.1	0.0	0.1	0.2	+0.1	0.0	0.1	0.0	0.0	0.1	+0.1

(Footnotes are on next page)

Source: *The Monitoring the Future Study*, The University of Michigan

Figure 16

Steroids: Lifetime, Annual, and Thirty-Day Prevalence Among Young Adults, 1995
by Age Group



NOTE: Lifetime prevalence estimates were adjusted for inconsistency in self-reports of drug use over time. See text for details.

Source: *The Monitoring the Future Study*, The University of Michigan

TABLE 15 (cont.)
Trends in Proportions of Friends Using Drugs
Young Adults in Modal Age Groups of 18, 19-22, 23-26, and 27-30
(Entries are percentages)

Q. How many of your friends would you estimate...	Age Group	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	'94-'95 change
Take other narcotics																		
% saying any friends	18	22.4	23.1	23.9	20.8	21.4	22.8	21.8	23.2	19.2	19.2	17.2	13.7	14.9	16.1	18.5	19.5	+1.0
	19-22	22.8	20.4	21.9	17.9	17.4	16.9	14.6	15.4	14.1	15.0	12.9	14.1	10.8	13.2	10.5	15.9	+5.4
	23-26					16.0	14.9	14.0	13.0	10.6	10.8	10.5	8.5	8.4	8.7	8.0	10.5	+2.5
	27-30									12.1	8.6	9.1	9.3	7.5	8.2	8.0	7.7	-0.3
% saying most or all	18	1.7	1.5	1.4	1.4	1.6	1.4	1.8	1.4	1.2	1.4	0.9	0.5	1.1	1.2	1.0	1.6	+0.6
	19-22	0.9	0.7	0.6	0.5	0.8	1.0	0.5	0.4	0.9	0.1	0.6	0.4	0.5	0.6	0.6	0.6	0.0
	23-26					0.4	0.3	0.7	0.0	0.3	0.2	0.2	0.0	0.0	0.0	0.3	0.2	-0.1
	27-30									0.3	0.0	0.2	0.2	0.1	0.2	0.2	0.0	-0.2
Take amphetamines																		
% saying any friends	18	43.9	48.8	50.6	46.1	45.1	43.3	41.8	39.5	33.4	33.5	28.7	24.5	24.3	27.5	28.1	30.3	+2.2
	19-22	54.1	52.2	51.3	49.7	46.1	42.1	38.5	34.5	26.8	29.6	23.3	26.2	19.5	21.0	20.9	21.7	+0.8
	23-26					45.6	40.1	33.5	32.1	28.4	23.1	20.6	17.1	15.1	16.8	16.2	18.2	+2.0
	27-30									26.1	21.6	19.3	17.0	15.3	14.0	13.1	13.7	+0.5
% saying most or all	18	4.8	6.4	5.4	5.1	4.5	3.4	3.4	2.6	1.9	2.6	1.9	1.3	1.3	2.0	1.8	2.0	+0.2
	19-22	3.8	5.7	4.6	3.8	3.3	2.9	1.3	1.9	1.4	0.7	1.0	0.6	0.9	0.2	1.1	1.2	+0.1
	23-26					1.9	1.8	1.7	1.2	0.3	0.6	0.7	0.8	0.4	1.5	0.9	0.5	-0.4
	27-30									0.6	0.4	0.5	0.5	0.1	0.5	0.5	0.3	-0.2
Take barbiturates																		
% saying any friends	18	30.5	31.1	31.3	28.3	28.6	27.1	25.6	24.3	19.7	20.3	17.4	14.8	16.4	17.8	18.2	17.8	-0.4
	19-22	33.2	27.9	27.7	23.6	22.0	17.2	18.8	15.5	14.0	14.1	11.9	12.8	10.7	11.7	9.7	13.3	+3.6
	23-26					22.2	18.7	16.3	14.1	11.2	10.4	8.9	8.3	8.7	8.2	7.6	9.6	+2.0
	27-30									12.0	8.5	8.8	7.1	6.6	6.7	7.4	7.2	-0.2
% saying most or all	18	2.6	2.1	1.8	1.7	1.7	1.6	1.4	1.1	1.1	1.4	0.6	0.5	0.6	1.0	1.1	1.4	+0.3
	19-22	1.1	1.3	1.0	0.8	0.8	0.5	0.3	0.4	0.8	0.1	0.2	0.3	0.1	0.1	0.3	0.8	+0.5
	23-26					0.4	0.3	0.3	0.3	0.1	0.2	0.2	0.1	0.1	0.3	0.2	0.0	-0.2
	27-30									0.2	0.0	0.4	0.2	0.2	0.2	0.0	0.0	0.0
Take quaaludes																		
% saying any friends	18	32.5	35.0	35.5	29.7	26.1	26.0	23.5	22.0	17.1	16.8	14.3	12.0	13.1	14.2	14.2	15.5	+1.3
	19-22	38.3	36.2	35.4	30.5	24.6	19.9	20.3	16.9	12.5	10.9	10.0	10.6	9.2	10.0	7.8	11.5	+3.7
	23-26					25.7	21.0	17.4	15.0	12.1	10.3	8.6	5.9	6.4	7.6	7.7	9.0	+1.3
	27-30									11.8	7.9	8.2	7.0	7.1	6.5	6.6	4.5	-2.1
% saying most or all	18	3.6	3.6	2.6	2.6	1.7	1.3	1.6	1.0	1.0	1.3	0.8	0.5	0.8	1.1	1.1	1.3	+0.2
	19-22	1.9	2.7	1.2	1.3	1.2	0.6	0.2	0.4	0.4	0.2	0.6	0.2	0.1	0.1	0.2	0.7	+0.5
	23-26					0.6	0.3	0.7	0.2	0.2	0.4	0.2	0.1	0.2	0.6	0.2	0.2	0.0
	27-30									0.5	0.2	0.2	0.2	0.0	0.2	0.0	0.0	0.0
Take tranquilizers																		
% saying any friends	18	29.7	29.5	29.9	26.7	26.6	25.8	24.2	23.3	19.9	18.0	14.9	13.5	14.6	15.5	16.5	15.6	-0.7
	19-22	37.5	33.9	28.7	22.9	22.0	19.7	20.6	18.0	16.4	14.6	13.4	13.0	11.3	11.9	9.5	13.6	+4.1
	23-26					29.3	26.3	22.3	20.8	15.5	13.1	14.8	12.1	12.5	11.0	13.4	10.4	-3.0
	27-30									20.1	16.6	16.9	14.9	12.0	12.5	13.9	11.9	-2.0
% saying most or all	18	1.9	1.4	1.1	1.2	1.5	1.2	1.3	1.0	0.7	1.5	0.5	0.4	0.7	0.9	0.9	1.1	+0.2
	19-22	0.7	0.9	0.5	0.8	0.3	0.7	0.3	0.6	0.4	0.1	0.4	0.5	0.1	0.1	0.2	0.7	+0.5
	23-26					0.4	0.3	0.5	0.0	0.3	0.4	0.2	0.3	0.1	0.4	0.3	0.0	-0.2
	27-30									0.5	0.3	0.4	0.2	0.1	0.2	0.4	0.0	-0.4
Take steroids																		
% saying any friends	18											25.9	24.7	21.5	19.0	18.1	19.5	+1.4
	19-22										23.4	21.5	22.2	19.7	20.7	16.8	16.6	-0.2
	23-26										15.3	15.0	12.3	14.5	11.1	10.5	12.4	+1.6
	27-30										9.9	10.5	7.5	8.0	8.0	8.0	8.0	-0.1
% saying most or all	18											1.8	1.0	1.7	0.9	1.2	1.3	+0.1
	19-22										0.2	0.6	0.0	0.1	0.4	0.2	0.1	-0.1
	23-26										0.4	0.0	0.0	0.2	0.1	0.1	0.0	-0.1
	27-30										0.5	0.0	0.0	0.0	0.2	0.1	0.0	-0.1

(Table continued on next page)

There also has been a decline for 27 tp 30 year olds of about 6 percentage points since 1989. These declines did not continue in 1995 among the young adults.

- ***Tranquilizer*** availability has been declining gradually among high school seniors from 72% in 1975 to 38% in 1995. From 1980, when data were first available for 19 to 22 year olds, through 1992, availability declined more sharply and from a higher level (from 67% to 41% in 1992) than among seniors, such that previous differences in availability between them have been eliminated since 1992. The older age groups also showed an overall decline in the availability of tranquilizers through 1991, with little change since then.

- Data on ***steroid*** availability were first gathered in 1990, and there was little systematic change in any age group through 1992. In 1993, however, all showed some drop in availability, though no one of them reached statistical significance. Since then, availability has been fairly flat. It drops with age, from 46% among seniors to 33% among 27 to 30 year olds, but, considering that steroids are used primarily by males, these are quite high levels of availability.

Source: *The Monitoring the Future Study*, The University of Michigan

TABLE 17 (cont.)
Trends in Reported Availability of Drugs
Young Adults in Modal Age Groups of 18, 19-22, 23-26, and 27-30
(Entries are percentages)[a]

Q. How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?	Age Group	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	'94-'95 change
		Percent saying "fairly easy" or "very easy" to get[a]																
Some other narcotic (including methadone)	18	29.4	29.6	30.4	30.0	32.1	33.1	32.2	33.0	35.8	38.3	38.1	34.6	37.1	37.5	38.0	39.8	+1.8
	19-22	32.7	32.4	30.8	31.0	28.7	34.3	32.6	33.8	37.9	37.9	35.6	35.4	35.2	33.5	35.1	38.7	+3.6
	23-26					32.8	32.1	33.6	32.2	35.9	36.4	34.7	33.2	33.9	33.1	35.8	32.6	-3.2
	27-30									31.6	36.2	36.1	29.0	31.8	33.0	34.8	36.9	+2.1
Amphetamines	18	61.3	69.5	70.8	68.5	68.2	66.4	64.3	64.5	63.9	64.3	59.7	57.3	58.8	61.5	62.0	62.8	+0.8
	19-22	71.7	72.6	73.5	69.7	69.1	69.1	63.1	61.8	61.3	62.2	57.7	58.3	56.3	56.0	56.6	60.3	+3.7
	23-26					65.8	66.0	64.5	65.3	62.2	60.1	55.8	54.8	54.5	52.6	52.9	56.0	+3.1
	27-30									54.3	58.6	55.3	54.4	50.4	52.9	48.3	53.7	+5.4
"Ice"	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	24.0	24.3	26.0	26.6	25.6	27.0	+1.4
	19-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	24.0	21.8	22.5	20.9	24.7	25.5	+0.7
	23-26					NA	NA	NA	NA	NA	NA	22.3	20.0	21.3	22.9	24.5	24.7	+0.2
	27-30									NA	NA	27.3	19.7	22.0	21.2	21.7	25.8	+4.1
Barbiturates	18	49.1	54.9	55.2	52.5	51.9	51.3	48.3	48.2	47.8	48.4	45.9	42.4	44.0	44.5	43.3	42.3	-1.0
	19-22	59.5	61.1	56.8	54.2	48.1	52.7	46.8	44.6	45.5	47.7	44.2	41.7	43.4	41.9	40.6	42.9	+2.3
	23-26					52.7	47.7	46.4	45.9	47.4	44.8	41.6	39.6	42.0	38.8	40.3	42.1	+1.8
	27-30									43.2	44.5	44.2	38.5	37.8	39.7	37.4	39.9	+2.5
Tranquilizers	18	59.1	60.8	58.9	55.3	54.5	54.7	51.2	48.6	49.1	45.3	44.7	40.8	40.9	41.1	39.2	37.8	-1.4
	19-22	67.4	62.8	62.0	62.3	52.5	55.6	52.9	50.3	50.0	49.4	45.4	44.8	40.7	40.9	41.0	40.2	-0.8
	23-26					60.2	54.3	54.1	56.3	52.8	51.4	47.8	45.1	48.1	43.2	45.9	44.3	-1.6
	27-30									55.3	54.4	54.9	47.5	47.8	47.4	44.4	44.8	+0.4
Steroids	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46.7	46.8	44.8	42.9	45.5	+2.6
	19-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	44.1	44.8	46.3	41.7	40.9	41.8	+0.9
	23-26					NA	NA	NA	NA	NA	NA	37.6	35.8	39.3	35.8	37.0	37.4	+0.4
	27-30									NA	NA	36.4	30.6	35.0	31.6	30.5	33.1	+2.7
Approximate Weighted N=	*18*	*3240*	*3578*	*3602*	*3385*	*3269*	*3274*	*3077*	*3271*	*3231*	*2806*	*2549*	*2476*	*2586*	*2670*	*2526*	*2552*	
	19-22	*582*	*601*	*582*	*388*	*559*	*571*	*592*	*581*	*568*	*572*	*571*	*534*	*512*	*480*	*459*	*470*	
	23-26					*540*	*541*	*548*	*539*	*526*	*514*	*537*	*511*	*523*	*500*	*463*	*449*	
	27-30									*519*	*513*	*510*	*487*	*475*	*473*	*437*	*445*	

Source: The Monitoring the Future Study, the University of Michigan.

NOTES: Level of significance of difference between the two most recent years: * = .05, ** = .01, *** = .001. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

[a]Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, and (5) Very easy.

students in grade 12. Overall, Hispanic students (7.5%) were significantly more likely than white and black students (2.6% and 1.3%, respectively) to report current cocaine use. This significant difference was identified for both male and female students. Current cocaine use varied nearly fourfold from 1.4% to 4.9% (median: 3.0%) across the state surveys and varied fivefold from 0.9% to 4.6% (median: 2.1%) across the local surveys.

Nationwide, 4.5% of students had used crack or freebase forms of cocaine during their lifetime (Table 18). Black male students (3.2%) were significantly more likely than black female students (0.3%) to have ever used crack cocaine. Overall, white and Hispanic students (4.2% and 10.5%, respectively) were significantly more likely than black students (1.6%) to have ever used crack cocaine, and Hispanic students (10.5%) were significantly more likely than white students (4.2%) to have done so. Hispanic and white female students (11.6% and 2.9%, respectively) were significantly more likely than black female students (0.3%) to have ever used crack cocaine. Hispanic female students (11.6%) also were significantly more likely than white female students (2.9%) to have done so. Hispanic male students (9.4%) were significantly more likely than black male students (3.2%) to have used crack cocaine. A nearly fourfold variation in crack or freebase use was observed across the state surveys, which ranged from 1.8% to 6.9% (median: 4.0%); a greater than tenfold variation was observed across the local surveys, which ranged from 0.7% to 7.4% (median: 2.9%) (Table 19).

Steroid Use

Nationwide, 3.7% of students had used steroids without a physician's prescription during their lifetime (Table 20). Overall, male students (4.9%) were significantly more likely than female students (2.4%) to have used steroids. This significant difference was identified for white students and students in grade 12. Overall, white and Hispanic students (3.8% and 4.7%, respectively) were significantly more likely than black students (1.6%) to have used steroids. Hispanic female students (5.3%) were significantly more likely than black female students (0.9%) to report lifetime steroid use, and white male students (5.3%) were significantly more likely than black male students (2.4%) to do so. Female students in grades 9 and 10 (3.4% and 3.1%, respectively) were significantly more likely to have used steroids than female students in grade 12 (1.0%). Lifetime steroid use varied threefold from 2.0% to 6.5% (median: 3.7%) across the state surveys and varied threefold from 1.7% to 5.1% (median: 3.2%) across the local surveys (Table 21).

Injecting-Drug Use

Nationwide, 2.0% of students had injected illegal drugs during their lifetime* (Table 20). Overall, male students (3.0%) were significantly more likely than female students (1.0%) to report injecting-drug use. This significant difference was identified for white and black students and students in grades 11 and 12. State prevalence rates varied threefold from 1.2% to 3.7% (median: 2.2%), and local prevalence rates varied nearly ninefold from 0.4% to 3.5% (median: 1.7%) (Table 21).

*Students were classified as injecting-drug users only if they a) reported injecting-drug use not prescribed by a physician and b) answered "one or more" to any of these questions: "During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?"; "During your life, how many times have you used any other type of illegal drug, such as LSD, PCP, ecstacy, mushrooms, speed, ice, or heroin?"; or "During your life, how many times have you taken steroid pills or shots without a doctor's prescription?"

TABLE 20. Percentage of high school students who used illegal steroids,* injected illegal drugs,† used other illegal drugs,§ and sniffed or inhaled intoxicating substances,¶ by sex, race/ethnicity, and grade — United States, Youth Risk Behavior Survey, 1995

Category	Lifetime illegal steroid use			Lifetime injected illegal-drug use			Lifetime use of other illegal drugs			Sniffed or inhaled intoxicating substances		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Race/Ethnicity												
White**	2.2 (±0.8)††	5.3 (±0.9)	3.8 (±0.6)	1.1 (±0.7)	2.8 (±0.9)	2.0 (±0.6)	17.0 (±3.8)	19.6 (±2.6)	18.4 (±2.6)	20.1 (±3.7)	25.0 (±2.5)	22.7 (±2.8)
Black**	0.9 (±0.5)	2.4 (±1.5)	1.6 (±0.8)	0.3 (±0.4)	2.1 (±1.3)	1.1 (±0.7)	2.3 (±1.8)	5.9 (±3.7)	3.9 (±1.6)	9.4 (±2.8)	8.9 (±2.0)	9.5 (±1.8)
Hispanic	5.3 (±2.6)	4.1 (±1.0)	4.7 (±1.5)	0.9 (±1.3)	3.5 (±1.4)	2.2 (±1.0)	17.2 (±5.7)	19.0 (±3.7)	18.1 (±3.8)	22.4 (±6.9)	23.1 (±6.1)	22.8 (±5.0)
Grade												
9th	3.4 (±1.5)	4.7 (±1.7)	4.1 (±1.3)	1.6 (±1.2)	3.8 (±1.8)	2.8 (±1.1)	10.3 (±3.8)	14.3 (±3.4)	12.5 (±2.6)	25.0 (±4.1)	23.9 (±4.7)	24.6 (±3.7)
10th	3.1 (±1.3)	4.2 (±1.5)	3.6 (±1.1)	1.7 (±1.3)	2.7 (±1.8)	2.2 (±1.3)	15.8 (±4.5)	17.5 (±3.4)	16.7 (±3.4)	21.3 (±4.3)	23.4 (±3.4)	22.4 (±1.9)
11th	2.2 (±1.2)	5.5 (±2.4)	3.9 (±1.4)	0.5 (±0.4)	2.8 (±1.0)	1.7 (±0.5)	15.3 (±4.2)	18.7 (±4.3)	17.0 (±2.9)	16.1 (±2.8)	22.0 (±3.9)	19.2 (±2.8)
12th	1.0 (±0.7)	4.8 (±1.2)	2.9 (±0.7)	0.4 (±0.4)	2.8 (±1.6)	1.6 (±0.9)	13.7 (±3.9)	20.1 (±3.6)	17.0 (±2.5)	12.6 (±4.1)	19.2 (±3.7)	15.9 (±2.6)
Total	2.4 (±0.6)	4.9 (±0.8)	3.7 (±0.6)	1.0 (±0.5)	3.0 (±0.6)	2.0 (±0.4)	14.1 (±2.7)	17.8 (±1.8)	16.0 (±1.8)	18.4 (±2.5)	22.1 (±2.3)	20.3 (±2.1)

*Ever used illegal steroids.
†Ever injected illegal drugs. Respondents were classified as injecting-drug users only if they a) reported injecting-drug use not prescribed by a physician and b) answered "one or more" to any of these questions: "During your life, how many times have you used any form of cocaine including powder, crack, or freebase?"; "During your life how many times have you used any other type of illegal drug, such as LSD, PCP, ecstacy, mushrooms, speed, ice, or heroin?"; or "During your life, how many times have you taken steroid pills or shots without a doctor's prescription?"
§Ever used any other type of illegal drug, such as LSD, PCP, ecstacy, mushrooms, speed, ice, or heroin.
¶Ever sniffed glue or breathed the contents of aerosol spray cans or inhaled any paint sprays to get high.
**Non-Hispanic.
††Ninety-five percent confidence interval.

OTHER DRUGS

Anabolic Steroids

While not widely reported in most CEWG areas, anabolic steroids remain readily available throughout Phoenix, in both oral and injectable forms; they sell for $2.25 per oral dose unit and $15–$18 per injectable dose unit. Police on the island of Hilo in Hawaii reported nine steroid law enforcement cases during 1995, while Kona had six such cases.

Inhalants

Inhalant abuse remains a serious problem among adolescents in Texas. Inhalant abusers comprised 8 percent of admissions in juvenile treatment programs during 1995 and 9 percent during first quarter 1996. The majority of the 1995 admissions were males (72 percent) and Hispanics (74 percent); 20 percent were white, and only 2 percent were African-American. However, African-American youth in Dallas continue abusing houseplant food by putting it in boiling water and inhaling the steam. In San Francisco, there are reports of inhalation of gasoline additives such as STP, called "chemo" on the street. According to focus group discussions in Philadelphia, toluene, spot remover, and other solvents are often inhaled in certain areas of the city. Unlike inhalent abusers in Texas, most inhalant abusers in other areas are predominately white males, often in their preteens to late teens. Several deaths in Minneapolis/St. Paul during 1995 were attributed to the intentional inhalation of volatile substances. Nitrous oxide, an inhalant medically used as a general anesthetic, reportedly sells for $7–$10 per cartridge in the Washington, DC, area.

Cough and Cold Medications

Dextromethorphan (DXM), an active ingredient in several cough medications, can produce hallucinations if consumed in sufficient quantity. The drug was present in the scopolamine/heroin mixture found in Philadelphia during May 1996. Well before that outbreak, across the Delaware River in the rural and suburban areas of New Jersey, DXM had achieved minor popularity as an abused substance. State crime laboratories in Texas have analyzed some "X" pills known as "rome" that include DXM and ephedrine. In San Francisco, reports persist of widespread consumption of cough syrup with DXM as the active ingredient.

ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) AMONG INJECTING DRUG USERS (IDUs)

Injecting drug use remains the second most common mode of exposure for AIDS cases nationwide, according to the Centers for Disease Control and Prevention (CDC). Through December 1995, injection-related AIDS cases accounted for 32.0 percent of the total diagnoses; of these cases, 25.4 percent (n=128,696) involved injecting drug use as the sole mode of exposure, and 6.6 percent (n=33,195) involved the

NIDA Research Report Series

Anabolic Steroids

A Threat to Mind and Body

The Price of Perfection

Shock waves went through the sports world when Canadian track superstar Ben Johnson was denied his gold medal at the 1988 Olympics after tests showed he had taken anabolic steroids. The incident called international attention to the use of anabolic steroids among world-class athletes to gain competitive advantage.

Still, athletes and nonathletes alike persist in taking them. Teenagers are taking anabolic steroids not just to excel in sports but to enhance their self-images by perfecting their physiques. There are even reports of male adults in physically demanding professions like law enforcement using them to appear tougher and more formidable.

As the drug grows in popularity so does awareness of the serious side effects it may cause. One of the most alarming is the threat of AIDS. HIV-human immunodeficiency virus-can be transmitted if shared needles are used to inject the drug.

But potential harm to physical and psychological health is only one aspect of this troubling trend.

A Question of Values

The nonmedical use of anabolic steroids raises more ethical and moral issues. Engaging in steroids use is illegal. Users are likely to find themselves acquiring these drugs through illicit-and expensive-channels. The heavy demand for anabolic steroids has given rise to black market, with sales estimated at as much as $400 million a year. Moreover, supplies, which are often illegally manufactured and do not meet established standards, may be contaminated.

Athletes who use these drugs are cheating. They gain an unfair advantage over opponents and violate the ban on steroids imposed by most major sports organizations.

Another Addictive Substance?

Can anabolic steroids be added to the list of addictive drugs? Early signs point to addictive patterns among users. At the very least, users demonstrate an unwillingness to give up anabolic steroids even in the face of possibly dire consequences to their health.

Stopping the Trend

As the health risks of anabolic steroids become more apparent, efforts to curtail their use -through education,

legislation, and medical practices-are intensifying.

For those already hooked, kicking the steroids habit is the best chance to escape devastating side effects. For potential users, the solution, of course, is to never take the drug at all. There are other ways to be a winner athletically and socially without harming health and without cheating.

"I daydreamed about walking down the hall in short shorts, a tank top and a great tan."

-Mark, 15

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A Threat to Mind and Body

Using Anabolic Steroids

Valid Medical Uses

Steroids are drugs derived from hormones. Anabolic steroids comprise one group of these hormonal drugs. In certain cases, some may have therapeutic value.

The U. S. Food and Drug Administration has approved the use of selected anabolic steroids for treating specific types of anemia, some breast cancers, osteoporosis, endometriosus, and hereditary angioedema, a rare disease involving swelling of some parts of the body.

Some medical specialists believe that anabolic steroids can improve the appetite and improve healing after surgery, but the FDA has withdrawn approval for such uses since the claims are vague and largely unsubstantiated.

What Are Anabolic Steroids?

Anabolic steroids - or more precisely, anabolic/androgenic steroids - belong to a group known as ergogenic, or so-called "performance-enhancing," drugs. They Some medical are synthetic derivatives of testosterone, a natural male hormone. "Anabolic" means growing or building. "Androgenic" means "masculinizing" or generating male sexual characteristics.

Most healthy males produce between 2 and 10 milligrams of testosterone a day. (Females do produce some testosterone, but in trace amounts.) The hormone's anabolic effects help the body retain dietary protein, thus aiding growth of muscles, bones, and skin.

The androgenic characteristics of testosterone are associated with masculinity. They foster the maturing of the male reproductive system in puberty, the growth of body hair and the deepening of the voice. They can affect aggressiveness and sex drive.

Do They Really Work?

Anabolic steroids are designed to mimic the body building traits of testosterone while minimizing its "masculinizing" effects. There are several types, with various combinations of anabolic and androgenic properties. The International Olympics Committee to date has placed 17 anabolic steroids and related compounds on its banned list.

Athletes who have used anabolic steroids-as well as some coaches, trainers, and physicians-do report significant

Athletes who have used anabolic steroids-as well as some coaches, trainers, and physicians-do report significant increases in lean muscle mass, strength, and endurance. But no studies show that the substances enhance performance. Anabolic steroids do not improve agility, skill or cardiovascular capacity. Some athletes insist that these substances aid in recovery from injuries, but no hard data exists to support the claim.

"There is little compelling scientific evidence to support the concept that steroids enhance athletic performance.

- Theodore J. Cicero, Ph.D., and Lynn H. O'Connor, Ph.D., 1990

"I wanted to be the best swimmer and black female athlete ever.

- Grace, 17

"Athletes would rather confess to cocaine use than to steroids use.

- Dr. Charles E. Yesalis, Pennsylvania State University

Sports Organizations Outlawing Anabolic Steroids

The International Olympics Committee banned steroids use by all athletes in its member associations in 1975. Since then most major amateur and professional organizations have put the drugs on their list of banned substances. They include:

National Football League

National Collegiate Athletic Association

International Amateur Athletic Federation

International Federation of Body Builders

A Brief History

Winning Through Doping

The drive to compete-and to win-is as old as humankind. Throughout history, athletes have sought foods and potions to transform their bodies into powerful, well tuned machines.

Greek wrestlers ate huge quantities of meat to build muscle, and Norse warriors-the Berserkers-ate hallucinogenic

mushrooms to gear up for battle.

The first competitive athletes believed to be charged with "doping taking drugs and other nonfood substances to improve performance were swimmers in Amsterdam in the 1860s. Doping, with anything from strychnine and caffeine to cocaine and heroin, spread to other sports over the next several decades.

Enter Anabolic Steroids

The use of anabolic steroids by athletes is relatively new. Testosterone was first synthesized in the 1930's and was introduced into the sporting arena in the 1940's and 1950's. When the Russian weightlifting team thanks, in part, to synthetic testosterone-walked off with a pile of medals at the 1952 Olympics, an American physician determined that U. S. competitors should have the same advantage.

By 1958 a U.S. pharmaceutical firm had developed anabolic steroids. Although the physician soon realized the drug had unwanted side effects, it was too late to halt its spread into the sports world.

Early users were mainly bodybuilders, weightlifters, football players, and discus, shot put, or javelin throwers-competitors who relied heavily on bulk and strength.

During the 1970's demand grew as athletes in other sports sought the competitive edge that anaholic steroids seemed to provide.

By the 1980's, as nonathletes also discovered the body-enhancing properties of steroids, a black market began to flourish for the illegal production and sale of the drugs for nonmedical purposes.

"There may be a greater number of cases of anabolic steroid-induced psychiatric illness in this country than had been assumed...these effects may pose a danger not only to the steroids user but to the public at large.

-David Katz and Harrison Pope, Harvard University

The Position of the Medical Community

The American Medical Association condemns the use of anabolic steroids by athletes. Other medical associations have joined with the AMA in deploring steroids abuse, including the:

American Academy of Pediatrics
American College of Sports Medicine
American Osteopathic

Academy of Sports Medicine

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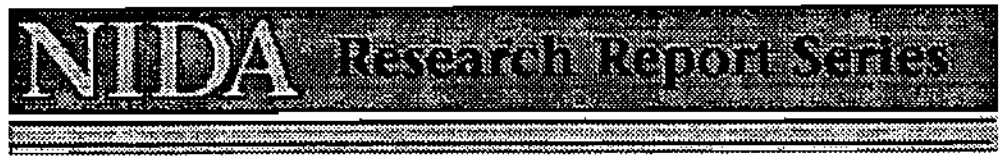


Anabolic Steroids

A Threat to Mind and Body

Abusing Anabolic Steroids

Who Takes Them-and Why?

Today it is not only the college football player or the professional weightlifter or the marathon runner who may use anabolic steroids.

It may be an 18-year-old who loathes his skinny body. Or a 15-year old in a hurry to reach maturity.

Or a policeman who wants more muscle power on the job.

And the use of anabolic steroids is not confined to males. Professional and amateur female athletes-track and field competitors, swimmers, bodybuilders-feel the pressure to triumph, too.

Increasing numbers of adolescents are turning to steroids for cosmetic reasons. In a 1986 survey, as many as 45 percent of 200 high school users cited appearance as a primary reason for taking steroids.

Young people who use steroids defy easy categorizing. They come from cities and rural areas, from poor families and wealthy ones. They are of all races and nationalities. The common link among them is the desire to look, perform and feel better at almost any cost. Users-and especially the young-are apt to ignore or deny warnings about health risks. if they see friends growing taller and stronger on steroids, they want the same benefits. They want to believe in the power of the drug.

How Prevalent is Use?

Surveys and anecdotal evidence indicate that the rate of nonmedical steroids use may be increasing. In 1990, a NIDA survey of high school seniors showed that nearly 3 percent-5 percent of males and 0.5 percent of females-reported using steroids at some time in their lives. The same survey showed that steroids were used within the last year by nearly as many students as crack cocaine and by more students than the hallucinogenic drug PCP.

Use among college females appears to have increased somewhat. A study of 11 universities in 1984 found that steroids users were reported in only one women's sport-swimming-at a rate of 1 percent. In a follow-up survey in 1988, 1 percent of women in track and field and basketball also reported taking steroids.

Use among adult or professional athletes has not been well documented, although anecdotal evidence clearly supports the suggestion that anabolic steroids have enjoyed popularity among football players, weightlifters,

wrestlers, and track and field competitors, among others.

Megadosing

Anabolic steroids are usually taken in pill form. Some that cannot be absorbed orally are taken by injection. The normal prescribed daily dose for medical purposes usually averages between 1 and 5 milligrams.

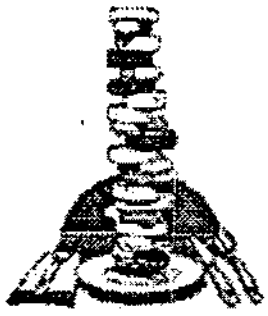
Some athletes, on the other hand, may take up to hundreds of milligrams a day, far exceeding medically recommended dosages.

Operating on the erroneous more-is-better theory, some athletes indulge in a practice known as "stacking." They take many types of steroids, sometimes in combination with other drugs such as stimulants, depressants, pain killers, anti-inflammatories, and other hormones.

Many users "cycle," taking the drugs for 6 to 12 weeks or more, stopping for several weeks and then starting another cycle. They may do this in the belief that by scheduling their steroids intake, they can manipulate test results and escape detection. It is not uncommon for athletes to cycle over a period of months or even years.

A Glossary of Terms

Drug and steroids use in sports has spawned a glossary of its own:



- ***Blending.*** Mixing different drugs.
- ***Bulking up.*** Increasing muscle mass through steroids.
- ***Cycling.*** Taking multiple doses of steroids over a specified period of time, stopping for a time and starting again.
- ***Doping.*** Using drugs and other nonfood substances to improve athletic performance and prowess.
- ***Ergogenic drugs.*** Performance enhancing substances.
- ***Megadosing.*** Taking massive amounts of steroids, by injection or pill.
- ***Plateauing.*** When a drug becomes ineffective at a certain level.
- ***Roid rages.*** Uncontrolled outbursts of anger, frustration or combativeness that may result from using anabolic steroids.
- ***Shotgunning.*** Taking steroids on a hit-or-miss basis.
- ***Stacking.*** Using a combination of anabolic steroids, often in combination with other drugs.
- ***Tapering.*** Slowly decreasing steroids intake.

NIDA Research Report Series

Anabolic Steroids

A Threat to Mind and Body

Health Hazards

Raising a Red Flag

Although controlled studies on the long-term outcome of megadosing with anabolic steroids have not been conducted, extensive research on prescribed doses for medical use has documented the potential side effects of the drug, even when taken in small doses. Moreover, reports by athletes, and observations of attending physicians, parents, and coaches do offer substantial evidence of dangerous side effects.

Some effects, such as rapid weight gain, are easy to see. Some take place internally and may not be evident until it is too late. Some are irreversible.

The Dangers

... to Men

Males who take large doses of anabolic steroids typically experience changes in sexual characteristics. Although derived from a male sex hormone, the drug can trigger a mechanism in the body that can actually shut down the healthy functioning of the male reproductive system. Some possible side effects:

- Shrinking of the testicles
- Reduced sperm count
- Impotence
- Baldness
- Difficulty or pain in urinating
- Development of breasts
- Enlarged prostate

... and to Women

Females may experience "masculinization" as well as other problems:

- Growth of facial hair
- Changes in or cessation of the menstrual cycle
- Enlargement of the clitoris
- Deepened voice

- Breast reduction

... and to Both Sexes

For both males and females, continued use of anabolic steroids may lead to health conditions ranging from merely irritating to life-threatening. Some effects are:

- Acne
- Jaundice
- Trembling
- Swelling of feet or ankles
- Bad breath
- Reduction in HDL, the "good" cholesterol
- High blood pressure
- Liver damage and cancers
- Aching joints
- Increased chance of injury to tendons, ligaments, and muscles

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"I was more aggressive, but is aggressiveness bad?"

-Tony, former steroids user

Special Dangers to Adolescents

Anabolic steroids can halt growth prematurely in adolescents. Because even small doses can irreversibly affect growth, steroids are rarely prescribed for children and young adults, and only for the severely ill. The Office of the Inspector General in the U.S. Department of Health and Human Services has gathered anecdotal evidence that preteens and teens taking steroids may be at risk for developing a dependence on them drugs and on other substances as well.

Anabolic steroids can halt growth prematurely in adolescents.

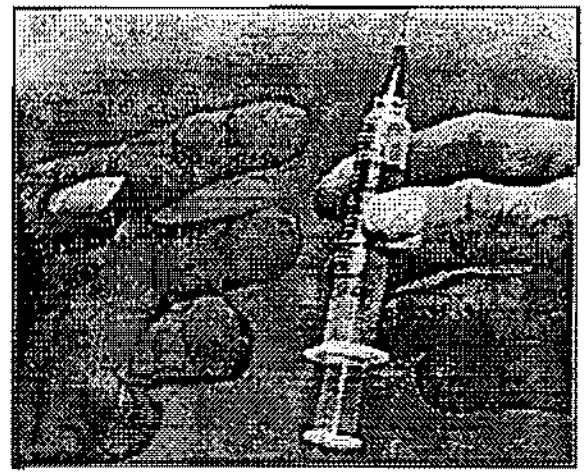
The Threat of AIDS

People sometimes take injections of anabolic steroids to augment oral dosages, using large-gauge, reusable needles normally obtained through the black market. If needles are shared, users run the risk of transmitting or contracting the HIV infection that can lead to AIDS.

The Psychological Effects

Scientists are just beginning to investigate the impact of anabolic steroids on the mind and behavior. Many athletes report "feeling good" about themselves while on a steroids regimen. The downside, according to Harvard researchers, is wide mood swings ranging from periods of violent, even homicidal, episodes known as "roid rages" to bouts of depression when the drugs are stopped.

The Harvard study also noted that anabolic steroids users may suffer from paranoid jealousy, extreme irritability, delusions, and impaired judgment stemming from feelings of invincibility.



"If needles are shared, steroids users run the risk of transmitting or contracting the HIV infection that can lead to AIDS."

NIDA Research Report Series

Anabolic Steroids

A Threat to Mind and Body

Are Anabolic Steroids Addictive?

Evidence that megadoses of anabolic steroids can affect the brain and produce mental changes in users poses serious questions about possible addiction to the drugs.

While investigations continue, researchers at Yale University have found that long-term steroids users do experience many of the characteristics of classic addiction: cravings, difficulty in ceasing steroids use and withdrawal symptoms.

Pennsylvania State University researchers studied a group of high school seniors who had developed a psychological, if not physical, dependence on anabolic steroids. Adolescent users exhibit a prime trait of addicts-denial. They tend to overlook or simply ignore the physical dangers and moral implications of taking illegal substances.

Certain delusional behavior that is characteristic of addiction can occur. Some athletes who "bulk up" on anabolic steroids are unaware of body changes that Are obvious to others, experiencing what is sometimes called reverse anorexia.

Supply And Demand: The Black Market

Many users maintain their habit with anabolic steroids acquired through a highly organized black market handling up to $400 million worth of the drugs a year.

Until recently most underground steroids were legitimately manufactured pharmaceuticals that were diverted to the black market through theft and fraudulent prescriptions. More effective law enforcement coupled with greater demand forced black marketers to seek new sources.

Now black-market anabolic steroids are either made overseas and smuggled into the United States or are produced in clandestine laboratories in this country. These counterfeit drugs may present greater health risks because they are manufactured without controls and thus may be impure, mislabeled, or simply bogus.

Sales are made in gyms, health dubs, on campuses, and through the mail. Users report that suppliers may be drug dealers or they may be trainers, physicians, pharmacists, or friends.

It's not hard for users to buy the drugs or to learn how to use them. Many of them rely on an underground manual, a "bible" on steroids that circulates around the country.

Safe-And Healthy-Alternatives

Anabolic steroids may have a reputation for turning a wimp into a winner or a runt into a hulk, but the truth is that it takes a lot more to be a star athlete.

Athletic prowess depends not only on strength and endurance, but on skill and mental acuity. It also depends on diet, rest, overall mental and physical health, and genes. Athletic excellence can be, and is, achieved by millions without reliance on dangerous drugs.

Fighting Back

Testing

The major national and international sports associations enforce their ban against anabolic steroids by periodic testing. Testing, however, is controversial.

Some observers say the tests are not reliable, and even the International Olympic Committees tests, considered to be the most accurate, have been challenged. Athletes can manipulate results with "masking agents" to prevent detection, or they can take anabolic steroids that have calculable detection periods.

Despite the problems, testing remains an important way of monitoring and controlling the abuse of steroids among athletes. Efforts are underway to make testing more accurate.

Treatment

Treatment programs for steroids abusers are just now being developed as more is learned about the habit.

Medical specialists do find persuasion is an important weapon is getting the user off the drug. They attempt to present medical evidence of the damage anabolic steroids can do to the body. One specialist notes that medical tests, such as those that show a lowered sperm count, can motivate male athletes to cease usage.

One health clinic considers the anabolic steroids habit as an addiction and structures treatment around the techniques used in traditional substance abuse programs. It focuses on acute intervention and a long-term follow-up, introducing nonsteroids alternatives that will maintain body fitness as well as self-esteem.

Legislation

Both Federal and State governments have enacted laws and regulations to control anabolic steroids abuse.

In 1988, Congress passed the Anti-Drug Abuse Act, making the distribution or possession of anabolic steroids for nonmedical reasons a Federal offense. Distribution to minors is a prison offense.

In 1990, Congress toughened the laws, passing legislation that classifies anabolic steroids as a controlled substance. The new law also increases penalties for steroids use and trafficking. To halt diversion of anabolic steroids onto the black market, the law imposes strict production and record keeping regulations on pharmaceutical firms.

Over 25 states have passed laws and regulations to control steroids abuse, and many others are considering similar legislation.

Education

Prevention is the best solution to halting the growing abuse of anabolic steroids. The time to educate youngsters is before they become users.

Efforts must not stop there, however. Current users, as well as coaches, trainers, parents, and medical practitioners need to know about the hazards of anabolic steroids. The young need to understand that they are not immortal and that the drugs can harm them. An education campaign must also address the problem of covert approval by some members of the medical and athletic communities that encourages steroids use.

The message needs to be backed up by accurate information and spread by responsible, respected individuals.

"We see ... people not being able to see their lives falling apart, people trying to get Off the drug and not being able to.

-Kenneth Yashkin and Herbert Kleber, Yale University

Conference on the Impact of National Steroid Control Legislation in the United States

June 1995

In late 1994, the Drug Enforcement Administration (DEA), Office of Diversion Control, sponsored a conference on the impact of national steroid control legislation in the United States. The conference took place in Annapolis, Maryland from November 30 through December 1, and was attended by representatives of law enforcement, the Federal Government and the international scientific community. The purpose of the conference was to analyze the impact of the Anabolic Steroid Control Act of 1990 both from law enforcement and scientific standpoints and to examine what has been accomplished as a result of this legislation. This law, which became effective on February 27, 1991, placed more than two dozen anabolic steroids into Schedule III of the Controlled Substances Act (CSA). The conference also sought to evaluate the current situation with regard to steroid abuse and diversion.

Executive Summary

The participants in this conference examined the impact of the Anabolic Steroid Control Act of 1990. Although experts presented evidence of considerable achievement, the data continues to show that abuse of anabolic steroids constitutes a significant threat to the general public health and safety, especially with respect to adolescents and young adults. It was determined that, while there have been notable accomplishments under this legislation, there are several serious obstacles to its effectiveness. One of these obstacles is that the current provisions of the Federal Sentencing Guidelines establish grossly inadequate sentencing standards for steroid traffickers. This provides little deterrence to those interested in profiting from trafficking in steroids. It also has led some Federal prosecutors to the conclusion that the investigation and prosecution of steroid traffickers is not a justifiable expenditure of resources. Another obstacle is that steroids are not controlled in many key countries nor are they controlled under international treaty. This has created a situation in which no matter how successful we are in dealing with domestic diversion of steroids, there is a constant supply of these drugs being smuggled into the United States which are obtained from international sources.

These obstacles can and must be removed if the United States is to make any further progress against the steroid abuse problem.

Gene R. Haislip
Deputy Assistant Administrator
Office of Diversion Control
Drug Enforcement Administration

Law Enforcement Concerns

Speaking at the conference were three Assistant United States Attorneys (AUSAs) from various areas of the country along with one DEA Group Supervisor and a Senior Investigator. All were in agreement that steroid investigations and prosecutions were unlike those involving other drugs and posed special problems. Chief among these is that the sentencing guidelines, as currently structured, are wholly inadequate. Very often, good cases are

developed and successfully prosecuted but the convictions rarely result in any jail time because the guidelines are skewed away from treating anabolic steroids as the dangerous drugs that they are. Thus, there is no deterrent to serious trafficking.

As one AUSA pointed out, there is a kind of "discount" for steroids in the sentencing guidelines. Firstly, 10 milliliters (ml) or 50 tablets of an anabolic steroid equate to a single dosage unit of a Schedule III substance. This calculation of dosage units is not appropriate as no one who is taking anabolic steroids for legitimate purposes takes 10 ml or 50 tablets at once. As a result of this "discount", prosecutors must prove that massive quantities of steroids were involved to obtain even minimal incarceration for a convicted defendant. Secondly, under the drug equivalency tables steroids are not treated like other Schedule III controlled substances. While one gram of any other Schedule III drug equates to one gram of marijuana, two grams of anabolic steroids are needed to equal one gram of marijuana. To be effective, these guidelines must be amended so that steroids are treated as seriously as any other Schedule III drug.

The DEA Group Supervisor and Diversion Investigator had concerns similar to those of the AUSAs. Traffickers have become more sophisticated and organized since anabolic steroids were controlled under the provisions of the CSA. Steroids are available for illicit purposes and the great majority of those encountered by the DEA are from foreign sources. There are several factors which complicate these investigations. First, steroids are not controlled in international commerce and second, the use of regular and special international mail systems allows massive quantities to be smuggled into the United States quickly and cheaply.

The Food and Drug Administration (FDA) representative agreed that steroids and steroid substitutes such as clenbuterol were very easy to acquire illicitly due to lack of international controls. When presented with a violation of the Food, Drug and Cosmetic Act (FDCA) by steroid traffickers, FDA investigators will also look for wire and mail fraud, false claims, money laundering, etc., to bolster their cases and to achieve maximum sentencing.

The Department of Justice representatives agreed that the inadequacy of the sentencing guidelines made it difficult to "bring" steroid cases and that juries are often sympathetic to defendants in cases that are prosecuted. However, since so many young people are becoming involved with steroids, we must look at the bigger picture and not let ourselves become discouraged with light penalties. Steroid prosecutions do have some deterrent effect, especially against low level dealers who may have something to lose from a criminal conviction on their records.

The Royal Canadian Mounted Police (RCMP) representative said that in Canada more and more people are found to be using steroids merely to improve their physical appearance. The RCMP has found that most steroids entering Canada come from Europe and Mexico. The United States is not seen as a significant source of diverted steroids, merely as a transshipment point.

Findings

- 1. The diversion of domestic anabolic steroids is not now a significant factor in the overall supply of steroids on the illicit market in the United States. Mexico and the countries of Europe are the usual sources.
- 2. Street prices of anabolic steroids have increased substantially since these drugs came under the DEA's jurisdiction.
- 3. Steroid investigations are difficult to prosecute due to a variety of factors, but those posing the greatest impediments are the limitations imposed by the sentencing guidelines and the unreasonable conversion factor imposed by the drug equivalency tables for anabolic steroids.
- 4. The lack of international controls over foreign sources of supply makes it impossible to attack the illicit traffic at its source.
- 5. The public, including steroid abusers, needs to be better educated as to the negative effects of these drugs,

especially about the irreversible effects on women.

- 6. Widespread use of the mail system and the relatively low prices of anabolic steroids in foreign source countries make steroids attractive to traffickers and easy for them to smuggle into the United States.

- 7. U.S. professional and amateur sports organizations are encouraged to get more involved in policing the use of steroids by their athletes and enforcing their own rules regarding permanent banishment when steroid use is detected. Athletes are often looked to as heroes and role models by our youth and so must be held to a higher standard regarding drug use and fairness in sport.

- 8. U.S. enforcement agencies must enhance means of sharing information and coordinating their investigations.

- 9. In the course of these investigations, field investigators must be alert to the possibility of pursuing other prosecutable federal/state violations, not just of those laws under a particular agency's jurisdiction. For example, DEA could work closely with other law enforcement authorities to identify tax evasion, firearms, money laundering, food and drug labelling, customs, postal and other violations of other statutes to bolster their own trafficking investigations to bring the full force of law to bear on defendants.

Scientific and Related Issues

Domestic Abuse and Trafficking of Anabolic Steroids

Three presenters examined trends in the extent and nature of anabolic steroid abuse and trafficking since they became controlled substances in 1991. Charles Yesalis, Sc.D., focused on abuse by high school students; Paul Goldstein, Ph.D., examined abuse by body builders in the Chicago area; and James Tolliver, Ph.D., discussed the steroids submitted for analysis to DEA laboratories.

The presenters agreed that the Anabolic Steroid Control Act of 1990 has had an impact on the availability and use of anabolic steroids. Studies of self-reported steroid use among students in grades seven through twelve between 1986 and 1993 showed that use ranged from one to six percent. The rates of use were generally higher among boys (1 - 12 percent) than girls (0 - 2.5 percent). Studies in Maryland (1989 and 1992), North Carolina (1989 and 1991) and South Carolina (1989 and 1992) all suggested a decreasing trend in steroid use among high school students, although it was not possible to determine if this trend was statistically significant. Nevertheless, the 1991 National Household Survey on Drug Abuse showed that about one million people had used steroids at some time in their lives and that 300,000 had used them in 1990. Approximately 50 percent of these users were over 26 years of age.

Preliminary results from a study of body builders (a group particularly involved with steroid use) in the Chicago area supports the impact of control on steroid availability. Steroids in general, and some in particular, are more difficult to obtain. Prices have increased, supplies have become unstable and bogus steroids are more common. Some users have switched to alternative non-steroidal preparations such as clenbuterol, amino acids, vitamins, protein powders, and diuretics; many cannot get their steroid of choice. Virtually all current users obtain steroids from the black market compared to 50 percent who claimed to obtain steroids through the medical profession prior to 1991. Individuals who are determined to use anabolic steroids, however, can find ways to obtain them and professional and elite body builders continue to use them.

Exhibits of anabolic steroids encountered in the illicit traffic and submitted to DEA laboratories have decreased from a peak of 719 in 1992 to only 264 during the period January through September 1994. This probably reflects some decreased availability of steroids, but it may also indicate a reluctance on the part of law enforcement officers to pursue these types of cases because of the problems these cases pose to prosecutors. The most frequently identified steroids were testosterone (882 of the 1,977 exhibits from 1990 to October 1, 1994), nandrolone (244 exhibits), methenolone (198 exhibits), methandrostenolone (158 exhibits), stanozolol (115 exhibits) and oxymetholone (103 exhibits). The majority of these steroids were not domestic products but were smuggled into the

United States.

Abuse and Trafficking of Anabolic Steroid Alternatives

The next block of presentations examined the use of substances other than anabolic steroids by elite athletes and body builders. Ann Grandjean, Ph.D., and James Wright, Ph.D., explained the types of substances used while Sharon Kurns, Esq., discussed litigating cases involving steroid alternatives.

Although it appears that the majority of elite athletes do not use steroids or other banned drugs, there are those who continue to do so. The fame and financial rewards are too great for some, particularly body builders, to rely solely on natural methods to improve performance and appearance. It is clear that there has been a shift in the pattern of drug use among elite athletes in recent years. This is due in part to increased and improved drug testing and decreased availability of controlled steroids. Athletes have begun to report the use of dihydrotestosterone (the natural active metabolite of testosterone), epitestosterone and dehydroepiandrosterone (DHEA, the natural precursor to testosterone) in order to avoid detection. Human growth hormone (HGH), clenbuterol, gamma-hydroxy butyrate (GHB), insulin growth factor 1 (IGF-1) and antiestrogens (tamoxifen and clomiphene) are also non-controlled substances used to increase muscle growth. Other drugs such as diuretics, fluoxetine (Prozac), and analgesics (nalbuphine and butorphanol) are used as supplementary drugs to eliminate fluids and treat the pain associated with training. There is also an increased interest in nutrients and pseudonutrients, such as creatinine phosphate, chromium picollinate, amino acids and various herbal preparations. The efficacy of these substances is uncertain and most are known to cause adverse effects, particularly when used without medical supervision.

Felony cases involving anabolic steroids can be prosecuted either under the FDCA or the CSA. The FDCA can be used for other types of substances, including human growth hormone and GHB. Drug felonies under FDA law are generally harder to prove (usually due to a required finding of intent to defraud or mislead the Government or the consumer) but successful prosecutions tend to yield higher penalties. There have been a number of successful prosecutions for the distribution of counterfeit steroids and GHB with significant sentences. Felony drug cases involving steroids under the CSA are generally easier to prosecute, but because of the sentencing guidelines, convictions result in relatively light penalties. Increased cooperation among law enforcement agencies in investigating these cases and sharing information would help the prosecution of steroids and other anabolic agents under either law. It was noted that there is no administrative provision to add anabolic agents (other than anabolic steroids) to the schedules of controlled substances under the CSA. Thus, drugs such as HGH or clenbuterol cannot presently be controlled under the CSA.

International Aspects of Anabolic Steroid Abuse and Control

Since most anabolic steroids are smuggled into the United States, their control under the CSA is not enough to eliminate their domestic availability. Pirkko Korkia, Ph.D., described the abuse of anabolic steroids in Great Britain and Mr. Frank Sapienza discussed the possibility of control under the international drug conventions.

Although the control of anabolic steroids is under consideration in Great Britain, currently they are not controlled as abusable substances. Consequently, anabolic steroids are available and abused in many areas of Great Britain. Up to 46 percent of the body builders in some gyms are steroids users. The pattern of abuse is very similar to that in the United States, with users taking amounts in excess of therapeutic doses, cycling, stacking, and polydrug use. Of particular concern is the number of users who inject anabolic steroids, thus increasing the risk of the transmission of HIV and other infectious diseases.

The control of anabolic steroids at the international level is limited to the regulation of their use by international sports bodies. Anabolic steroids are not covered by the international drug control treaties which regulate the production, distribution and importation / exportation of these substances.

Findings

- 1. Anabolic steroid use among the general population of the United States has decreased since anabolic steroids were placed into Schedule III of the CSA.
- 2. Although the majority of athletes are drug free, certain groups of athletes and body builders continue to find ways to obtain and use anabolic steroids.
- 3. Anabolic steroids are more difficult to obtain, cost more, are of lower purity and quality and are primarily obtained on the black market since their control under the CSA.
- 4. Most anabolic steroids found in the United States illicit market are smuggled from other countries; there is little diversion of domestically produced anabolic steroids.
- 5. Testosterone, primarily of foreign origin, is the anabolic steroid most frequently identified in the illicit market.
- 6. Some anabolic steroid users have switched to alternative non-controlled drugs such as clenbuterol and human growth hormone.
- 7. Athletes and body builders also use a number of other substances including diuretics, analgesics (butorphanol and nalbuphine), hypnotics (GHB and triazolam), and nutritional supplements.
- 8. The FDCA provides a mechanism for the prosecution of felony drug offenses involving steroid alternatives. Successful prosecution of GHB cases with significant penalties is particularly noteworthy.
- 9. There is no control mechanism under the CSA to add anabolic agents, other than steroids, to the list of controlled substances.
- 10. Although anabolic steroids are abused and trafficked in a number of countries, most treat the problem as one which is best handled by sports bodies. This does not address the problems of trafficking and smuggling.

NIH NEWS RELEASE

NATIONAL INSTITUTES OF HEALTH

National Institute on Drug Abuse

New Drug Prevention Program Helps Student Athletes Avoid Steroids Use

A new drug prevention and education program called ATLAS (Adolescents Training and Learning to Avoid Steroids) is extremely effective in preventing use of anabolic steroids among high school athletes, according to a study published in the November 20, 1996 issue of the *Journal of the American Medical Association*. The study demonstrated that students in the ATLAS program had enhanced healthy behaviors, reduced factors that encourage steroid use, and lower intent to use steroids. The ATLAS program, created by scientists at the Oregon Health Sciences University and led by Dr. Linn Goldberg, was funded by a research grant from the National Institute on Drug Abuse (NIDA), National Institutes of Health.

"This is the first prevention study that has focused on the abuse of anablic steroids," said Dr. Alan I. Leshner, Director of NIDA. "The results are promising, with the potential to have a long-term impact of health of young people and on their use of drugs such as steroids."

The ATLAS program includes seven 50-minute classes led by coaches and student team leaders. These sessions focus on the effects of steroids, sports nutrition, and strength training alternatives to steroids use. Students also participate in drug refusal role playing and learn about anti-steroids media messages. In addition to the classes there are seven weight room sessions taught by Oregon Health Sciences University research staff. Information is also distributed to parents, and they were invited to a discussion session.

"ATLAS is a very unique approach to dealing with the problem of steroid use among athletes. It involves a team-approach that empowers student athletes to make the right choices through education. And we now know it works," comments Dr. Goldberg.

The randomized, prospective study involved 1,506 football players/students from 31 different high schools. This year-long study was the first study to use coaches as members of the drug prevention team. Students filled out confidential questionnaires immediately before and after participating in the ATLAS program and then again approximately 12 months later to measure the effectiveness of the program.

Compared to student athletes who were not exposed to the ATLAS program, ATLAS participants had increased understanding of the effects of steroids, greater belief in personal vulnerability to the consequences of steroid use, improved drug refusal skills, less belief in steroid-promoting media messages, increased belief in the team as an information source, improved perception of athletic abilities and strength training self-efficacy, improved nutrition and exercise behaviors and reduced intentions to use steroids.

In the 1995 Monitoring the Future Study, conducted under NIDA funding by the University of Michigan, about 2% of students in the 8th, 10th, and 12th grades had used anabolic steroids at least once in their lives. Anabolic steroids are synthetic derivatives of the male hormone testosterone. Their use, by athletes and others, increases lean muscle mass, strength, and the ability to train longer and harder. However, anabolic

steroids use can produce severe physical and emotional side effects. For adolescents, a serious side effect can be premature skeletal maturation, or stunted growth. Other risks include severe acne, trembling, high blood pressure, jaundice, and liver tumors. In addition, clinical depression often occurs when use of anabolic steroids is stopped, a factor which may lead to dependence.

NIDA, an Institute of the National Institutes of Health, supports over 85% of the world's research to increase knowledge and promote effective strategies to deal with the health problems and issues associated with drug abuse and addiction. The Institute also carries out a large variety of programs to ensure the rapid dissemination of research information and its implementation in policy and practice.

NIDA's research program on drug abuse prevention approaches has shown that when prevention programs are developed and implemented on sound theory and epidemiologic and behavioral research, such as the ATLAS program, they will decrease drug use. Other effective prevention approaches were highlighted at a recent NIDA conference on drug abuse prevention research.

For additional information on this study and other NIDA research, contact NIDA at (301) 443-6245 or visit the NIDA web site at http://www.nida.nih.gov.

FOR MORE INFORMATION

Full copies of publications used to produce this information packet may be obtained by contacting the agencies below:

Centers for Disease Control and Prevention
MMWR Series, Mailstop C-08
1600 Clifton Road, NE
Atlanta, GA 30333
Phone: 404-332-4555
http://www.cdc.gov

U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, *Youth Risk Behavior Surveillance—United States, 1995*, 1996.

Drug Enforcement Administration
Office of Diversion Control
Washington, D.C. 20537

U.S. Department of Justice
Drug Enforcement Administration
Conference on the Impact of National Steroid Control Legislation in the United States, June 1995.
http://www.usdoj.gov/dea/diverson/divpub/confer/steroids.htm

National Clearinghouse for Alcohol and Drug Information
PO Box 2345
Rockville, MD 20847-2345
1-800-729-6686 or
301-468-2600 in the metropolitan Washington, DC area
http://www.health.org

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *National Household Survey on Drug Abuse: Main Findings 1994*, 1996.
http://www.samhsa.gov/oas/nhsda/

National Institute on Drug Abuse
Division of Epidemiology and Prevention Research
5600 Fishers Lane, Room 9-A-53
Rockville, MD 20857
Phone: 301-443-6543

U.S. Department of Health and Human Services, National Institute on Drug Abuse, *Epidemiologic Trends in Drug Abuse, Highlights and Executive Summary, June 1996*, 1996.

National Institute on Drug Abuse
5600 Fishers Lane
Rockville, MD 20857
http://www.nida.nih.gov

U.S. Department of Health and Human Services, National Institute on Drug Abuse, *Anabolic Steroids: A Threat to Mind and Body*, no date.

U.S. Department of Health and Human Services, National Institute on Drug Abuse, *New Drug Prevention Program Helps Student Athletes Avoid Steroid Use*, ATLAS press release, November 19, 1996.

U.S. Government Printing Office
Superintendent of Documents
Mail Stop: SSOP
Washington, DC 20402-9328
202-512-8100

U.S. Department of Justice, Drug Enforcement Administration, *Drugs of Abuse 1996 Edition*, 1996.
http://www.usdoj.gov/dea/pubs/abuse/chap7/steroids.htm

University of Michigan
Institute for Social Research
Survey Research Center
Ann Arbor, MI 48109-1399
(313) 763-5043
http://www.isr.umich.edu/src/mtf

University of Michigan, Institute for Social Research, *The Monitoring the Future Study*, December 18, 1997 press release.

U.S. Department of Health and Human Services, National Institute on Drug Abuse, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995, Volume II: College Students and Young Adults*, 1997.

White House Office of National Drug Control Policy

Drug Policy Information Clearinghouse

WOMEN AND DRUGS

Facts and Figures

February 1998
PK20

1-800-666-3332 http://www.whitehousedrugpolicy.gov

INTRODUCTION

This information packet includes excerpts from selected Federal government. or Federally-sponsored publications that contain information on the relationship between women and drugs. These data include usage patterns and sentencing data. Information from the following publications is presented in this information packet:

Preliminary Results from the 1996 National Household Survey on Drug Abuse
National Household Survey on Drug Abuse: Population Estimates 1996
Monitoring the Future Study, December 1997
Drug Abuse Warning Network, Annual Emergency Department Data, 1996
Drug Abuse Warning Network, Annual Medical Examiner Data, 1995
Patterns of Substance Use and Substance-Related Impairment Among Participants in the Aid To Families with Dependent Children Program (AFDC)
Patterns of Substance Use and Pragram Participation
Substance Abuse Among Women and Parents
Crime in the United States, Uniform Crime Reports, 1996
1996 Drug Use Forecasting Annual Report on Adult and Juvenile Arrestees
Drug-Abusing Women Offenders: Results of a National Survey
Felony Defendants in Large Urban Counties, 1994
Felony Sentences in State Courts, 1994
Characteristics of Adults on Probation, 1995
State Court Sentencing of Convicted Felons, 1992
Women in Jail, 1989
National Corrections Reparting Program, 1992
Women in Prison
Survey of State Prison Inmates, 1991
Murder in Large Urban Counties, 1988
United States Sentencing Commission: 1996 Annual Report
National Drug and Addiction Treatment Unit Survey (NDATUS), 1996

Complete citations and ordering instructions for full copies of publications used in producing this information packet may be found on the last page.

This information packet was prepared by Jill Schmidtlein at the Drug Policy Information Clearinghouse. The Clearinghouse is funded by the White House Office of National Drug Control Policy (ONDCP) to support drug control policy research, and is a component of the National Criminal Justice Reference Service. For further information concerning the contents of this information packet or other drug policy issues, call 1-800-666-3332, write the Drug Policy Information Clearinghouse, PO Box 6000, Rockville, MD 20849-6000, or visit the ONDCP World Wide Web Site at www.whitehousedrugpolicy.gov.

9. WOMEN OF CHILDBEARING AGE

It is important to focus on women of childbearing age (age 15-44 in this report) because their substance abuse could affect the children they care for or give birth to. Because the NHSDA includes questions about pregnancy, it is possible to study substance use among pregnant women. To allow more detailed analyses to be done, data from the 1995 and 1996 NHSDAs were combined, providing a sample of 812 pregnant and 14,712 nonpregnant women age 15-44. The estimates below are average annual estimates for 1995 and 1996.

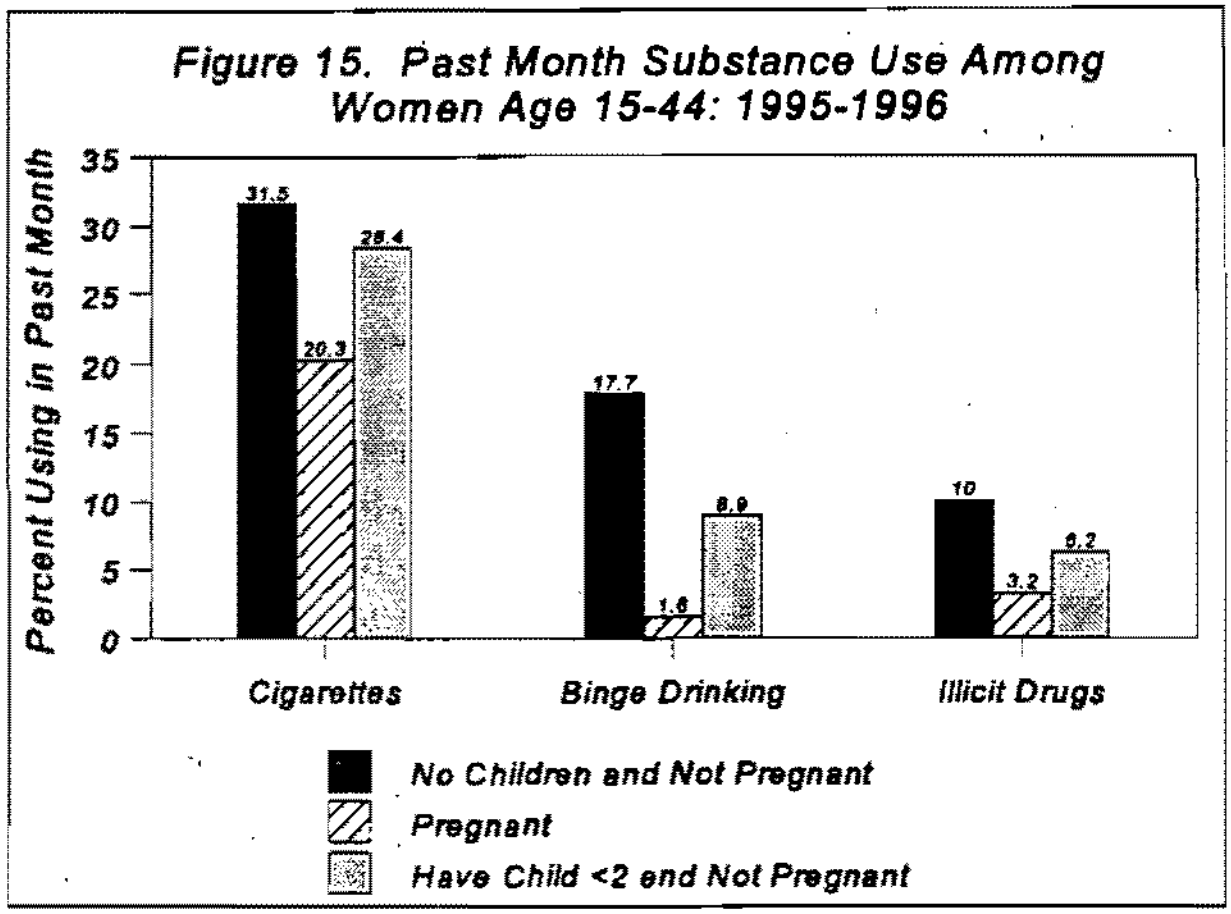
Reporting of pregnancy by NHSDA respondents appears reasonably accurate, producing an estimate of about 2.5 million pregnant women per year. This is close to the number of pregnant women on a given day that would be expected based on counts of live births from the birth registration system, and estimates of induced abortions and fetal loss rates (Ventura, Taffel, and Mosher 1995).

- Of the 4.1 million women age 15-44 who were current illicit drug users, more than 1.5 million (38 percent) had children living with them. More than 400,000 (11 percent) had at least one child under 2 years of age.

- Among women age 15-44 with no children who were not pregnant, 10.0 percent were current illicit drug users. Only 3.2 percent of pregnant women were current drug users, which suggests that most women may reduce their drug use when they become pregnant. However, women who recently gave birth (have a child under 2 years old, and not pregnant) had a rate of use of 6.2 percent, suggesting that many women resume their drug use after giving birth. Similar patterns are seen for alcohol and cigarette use (Figure 15).

- Among pregnant women, rates of substance use generally varied as they do among nonpregnant women. Rates were higher among women 15-25 than among those 26-44, and they were higher among unmarried women than among married women. One exception to this pattern was evident in smoking rates by age. Nonpregnant women age 15-25 and age 26-44 had about the same rates of smoking. However, among pregnant women, those age 26-44 had a significantly lower past month smoking rate than those age 15-25, suggesting that older women smokers are more likely to reduce their smoking during pregnancy than are younger women smokers.

Source: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, *Preliminary Results from the 1996 National Household Survey on Drug Abuse*, July 1997.



10. PERCEIVED RISK OF HARM AND OTHER MEASURES

In addition to the behavioral information on substance use, the NHSDA collects data on respondents' perceptions of the risk of harm of using drugs and the availability of drugs. For this report, perceived risk of harm is presented as the percent reporting that they perceive great risk of harm in using the drug at a specified level of frequency. Perceived availability is measured as the percent reporting that obtaining the drug is either very easy or fairly easy. Another measure included in the NHSDA related to availability of drugs is the percent of respondents reporting that they had been approached by someone selling drugs in the past month. All of these measures are important correlates of drug use that help explain the patterns and trends in substance use, particularly among youth.

- The percent of the population reporting great risk of harm in using marijuana once a month increased from 40 percent in 1994 to 44 percent in 1996. However, the percent reporting great risk in using marijuana more frequently (once or twice a week) did not change.

Source. Substance Abuse and Mental Health Services Administration. Office of Applied Studies, *Preliminary Results from the 1996 National Household Survey on Drug Abuse*. July 1997.

Table 32A. Estimated Numbers (in Thousands) of Lifetime, Past Year, and Past Month Users of Illicit Drugs, Alcohol, and Tobacco in the U.S. Population of Females Aged 15 to 44, by Pregnancy Status and Parental Status: Annual Averages Based on 1995 and 1996 Samples

	Females Aged 15-44											
	Used in Lifetime				Used in Past Year				Used in Past Month			
		Not Pregnant				Not Pregnant				Not Pregnant		
Drug	Pregnant	No Children	Has Child Aged <2[1]	All Children Aged ≥2[1]	Pregnant	No Children	Has Child Aged <2[1]	All Children Aged ≥2[1]	Pregnant	No Children	Has Child Aged <2[1]	All Children Aged ≥2[1]
Any Illicit Drug[2]	1,037	10,851	3,002	11,149	262	4,811	698	2,127	80	2,488	431	1,081
Marijuana and Hashish	973	9,983	2,775	10,372	224	3,944	509	1,445	40	2,000	318	738
Cocaine	329	3,269	842	3,475	70	773	97	364	14	260	36	178
Crack	98	699	169	389	35	273	22	109	14	88	14	57
Inhalants	104	2,013	305	1,062	22	583	27	40	7	183	15	18
Hallucinogens	244	3,220	731	2,538	43	988	73	126	5	391	47	64
PCP	64	773	219	887	6	99	29	7	*	8	29	3
LSD	139	2,522	563	1,856	29	625	23	28	2	176	6	6
Heroin	40	282	50	168	10	91	*	18	7	23	*	10
Nonmedical Use of Any Psychotherapeutic[3]	276	3,129	712	2,856	69	1,311	229	792	34	513	121	254
Stimulants	136	1,244	257	1,334	44	357	45	190	5	146	19	93
Sedatives	71	636	136	748	15	114	9	103	*	70	5	56
Tranquilizers	115	1,284	318	1,021	39	450	111	254	5	147	54	87
Analgesics	156	1,930	413	1,364	36	905	171	469	24	309	86	98
Any Illicit Drug other than Marijuana[2]	541	6,233	1,543	5,600	136	2,444	354	1,114	58	1,125	186	464
Alcohol	2,075	20,239	5,645	20,646	1,469	17,796	4,465	16,969	402	13,736	3,177	12,558
"Binge" Alcohol Use[4]	--	--	--	--	--	--	--	--	38	4,284	595	2,284
Heavy Alcohol Use[4]	--	--	--	--	--	--	--	--	12	1,050	136	434
Cigarettes	1,577	16,443	4,617	17,497	725	9,239	2,152	8,660	506	7,861	1,977	8,116
Smokeless Tobacco	85	1,894	337	888	7	338	32	77	4	132	7	36

*Low precision; no estimate reported.
-- Not available.

[1] The respondent and the child(ren) both (all) reside in the same household.
[2] Any Illicit Drug indicates use at least once of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP and LSD), heroin, or any prescription-type psychotherapeutic used nonmedically. Any Illicit Drug Other than Marijuana indicates use at least once of any of these listed drugs, regardless of marijuana use; marijuana users who also have used any of the other listed drugs are included.
[3] Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.
[4] "Binge" Alcohol Use is defined as drinking five or more drinks on the same occasion on at least one day in the past 30 days. By "occasion" is meant at the same time or within a couple hours of each other. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of five or more days in the past 30 days; all Heavy Alcohol Users are also "Binge" Alcohol Users.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 1995 and 1996.

Table 33. Percentages Reporting Lifetime, Past Year, and Past Month Use of Any Illicit Drug in the U.S. Population of Females Aged 15 to 44, by Pregnancy Status and Demographic Characteristics: Annual Averages Based on 1995 and 1996 Samples

Demographic Characteristics	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	Pregnant	Not Pregnant	Pregnant	Not Pregnant	Pregnant	Not Pregnant
TOTAL	41.5	45.2	10.5	13.8	3.2	7.2
AGE						
15-25	40.6	39.6	18.8	22.9	5.0	12.2
26-44	42.1	48.0	4.3	9.4	1.8	4.8
RACE/ETHNICITY						
White	47.8	52.3	11.0	15.2	3.5	7.8
Black	30.0	33.9	8.5	13.3	2.6	7.4
Hispanic	29.1	25.0	8.6	8.3	1.5	4.5
MARITAL STATUS						
Married	37.2	44.6	4.7	7.6	1.1	3.7
Not Married	52.5	45.9	25.5	20.2	8.6	10.9
Never Married	52.9	42.4	26.8	22.2	7.2	11.8
Divorced, Separated	*	56.9	*	13.9	*	8.0
POPULATION DENSITY[1]						
Large Metro	39.1	45.1	8.4	14.0	3.1	7.4
Small Metro	45.5	48.2	12.7	14.8	5.7	8.0
Nonmetro	40.5	41.3	11.5	12.1	3.7	5.7
PARENTAL STATUS						
No Children	43.0	43.5	17.3	19.3	5.3	10.8
Has Child Aged <2[2]	38.7	43.1	6.0	10.0	1.4	6.2
All Children Aged ≥2[2]	41.2	47.7	6.4	9.1	2.0	4.6
TRIMESTER[3]						
First	41.8	N/A	12.1	N/A	8.4	N/A
Second	44.9	N/A	12.1	N/A	1.1	N/A
Third	38.1	N/A	6.5	N/A	2.5	N/A
ADULT EDUCATION[4]						
<High School	45.0	41.3	16.8	15.9	8.0	10.1
High School Grad	38.8	47.3	7.2	13.3	1.9	7.1
Some College	34.4	48.8	7.8	11.5	*	5.6
College Graduate	*	46.9	6.8	10.6	*	4.6

*Low prevalence, no estimate reported
N/A Not applicable
NOTE Any Illicit Drug indicates use at least once of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP and LSD), heroin, or any prescription-type psychotherapeutic used nonmedically. Any Illicit Drug Other than Marijuana indicates use at least once of any of these listed drugs, regardless of marijuana use, marijuana users who also have used any of the other listed drugs are included
NOTE The sum of the pregnant and not pregnant females aged 15-44 is less than the total of all females aged 15-44 because of item nonresponse to the pregnancy question
[1] Population density is based on 1990 MSA classifications and their 1990 Census of Population counts
[2] The respondent and the child(ren) both (all) reside in the same household
[3] Trimester not reported by all pregnant respondents
[4] Data on adult education not shown for persons aged 12-17. Estimates for adult education are for persons aged 18 to 44
Source SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 1995 and 1996

Table 2A. Any Illicit Drug Use by Sex Within Age Group for Total Population in 1996

AGE/SEX	Ever Used		Used Past Year		Used Past Month	
	Observed Estimate	95% C.I.	Observed Estimate	95% C.I.	Observed Estimate	95% C.I.
RATE ESTIMATES (Percent)						
12-17	22.1	(20.4 - 23.8)	16.7	(15.1 - 18.5)	9.0	(8.0 - 10.2)
Male	21.5	(19.4 - 23.8)	16.4	(14.3 - 18.7)	9.2	(7.8 - 10.7)
Female	22.7	(20.6 - 24.9)	17.0	(15.0 - 19.2)	8.9	(7.5 - 10.5)
18-25	48.0	(45.5 - 50.5)	26.8	(24.7 - 28.9)	15.6	(14.1 - 17.2)
Male	53.6	(50.4 - 56.8)	32.5	(29.6 - 35.5)	20.2	(18.0 - 22.7)
Female	42.5	(39.5 - 45.4)	21.1	(19.0 - 23.3)	11.0	(9.4 - 12.7)
26-34	53.1	(51.3 - 54.9)	14.6	(13.4 - 15.9)	8.4	(7.5 - 9.4)
Male	57.5	(54.9 - 60.1)	18.4	(16.5 - 20.4)	11.0	(9.5 - 12.6)
Female	48.8	(46.4 - 51.3)	10.9	(9.5 - 12.5)	5.9	(4.9 - 7.2)
≥35	29.0	(27.2 - 30.9)	5.3	(4.6 - 6.2)	2.9	(2.3 - 3.6)
Male	35.3	(32.3 - 38.4)	7.8	(6.5 - 9.5)	4.2	(3.2 - 5.6)
Female	23.5	(21.4 - 25.8)	3.1	(2.4 - 4.0)	1.7	(1.1 - 2.5)
TOTAL	34.8	(33.4 - 36.1)	10.8	(10.0 - 11.7)	6.1	(5.5 - 6.7)
Male	40.0	(37.9 - 42.0)	13.9	(12.6 - 15.3)	8.1	(7.2 - 9.1)
Female	29.9	(28.3 - 31.6)	8.0	(7.3 - 8.7)	4.2	(3.7 - 4.8)
POPULATION ESTIMATES (In Thousands)						
12-17	4,968	(4,590 - 5,367)	3,761	(3,390 - 4,165)	2,031	(1,797 - 2,291)
Male	2,482	(2,240 - 2,741)	1,895	(1,654 - 2,162)	1,059	(904 - 1,236)
Female	2,486	(2,258 - 2,730)	1,867	(1,649 - 2,107)	972	(818 - 1,152)
18-25	13,346	(12,657 - 14,039)	7,439	(6,864 - 8,043)	4,332	(3,907 - 4,793)
Male	7,434	(6,987 - 7,876)	4,507	(4,109 - 4,924)	2,806	(2,493 - 3,147)
Female	5,913	(5,505 - 6,328)	2,932	(2,646 - 3,241)	1,526	(1,309 - 1,774)
26-34	18,833	(18,184 - 19,478)	5,170	(4,744 - 5,627)	2,979	(2,666 - 3,326)
Male	9,984	(9,528 - 10,434)	3,191	(2,866 - 3,543)	1,907	(1,654 - 2,194)
Female	8,848	(8,401 - 9,297)	1,979	(1,729 - 2,261)	1,072	(880 - 1,302)
≥35	37,243	(34,913 - 39,663)	6,812	(5,855 - 7,916)	3,693	(2,978 - 4,574)
Male	21,223	(19,412 - 23,106)	4,713	(3,889 - 5,693)	2,548	(1,937 - 3,341)
Female	16,021	(14,568 - 17,571)	2,099	(1,619 - 2,716)	1,145	(779 - 1,678)
TOTAL	74,390	(71,468 - 77,366)	23,182	(21,476 - 25,006)	13,035	(11,858 - 14,321)
Male	41,122	(39,009 - 43,272)	14,305	(12,953 - 15,773)	8,320	(7,375 - 9,374)
Female	33,268	(31,501 - 35,091)	8,878	(8,133 - 9,684)	4,715	(4,127 - 5,383)

* Low precision; no estimate reported

Source: Substance Abuse and Mental Health Services Administration, Office of Applied Studies
1996 National Household Survey on Drug Abuse

Table 3A. Marijuana Use by Sex Within Age Group for Total Population in 1996

AGE/SEX	Ever Used		Used Past Year		Used Past Month	
	Observed Estimate	95% C.I.	Observed Estimate	95% C.I.	Observed Estimate	95% C.I.
RATE ESTIMATES (Percent)						
12-17	16.8	(15.2 - 18.5)	13.0	(11.5 - 14.6)	7.1	(6.1 - 8.2)
Male	16.5	(14.6 - 18.5)	13.2	(11.5 - 15.2)	7.6	(6.4 - 9.1)
Female	17.1	(15.2 - 19.3)	12.7	(10.9 - 14.8)	6.6	(5.4 - 8.0)
18-25	44.0	(41.5 - 46.6)	23.8	(21.8 - 26.0)	13.2	(11.7 - 14.9)
Male	49.3	(46.0 - 52.4)	29.8	(26.9 - 32.8)	17.4	(15.1 - 19.9)
Female	38.9	(36.0 - 41.9)	18.0	(16.0 - 20.1)	9.1	(7.6 - 10.8)
26-34	50.5	(48.6 - 52.3)	11.3	(10.3 - 12.4)	6.3	(5.6 - 7.2)
Male	55.0	(52.2 - 57.7)	14.5	(12.8 - 16.4)	8.6	(7.3 - 10.2)
Female	46.1	(43.8 - 48.5)	8.3	(7.1 - 9.6)	4.1	(3.4 - 5.1)
≥35	27.0	(25.1 - 29.0)	3.8	(3.2 - 4.5)	2.0	(1.6 - 2.6)
Male	32.9	(30.0 - 35.9)	5.9	(4.8 - 7.3)	3.1	(2.4 - 4.2)
Female	21.8	(19.6 - 24.2)	1.9	(1.3 - 2.6)	1.0	(0.6 - 1.5)
TOTAL	32.0	(30.6 - 33.6)	8.6	(7.9 - 9.3)	4.7	(4.2 - 5.3)
Male	37.0	(34.9 - 39.1)	11.4	(10.3 - 12.6)	6.5	(5.7 - 7.4)
Female	27.5	(25.8 - 29.3)	6.0	(5.4 - 6.7)	3.1	(2.7 - 3.5)
POPULATION ESTIMATES (In Thousands)						
12-17	3,782	(3,425 - 4,169)	2,925	(2,599 - 3,285)	1,600	(1,378 - 1,853)
Male	1,902	(1,687 - 2,138)	1,529	(1,331 - 1,750)	877	(735 - 1,044)
Female	1,880	(1,664 - 2,118)	1,396	(1,196 - 1,625)	723	(593 - 877)
18-25	12,239	(11,544 - 12,942)	6,628	(6,055 - 7,236)	3,678	(3,266 - 4,134)
Male	6,824	(6,378 - 7,271)	4,128	(3,736 - 4,543)	2,411	(2,100 - 2,758)
Female	5,415	(5,007 - 5,834)	2,500	(2,222 - 2,803)	1,267	(1,060 - 1,509)
26-34	17,904	(17,255 - 18,553)	4,021	(3,658 - 4,415)	2,252	(1,977 - 2,563)
Male	9,544	(9,061 - 10,021)	2,520	(2,226 - 2,844)	1,501	(1,272 - 1,765)
Female	8,361	(7,942 - 8,782)	1,502	(1,292 - 1,741)	752	(610 - 925)
≥35	34,645	(32,258 - 37,140)	4,825	(4,045 - 5,747)	2,565	(2,005 - 3,276)
Male	19,769	(18,028 - 21,592)	3,540	(2,859 - 4,370)	1,894	(1,417 - 2,525)
Female	14,876	(13,371 - 16,501)	1,285	(916 - 1,798)	671	(441 - 1,017)
TOTAL	68,571	(65,405 - 71,817)	18,398	(16,986 - 19,916)	10,095	(9,059 - 11,242)
Male	38,039	(35,916 - 40,211)	11,716	(10,602 - 12,930)	6,683	(5,873 - 7,596)
Female	30,532	(28,634 - 32,507)	6,683	(6,035 - 7,394)	3,412	(2,950 - 3,943)

* Low precision; no estimate reported

Source: Substance Abuse and Mental Health Services Administration, Office of Applied Studies
1996 National Household Survey on Drug Abuse

Table 4A. Cocaine Use by Sex Within Age Group for Total Population in 1996

AGE/SEX	Ever Used		Used Past Year		Used Past Month	
	Observed Estimate	95% C.I.	Observed Estimate	95% C.I.	Observed Estimate	95% C.I.
RATE ESTIMATES (Percent)						
12-17	1.9	(1.5 - 2.4)	1.4	(1.1 - 1.8)	0.6	(0.4 - 0.9)
Male	1.6	(1.1 - 2.3)	1.1	(0.7 - 1.7)	0.4	(0.2 - 0.8)
Female	2.3	(1.7 - 3.1)	1.7	(1.2 - 2.4)	0.8	(0.5 - 1.4)
18-25	10.2	(9.1 - 11.5)	4.7	(3.9 - 5.6)	2.0	(1.5 - 2.7)
Male	11.8	(10.0 - 13.7)	6.2	(5.0 - 7.8)	2.7	(1.9 - 3.8)
Female	8.7	(7.2 - 10.4)	3.2	(2.3 - 4.4)	1.3	(0.8 - 2.1)
26-34	20.9	(19.4 - 22.5)	3.5	(2.9 - 4.2)	1.5	(1.2 - 1.9)
Male	24.7	(22.4 - 27.1)	4.8	(3.8 - 6.1)	2.3	(1.7 - 3.1)
Female	17.3	(15.4 - 19.3)	2.3	(1.7 - 3.0)	0.7	(0.5 - 1.2)
≥35	8.9	(8.0 - 10.0)	0.9	(0.7 - 1.2)	0.4	(0.3 - 0.7)
Male	11.8	(10.2 - 13.8)	1.2	(0.8 - 1.9)	0.6	(0.3 - 1.1)
Female	6.3	(5.2 - 7.7)	0.6	(0.4 - 1.0)	0.3	(0.1 - 0.6)
TOTAL	10.3	(9.6 - 11.1)	1.9	(1.6 - 2.2)	0.8	(0.7 - 1.0)
Male	12.8	(11.6 - 14.1)	2.5	(2.1 - 3.0)	1.1	(0.9 - 1.4)
Female	8.0	(7.2 - 8.9)	1.3	(1.1 - 1.6)	0.5	(0.4 - 0.7)
POPULATION ESTIMATES (In Thousands)						
12-17	430	(339 - 545)	311	(238 - 405)	131	(82 - 210)
Male	180	(122 - 266)	126	(80 - 198)	41	(19 - 91)
Female	250	(182 - 343)	185	(128 - 267)	89	(51 - 156)
18-25	2,842	(2,517 - 3,202)	1,308	(1,093 - 1,563)	557	(419 - 737)
Male	1,632	(1,392 - 1,907)	866	(692 - 1,080)	369	(259 - 524)
Female	1,210	(1,008 - 1,447)	442	(320 - 608)	188	(118 - 298)
26-34	7,417	(6,868 - 7,997)	1,251	(1,038 - 1,506)	531	(410 - 687)
Male	4,283	(3,886 - 4,708)	839	(665 - 1,054)	396	(290 - 540)
Female	3,133	(2,799 - 3,498)	412	(309 - 549)	135	(86 - 210)
≥35	11,442	(10,203 - 12,814)	1,163	(844 - 1,600)	531	(330 - 853)
Male	7,127	(6,108 - 8,290)	734	(472 - 1,138)	340	(177 - 649)
Female	4,315	(3,546 - 5,236)	429	(258 - 713)	191	(89 - 411)
TOTAL	22,130	(20,513 - 23,858)	4,033	(3,509 - 4,633)	1,749	(1,443 - 2,118)
Male	13,222	(11,987 - 14,564)	2,564	(2,119 - 3,100)	1,146	(888 - 1,477)
Female	8,908	(7,989 - 9,922)	1,468	(1,220 - 1,766)	603	(445 - 815)

* Low precision; no estimate reported

Source: Substance Abuse and Mental Health Services Administration, Office of Applied Studies
1996 National Household Survey on Drug Abuse

Table 5A. Crack Use by Sex Within Age Group for Total Population in 1996

AGE/SEX	Ever Used		Used Past Year		Used Past Month	
	Observed Estimate	95% C.I.	Observed Estimate	95% C.I.	Observed Estimate	95% C.I.
RATE ESTIMATES (Percent)						
12-17	0.7	(0.5 - 1.1)	0.4	(0.3 - 0.7)	0.2	(0.1 - 0.4)
Male	0.5	(0.2 - 1.0)	0.3	(0.1 - 0.7)	0.1	(0.0 - 0.5)
Female	1.0	(0.6 - 1.6)	0.6	(0.3 - 1.1)	0.3	(0.1 - 0.6)
18-25	3.0	(2.4 - 3.8)	1.3	(0.9 - 1.9)	0.6	(0.4 - 1.0)
Male	3.8	(2.8 - 5.0)	1.6	(1.1 - 2.5)	0.8	(0.4 - 1.5)
Female	2.3	(1.6 - 3.3)	1.0	(0.6 - 1.8)	0.5	(0.2 - 1.0)
26-34	4.4	(3.7 - 5.2)	1.1	(0.8 - 1.5)	0.5	(0.3 - 0.8)
Male	5.7	(4.7 - 7.0)	1.5	(1.0 - 2.2)	0.8	(0.5 - 1.4)
Female	3.1	(2.4 - 4.0)	0.7	(0.5 - 1.1)	0.3	(0.1 - 0.6)
≥35	1.6	(1.2 - 2.1)	0.4	(0.3 - 0.7)	0.2	(0.1 - 0.4)
Male	2.2	(1.5 - 3.2)	0.6	(0.3 - 1.1)	0.3	(0.1 - 0.7)
Female	1.1	(0.8 - 1.6)	0.3	(0.1 - 0.6)	0.1	(0.0 - 0.4)
TOTAL	2.2	(1.9 - 2.5)	0.6	(0.5 - 0.8)	0.3	(0.2 - 0.4)
Male	2.8	(2.3 - 3.4)	0.8	(0.6 - 1.1)	0.4	(0.3 - 0.6)
Female	1.6	(1.3 - 1.9)	0.5	(0.4 - 0.6)	0.2	(0.1 - 0.3)
POPULATION ESTIMATES (In Thousands)						
12-17	158	(105 - 237)	99	(62 - 139)	47	(24 - 93)
Male	53	(25 - 110)	33	(15 - 75)	16	(4 - 57)
Female	105	(63 - 176)	66	(37 - 117)	31	(14 - 69)
18-25	847	(680 - 1,054)	365	(257 - 517)	178	(110 - 285)
Male	521	(388 - 697)	224	(146 - 344)	112	(61 - 205)
Female	326	(230 - 463)	140	(77 - 255)	65	(30 - 141)
26-34	1,556	(1,320 - 1,831)	385	(278 - 532)	191	(124 - 295)
Male	995	(818 - 1,209)	256	(169 - 388)	140	(82 - 237)
Female	560	(430 - 727)	129	(83 - 200)	51	(26 - 100)
≥35	2,067	(1,562 - 2,731)	526	(321 - 863)	252	(126 - 502)
Male	1,315	(906 - 1,902)	334	(169 - 659)	159	(61 - 410)
Female	752	(518 - 1,089)	193	(92 - 402)	94	(32 - 269)
TOTAL	4,628	(3,980 - 5,377)	1,375	(1,093 - 1,730)	668	(495 - 901)
Male	2,884	(2,391 - 3,474)	847	(612 - 1,172)	427	(283 - 643)
Female	1,744	(1,439 - 2,112)	528	(394 - 707)	241	(160 - 364)

* Low precision; no estimate reported

Source: Substance Abuse and Mental Health Services Administration, Office of Applied Studies
1996 National Household Survey on Drug Abuse

Table 13A. Alcohol Use by Sex Within Age Group for Total Population in 1996

AGE/SEX	Ever Used		Used Past Year		Used Past Month	
	Observed Estimate	95% C.I.	Observed Estimate	95% C.I.	Observed Estimate	95% C.I.
RATE ESTIMATES (Percent)						
12-17	38.8	(36.7 - 41.0)	32.7	(30.5 - 35.0)	18.8	(17.0 - 20.6)
Male	38.3	(35.2 - 41.4)	32.0	(29.1 - 35.1)	19.2	(16.9 - 21.6)
Female	39.4	(36.7 - 42.1)	33.5	(30.8 - 36.3)	18.3	(16.1 - 20.8)
18-25	83.8	(81.3 - 85.9)	75.3	(71.9 - 78.4)	60.0	(56.7 - 63.2)
Male	86.3	(83.9 - 88.5)	78.6	(75.4 - 81.5)	66.5	(63.2 - 69.7)
Female	81.2	(77.9 - 84.1)	72.0	(67.8 - 75.7)	53.5	(49.6 - 57.5)
26-34	90.3	(88.9 - 91.6)	77.2	(75.0 - 79.3)	61.6	(59.5 - 63.8)
Male	93.8	(92.3 - 95.0)	81.5	(78.7 - 84.1)	70.0	(66.8 - 73.0)
Female	87.0	(85.1 - 88.7)	73.1	(70.7 - 75.3)	53.7	(51.2 - 56.2)
≥35	87.8	(86.1 - 89.4)	64.9	(62.5 - 67.2)	51.7	(49.0 - 54.4)
Male	93.9	(92.0 - 95.4)	72.0	(68.3 - 75.4)	61.6	(57.7 - 65.4)
Female	82.5	(79.8 - 84.9)	58.6	(55.6 - 61.5)	43.0	(40.0 - 46.1)
TOTAL	82.6	(81.1 - 83.9)	64.9	(63.0 - 66.8)	51.0	(49.0 - 53.0)
Male	86.6	(85.2 - 87.9)	70.0	(67.5 - 72.4)	58.9	(56.4 - 61.4)
Female	78.8	(76.7 - 80.7)	60.2	(57.9 - 62.4)	43.6	(41.3 - 46.0)
POPULATION ESTIMATES (In Thousands)						
12-17	8,735	(8,251 - 9,228)	7,367	(6,877 - 7,874)	4,221	(3,835 - 4,636)
Male	4,414	(4,061 - 4,778)	3,693	(3,358 - 4,045)	2,210	(1,955 - 2,489)
Female	4,321	(4,026 - 4,622)	3,674	(3,376 - 3,984)	2,011	(1,767 - 2,280)
18-25	23,282	(22,605 - 23,885)	20,926	(19,984 - 21,789)	16,686	(15,773 - 17,575)
Male	11,976	(11,636 - 12,271)	10,907	(10,461 - 11,308)	9,230	(8,762 - 9,674)
Female	11,306	(10,854 - 11,705)	10,020	(9,444 - 10,548)	7,457	(6,905 - 8,002)
26-34	32,039	(31,535 - 32,485)	27,389	(26,604 - 28,123)	21,869	(21,100 - 22,622)
Male	16,273	(16,016 - 16,483)	14,148	(13,653 - 14,591)	12,141	(11,591 - 12,660)
Female	15,767	(15,422 - 16,073)	13,241	(12,814 - 13,645)	9,728	(9,277 - 10,176)
≥35	112,651	(110,452 - 114,613)	83,231	(80,115 - 86,250)	66,373	(62,901 - 69,832)
Male	56,489	(55,343 - 57,376)	43,326	(41,099 - 45,386)	37,073	(34,725 - 39,335)
Female	56,163	(54,322 - 57,805)	39,905	(37,853 - 41,914)	29,300	(27,212 - 31,424)
TOTAL	176,707	(173,583 - 179,638)	138,912	(134,744 - 142,977)	109,149	(104,935 - 113,356)
Male	89,152	(87,682 - 90,499)	72,073	(69,470 - 74,557)	60,653	(58,059 - 63,201)
Female	87,556	(85,276 - 89,685)	66,839	(64,330 - 69,301)	48,496	(45,945 - 51,076)

* Low precision; no estimate reported

Source: Substance Abuse and Mental Health Services Administration, Office of Applied Studies
1996 National Household Survey on Drug Abuse

Table 18. Heroin Use by Age, Sex, Race, and Region for Total Population in 1996

	Ever Used		Used Past Year	
	Observed Estimate	95% C.I.	Observed Estimate	95% C.I.
RATE ESTIMATES (Percent)				
AGE				
12-17	0.5	(0.3 - 0.8)	0.3	(0.1 - 0.6)
18-25	1.3	(0.9 - 2.0)	0.9	(0.6 - 1.6)
26-34	1.3	(1.0 - 1.7)	0.2	(0.1 - 0.4)
≥35	1.2	(0.8 - 1.7)	*	*
SEX				
Male	1.7	(1.3 - 2.2)	0.3	(0.2 - 0.5)
Female	0.6	(0.4 - 0.9)	0.1	(0.1 - 0.2)
RACE/ETHNICITY				
White	1.2	(0.9 - 1.6)	0.2	(0.1 - 0.3)
Black	1.4	(0.9 - 2.1)	0.2	(0.1 - 0.4)
Hispanic	0.9	(0.6 - 1.4)	0.2	(0.1 - 0.5)
REGION				
Northeast	1.5	(0.9 - 2.5)	0.2	(0.1 - 0.5)
North Central	1.1	(0.6 - 2.0)	0.2	(0.1 - 0.5)
South	0.9	(0.6 - 1.3)	0.3	(0.1 - 0.5)
West	1.3	(0.8 - 1.9)	0.1	(0.1 - 0.3)
TOTAL	1.1	(0.9 - 1.5)	0.2	(0.1 - 0.3)
POPULATION ESTIMATES (In Thousands)				
AGE				
12-17	103	(59 - 181)	60	(27 - 134)
18-25	365	(241 - 552)	262	(155 - 442)
26-34	464	(351 - 613)	86	(47 - 159)
≥35	1,511	(1,034 - 2,207)	*	*
SEX				
Male	1,731	(1,293 - 2,313)	309	(202 - 474)
Female	713	(493 - 1,029)	146	(86 - 247)
RACE				
White	1,898	(1,407 - 2,557)	346	(214 - 560)
Black	333	(224 - 494)	58	(32 - 106)
Hispanic	182	(116 - 285)	47	(23 - 95)
REGION				
Northeast	650	(393 - 1,072)	102	(50 - 208)
North Central	577	(319 - 1,038)	91	(31 - 262)
South	640	(424 - 964)	195	(108 - 353)
West	577	(383 - 867)	66	(28 - 155)
TOTAL	2,444	(1,896 - 3,147)	455	(311 - 665)

* Low precision; no estimate reported

Source: Substance Abuse and Mental Health Services Administration, Office of Applied Studies
1996 National Household Survey on Drug Abuse

TABLE 2a

Marijuana: Trends in Annual Prevalence of Use by Subgroups for Eighth and Tenth Graders

Percent who used in last twelve months

	8th Grade									10th Grade								
	1991	1992	1993	1994	1995	1996	1997	'96–'97 change	'91–'97 change	1991	1992	1993	1994	1995	1996	1997	'96–'97 change	'91–'97 change
Approx. N =	17500	18600	18300	17300	17500	17800	18600			14800	14800	15300	15800	17000	15800	15500		
Total	6.2	7.2	9.2	13.0	15.8	18.3	17.7	-0.6	+11.5sss	16.5	15.2	19.2	25.2	28.7	33.6	34.8	+1.2	+18.3sss
Sex:																		
Male	7.3	7.4	10.5	15.1	17.7	19.6	19.2	-0.4	+11.9sss	17.7	16.3	21.2	28.2	30.8	36.0	37.3	+1.3	+19.6sss
Female	5.1	6.9	8.0	10.9	13.7	16.9	16.1	-0.8	+11.0sss	15.1	13.9	16.9	21.9	26.5	31.4	32.3	+0.9	+17.2sss
College Plans:																		
None or under 4 yrs.	15.8	17.5	22.4	27.7	30.3	34.6	34.5	-0.1	+18.7sss	26.9	25.1	31.5	37.3	41.8	49.9	51.5	+2.6	+24.6sss
Complete 4 yrs.	4.6	5.5	7.3	11.0	13.8	15.8	15.5	-0.3	+10.9sss	14.2	13.0	16.5	22.4	26.4	31.0	32.0	+1.0	+17.8sss
Region:																		
Northeast	5.0	5.8	6.2	12.1	13.0	15.3	16.2	+0.9	+11.2sss	17.1	14.9	22.4	25.6	28.8	34.8	34.6	-0.2	+17.6sss
North Central	5.9	6.0	8.0	12.0	17.5	18.6	17.0	-1.6	+11.1sss	15.8	14.8	17.4	23.4	26.6	33.1	34.4	+1.3	+18.6sss
South	6.1	7.3	9.0	11.4	14.7	17.1	17.2	+0.1	+11.1sss	14.5	12.5	16.4	23.8	28.4	33.9	34.4	+0.5	+19.9sss
West	7.8	10.3	14.8	18.1	18.4	22.5	20.6	-1.9	+12.8sss	19.4	20.4	24.0	30.0	32.2	32.4	36.5	+4.1	+17.1sss
Population Density:																		
Large MSA	5.2	6.7	8.0	13.1	15.6	18.3	16.4	-1.9	+11.2sss	16.5	15.1	19.0	26.3	27.8	31.5	34.1	+2.6	+17.6sss
Other MSA	7.2	8.3	10.9	15.7	17.2	19.5	18.2	-1.3	+11.0sss	17.3	15.9	19.8	28.2	31.2	36.2	36.6	+0.4	+19.3sss
Non-MSA	5.3	5.7	7.2	8.0	13.7	15.8	18.0	+2.2	+12.7sss	14.9	13.9	18.2	18.5	24.8	30.9	32.5	+1.6	+17.6sss
Parental Education:[a]																		
1.0-2.0 (Low)	13.2	12.7	13.6	18.7	23.0	20.2	24.8	+4.6s	+11.6sss	20.3	18.9	22.4	25.8	32.0	32.9	34.5	+1.6	+14.2sss
2.5-3.0	7.0	7.7	10.7	14.5	17.9	20.6	20.3	-0.3	+13.3sss	17.8	16.0	19.7	26.3	31.8	35.6	36.8	+1.2	+19.0sss
3.5-4.0	6.2	7.0	9.7	13.2	17.2	20.2	19.5	-0.7	+13.3sss	16.2	15.1	19.3	25.6	30.0	36.4	37.8	+1.4	+21.6sss
4.5-5.0	3.7	5.4	7.4	10.9	12.7	16.2	15.7	-0.5	+12.0sss	14.9	14.1	17.8	23.8	27.0	31.7	33.1	+1.4	+18.2sss
5.5-6.0 (High)	4.6	5.2	6.4	11.0	13.0	14.7	12.1	-2.6	+7.5sss	15.9	13.7	18.5	23.3	23.4	30.3	30.5	+0.2	+14.6sss
Race (2-year average):[b,c]																		
White	—	6.4	7.8	10.0	13.5	16.7	17.8	+1.1	+11.4sss	—	17.0	18.0	22.6	27.7	32.0	35.3	+3.3s	+18.3sss
Black	—	4.1	5.7	8.9	11.9	14.0	15.3	+1.3	+11.2sss	—	7.6	8.7	15.3	20.9	25.7	28.4	+2.7	+20.8sss
Hispanic	—	11.9	13.9	18.1	20.4	20.8	21.8	+1.0	+9.9sss	—	18.9	21.3	25.1	29.2	34.0	36.8	+2.2	+17.9sss

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.
"—" indicates data not available.
See Table D-39 for the number of subgroup cases.
See Appendix B for definition of variables in table.

SOURCE: The Monitoring the Future Study, the University of Michigan.

[a]Parental education is an average score of mother's education and father's education. See Appendix B for details.
[b]To derive percentages for each racial subgroup, data for the specified year *and* the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.
[c]The changes in the '91–'97 change columns are actually the '92–'97 changes.

TABLE 2b

Marijuana: Trends in Annual Prevalence of Use by Subgroups for Twelfth Graders

	Percent who used in last twelve months																								
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989	Class of 1990	Class of 1991	Class of 1992	Class of 1993	Class of 1994	Class of 1995	Class of 1996	Class of 1997	'96–'97 change	'91–'97 change
Approx. N =	9400	15400	17100	17800	15500	15900	17500	17700	16300	15900	16000	15200	16300	16300	16700	15200	15000	15800	16300	15400	15400	14300	16400		
Total	40.0	44.5	47.6	50.2	50.8	48.8	46.1	44.3	42.3	40.0	40.6	38.8	36.3	33.1	29.6	27.0	23.9	21.9	26.0	30.7	34.7	35.8	38.6	+2.7	+14.6sss
Sex:																									
Male	45.8	50.6	53.2	55.9	55.8	53.4	49.2	47.2	45.7	43.2	43.1	41.2	38.6	35.8	32.8	29.4	27.2	24.4	29.0	35.1	38.1	39.4	40.9	+1.5	+13.7sss
Female	34.9	37.8	42.0	44.3	46.7	44.1	42.5	40.8	38.4	36.0	37.8	36.0	33.8	30.3	26.3	24.2	20.1	18.9	22.4	26.4	30.6	31.6	35.5	+3.9s	+15.4sss
College Plans																									
None or under 4 yrs	—	46.8	50.7	51.6	53.1	51.7	49.7	48.2	46.0	44.2	44.0	42.7	40.6	36.2	34.4	31.1	27.6	27.5	29.1	34.4	39.0	41.7	44.6	+2.9	+17.0sss
Complete 4 yrs	—	40.7	43.4	47.1	47.3	45.9	42.6	40.6	38.3	35.9	37.5	36.1	34.0	31.3	27.3	24.7	22.0	19.4	24.4	29.1	32.6	33.4	36.4	+3.0s	+14.4sss
Region																									
Northeast	47.4	52.7	53.5	59.2	60.6	55.5	53.2	50.9	49.3	49.6	48.2	44.6	41.2	36.7	31.3	32.2	28.2	23.9	31.2	36.0	37.7	40.0	40.5	+3.5	+15.3sss
North Central	40.1	44.0	48.1	51.6	52.2	48.9	46.8	45.6	42.0	36.4	40.8	40.2	37.4	34.3	33.0	28.7	26.1	22.7	26.0	30.5	36.9	36.9	36.5	-0.4	+10.4sss
South	32.4	37.9	42.5	42.7	41.2	42.0	38.0	36.7	36.1	35.6	31.0	31.7	30.2	28.7	25.0	21.4	18.1	18.1	23.2	28.7	31.8	32.8	35.0	+2.2	+16.9sss
West	44.1	45.8	46.8	49.1	51.9	51.7	49.6	45.5	44.8	43.2	46.2	41.2	39.6	35.6	32.3	28.3	26.8	26.1	26.4	30.0	33.8	35.6	42.6	+7.0s	+15.8sss
Population Density																									
Large MSA	50.4	51.3	53.2	57.2	58.7	56.3	51.4	50.4	47.0	44.2	44.4	42.6	39.3	34.3	27.8	27.7	24.3	22.6	29.1	32.0	37.5	37.2	38.3	+1.1	+14.0sss
Other MSA	40.3	44.2	48.9	50.8	51.9	49.8	46.4	44.8	44.0	41.0	40.7	39.4	36.9	34.7	30.3	28.3	27.5	22.1	26.2	32.7	34.9	38.0	40.5	+1.9	+13.0sss
Non-MSA	32.9	39.8	41.2	43.3	43.3	41.9	41.6	38.5	36.5	35.3	37.3	34.7	32.2	29.0	30.0	23.5	17.5	21.0	23.1	25.8	31.0	29.6	34.9	+5.3	+17.4sss
Parental Education*																									
1.0-2.0 (Low)	35.2	38.9	41.0	42.5	46.0	43.7	41.8	38.9	39.7	35.7	37.1	33.4	30.7	30.7	23.3	21.0	22.4	21.2	23.0	26.3	30.9	31.3	34.8	+3.5	+12.4sss
2.5-3.0	39.2	46.1	48.2	50.3	50.0	49.0	45.3	44.5	42.2	40.1	40.6	38.8	36.3	31.1	29.0	20.9	22.5	21.1	24.1	29.7	33.8	35.1	37.4	+2.3	+14.9sss
3.5-4.0	38.5	44.9	49.5	51.4	52.7	49.8	47.0	46.5	42.2	41.4	41.0	40.1	36.8	33.4	31.4	27.6	24.0	22.7	26.6	31.5	34.2	36.1	38.1	+2.0	+14.1sss
4.5-5.0	40.6	46.8	49.3	53.2	53.7	50.5	47.6	45.9	43.5	39.6	43.2	39.9	37.5	35.1	29.7	28.5	23.8	20.8	27.2	32.0	35.0	36.6	40.1	+3.5	+16.3sss
5.5-6.0 (High)	38.7	47.5	48.6	55.2	51.2	52.0	48.5	45.7	43.7	39.9	37.9	38.9	38.6	35.9	30.7	29.4	28.2	22.6	28.0	32.3	37.5	36.7	39.7	+3.0	+11.5sss
Race (2-year average)*																									
White	—	—	46.8	50.1	51.8	51.2	49.1	47.1	44.6	42.0	41.6	41.4	39.7	37.6	34.5	31.6	28.2	24.9	25.9	30.2	34.2	36.4	38.7	+2.3	+10.5sss
Black	—	—	37.9	39.6	38.4	37.5	36.1	35.5	37.4	36.4	33.4	30.6	25.7	21.2	17.8	13.7	11.4	11.5	14.2	20.7	26.8	30.2	30.4	+0.2	+19.0sss
Hispanic	—	—	45.8	43.4	42.1	44.1	41.2	38.6	38.3	38.8	37.8	36.7	33.3	29.6	25.0	21.6	23.6	24.7	23.5	25.7	29.7	32.3	36.4	+4.1	+12.8s

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available.
See Table D-40 for the number of subgroup cases.
See Appendix B for definition of variables in table.

SOURCE: The Monitoring the Future Study, the University of Michigan.

*Parental education is an average score of mother's education and father's education. See Appendix B for details.
*To derive percentages for each racial subgroup, data for the specified year *and* the previous year have been combined to increase subgroup sample sizes and thus provide more stable est

ESTIMATED NUMBER OF EMERGENCY DEPARTMENT DRUG EPISODES, BY AGE, SEX, RACE/ETHNICITY, HOSPITAL LOCATION, DRUG USE MOTIVE, AND REASON FOR EMERGENCY DEPARTMENT VISIT: 1989 - 1996

CATEGORY: DRUG EPISODES

	TOTAL 1989	TOTAL 1990	TOTAL 1991	TOTAL 1992	TOTAL 1993	TOTAL 1994	TOTAL 1995*	TOTAL 1996*	P-VAL 1995, 1996@	P-VAL 1994, 1996@
DOMAIN										
TOTAL U.S.***	425,904	371,208	393,968	433,493	460,910	518,521	517,764	487,564	0.021 -	0.024 -
AGE 6-34	301,872	254,297	261,873	277,887	288,332	324,933	311,460	286,029	0.000 -	0.000 -
AGE 12-17	55,299	49,109	47,494	46,822	50,039	60,472	60,881	59,072	0.456 -	0.583 -
AGE 18-25	111,707	92,236	92,410	96,307	98,276	112,262	103,715	92,827	0.001 -	0.000 -
AGE 26-34	133,510	111,980	121,354	133,506	138,634	151,195	145,355	132,957	0.011 -	0.000 -
AGE 35+	122,855	115,954	130,852	154,570	171,257	190,145	204,969	200,706	0.516 -	0.060 +
MALE	204,203	172,976	189,455	219,607	231,721	263,334	259,338	244,443	0.117 -	0.051 -
FEMALE	218,015	194,028	200,972	210,051	224,526	250,333	253,105	237,826	0.006 -	0.029 -
WHITE	243,862	217,191	221,541	235,643	245,243	279,312	278,754	263,319	0.054 -	0.079 -
BLACK	97,480	88,317	106,914	122,880	126,929	141,171	141,559	129,517	0.174 -	0.207 -
HISPANIC	38,743	29,834	33,082	42,174	48,233	50,438	47,180	46,493	0.774 -	0.314 -
OTHER RACE	3,228	3,631	4,298	4,892	5,844	6,050	5,627	5,852	0.707 +	0.710 -
RACE UNK.	42,591	32,236	28,133	27,905	34,660	41,550	44,645	42,383	0.561 -	0.846 +
CENTRAL CITY	129,308	113,455	136,436	158,892	162,210	170,269	173,483	163,053	0.005 -	0.083 -
OUTSIDE CEN. CITY	78,627	64,304	64,692	70,445	74,542	82,063	81,851	77,918	0.051 -	0.158 -
NATIONAL PANEL	217,968	193,450	192,840	204,155	223,256	266,189	262,430	246,593	0.203 -	0.129 -
RECREATIONAL USE	42,351	29,817	30,362	35,008	36,421	43,948	45,917	50,284	0.228 +	0.105 +
DEPENDENCE	119,709	96,346	114,009	135,280	144,152	165,541	167,076	159,723	0.531 -	0.598 -
SUICIDE	189,293	172,816	172,710	172,403	180,212	199,773	201,055	181,608	0.000 -	0.001 -
OTHER/UNK MOTIVE	74,551	72,230	76,887	90,801	100,125	109,259	103,715	95,950	0.085 -	0.034 -
UNEXPECTED REACT.	50,552	37,276	41,246	52,588	54,569	66,595	57,602	58,701	0.791 +	0.093 -
OVERDOSE	241,310	224,824	224,189	232,674	243,765	269,573	272,161	239,080	0.000 -	0.000 -
CHRONIC EFFECTS	45,384	37,069	43,964	46,865	50,180	56,010	61,636	51,499	0.000 -	0.253 -
SEEKING DETOX.	40,885	31,070	36,704	44,815	47,398	52,213	51,890	57,262	0.508 +	0.478 +
WITHDRAWAL	10,353	8,159	7,166	9,851	11,125	14,025	15,377	14,096	0.234 -	0.949 +
OTHER/UNK REASON	37,421	32,809	40,699	46,700	53,872	60,105	59,098	66,926	0.016 +	0.067 +

... ESTIMATE DOES NOT MEET STANDARD OF PRECISION OR IS LESS THAN 10.
* ESTIMATES FOR THIS TIME PERIOD ARE PRELIMINARY. FINAL ESTIMATES WILL BE PRODUCED LATER AND MAY BE HIGHER OR LOWER THAN PRELIMINARY ESTIMATES DUE TO NONRESPONSE ADJUSTMENT AND OTHER FACTORS.
*** TOTAL INCLUDES PATIENTS WHOSE SEX OR AGE WAS UNKNOWN.
@ IN THIS COLUMN, '+' AND '-' DENOTE INCREASES AND DECREASES, RESPECTIVELY.
NOTE: THESE ESTIMATES ARE BASED ON A REPRESENTATIVE SAMPLE OF NON-FEDERAL SHORT STAY HOSPITALS WITH 24-HOUR EMERGENCY DEPARTMENTS.
SOURCE: SAMHSA, DRUG ABUSE WARNING NETWORK, APR. 97 FILES.

MEDICAL EXAMINER DATA[1]

Table 2.01 - Distribution of drug abuse deaths by selected demographic characteristics according to gender, 1995

Demographic characteristics	TOTAL[2]		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
GENDER						
Male	7,005	76.0				
Female	2,166	23.5				
Unknown/no response	45	0.5				
TOTAL	9,216	100.0				
RACE/ETHNICITY						
White	5,375	58.3	4,015	57.3	1,339	61.8
Black	2,559	27.8	1,920	27.4	633	29.2
Hispanic	1,066	11.8	932	13.4	143	6.6
Other	116	1.3	80	1.1	35	1.6
American Indian/Alaskan Native	37	0.4	24	0.3	13	0.6
Asian/Pacific Islander	67	0.7	47	0.7	19	0.9
Unknown/no response	79	0.9	51	0.7	16	0.7
TOTAL	9,216	100.0	7,005	100.0	2,166	100.0
AGE						
8 to 17 years	100	1.1	79	1.1	20	0.9
8 to 11 years	4	*	4	0.1	*	*
12 to 17 years	96	1.0	75	1.1	20	0.9
18 to 25 years	823	8.9	649	9.3	169	7.8
18 to 19 years	143	1.6	115	1.6	26	1.2
20 to 25 years	680	7.4	534	7.6	143	6.6
26 to 34 years	2,190	23.8	1,718	24.5	464	21.4
26 to 29 years	736	8.0	570	8.1	165	7.6
30 to 34 years	1,452	15.8	1,148	16.4	299	13.8
35 years and older	6,061	65.8	4,533	64.7	1,526	69.5
35 to 44 years	3,701	40.2	2,834	40.5	854	39.4
45 to 54 years	1,653	17.9	1,235	17.6	413	19.1
55 years and older	707	7.7	464	6.6	239	11.0
Unknown/no response	42	0.5	26	0.4	7	0.3
TOTAL	9,216	100.0	7,005	100.0	2,166	100.0

[1] Excludes deaths in which AIDS was reported and deaths in which "drug unknown" was the only substance mentioned.

[2] Includes decedents for which gender was unknown or not reported.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file).

MEDICAL EXAMINER DATA[1]

Table 2.03 - Percent distribution of drug abuse deaths by selected episode characteristics according to gender and race/ethnicity, 1995

Episode characteristics	TOTAL[2]	Gender		Race/ethnicity			
		Male	Female	White	Black	Hispanic	Other
DRUG CONCOMITANCE							
Single-drug episode	24.0	23.2	26.9	21.4	31.0	19.8	31.0
Multi-drug episode	76.0	76.8	73.1	78.6	69.0	80.2	69.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0
CAUSE OF DEATH							
Drug induced (overdose)	68.8	68.0	71.3	71.6	64.2	66.3	70.7
Direct - single drug cause	10.7	9.5	14.3	11.2	10.6	7.4	17.2
Direct - multiple drug cause	58.1	58.5	57.0	60.4	53.6	58.9	53.4
Drug related (contributory factor)	29.9	30.8	27.1	27.0	34.7	33.1	25.0
Drug and physiological condition	10.0	9.8	10.8	7.7	14.8	10.5	5.2
Drug and external physical event	17.6	18.8	13.9	17.7	15.2	19.9	13.5
Drug and medical disorder	2.3	2.2	2.6	1.6	3.7	2.7	4.3
Unknown	1.3	1.2	1.6	1.4	1.1	0.6	4.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MANNER OF DEATH							
Accidental/unexpected	57.8	60.8	48.4	51.9	62.1	79.2	44.8
Suicide	18.5	15.4	28.0	24.6	8.3	9.9	32.8
Other/unknown	23.7	23.7	23.6	23.5	29.6	11.0	22.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total drug abuse deaths	9,210	7,005	2,166	5,376	2,559	1,086	116

[1] Excludes deaths in which AIDS was reported and deaths in which "drug unknown" was the only substance mentioned.

[2] Includes episodes for which gender or race/ethnicity was unknown or not reported.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file).

Table 2.12 - Percent distribution of drug mentions by gender and race/ethnicity according to drug group: 1995

Drug groups therapeutic class by drug category	Gender				Race/ethnicity						Number of mentions
	Male	Female	Unknown	TOTAL	White	Black	Hispanic	Other	Unknown	TOTAL	
TRANQUILIZERS	69.5	29.6	0.9	100.0	82.1	11.8	4.1	0.3	1.7	100.0	1,261
Diazepam	72.4	27.0	0.6	100.0	82.4	12.1	3.8	0.3	1.4	100.0	660
Alprazolam	60.0	39.2	0.8	100.0	92.3	5.4	2.3	-	-	100.0	130
Chlordiazepoxide	72.4	26.5	1.0	100.0	76.5	17.3	6.1	-	-	100.0	98
Lorazepam	64.0	36.0	-	100.0	80.0	8.0	8.0	4.0	-	100.0	25
Meprobamate	67.5	31.3	1.2	100.0	81.9	9.6	3.6	1.2	3.6	100.0	83
Other/unspecified tranquilizers	67.2	31.3	1.5	100.0	78.5	13.2	4.9	-	3.4	100.0	265
NARCOTIC ANALGESICS	79.2	20.4	0.4	100.0	61.0	24.3	13.1	0.6	0.9	100.0	8,492
Heroin/Morphine[2]	83.4	16.2	0.4	100.0	57.0	26.8	14.5	0.8	0.9	100.0	4,178
d-Propoxyphene	60.7	38.8	0.5	100.0	64.7	7.9	4.8	1.6	1.1	100.0	386
Methadone	67.6	31.8	0.6	100.0	54.3	28.0	16.1	0.4	1.2	100.0	497
Oxycodone	72.5	25.5	2.0	100.0	86.3	11.8	-	-	2.0	100.0	51
Codeine	76.6	21.2	0.2	100.0	64.7	22.1	12.1	0.6	0.4	100.0	1,155
Meperidine HCl	58.5	41.5	-	100.0	86.3	17.1	7.3	4.9	2.4	100.0	41
Hydromorphone	62.5	31.2	6.2	100.0	81.2	18.8	-	-	-	100.0	16
Other/unspecified narcotic analgesics	63.6	35.8	0.5	100.0	87.2	9.6	0.5	1.1	1.6	100.0	187
NON-NARCOTIC ANALGESICS	58.2	40.6	1.1	100.0	79.0	14.2	4.1	0.9	1.7	100.0	534
Aspirin	55.2	42.9	1.9	100.0	79.0	11.4	4.8	1.9	2.9	100.0	105
Acetaminophen	58.6	40.3	1.1	100.0	79.0	15.0	3.5	0.8	1.6	100.0	357
Pentazocine	50.0	50.0	-	100.0	100.0	-	-	-	-	100.0	2
Other/unspecified non-narcotic analgesics	61.7	38.3	-	100.0	78.3	15.0	6.7	-	-	100.0	60
NON-BARBITURATE SEDATIVES	52.8	47.2	-	100.0	83.7	7.3	3.2	4.9	0.8	100.0	123
Flurazepam	46.9	53.1	-	100.0	75.0	6.2	9.4	6.2	3.1	100.0	32
Ethchlorvynol	100.0	-	-	100.0	100.0	-	-	-	-	100.0	7
Glutethimide	100.0	-	-	100.0	-	100.0	-	-	-	100.0	1
Chloral hydrate	-	100.0	-	100.0	100.0	-	-	-	-	100.0	2
Other/unspecified non-barbiturate sedatives	51.9	48.1	-	100.0	86.4	7.4	1.2	4.9	-	100.0	81
ANTIDEPRESSANTS	53.3	46.1	0.6	100.0	77.7	14.1	6.7	0.8	0.7	100.0	1,397
Amitriptyline	53.8	45.4	0.9	100.0	73.0	16.4	9.3	0.9	0.4	100.0	463
Doxepin	56.1	43.2	0.6	100.0	71.6	20.6	5.8	0.6	1.3	100.0	155
Fluoxetine	55.2	44.8	-	100.0	90.9	8.5	1.3	0.6	0.6	100.0	154
Imipramine	44.7	55.3	-	100.0	85.5	5.3	6.6	2.6	-	100.0	76
Desipramine	47.7	50.0	2.3	100.0	83.7	11.6	3.5	1.2	-	100.0	86
Other/unspecified antidepressants	53.6	46.0	0.4	100.0	77.8	14.0	6.7	0.4	1.1	100.0	463
ANTIPSYCHOTICS	58.5	41.5	-	100.0	73.9	18.8	5.7	0.6	1.1	100.0	176
Chlorpromazine	66.7	33.3	-	100.0	84.8	9.1	3.0	3.0	-	100.0	33
Thioridazine	55.1	44.9	-	100.0	71.0	18.8	7.2	-	2.9	100.0	69
Haloperidol	83.3	16.7	-	100.0	41.7	41.7	16.7	-	-	100.0	12
Trifluoperazine	28.6	71.4	-	100.0	57.1	42.9	-	-	-	100.0	7
Other/unspecified antipsychotics	56.4	43.6	-	100.0	80.0	16.4	3.6	-	-	100.0	55
BARBITURATE SEDATIVES	61.9	37.3	0.8	100.0	82.0	9.6	4.8	1.0	2.5	100.0	394
Phenobarbital	65.6	33.8	0.6	100.0	80.9	11.5	5.7	1.3	0.6	100.0	157
Secobarbital	66.1	32.1	1.8	100.0	91.1	3.6	1.8	1.8	1.8	100.0	56
Pentobarbital	73.5	23.5	2.9	100.0	73.5	17.6	2.9	-	5.9	100.0	34
Other/unspecified barbiturate sedatives	53.7	46.3	-	100.0	81.6	8.2	5.4	0.7	4.1	100.0	147
AMPHETAMINES	80.1	19.9	-	100.0	76.1	4.9	15.7	1.7	1.7	100.0	783
Amphetamine	79.0	21.0	-	100.0	74.5	4.5	16.6	1.7	2.4	100.0	266
Methamphetamine/Speed	80.7	19.3	-	100.0	76.8	4.9	15.4	1.6	1.2	100.0	488
Other/unspecified amphetamines	77.8	22.2	-	100.0	66.9	11.1	-	-	-	100.0	9
HALLUCINOGENS	83.8	15.7	0.5	100.0	36.1	39.8	20.8	-	1.5	100.0	197
PCP/PCP combinations	84.5	15.0	0.5	100.0	36.8	40.4	21.2	-	1.6	100.0	193
LSD	50.0	50.0	-	100.0	100.0	-	-	-	-	100.0	2
Other/unspecified hallucinogens	50.0	50.0	-	100.0	100.0	-	-	-	-	100.0	2
OTHER DRUGS	75.2	24.3	0.5	100.0	60.8	25.6	11.6	1.0	1.0	100.0	22,383
Alcohol-combination	81.8	17.7	0.4	100.0	57.2	26.4	14.5	1.0	0.9	100.0	3,813
Cocaine	79.6	19.9	0.5	100.0	42.0	42.4	14.2	0.7	0.7	100.0	4,202
Marijuana/Hashish	85.3	14.0	0.7	100.0	59.5	25.3	11.3	1.1	2.8	100.0	723
Diphenhydramine sodium	71.9	27.0	1.1	100.0	61.8	26.1	7.9	1.3	1.1	100.0	89
Diphenhydramine	62.2	37.3	0.4	100.0	72.1	15.2	6.8	3.1	0.4	100.0	458
Inhalants/Solvents/Aerosols	79.2	20.0	0.8	100.0	66.4	17.6	11.2	3.2	1.6	100.0	125
All other drugs	65.7	33.8	0.4	100.0	63.2	27.4	6.6	1.9	0.9	100.0	1,804
DRUG UNKNOWN	91.7	8.3	-	100.0	100.0	-	-	-	-	100.0	12
TOTAL DRUG MENTIONS	75.2	24.3	0.5	100.0	60.8	25.6	11.6	1.0	1.0	100.0	22,383

[1] Excludes deaths in which AIDS was reported and deaths in which "drug unknown" was the only drug mentioned

[2] Includes opiates not specified as to type

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file)

EXECUTIVE SUMMARY

This report provides data on substance use and substance-related impairment among participants in the Aid to Families with Dependent Children (AFDC) program. The study is based on data from the 1991 and 1992 National Household Surveys on Drug Abuse (NHSDA), and was sponsored jointly by the Office of the Assistant Secretary for Planning and Evaluation, the Substance Abuse and Mental Health Services Administration, and the National Institute on Drug Abuse. Estimates from the NHSDA should be regarded as conservative because of potential underreporting of both drug use and program participation.

Another study has examined the prevalence of drug and alcohol use in households participating in AFDC, medicaid, and food stamps.[1] This study expands on that work and examines not only the prevalence of substance use in households participating in AFDC, but importantly further analyzes a combined 1991 and 1992 data set to examine extent of use and impairment related to that use.

Substance abuse issues are generally not part of the eligibility/intake process for AFDC at this time, and usually do not arise even in a family needs assessment process, although they may be suspected. Instead, such issues are more likely to be recognized if a recipient has a high absentee rate in a training program or other activity. In this way it is similar to substance abuse in the work place. A 1992 report of the HHS Office of Inspector General found that only 14 percent of states' AFDC intake forms and 55 percent of JOBS intake assessment forms included questions on substance abuse problems[2]. In addition,

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[1] U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation and the National Institute on Drug Abuse, Patterns of Substance Use and Program Participation, 1994.

[2] U.S. Department of Health and Human Services, Office of Inspector General, Functional Impairments of AFDC Clients, OEI-02-90-00400, 1992.

Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *Patterns of Substance Use and Substance-Related Impairment Among Participants in the Aid to Families with Dependent Children Program (AFDC)*, December 1994.

because denial of the disease is typical in substance abusers, problems may not be easily detected simply through intake questions.

Because proposals for welfare reform would require participating parents to take part in education and job training programs and benefits would be time limited, intervention with substance abusing beneficiaries takes on an importance it has not held previously. Substance abuse is clearly a barrier to self sufficiency for some welfare recipients. In the absence of intervention, at the end of two years beneficiaries with substance abuse problems could be ineligible for the program without the ability to be self supporting.

As family self sufficiency becomes an increasingly important goal within the welfare system, treatment and rehabilitation of substance abusers becomes a focus. The question then arises, how many AFDC recipients might be expected to need such treatment, and for how many would intense treatment needs preclude concurrent participation in education, training and employment activities?

Typically, analyses of substance abuse focus on prevalence and frequency of individuals' use of particular substances. While prevalence rates of drug and alcohol use are important indicators, the questions of greater interest in the context of welfare reform and potential intervention are ones of impairment and need for services. Drug and alcohol use prevalence analyses by themselves do not address the question of the extent to which substance abuse interferes with individuals' ability to work or participate in job training. Such an impairment oriented analysis, however, represents a more complex approach than, for example, an analysis of prevalence of drug use in the past month.

The impairment analysis described in this study was undertaken to answer the more specific question of the extent to which recipients' substance abuse problems might pose a barrier to the employment related objectives of welfare reform. The methodology employed in the impairment analysis represents a new approach to the use of data from the National Household Survey on Drug Abuse. This report represents an attempt to use questions in the

Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *Patterns of Substance Use and Substance-Related Impairment Among Participants in the Aid to Families with Dependent Children Program (AFDC)*, December 1994.

National Household Survey on Drug Abuse about individual functioning and problems associated with substance use and combine them with prevalence data to approach more closely the issue of functional impairment and need for treatment. As part of the impairment analysis a new ratio estimation procedure was used to improve estimates of so-called "hard core" drug use by accounting for the underestimation of these populations in the Household Survey. For comparative purposes, this report also includes prevalence data on the AFDC population from another analysis[3] which focused primarily on past-month and past-year use.

The impairment analysis divides the population into groups according to their patterns of alcohol and other drug use. Those identified as having "significant impairment" include persons identified as dependent on alcohol and drunk at least weekly **OR** as dependent on an illicit drug other than marijuana **AND** used an illicit drug at least monthly or used heroin at least once in the past year. Those identified as having "some impairment" include individuals identified as not dependent on an illicit drug but used an illicit drug at least weekly **OR** not dependent on alcohol but was drunk at least weekly **OR** dependent on an illicit drug other than marijuana but used an illicit drug less than monthly and did not use heroin **OR** dependent on marijuana **OR** dependent on alcohol but was drunk less than weekly.

The impairment analysis found that[4]:

- Approximately 4.9 percent of female AFDC recipients are estimated to have significant functional impairment related to substance abuse. These

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[3] op. cit. U.S. Department of Health and Human Services, Patterns of Substance Use and Program Participation.

[4] It should be noted that preliminary analyses reported on in the press contained slightly different figures from those reported here. The numbers reported here are different for two reasons. First, the earlier analysis used 18 - 64 year olds as the basis for analysis while the current estimates focus on younger individuals, age 18 - 44, in order to be more consistent with the younger age composition of the AFDC population. In addition, the ratio estimation technique used to produce this report's estimates has been refined since the preliminary figures.

Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *Patterns of Substance Use and Substance-Related Impairment Among Participants in the Aid to Families with Dependent Children Program (AFDC)*, December 1994.

individuals' substance abuse problems may be sufficiently debilitating to preclude immediate participation in employment or training activities. When both female and male AFDC recipients are included, the estimated rate of impairment is slightly higher (5.2 percent). It is important to note, however, that the vast majority of individuals identified in this significant impairment category are not AFDC recipients. An estimated 204,600 AFDC recipients and 2,662,600 non-AFDC recipients ages 18-44 were estimated to have this level of impairment. In addition, while we believe that many of these individuals will need intervention prior to other activities, it should be recognized that in the general population many individuals with this level of impairment report being employed.

- An additional 10.6 percent of female AFDC recipients are estimated to be somewhat impaired by substance abuse problems, indicating a likely need for substance abuse treatment concurrent with participation in employment and training activities. When male AFDC recipients are included as well, the rate rises slightly to 11.2 percent.

- AFDC recipients have somewhat higher rates of substance abuse related impairments than persons not receiving AFDC. Because the AFDC population is poorer than the general population, this is not surprising. Persons living in poverty are known to have higher rates of drug and heavy alcohol use than do those with higher incomes, regardless of program participation.

- The vast majority of persons impaired by substance abuse are **not** AFDC recipients. Just seven percent of all adults (age 18-44) estimated to be significantly impaired by substance abuse report receiving AFDC.

- Because women make up such a large proportion of adults receiving AFDC, a women only comparison is also relevant. Analysis again finds that most

Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *Patterns of Substance Use and Substance-Related Impairment Among Participants in the Aid to Families with Dependent Children Program (AFDC)*, December 1994.

women in the group we have defined as significantly impaired by alcohol and other drug use are not AFDC recipients. Of these women, only 20 percent receive AFDC.

- Impaired AFDC recipients are more likely than other impaired persons to report receiving treatment for their substance abuse in the past year. Half of AFDC recipients estimated to be significantly impaired by substance abuse reported receiving some form of substance abuse treatment in the past year. Only 23 percent of the non-AFDC household adults (age 18 - 44) in this impairment category reported receiving any treatment for their substance abuse problem in the past year.

The study of the basic prevalence of substance use in the AFDC population[5] found that:

- The prevalence rates of self-reported non-medical drug use are somewhat higher among persons who participate in AFDC than in the general population. In 1991, past-month drug use for persons 15 years of age and older is 10.5 percent for those in AFDC households compared to 6.5 percent in the overall population in that age group. Marijuana is the most frequently reported illicit drug, with nearly 9 percent of individuals in AFDC households reporting past-month use. Past month cocaine use is reported by 1.0 percent of the general population age 15 and older and by 1.6 percent of individuals in AFDC households.

- Three or more episodes of binge drinking in the past month is reported by 8.2 percent of women in AFDC households and 3.8 percent of all women age 15 and older. Among men and women combined, this level of heavy episodic

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[5] op. cit. U.S. Department of Health and Human Services, Patterns of Substance Use and Program Participation.

Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *Patterns of Substance Use and Substance-Related Impairment Among Participants in the Aid to Families with Dependent Children Program (AFDC)*, December 1994.

drinking is reported by 8.6 percent of all persons 15 years of age and older and 8.7 percent of those in AFDC households. Binge drinking is defined as having had five or more drinks in a row.

- The vast majority of past month drug users are not AFDC recipients. Among the past-month users, 2.7 percent of males and 9.2 percent of females live in households participating in AFDC. In fact, a previous analysis of substance use among parents has shown that more parents who have used illicit drugs in the past month have incomes above 300 percent of the poverty line than have incomes below poverty[6].

The findings of relatively higher rates of reported drug and binge alcohol use among AFDC program participants is not surprising. This program serves persons in poverty, and poor people are at a higher risk for a number of problems including alcohol and drug abuse.

These findings suggest that AFDC program administrators should recognize the presence of persons with substance abuse problems in their caseloads, in order to improve the ability to serve these persons and better focus prevention and treatment efforts.

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[6] U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation and the National Institute on Drug Abuse, Substance Abuse Among Women and Parents, July 1994, p. 37.

Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *Patterns of Substance Use and Substance-Related Impairment Among Participants in the Aid to Families with Dependent Children Program (AFDC)*, December 1994.

Table 12

Prevalence of drug and alcohol use by persons 15 years of age and older
Total persons and by AFDC program participation: 1991
(FEMALES ONLY)

Alcohol and Drug Use Pattern	Total persons in category		AFDC	
	Number	Rate	Number	Rate
FEMALES ONLY				
Alcohol				
Weekly or almost weekly for past year	14,290,401	14.2	662,701	14.8
Daily or almost daily for past year	5,517,397	5.5	296,565	6.6
Five or more drinks one or more times in past 30 days	8,217,084	8.2	558,849	12.5
Five or more drinks three or more times in past 30 days	3,834,926	3.8	368,579	8.2
Any illicit drug use				
Past year	11,098,258	11.0	943,693	21.1
Past month	5,275,629	5.2	482,820	10.8
Marijuana				
Past year	7,593,606	7.5	721,971	16.2
Past month	3,529,467	3.5	385,211	8.6
Weekly for past year	1,491,354	1.5	232,931	5.2
Daily or almost daily for past year	822,250	0.8	134,303	3.0
Cocaine				
Past year	2,095,005	2.1	243,895	5.5
Past month	616,075	0.6	76,595	1.7
Weekly for past year	275,030	0.3	45,928	1.0
Total females in population	100,619,957	100.0	4,468,498	100.0

NOTE: The "any illicit drug" category includes any nonmedical use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or psychotherapeutic drugs. Numbers and percentages may not sum to totals because of rounding. Past-year use includes use in the past month. Program participation is counted if any member of the family received benefits. Selected comparisons of drug use rates in this table have been subjected to statistical difference testing; the results of these tests are shown in the appendix.

Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *Patterns of Substance Use and Substance-Related Impairment Among Participants in the Aid to Families with Dependent Children Program (AFDC)*, December 1994.

Table 2 - Prevalence of drug and alcohol use by persons 15 years of age and older according to program participation: 1991 (continued)

Alcohol and drug use pattern	AFDC		Medicaid		Food Stamps		Total persons in category	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
FEMALES								
Alcohol								
Weekly or almost weekly for past year	662,701	14.8	949,014	12.4	1,053,554	12.9	14,290,401	14.2
Daily or almost daily for past year	296,565	6.6	429,136	5.6	533,896	6.6	5,517,397	5.5
Five or more drinks one or more times in past 30 days	558,849	12.5	747,666	9.8	869,444	10.7	8,217,084	8.2
Five or more drinks three or more times in past 30 days	368,579	8.2	433,248	5.7	558,608	6.9	3,834,926	3.8
Marijuana								
Past year	721,971	16.2	921,834	12.0	1,100,592	13.5	7,593,606	7.5
Past month	385,211	8.6	470,675	6.1	520,748	6.4	3,529,467	3.5
Weekly for past year	232,931	5.2	268,641	3.5	361,687	4.4	1,491,354	1.5
Daily or almost daily for past year	134,303	3.0	173,280	2.3	200,534	2.5	822,250	0.8
Cocaine								
Past year	243,895	5.5	358,743	4.7	419,044	5.1	2,095,005	2.1
Past month	76,595	1.7	144,447	1.9	117,815	1.4	616,075	0.6
Weekly for past year	45,928	1.0	72,265	0.9	79,109	1.0	275,030	0.3
Psychotherapeutic drugs (nonmedical use)								
Past year	309,797	6.9	488,064	6.4	509,583	6.3	4,627,952	4.6
Past month	137,176	3.1	252,106	3.3	200,209	2.5	1,712,771	1.7
Any illicit drug use								
Past year	943,893	21.1	1,346,736	17.6	1,430,454	17.6	11,098,258	11.0
Past month	482,820	10.8	757,683	9.9	738,176	9.0	5,275,829	5.2
Total females in population	4,468,498	100.0	7,656,641	100.0	8,140,241	100.0	100,619,957	100.0

See footnotes at end of table.

Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *Patterns of Substance Use and Program Participation*, December 1994.

EXECUTIVE SUMMARY

This report provides data on substance abuse by women of childbearing age and by parents and examines the number of children potentially at risk because of parental drug abuse. The study is based primarily on data from the 1991 National Household Survey on Drug Abuse (NHSDA) but also includes 1991 data from the Drug Abuse Warning Network (DAWN). This study reflects the first attempt to address this topic using data from some of these sources, notably the NHSDA. The study was sponsored jointly by the Office of the Assistant Secretary for Planning and Evaluation and the National Institute on Drug Abuse, with technical assistance from the Substance Abuse and Mental Health Services Administration. Estimates from the NHSDA should be regarded as conservative because of potential underreporting of drug use.

PRIMARY FINDINGS

The basic findings of this study are:

(1) Parents with children in the household use illicit drugs less often than do men and women ages 15-44 without children. Past-month illicit drug use is reported by 5.7 percent of women ages 15 - 44 with children in the home compared to 11.2 percent of women ages 15 - 44 without children. Rates for men show similar patterns.

(2) Based on this analysis, it is estimated that there are approximately 6 million children under 18 years of age (9 percent of all such children) whose parent(s) have used illicit drugs in the past month. Marijuana is the illicit drug used most often by parents.

Source: U.S. Department of Health and Human Services, National Institute on Drug Abuse, *Substance Abuse Among Women and Parents*, July 1994.

(3) Contrary to expectations, there is little difference in rates of illicit drug use among parents in large metropolitan areas, small metropolitan areas, and nonmetropolitan areas.

(4) The prevalence of illicit drug use among parents has similar demographic patterns as does drug use in the general population. Use rates differ according to income/poverty status, employment, education, age, race/ethnicity, and marital status.

(5) In addition to illicit drug use, the study examined the prevalence of binge alcohol consumption among parents. Consumption of five or more drinks at one time on at least three occasions in the past 30 days is reported by 5.2 million parents (4 percent of mothers and 13 percent of fathers).

PARENTAL SUBSTANCE ABUSE AND CHILDREN AT RISK

Nationwide, an estimated 12.8 million children under 18 years of age live with a parent who reportedly has used illicit drugs in the past year. This figure, which is derived from the 1991 NHSDA, represents approximately 18 percent of all children in this age group. Of the 12.8 million children, approximately 6 million -- 9 percent of children under 18 years old -- have parents who report having used illicit drugs in the past month. Illicit drug use includes any use of illegal drugs such as cocaine, marijuana, heroin, or hallucinogens and nonmedical use of prescription psychotherapeutic drugs such as tranquilizers, stimulants, sedatives, and analgesics. Marijuana is the illicit drug used most often by parents.

Children under 18 years old who live with at least one parent who uses drugs tend to be younger than children overall. For example, 20 percent of children of both past-year and past-month drug users are under 3 years old, whereas 17 percent of all children are in this age group. This is consistent with the findings, discussed below, that drug use is more prevalent among younger parents than among older parents.

Source: U.S. Department of Health and Human Services, National Institute on Drug Abuse, *Substance Abuse Among Women and Parents*, July 1994.

Overall, 4.6 million self-reported past-month drug users have biologically-related minor children, and 63 percent of these parents, including 78 percent of mothers and 49 percent of fathers, have at least one of their children living with them. With the addition of stepchildren and adopted children, an estimated 3.4 million past-month drug users are parents and have their minor children living with them. Among all parents in this category, the prevalence rate of past-month drug use is 5.3 percent.

Analyses of data on parents' use of specific drugs show the following:

- The prevalence of past-month marijuana use among parents is 4.1 percent overall (2.6 million parents), 3.6 percent for mothers, and 4.7 percent for fathers. Weekly use of marijuana over the past year is reported by 1.4 million parents, and daily or almost daily use of this drug over the past year is reported by almost 900,000 parents.

- Use of cocaine (including crack) in the past 12 months is reported by 1.8 million parents (a prevalence rate of 2.9 percent), and past-30-day use of this drug is reported by approximately 625,000 parents. An estimated 170,000 parents reportedly used cocaine weekly for the past year.

- Although not included in the category of illicit drugs, episodic heavy (binge) drinking -- consumption of five or more drinks of alcohol on at least three occasions in the past 30 days -- is reported by 5.2 million parents (a prevalence rate of 8.1 percent overall, 4 percent for mothers, and 13 percent for fathers). Daily or almost daily alcohol use over the past year is reported by 5.2 million parents (a prevalence rate of 8.2 percent overall, 3.8 percent for mothers, and 14 percent for fathers).

As noted above, drug use patterns differ by age, race/ethnicity, marital status, education, employment status, and family income. These patterns are similar to what previous research has shown occurs in the general population. Some important patterns are:

Source: U.S. Department of Health and Human Services, National Institute on Drug Abuse, *Substance Abuse Among Women and Parents*, July 1994.

- As with drug users generally, illicit drug use rates generally are higher for younger parents than for older parents. The highest rates of drug use are seen for parents 20 to 25 years of age. In this group, the prevalence rates for any illicit drug use are 24 percent for past-year use and 12 percent for past-month use.

- Prevalence rates differ according to parents' marital status. The rate of past-month use of any illicit drug, for example, is 13.2 percent among never-married parents, 10.8 percent among divorced or separated parents, and 4.0 percent among currently married parents. Age differences among these groups may explain some of the differences in drug use rates. These findings are similar to those previous research has established for the general population.

- Rates of drug use also differ according to employment status and educational level. Rates of past-month drug use are 17 percent for parents who are unemployed and just under 5 percent for those who are employed either full time or part time. Based on educational level, the highest rate of past-month drug use, 9.8 percent, is found for persons who did not complete high school.

- Population density is less strongly associated with differences in drug use rates than was expected. For example, the prevalence rates for past-month drug use are 5.2 percent in metropolitan areas of over 1 million, 6.0 percent in smaller metropolitan areas, and 4.7 percent in nonmetropolitan areas. Past-year drug use prevalence rates across the three types of areas vary less than 1 percentage point (from 11.0 percent for large metropolitan areas to 11.9 percent for nonmetropolitan areas).

- Consistent with findings about drug use in the general population, differences in drug use rates are found for parents of different family income levels. For example, the prevalence rate for past-month illicit drug use among parents below the poverty line, 9.5 percent, is higher than the rate for those above the poverty line, 4.6 percent. It is important to note that while the rates of drug use are

Source: U.S. Department of Health and Human Services, National Institute on Drug Abuse, *Substance Abuse Among Women and Parents*, July 1994.

Table 37. — Total Arrest Trends, Sex, 1995-1996

[8,275 agencies; 1996 estimated population 175,898,000; 1995 estimated population 174,157,000]

Offense charged	Males						Females					
	Total			Under 18			Total			Under 18		
	1995	1996	Percent change	1995	1996	Percent change	1995	1996	Percent change	1995	1996	Percent change
TOTAL	8,223,945	8,239,213	+.2	1,437,879	1,463,009	+1.7	2,076,796	2,131,442	+2.6	467,989	495,352	+5.8
Murder and nonnegligent manslaughter	14,110	12,516	-11.3	2,327	1,972	-15.3	1,461	1,421	-2.7	137	137	—
Forcible rape	22,960	22,493	-2.0	3,730	3,743	+.3	278	248	-10.8	77	53	-31.2
Robbery	113,419	105,487	-7.0	37,268	34,051	-8.6	11,957	11,397	-4.7	3,908	3,662	-6.3
Aggravated assault	314,582	302,629	-3.8	45,404	42,868	-5.6	64,668	66,173	+2.3	10,697	11,009	+2.9
Burglary	225,059	219,026	-2.7	79,385	81,809	+3.1	28,966	28,391	-2.0	8,867	9,320	+5.1
Larceny-theft	687,011	670,877	-2.3	230,621	227,000	-1.6	338,661	340,922	+.7	108,885	114,092	+4.8
Motor vehicle theft	119,098	108,666	-8.8	49,413	44,490	-9.9	18,493	17,012	-8.0	8,508	7,860	-7.6
Arson	11,666	10,965	-6.0	6,412	6,081	-5.2	2,160	1,908	-11.7	873	754	-13.6
Violent crime[1]	465,071	443,125	-4.7	88,729	82,634	-6.9	78,364	79,239	+1.1	14,819	14,861	+.3
Property crime[2]	1,042,834	1,009,534	-3.2	365,831	359,389	-1.8	388,280	388,333	*	127,133	132,026	+3.8
Crime Index total[3]	1,507,905	1,452,659	-3.7	454,560	442,023	-2.8	466,644	467,472	+.2	141,952	146,887	+3.5
Other assaults	727,605	723,464	-.6	112,567	115,354	+2.5	176,050	183,958	+4.5	42,561	44,482	+4.5
Forgery and counterfeiting	51,032	52,505	+2.9	3,808	3,611	-5.2	39,092	38,443	-2.2	2,084	2,094	+.5
Fraud	170,440	173,308	+1.7	12,822	13,717	+7.0	119,061	122,677	+3.0	4,474	4,555	+1.8
Embezzlement	5,597	6,018	+7.5	492	494	+.4	4,362	4,910	+12.6	357	408	+14.3
Stolen property; buying, receiving, possessing	97,749	88,333	-9.6	26,311	24,563	-6.6	16,168	15,068	-6.8	3,623	3,580	-1.2
Vandalism	194,757	188,322	-3.3	89,221	85,465	-4.2	30,357	30,339	-.1	10,766	10,613	-1.4
Weapons; carrying, possessing, etc.	159,987	141,592	-11.5	37,688	34,323	-8.9	13,744	12,143	-11.6	3,320	3,160	-4.8
Prostitution and commercialized vice	29,910	31,217	+4.4	517	504	-2.5	48,593	46,954	-3.4	483	550	+13.9
Sex offenses (except forcible rape and prostitution)	59,495	60,973	+2.5	10,345	10,897	+5.3	5,104	5,288	+3.6	811	907	+11.8
Drug abuse violations	880,907	891,206	+1.2	123,574	130,408	+5.5	177,850	179,436	+.9	17,335	19,098	+10.2
Gambling	14,147	14,306	+1.1	1,910	2,106	+10.3	2,413	2,296	-4.8	62	63	+1.6
Offenses against family and children	75,004	72,908	-2.8	2,507	3,223	+28.6	19,062	21,293	+11.7	1,473	1,918	+30.2
Driving under the influence	781,518	803,028	+2.8	8,264	9,877	+19.5	131,055	138,766	+5.9	1,507	1,897	+25.9
Liquor laws	325,931	367,847	+12.9	60,160	71,634	+19.1	74,905	88,206	+17.8	24,219	30,108	+24.3
Drunkenness	439,319	430,895	-1.9	12,241	13,317	+8.8	59,247	59,063	-.3	2,313	2,769	+19.7
Disorderly conduct	446,196	458,492	+2.8	104,447	112,479	+7.7	117,993	122,539	+3.8	31,957	35,707	+11.7
Vagrancy	16,316	16,424	+.7	2,433	2,191	-9.9	3,933	4,098	+4.2	313	360	+15.0
All other offenses (except traffic)	2,101,428	2,113,328	+.6	235,310	234,435	-.4	467,883	482,503	+3.1	65,099	70,186	+7.8
Suspicion (not included in totals)	3,287	3,524	+7.2	1,047	1,062	+1.4	687	843	+22.7	272	271	-.4
Curfew and loitering law violations	78,981	95,892	+21.4	78,981	95,892	+21.4	33,277	40,020	+20.3	33,277	40,020	+20.3
Runaways	59,721	56,496	-5.4	59,721	56,496	-5.4	80,003	75,990	-5.0	80,003	75,990	-5.0

[1] Violent crimes are offenses of murder, forcible rape, robbery, and aggravated assault.

[2] Property crimes are offenses of burglary, larceny-theft, motor vehicle theft, and arson.

* Less than one-tenth of 1 percent.

[3] Includes arson.

Source: U.S. Department of Justice, Federal Bureau of Investigation, *Crime in the United States, Uniform Crime Reports 1996.*

higher among poor parents, most substance-abusing parents and their children are not poor. In fact, nearly three-fourths of past-month drug-using parents have incomes above the poverty line, and over one-fourth have incomes more than three times the poverty line.

CONCLUSION

Parents with children in the home use illicit drugs less frequently than do men and women (ages 15 - 44) without children. Still, this analysis found that an estimated 12.8 million children live with parent(s) who report illicit drug use in the past year, and 6.2 million live with parents(s) who report past month illicit drug use. Where substance abuse is serious enough to affect parental functioning, some of these children may suffer deleterious social and emotional effects. In addition, some of the children in substance-abusing families will have been exposed to alcohol and other drugs prenatally. The data presented in this report show that drug use among parents, as among the general household population, appears to be closely related to age, income/poverty status, and a host of other factors which are themselves interrelated.

The fact that many families and children are directly affected by alcohol and drug abuse strongly suggests that mainstream service providers working with families in health, social services, and education systems need to be aware of the potential for abuse of alcohol and drugs among their clients, and should play an active role in identifying and intervening with families, including referral for appropriate treatment. Drug treatment programs must recognize that a portion of individuals seeking their services are likely to be families with young children, and that services appropriate to families are needed. Moreover, the effectiveness of services for children and families at risk would be enhanced through better coordination among providers.

Source: U.S. Department of Health and Human Services, National Institute on Drug Abuse, *Substance Abuse Among Women and Parents*, July 1994.

Table 40. — Female Arrests, Distribution by Age, 1996

[9,666 agencies; 1996 estimated population 189,927,000]

Offense charged	Total all ages	Ages under 15	Ages under 18	Ages 18 and over	Age: Under 10	10-12	13-14	15	16	17	18	19	20	21
TOTAL	2,289,519	196,506	533,241	1,756,678	5,560	37,647	153,319	116,845	119,611	100,279	90,495	87,231	77,044	68,818
Percent distribution[1]	100.0	8.6	23.3	76.7	.3	1.6	6.7	5.1	5.2	4.4	4.0	3.8	3.4	3.0
Murder and nonnegligent manslaughter	1,482	31	142	1,340	1	2	28	30	39	42	76	74	67	72
Forcible rape	281	30	63	218	—	11	19	11	13	9	10	4	7	6
Robbery	11,869	1,347	3,781	8,088	19	231	1,097	665	797	772	636	516	499	362
Aggravated assault	69,292	4,066	11,524	57,768	109	820	3,137	2,395	2,568	2,495	2,297	2,335	2,229	2,302
Burglary	29,985	4,290	9,921	20,064	302	1,096	2,892	1,987	1,930	1,714	1,585	1,222	1,033	820
Larceny-theft	370,482	52,459	124,246	246,236	1,775	13,424	37,260	24,162	25,030	22,595	19,270	15,565	12,304	10,838
Motor vehicle theft	17,898	2,834	8,251	9,647	12	294	2,508	2,183	1,892	1,362	925	614	493	428
Arson	2,052	558	818	1,234	75	201	282	116	75	69	46	40	46	48
Violent crime[2]	82,924	5,474	15,510	67,414	129	1,064	4,281	3,301	3,417	3,318	3,019	2,929	2,802	2,742
Percent distribution[1]	100.0	6.6	18.7	81.3	.2	1.3	5.2	4.0	4.1	4.0	3.6	3.5	3.4	3.3
Property crime[3]	420,417	60,121	143,236	277,181	2,164	15,015	42,942	28,448	28,927	25,740	21,826	17,441	13,876	12,134
Percent distribution[1]	100.0	14.3	34.1	65.9	.5	3.6	10.2	6.8	6.9	6.1	5.2	4.1	3.3	2.9
Crime Index total[4]	503,341	65,595	158,746	344,595	2,293	16,079	47,223	31,749	32,344	29,058	24,845	20,370	16,678	14,876
Percent distribution[1]	100.0	13.0	31.5	68.5	.5	3.2	9.4	6.3	6.4	5.8	4.9	4.0	3.3	3.0
Other assaults	197,882	20,313	47,650	150,232	526	4,693	15,094	9,829	9,410	8,098	6,974	6,809	6,215	6,396
Forgery and counterfeiting	31,295	323	2,289	29,006	11	46	266	329	685	952	1,417	1,499	1,449	1,257
Fraud	135,402	1,487	4,725	130,677	29	213	1,245	1,043	844	1,351	3,214	4,641	3,213	5,573
Embezzlement	5,118	22	428	4,690	3	3	16	19	151	226	349	327	317	268
Stolen property; buying, receiving, possessing	16,198	1,195	3,800	12,398	18	190	987	819	667	919	875	737	662	542
Vandalism	32,358	5,239	11,338	21,020	361	1,390	3,488	2,105	2,145	1,849	1,509	1,214	1,042	955
Weapons; carrying, possessing, etc.	12,680	1,307	3,327	9,353	36	289	982	755	689	576	512	445	378	387
Prostitution and commercialized vice	48,591	71	578	48,013	3	3	65	91	137	279	963	1,331	1,331	1,514
Sex offenses (except forcible rape and prostitution)	5,681	553	991	4,690	66	175	312	170	137	131	203	230	203	184
Drug abuse violations	188,880	5,111	20,344	168,536	56	616	4,439	3,944	5,241	6,048	7,289	6,754	5,923	5,495
Gambling	2,336	13	69	2,267	—	1	11	15	16	26	41	44	32	45
Offenses against family and children	23,251	783	2,183	21,068	64	108	613	468	519	411	574	563	598	637
Driving under the influence	149,706	84	2,039	147,667	19	6	59	124	604	1,227	2,515	3,063	3,175	4,630
Liquor laws	95,750	5,349	33,283	62,467	61	450	4,838	6,362	9,713	11,839	14,880	13,338	9,328	2,003
Drunkenness	63,524	731	2,976	60,548	16	60	655	628	735	882	1,263	1,353	1,239	1,494
Disorderly conduct	132,537	15,026	38,545	93,992	264	2,928	11,834	8,439	8,098	6,982	5,835	5,116	4,534	4,420
Vagrancy	4,370	136	439	3,931	3	16	117	96	108	99	176	143	104	134
All other offenses (except traffic)	517,044	25,506	76,126	440,918	1,081	3,924	20,501	17,311	17,783	15,528	16,989	19,230	18,572	17,983
Suspicion	971	99	361	610	1	16	82	72	97	93	50	24	29	25
Curfew and loitering law violations	41,815	13,178	41,815	—	176	1,763	11,239	10,349	11,139	7,149	—	—	—	—
Runaways	81,209	34,384	81,209	—	453	4,678	29,253	22,128	18,151	6,546	—	—	—	—

See footnotes at end of table.

Source: U.S. Department of Justice, Federal Bureau of Investigation, *Crime in the United States, Uniform Crime Reports 1996.*

In the majority of sites, overall drug use increased, and in all but two sites (New Orleans and San Antonio), the rate was more than 50 percent. Even with cocaine use slowing down in many sites, the decrease was offset by increased use of marijuana, amphetamines, and, to a lesser degree, opiates.

Drug Use Among the Youngest Female Arrestees

- Decreases in cocaine use for the youngest female arrestees were less dramatic than in the previous year.

While several sites reported sharp declines in cocaine positives consistent with the previous year (percentages in Birmingham, Dallas, and Denver decreased by 12 to 16 points), percentages increased in 10 sites. The most notable increases in cocaine test positive percentages among the youngest females were in St. Louis (17 points), Ft. Lauderdale (8 points), and Portland and Washington, D.C. (6 points). Again, because of small numbers of respondents in these categories the percentage changes should be interpreted cautiously.

- Female arrestees under age 21 had the highest percentage of marijuana positives among adult females.

In every site, marijuana positives among the youngest female arrestees were more than 20 percent, with dramatic increases over 1995 in a few sites. In St. Louis, the rate for this population went from 26 to 50 percent, in Portland from 15 to 30 percent, in Cleveland from 18 to 47 percent, in Birmingham from 18 to 43 percent, and in Atlanta from 10 to 49 percent.

Use of Opiates:

- Prevalence of opiate use varied considerably across sites for the youngest female arrestees.

Although nine sites showed rates of less than 1 percent for opiate use among this group, in some sites high rates were found even among the youngest female arrestees. In Manhattan, Philadelphia, and Portland, the numbers were at 15 percent or greater. In each of these sites, the percentage represented an increase over 1995.

Drug Use Among Male Juvenile Arrestees/Detainees

Interviews and urine tests were conducted with 4,145 boys in 12 sites in 1996.

- Marijuana use rose sharply and cocaine use was up slightly among male juveniles.

Drug use among boys was greater in every site but one (in San Diego rates held steady), with increases of 10 or more percentage points in 8 out of 12 sites. The increase was due mainly to marijuana use. The median marijuana test positive rate for boys was 52 percent in 1996, compared to 41 percent in 1995. Cocaine use, typically low among juvenile males, has fluctuated in recent years and in 1996 took a slight upturn, increasing in the majority of sites. Sites with the highest rates of cocaine use were Cleveland, Los Angeles, Phoenix, and San Antonio, ranging from 10 to 13 percent prevalence. Use of opiates among male juveniles remained very low overall.

Drug Use and School Attendance:

- Overall, cocaine use was much higher for boys out of school than for boys in school, a consistent finding for several years.

Marijuana use rates for boys out of school continued to be higher than for boys in school; however, in three sites (Denver, Los Angeles, and Phoenix), the rates were within 3 percentage points of each other.

The median prevalence rate for marijuana use by boys out of school (61 percent) was lower by 3 points than the median use rate for 15- to 20-year-old male arrestees—the adult group with the highest rates of marijuana use. The median marijuana use rate for boys in school was 48 percent.

Other Drug Use

Use of Methamphetamine:

- While methamphetamine use continued to be detected mainly in Western U.S. DUF sites, test positive rates fell significantly from 1995 levels.

The eight cities (San Diego, Phoenix, San Jose, Portland, Omaha, Los Angeles, Denver, and Dallas) that were cited in the *1995 Drug Use Forecasting Annual Report on Adult and Juvenile Arrestees* as having the highest methamphetamine test positive rates among adult arrestees all reported substantial declines in 1996. In San Diego, adult methamphetamine test positives declined from 37.1 to 29.9 percent; in Phoenix from 21.9 to 12.2 percent; in Portland from 18.7 to 12.4 percent; in San Jose from 18.5 to 14.8 percent; in Omaha from 8.1 to 4.3 percent; in Los Angeles from 7.5 to 7.0 percent; in Denver from 3.8 to 2.2 percent; and in Dallas from 2.7 to 1.3 percent. Only in San Antonio did the percentage of methamphetamine detections increase over 1995, from 1.5 percent to 2.1 percent.

- In keeping with trends of recent years, adult females showed greater methamphetamine use than males.

Females continued to lead males in terms of methamphetamine test positive percentages by 2 to 10 percentage points in most of the Western sites. Only in Denver did a larger fraction of males test positive for methamphetamine than females. The gap between females and males increased between 1995 and 1996 in five Western sites, and declined in three. Far greater numbers of females were arrested on prostitution charges than males, and drug test positive rates were often the highest in this charge category. However, even when female and male methamphetamine use was compared across similar charge categories, females were detected as methamphetamine users more frequently than males.

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Drug-Abusing Women Offenders: Results of a National Survey

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In recent years, women, particularly women arrested on drug charges, have constituted the fastest growing population within the criminal justice system. From 1982 to 1991, the number of women arrested for drug offenses, including possession, manufacturing, and sale, increased by 89 percent.[1] The increasing arrest rate for women has been accompanied by a corresponding rise in the number of women offenders under community supervision or incarcerated in jail or prison.

Although drug offenses constitute only 7 percent of the charges for which women are arrested and about 12 percent of the crimes for which they are incarcerated in prisons, these numbers are deceptively low as indicators of drug involvement by women offenders.[2] Results of the National Institute of Justice's (NIJ's) Drug Use Forecasting (DUF) program, which interviews arrestees in more than 20 cities around the Nation, show that the majority of women interviewed, regardless of charge, test positive for at least one illicit drug.[3] These findings are expected, since a high proportion of the income-producing, nondrug crimes for which women are arrested—fraud, larceny, burglary, and prostitution—are committed, in part, to support drug habits.[4]

Although significant percentages of drug-abusing women offenders are in jail, prison, or under community supervision, little is known concerning their specific service needs. In 1987, 87 percent of State

Issues and Findings

Discussed in this Brief: A national survey in 1992–1993 of drug abuse treatment programs for women offenders funded by NIJ. The survey focused on issues of assessing drug-abusing women offenders' needs and services in community and custodial treatment programs.

Key issues: Drug-abusing women offenders constitute one of the fastest growing segments within the criminal justice system. Little is known regarding their specific needs since very few drug-abusing women offenders receive treatment in custody or in the community, and little is known about how treatment programs assess needs and conduct treatment services.

Key findings: Highlights of survey results include:

◆ More treatment programs are available than in the past, but they have not reduced the difference between those women who need and those who receive drug treatment services.

◆ Many programs do not assess the multiple problems of the drug-abusing women offender population and fail to address them with suitable services.

◆ Treatment provided by the programs surveyed is usually limited in intensity and duration.

◆ Services offered for women drug abusers are mostly found in women-only programs rather than both-sex programs.

Implications of these findings for changes in policy and practice include:

◆ More coordinated efforts among Federal, State, and local agencies are needed to research and implement improved treatment and related services for drug-abusing women offenders.

◆ More programs that provide continuing support for women are needed to enable a transition from treatment to independent living in the community; such support includes training in personal empowerment, as well as vocational training.

◆ More family services are needed, especially since few programs provide accommodations for infants and children; this deters drug-abusing women offenders from entering and continuing treatment.

Target audience: Local, State, and Federal legislators and agencies; policymakers; drug treatment program staff; law enforcement officials; community leaders; health care organizations; child protective services.

Characteristics of Drug-Abusing Women Offenders

To gain a picture of the special needs of drug-abusing women offenders, information was taken from several sources covering women arrestees, women incarcerated in jails and prisons, women offenders diverted into community-based treatment instead of incarceration or as a condition of probation or parole, and women in publicly supported drug treatment programs.[5] Provided below are characteristics of these women:

- Health problems. Many drug-abusing women are physically or mentally ill. All drug users, and cocaine users in particular, are at increased risk for extreme weight loss, dehydration, digestive disorders, skin problems, dental problems, gynecological and venereal infections, tuberculosis, hepatitis B, hypertension, seizures, respiratory arrest, and cardiac failure.[6]

- Educational/vocational background. Most of the women are unemployed or work at low-paying jobs. Most have not completed high school, have inadequate vocational skills, and lack many of the skills and knowledge needed to function productively in society.[7]

- Psychosocial problems. Drug-addicted women tend to come from families with a high incidence of mental illness, suicide, alcohol or drug dependence, violence, or are victims of incest, rape, or physical or sexual abuse.[8]

- Responsibility for parenting. Most drug-abusing women offenders are of child-bearing age, already have children, and are single mothers. Many of them receive little or no help from the children's father(s), lack supportive family and social networks, and have limited or no financial resources. Often their children become drug abusers themselves, thereby perpetuating both drug abuse and dysfunctional parenting across generations.[9]

- Drug use and treatment. Most drug-abusing women offenders started abusing drugs and alcohol at an early age, and many used drugs, especially cocaine, on a daily basis prior to incarceration. In one survey of women in prison, 46 percent of respondents reported they had used drugs and/or alcohol at the time of their offense.[10] Approximately 25 percent of adult women offenders have spent some time in a drug/alcohol treatment program, which, however, has most likely been of limited duration and intensity.[11]

- Criminal justice and child protective services involvement. A large percentage of drug-abusing women who seek treatment have had some involvement with the criminal justice system or with child protective services. One study reported that an estimated 60 to 80 percent of child abuse and neglect cases were from substance-abusing families.[12]

Although these characteristics have been found to typify the population of drug-abusing women offenders, they have different implications for programs. Individual women will differ in the manifestations and severity of these characteristics and attendant problems. Such diversity calls for an assessment of specific clients' needs and the provision of services designed to meet those needs. If a program lacks a well-developed assessment procedure, clients are less likely to receive appropriate services, such as treatment in a style matched to cultural identity and cognitive level and of adequate intensity and duration.

correctional institutions for women reported that 40 percent or more of their inmates needed treatment for drug problems at time of intake.[13] By all indications, few drug-abusing women offenders actually receive treatment, either in custody or in the community, and little information is available on how programs for women offenders determine needs, plan treatment, and perform services. This NIJ study conducted a nationwide survey of drug treatment programs for women offenders in the care or custody of the criminal justice system. The results, findings, and policy implications for improving treatment of drug-abusing women offenders are reported in this Research in Brief.

Survey approach

The survey, conducted in late 1992 and early 1993, was part of a larger study of criminal justice drug treatment programs for women offenders conducted by the University of California at Los Angeles (UCLA) Drug Abuse Research Center and the National Development and Research Institute, with funding from NIJ. Programs to be included in the survey were identified from a review of the literature, recommendations of colleagues, and a mailing to the directors of Treatment Alternatives to Street Crime projects and to the directors of State departments of corrections and State departments of alcohol and drug programs, asking them to identify drug treatment programs in their area that treated women offenders.[14] In all, 336 programs were identified through these sources.[15] Two questionnaire forms were mailed to these programs, one for community-based programs and the other for corrections-based programs. From the returned questionnaires, data were available for analysis on 165 community-based programs, 16 jail programs, and 53 prison programs. Information was received on programs in 40 States (including the District of Columbia).[16]

The survey aimed to increase the knowledge about needs assessment methods and services offered in community and custodial treatment programs serving drug-abusing women offenders, emphasizing the programs' methods for assessing women's needs and the services provided to meet the assessed needs. In addition, the survey identified programs for more indepth examination of needs assessment and services through site visits and personal interviews.[17] Results are reported separately for community-based programs and for custodial programs.

Results for community-based programs

Most responding community-based programs were either residential (55) or outpatient drug-free (77), followed by day treatment programs (24). The distinction between the outpatient drug-free (OP) and the day treatment (DT) modalities was not uniformly interpreted by respondents: some regarded OP as more intensive (providing more services and hours of treatment), while others viewed DT as more intensive. Consequently, they were

Source: U.S. Department of Justice, National Institute of Justice, *Drug-Abusing Women Offenders: Results of a National Survey*, October 1994.

women-only programs showing somewhat greater availability.

- More women-only OP/DT programs than both-sex OP/DT programs made other family life supportive services available: these services included training in hygiene and nutrition and group meetings for parents and children.

- Training in personal empowerment was available in 76 percent of the residential and 70 percent of all outpatient programs; 90 percent of the women-only OP/DT programs offered such training.

- All of the halfway houses provided services related to economic survival (education leading to the General Equivalency Diploma and vocational training); 78 percent of residential and 62 percent of outpatient programs offered education leading to the GED; and 69 percent of residential and 56 percent of outpatient programs offered vocational training.

- Transportation to hospitals, schools, and other places was available in 93 percent of the residential programs and in 83 percent of the halfway houses, but in only 44 percent of the OP/DT programs.

- Legal advice was offered by 51 percent of the residential and 42 percent of the outpatient programs.

- Assistance with post-discharge housing arrangements was offered in 80 percent of the residential and 46 percent of the OP/DT programs.

Transition and followup services

When women completed their formal treatment, most programs encouraged them to continue treatment on a less intensive basis, and the majority of programs encouraged them to begin or continue attendance at Anonymous Fellowship meetings (Alcoholics Anonymous, Narcotics Anonymous, and Cocaine Anonymous) (see tables 4 and 5). However, where a greater outlay of resources was required to provide services, such as to arrange adequate housing, secure sources of income, maintain contacts, and provide support, more disparity in the services offered across modalities was observed. For instance, nearly three times as many residential as outpatient programs offered help in procuring housing and twice as many residential programs helped to secure income.

Residential programs and halfway houses were less likely than outpatient programs to offer immediate reentry to the treatment program after a client relapsed because they had limited housing space. Although some programs indicated that reentry was determined by space availability, others required a mandatory waiting period, presumably as a tenet of their treatment philosophy.

Results for custodial programs

Results from the custodial drug treatment programs are shown in tables 6 through 8. The survey methodology was the same as that for the community-based programs, although some of the questions differed to address special institutional characteristics of custodial programs.

Program characteristics

Information from 16 jail programs and 53 prison programs was available for analysis. The jail programs included five that were identified as therapeutic communities (TC's), three that were typical residential programs (non-TC), six that provided only a few hours of treatment per week, and two that were basically transition programs—clients were identified while they were in jail, but all or most treatment services were provided after their release into the community. Among the prison programs, 14 were identified to be TC's, 7 were residential (non-TC type) programs, 29 provided only a few hours of treatment per week, and 3 were transition programs.

Jail programs for women averaged 46 clients; prison programs averaged 58. Seventy percent of the jails and 45 percent of the prisons claimed they were able to treat all of the women who volunteered and who were eligible for treatment.

Jail programs averaged 19 weeks and ranged from 4 to 42 weeks, while prison programs averaged 24 weeks and ranged from 5 to 156 weeks. Jail programs averaged 20 hours of treatment per week (range 2 to 100 hours; mode 4 hours); prison programs averaged 21 hours (range 1 to 70 hours; mode 20 hours).

Most jail (75 percent) and prison (66 percent) programs had separate space within the institution to provide treatment services. Just under 50 percent of the custodial programs had separate housing for their clients. In 63 percent of the jails and 53 percent of the prisons, an external contractor provided the treatment program. Approximately 50 percent of the jails and 28 percent of the prisons indicated that there were major philosophical differences between correctional staff and drug treatment personnel. In most jails and prisons, survey respondents (mainly treatment staff) reported that the correctional administrators thought the treatment programs helped to maintain order and were effective in reducing recidivism and drug use.

Client assessment

Drug use history and drug treatment history were assessed in nearly all the drug treatment programs, primarily on the basis of the clinical intake interview. More prisons than jails used standardized instruments to obtain drug use history (34 percent of prisons compared to 19 percent of jails) and to assess drug treatment history (21 percent of prisons and 13 percent of jails).

Professional staff performed Medical and dental examinations in 56 percent of the jails and 60 percent of the prisons. One jail and six prisons surveyed indicated that medical conditions were not assessed at all.[19] Physical fitness was not assessed in 39 percent of the jails and 32 percent of the prisons; vocational skills were not assessed in 31 percent of the jails and 21 percent of the prisons. When assessment did occur in these two areas, it was provided mostly by clinical interviews or staff observation.

Treatment services

Similarities of treatment services in custodial programs were greater than their differences:

- Most jail and prison programs offered case management, relapse prevention,

Source: U.S. Department of Justice, National Institute of Justice, *Drug-Abusing Women Offenders: Results of a National Survey*, October 1994.

HIV/AIDS education, counseling, and 12-step meetings.

- Training in personal empowerment was offered in all of the jail programs and in 75 percent of the prisons.

- More than 80 percent of the programs had groups dealing with specific issues such as sexual abuse, battering, and HIV-positive status. Psychotherapy was available in 50 percent of the jails and 77 percent of the prisons.

- Training in parenting was available in 69 percent of the jails and 74 percent of the prisons. Thirty-eight percent of the jails and 57 percent of the prisons provided family planning services.

- Accommodations for visiting children and infants were available in 63 percent of the jails and 85 percent of the prisons, but support groups for parents and children were available in only 25 percent of the jails and 36 percent of the prisons.

- Approximately 90 percent of the jails and prisons provided prenatal, postpartum, obstetrical, and gynecological care.

- Medical and dental exams and treatment were available in approximately 80 percent of the jails and in more than 90 percent of the prisons. HIV testing was available in 75 percent of the jails and 85 percent of the prisons.

- Vocational counseling was more available than vocational training (81 percent and 85 percent for counseling in jail and prison; 69 and 76 percent, respectively, for vocational training). Education leading to the GED and literacy classes/tutoring were generally available.

- Legal advice was available in 63 percent of the jails and 68 percent of the prisons.

Transition and followup services

As in the community-based programs, more than 90 percent of the programs provided transition by encouraging women to begin or continue attendance at Alcoholics Anonymous, Narcotics Anonymous, or Cocaine Anonymous meetings. More than 80 percent of the programs made arrangements for women to continue treatment in the community. More jail than prison programs said that women were contacted regularly after release, and that before release, arrangements were made for continuing social, medical, and welfare support, as needed. However, in both types of institutions, less than 50 percent offered these transition and followup services: 44 percent of the jails contacted clients after release and 50 percent made prior arrangements with community agencies for continued support; in prisons, the comparable percentages were 25 and 45 percent.

Transition services were coordinated with probation/parole officers before release in 25 percent of the jails and in 64 percent of the prisons; in 63 percent of the jails and 19 percent of the prisons, transition services were arranged by treatment staff only.

Discussion of findings

Results of surveys conducted over the past 14 years indicate that treatment programs for women offenders have been increasing:

- The National Institute on Drug Abuse (NIDA) 1979 survey identified 44 programs that met the selection criteria of publicly supported women-oriented drug treatment programs.[20]

- The National Council on Crime and Delinquency (NCCD) 1990 survey identified 111 community-based programs that provided services (but not specifically drug treatment) to women offenders exclusively (the selection criteria were more rigorous than the present survey since they specified that all clients had to be currently or previously involved with the criminal justice system).[2]

- The 1992–1993 survey reported in this study identified 165 community-based programs for women offenders.

Although more programs may be available for women offenders today than in the 1970's, evidence from other research[22] indicates that the increased number of programs have not significantly reduced the difference between those who need services and those who receive treatment. The percentage of those being served, relative to those in need, is probably not greater than it was in the late 1970's.

Treatment provided by the programs surveyed was usually found to be limited in intensity and duration. Although sufficient data on the effectiveness of highly intensive, well-designed programs of short duration are not available, evidence is available that shows that among programs in general, particularly residential programs, the effects of treatment are positively related to time in treatment.[23] The effectiveness of many of the surveyed programs that provide treatment of relatively short duration to a population with multiple needs, particularly programs that provide only a few hours of service a week, is questionable.

The survey found that although services for individual clients are supposed to provide for the special needs of women, many programs do not assess those areas known to be problematic for this population and fail to provide some of the services that these women require. It is notable that services needed by women are more likely to be found in women-only programs than in programs that serve both men and women. This finding suggests that the specific needs of women are an afterthought in many programs. Although the situation is changing, too many programs designed for men by men continue to exist.

In addition, relatively few programs accommodate infants and children since the facilities are costly and must meet special requirements in terms of space, neighborhood acceptance, insurance coverage, legal provisions, and staffing. Despite these hindrances, provisions for infants and children are important. Since many women cannot arrange adequate care for their children while they are in treatment, the absence of infant and child care in treatment programs becomes a major deterrent for them to enter and continue treatment. In cases where outpatient programs allow women to bring their children for limited periods but do not provide staff and facilities for the care of the children, mothers are prevented from receiving the full benefits of treatment activities because they need to attend to their children. Finally, the lack of provision for mothers and their children deprives these women of the valuable hands-on training experience of caring for their infants and children within the treatment program under expert supervision.

Source: U.S. Department of Justice, National Institute of Justice, *Drug-Abusing Women Offenders: Results of a National Survey*, October 1994.

Implications for practice and policy

Since most drug-abusing women offenders are indigent, have multiple problems, and possess few personal and social resources, drug treatment alone, without an attendant comprehensive range of rehabilitation services, can rarely effect stable, long-term behavioral change. Moreover, given the nature of drug dependence, which in the case of severe, long-term use—a characteristic of many women offenders—tends to be a chronic, relapsing condition, a single treatment episode is rarely sufficient to produce more than limited short-term benefits. Therefore, not only are more programs needed specifically geared toward rehabilitating women, but programs are also needed that provide continuing support for women to enable them to move from custodial to community care, or from intensive residential treatment to halfway houses or to cooperative living arrangements.

The study revealed the necessity to improve assessment of needs and then develop better programs to deliver a range of appropriate services. Assessment should enable program planners to determine what new services are needed, which services should be modified, and which are no longer relevant. The assessment process should also provide the basis for developing individual treatment plans, establishing a baseline from which progress in treatment can be monitored, and generating data for program evaluation.

Several Federal agencies and some State agencies have recently been active in promoting more and better services for women, but further direction and guidance are required to meet the needs of drug-abusing women, particularly drug-abusing women offenders. To achieve such improvements, many approaches should be taken:

Research

- Foster a collaborative effort among Federal, State, and local agencies and other organizations, including education agencies, the health policy research community, and health care services, to establish a research agenda.

- Focus research on such issues as:

— Identifying and describing basic aspects of drug treatment for women offenders, such as the number of women in treatment relative to those who need treatment; centralized needs assessment and referral; individualized services; empowerment; vocational training and jobs; duration of treatment; privatization; cultural/ethnic sensitivity and relevance; and family planning and contraception.

— Developing descriptions of examples of coordination of successful programs for women offenders and instances of systemization of treatment within the community.

— Developing analytical methods for evaluating programs and performing systemic evaluations of multiservice treatment programs.

— Performing cost-benefit analyses including nontraditional treatments.

- Set up developmental/experimental studies for the design, development, implementation, and evaluation of short-term, high-intensity drug treatment programs (perhaps combined with vocational rehabilitation programs) for those drug-abusing women offenders who are employable. Such short-term programs, if successful, would enable more women to receive treatment and rehabilitation services.

Federal and State action

- Define requirements as part of funding allocations or provide guidance for necessary procedures to assess client needs, such as general medical/dental examinations, psychological/psychiatric examinations, and gynecological examinations, all to be conducted by qualified professional staff.

- Require programs with Federal funding to provide education, counseling, and training in family planning by qualified consultants (this would include the availability of long-term contraception).

- Promote interagency linkages and treatment systemization in community-based treatment to provide multiple services and a range of treatment alternatives.

- Develop statewide systems of drug treatment for women offenders that include custodial programs and transition to continuity of care in the community.[34]

Local assistance

- Assist local communities in forming a longer term view of the relative costs of drug treatment for women offenders compared with the costs associated with crime, disease, and drug-exposed infants by assisting communities in developing long-term plans and budgets, lending them front-end money, and making more funding available for their population of drug-abusing women offenders.

- Assist communities with the planning required to establish treatment and rehabilitation systems that link drug treatment, public health, and criminal justice. Such systems would include workable procedures; sufficient, appropriate, and specialized programs where women (and their children) can be referred; and realistic, graduated sanctions. In addition, such systems would include transition programs, several levels of continuing care and support, and followup services. Recognizing that some clients need multiple episodes of treatment, they would also include expedited procedures for readmission to treatment.

In conclusion, great strides in treatment for offenders in general, and for women in particular, are likely to occur over the next few years. Overcrowding in jails and prisons, the anticipated increase in incarceration rates resulting from new statutory requirements, public reluctance to pay for the construction of more jails and prisons, and the expense of keeping people incarcerated—all these factors may have a salutary effect upon funding for drug treatment within the criminal justice system. Within this climate, to improve drug abuse treatment for women offenders, research should be directed toward identifying cost-effective methods for systemizing drug treatment, for linking drug treatment to the multiple medical and social services needed by this population, and for ensuring continuity of care as women pass from one treatment setting to another.

Source: U.S. Department of Justice, National Institute of Justice, *Drug-Abusing Women Offenders: Results of a National Survey*, October 1994.

Overall, 85% of felony defendants in the 75 largest counties were male (table 3). Men comprised the largest percentages among defendants charged with rape (97%), weapons offenses (95%), murder (94%), robbery (93%), driving-related offenses (93%), or burglary (91%). Women accounted for 15% of defendants, including about a fourth of the defendants charged with property offenses other than burglary.

Without consideration of Hispanic origin, which was poorly reported in some jurisdictions (see *Methodology*), 56% of defendants were black, and 42% were white. Blacks comprised the largest percentages among defendants charged with robbery (74%), weapons offenses (71%), murder (64%), and drug offenses (62%). Whites accounted for three-fourths of the defendants facing driving-related charges and half of those charged with theft or burglary (figure 3).

Race of felony defendants in the 75 largest counties, by most serious arrest charge, 1994

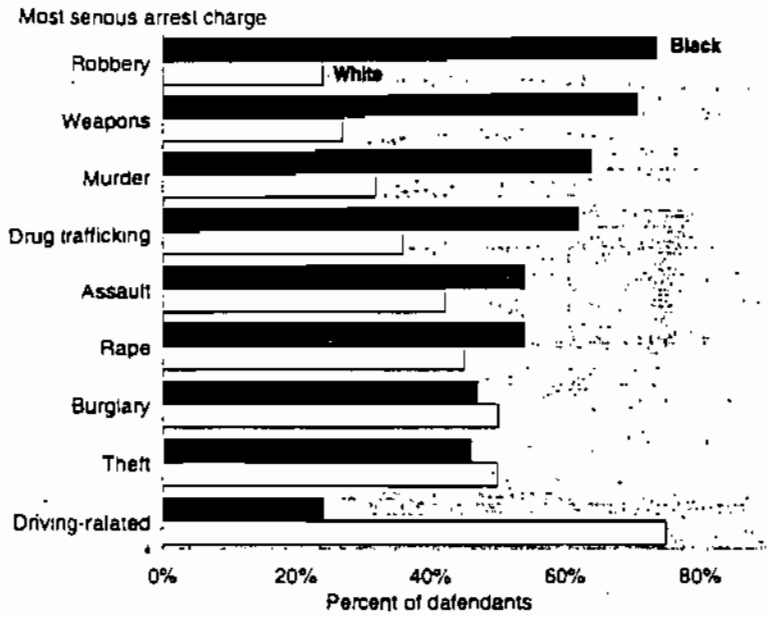


Figure 3

Table 3. Sex and race of felony defendants, by most serious arrest charge, 1994

Most serious arrest charge	Number of defendants	Percent of felony defendants in the 75 largest counties: Sex: Total	Male	Female	Number of defendants	Race: Total	Black	White	Other
All offenses	52,343	100%	85%	15%	44,987	100%	56%	42%	3%
Violent offenses	13,417	100%	86%	12%	11,778	100%	59%	38%	3%
Murder	521	100	94	6	476	100	64	32	4
Rape	532	100	97	3	497	100	54	46	1
Robbery	4,063	100	93	7	3,458	100	74	24	2
Assault	6,091	100	84	16	5,467	100	54	43	3
Other violent	2,209	100	90	10	1,881	100	44	53	3
Property offenses	16,259	100%	81%	19%	14,471	100%	48%	49%	3%
Burglary	4,609	100	91	9	4,060	100	47	50	3
Theft	5,867	100	77	23	5,390	100	46	50	4
Other property	5,783	100	77	23	5,020	100	51	46	3
Drug offenses	18,115	100%	85%	15%	15,039	100%	62%	37%	2%
Trafficking	7,642	100	87	13	6,470	100	62	36	3
Other drug	10,473	100	83	17	8,569	100	62	37	1
Public-order offenses	4,552	100%	91%	9%	3,699	100%	52%	46%	2%
Weapons	2,013	100	95	5	1,729	100	71	27	2
Driving-related	1,281	100	93	7	884	100	24	75	1
Other public-order	1,257	100	83	17	1,086	100	44	52	3

Note: Data on sex of defendants were available for 99% of all cases and data on race of defendants were available for 86% of all cases. Without consideration of Hispanic origin, Bureau of the Census data for 1994 indicate that the racial distribution of the population of the 75 largest counties was 75% white, 17% black, and 7% other races. Detail may not add to total because of rounding.

Convicted felon populations: Sex, race, and age

In 1994 men comprised 48% of the adult U.S. population but 85% of persons convicted of a felony and 92% of persons convicted of a violent felony (table 5). Whites were 85% of the adult U.S. population but 51% of persons convicted of a felony and 48% of the persons convicted of a violent felony. Corresponding figures for blacks were 11% of the adult U.S. population but 48% of convicted felons and 51% of felons convicted of a

Table 5. Demographic characteristics of persons convicted of felonies by State courts, 1994

Most serious conviction offense	Percent of convicted felons													
		Sex		Race			Age at sentencing							
	Total	Male	Female	White	Black	Other	13-19	20-29	30-39	40-49	50-59	60+	Mean	Median
All offenses	100%	85%	15%	51%	48%	1%	10%	43%	31%	12%	3%	1%	30 yrs	29 yrs
Violent offenses	100%	92%	8%	48%	51%	1%	14%	44%	27%	10%	3%	2%	29 yrs	27 yrs
Murder[a]	100	89	11	37	62	1	18	45	22	10	4	1	28	25
Rape	100	97	3	64	35	1	7	34	33	16	6	4	34	32
Robbery	100	94	8	28	71	1	23	51	21	5	–	–	26	24
Aggravated assault	100	89	11	53	48	1	11	44	29	11	4	1	30	28
Other violent[b]	100	89	11	73	26	1	6	40	31	15	5	3	33	31
Property offenses	100%	81%	19%	59%	40%	1%	11%	44%	31%	11%	2%	1%	30 yrs	26 yrs
Burglary	100	93	7	59	40	1	15	47	29	8	1	–	28	26
Larceny[c]	100	80	20	59	40	1	11	43	30	12	3	1	30	28
Fraud[d]	100	61	39	61	38	1	4	41	37	14	3	1	32	30
Drug offenses	100%	83%	17%	41%	59%	–	7%	43%	34%	12%	3%	1%	30 yrs	29 yrs
Possession	100	81	19	46	53	1	7	41	37	12	2	1	31	30
Trafficking	100	84	16	37	63	–	7	45	32	12	3	1	30	29
Weapons offenses	100%	95%	5%	37%	62%	1%	14%	50%	23%	9%	3%	1%	28 yrs	26 yrs
Other offenses[e]	100%	87%	13%	67%	31%	2%	6%	39%	36%	14%	4%	1%	32 yrs	31 yrs

Note: Data on sex were available for 616,160 cases; on race, 490,838; and on age, 710,795.
–Less than 0.5%.
[a]Includes nonnegligent manslaughter.
[b]Includes offenses such as negligent manslaughter, sexual assault, and kidnaping.
[c]Includes motor vehicle theft.
[d]Includes forgery and embezzlement.
[e]Composed of nonviolent offenses such as receiving stolen property and vandalism.

Felony convictions and sentences relative to the number of arrests, 1994

Using data from the NJRP and the FBI's Uniform Crime Reports (UCR) on offenses and arrests, the number of felony convictions in 1994 was compared with the number of crimes reported to police for offenses likely to be felonies and the number of arrests made for these crimes in 1994. These numbers are aggregates and should not be interpreted as representing the disposition of individual cases tracked across processing stages of the criminal justice system. In fact, a person arrested for a specific offense may be convicted of a different crime. Nevertheless, the comparisons illustrate the approximate odds of conviction and a prison sentence, given an arrest for a felony.

For example, the FBI reports that in 1994 about 18,387 adults were arrested for murder (including nonnegligent manslaughter). NJRP data show that 12,007 persons were convicted of murder and 11,282 murderers received a prison sentence. Together the data show that for every 100 persons arrested for murder in the United States in 1994, 65 were convicted of murder, and 61 were sentenced to prison for that offense. Corresponding figures for drug traffickers were 52 convictions and 25 prison sentences for every 100 arrests for drug trafficking.

Offense	Uniform Crime Reports					For 100 arrests		
	Number of crimes reported to police	Number of adults arrested	Number of felony convictions	Number of felony sentences		Number of felony convictions	Number of felony sentences	
				Incarceration	Prison		Incarceration	Prison
Murder[a]	23,310	18,387	12,007	11,537	11,282	65	63	61
Robbery	618,820	117,157	46,028	40,284	35,339	39	34	30
Aggravated assault	1,119,950	462,309	65,174	46,856	31,562	14	11	7
Burglary	2,712,200	252,712	98,109	73,156	51,976	39	29	21
Motor vehicle theft	1,539,100	111,912	21,049	15,578	6,404	19	14	8
Drug trafficking	...	318,607	165,430	116,938	78,762	52	37	25

Note: The offenses selected have the greatest comparability across reporting series and are widely defined across the States as felonies. The offense designations in convictions and sentences came from the most serious offense.
...Data not available.
[a]Includes nonnegligent manslaughter.
Source of data on crime and arrests: *Crime in the United States, 1994* (FBI, 1995).

Felons more than half of all adults on probation

Of the 2.6 million adults formally sentenced to probation in 1995, an estimated 1.5 million had been convicted of a felony (58%). Of these, half had been convicted of a violent (20%) or drug offense (31%). Drug trafficking was the single most frequent offense among felons on probation (15%). This was closely followed by drug possession (13%), larceny/theft (11%), and burglary (10%).

In contrast, 60% of the estimated 1 million misdemeanants on probation had been convicted of a public-order offense — 35% for driving while intoxicated, 10% for another traffic offense, and 5% for drunkenness or morals offenses. An estimated 14% of probationers convicted of a misdemeanor had committed a violent offense (nearly all of whom were convicted of assault); 18% a property offense; and 8% a drug offense.

Women and non-Hispanic whites make up comparatively high percentages of adult probationers

In 1995 women constituted 21% of the probation population, or twice as large a share as among the jail and parole populations (10% each), and more than 3 times the share of women in prison (6%) (table 2).

	Percent female, 1995
Probation	21%
Jail	10
Prison	6
Parole	10

Unlike the Nation's jail and prison population, a majority of probationers were non-Hispanic whites (58%).

	Percent of offenders		
	White	Black	Hispanic
Probation, 1995	58%	28%	11%
Jail*	37	41	18
State prison*	35	46	17
Federal prison*	38	30	28

*Based on surveys of jail inmates conducted in 1995-96, and State and Federal inmates in 1991.

Non-Hispanic whites accounted for a larger share of misdemeanants than felons (62% compared to 55%). Non-Hispanic blacks constituted 28% of all probationers (31% of felons and 25% of misdemeanants). Hispanics, who may be of any race, comprised 11% of both felons and misdemeanants.

Slightly more than half of all probationers never married (51%), and 58% had completed at least high school or a GED. Felons (54%) were somewhat less likely than misdemeanants (63%) to have completed high school or a GED.

Types of offenses vary among men and women and blacks, whites, and Hispanics on probation

Men were more likely than women to be sentenced for a violent offense (19% compared to 10%), but nearly as likely to have been sentenced for a drug offense (22% of men and 20% of women) (table 3). Among men,

Table 3. Most serious offense of adults on probation, by sex, race/Hispanic origin, and age, 1995

Most serious offense	Sex		Race/Hispanic origin			Age			
	Male	Female	White	Black	Hispanic	24 or younger	25-34	35-44	45 or older
Violent offenses	19.4%	9.5%	16.5%	17.1%	19.4%	16.5%	17.0%	17.4%	20.3%
Homicide	.6	.9	1.0	.3	.3	.4	.6	.9	1.1
Sexual assault	4.3	.6	4.9	1.2	2.4	1.8	3.0	3.8	9.1
Robbery	2.0	1.4	1.0	3.1	2.4	3.1	1.3	2.0	.7
Assault	10.3	5.1	7.6	11.0	11.6	9.0	10.3	8.7	7.1
Other violent	2.2	1.5	2.0	1.6	2.7	2.2	1.8	2.0	2.3
Property offenses	25.3%	42.6%	29.9%	28.6%	23.8%	38.7%	27.0%	22.9%	24.7%
Burglary	6.6	2.8	6.3	5.5	4.3	10.4	5.2	3.5	2.2
Larceny/theft	8.2	16.5	10.0	10.9	8.4	13.6	9.3	8.2	7.2
Motor vehicle theft	1.5	.8	1.1	1.0	2.7	2.5	1.4	.7	.1
Fraud	3.7	20.8	7.4	7.4	5.6	4.6	7.9	7.7	10.3
Stolen property	2.0	.8	2.0	1.3	1.5	3.0	1.4	1.3	1.0
Other property	3.2	.9	3.2	2.5	1.3	4.6	1.8	1.6	3.8
Drug offenses	21.7%	20.1%	17.0%	30.9%	23.1%	19.7%	23.9%	23.2%	13.4%
Possession	10.3	8.0	8.1	13.4	10.9	8.0	10.7	11.2	8.1
Trafficking	9.7	9.7	7.8	14.2	9.7	10.2	10.8	9.8	4.7
Other/unspecified	1.7	2.4	1.1	3.4	2.4	1.5	2.3	2.2	.6
Public-order offenses	32.3%	26.5%	35.6%	22.2%	30.4%	22.1%	31.5%	35.7%	40.7%
Weapons	2.8	.7	1.8	3.2	2.5	3.9	2.3	.9	1.8
Obstruction of justice	2.3	1.7	2.1	2.4	2.1	2.6	2.7	1.3	1.4
Traffic	4.7	4.7	4.7	5.0	4.7	4.2	5.5	4.6	3.2
Driving while intoxicated	17.4	14.2	21.2	7.7	17.3	7.1	16.4	22.7	27.7
Drunkenness/morals	2.0	2.5	2.0	2.3	1.6	1.5	2.0	2.7	2.3
Other public-order	3.1	2.8	3.9	1.6	2.2	2.7	2.6	3.5	4.3
Other	1.3%	1.3%	1.0%	1.2%	3.2%	3.1%	.6%	.7%	.8%
Number of probationers	2,057,405	538,094	1,521,161	717,389	295,243	700,261	957,412	641,015	298,811

Note: Excludes an estimated 25,061 probationers (1% of all adults on probation) for whom information on type of offense was not reported.

Table 2.8. Offenses of felons sentenced to incarceration or prison, by sex and race, in State courts, 1992

Most serious conviction offense	Percent of convictions				
		Sex		Race	
	Total	Male	Female	White	Black
Sentenced to incarceration					
All offenses	100%	100%	100%	100%	100%
Violent offenses	21%	23%	13%	19%	23%
Murder[a]	2	2	2	2	2
Rape	3	3	1	4	2
Robbery	8	8	4	5	10
Aggravated assault	7	7	6	7	7
Other violent[b]	2	2	1	3	1
Property offenses	32%	31%	36%	38%	28%
Burglary	14	15	8	16	12
Larceny[c]	12	12	17	14	11
Fraud[d]	5	4	15	6	5
Drug offenses	32%	31%	38%	28%	38%
Possession	11	11	16	10	13
Trafficking	21	20	22	18	24
Weapons offenses	3%	3%	1%	2%	3%
Other offenses[e]	12%	13%	10%	14%	8%
Sentenced to prison					
All offenses	100%	100%	100%	100%	100%
Violent offenses	25%	26%	15%	23%	25%
Murder[a]	3	3	3	3	3
Rape	4	4	1	5	2
Robbery	10	10	5	7	12
Aggravated assault	7	7	5	6	7
Other violent[b]	2	2	1	3	1
Property offenses	32%	31%	39%	39%	27%
Burglary	15	16	6	19	13
Larceny[c]	11	11	17	13	11
Fraud[d]	5	4	16	7	4
Drug offenses	30%	29%	36%	23%	36%
Possession	10	9	14	8	12
Trafficking	20	20	22	15	25
Weapons offenses	3%	3%	1%	2%	3%
Other offenses[e]	11%	11%	9%	14%	8%

Note: See note on tables 1.1, 1.2, and 2.1. Detail may not sum to total because of rounding.

[a]Includes nonnegligent manslaughter.

[b]Includes offenses such as negligent manslaughter, sexual assault, and kidnaping.

[c]Includes motor vehicle theft.

[d]Includes forgery and embezzlement.

[e]Composed of nonviolent offenses such as receiving stolen property and driving while intoxicated.

Table 2.9. Offenses of felons sentenced to jail or probation, by sex and race, in State courts, 1992

Most serious conviction offense	Percent of convictions				
		Sex		Race	
	Total	Male	Female	White	Black
Sentenced to jail					
All offenses	100%	100%	100%	100%	100%
Violent offenses	16%	16%	11%	14%	18%
Murder[a]	–	–	–	–	–
Rape	2	2	–	2	1
Robbery	4	4	2	2	6
Aggravated assault	8	8	6	7	9
Other violent[b]	2	3	2	2	2
Property offenses	31%	30%	38%	33%	29%
Burglary	11	12	6	13	10
Larceny[c]	14	14	18	15	13
Fraud[d]	6	4	15	5	6
Drug offenses	36%	34%	40%	38%	41%
Possession	14	13	18	14	18
Trafficking	21	20	22	22	23
Weapons offenses	3%	3%	1%	2%	4%
Other offenses[e]	15%	17%	11%	15%	9%
Sentenced to probation					
All offenses	100%	100%	100%	100%	100%
Violent offenses	12%	14%	8%	13%	12%
Murder[a]	–	–	–	–	–
Rape	1	1	–	2	1
Robbery	2	3	2	2	3
Aggravated assault	6	6	5	7	6
Other violent[b]	2	3	1	3	1
Property offenses	38%	35%	49%	43%	33%
Burglary	11	13	4	13	9
Larceny[c]	15	14	20	17	13
Fraud[d]	11	8	26	12	11
Drug offenses	31%	31%	31%	26%	40%
Possession	15	15	15	13	20
Trafficking	16	16	16	13	20
Weapons offenses	3%	4%	1%	2%	5%
Other offenses[e]	15%	17%	11%	17%	11%

Note: See note on tables 1.1, 1.2, and 2.1. Detail may not sum to total because of rounding.
–Less than 0.5%.
[a]Includes nonnegligent manslaughter.
[b]Includes offenses such as negligent manslaughter, sexual assault, and kidnaping.
[c]Includes motor vehicle theft.
[d]Includes forgery and embezzlement.
[e]Composed of nonviolent offenses such as receiving stolen property and driving while intoxicated.

Table 2.10. Percent of all convicted felons sentenced to incarceration or prison, by sex and race, 1992

Most serious conviction offense	Percent receiving designated sentence: White Male	White Female	Black Male	Black Female
Sentenced to incarceration				
All offenses	76%	59%	78%	58%
Violent offenses	82%	66%	87%	69%
Murder[a]	97	94	97	92
Rape	86	**	90	**
Robbery	90	76	91	79
Aggravated assault	75	58	80	59
Other violent[b]	72	63	71	77
Property offenses	74%	54%	76%	52%
Burglary	78	71	81	67
Larceny[c]	71	58	76	57
Fraud[d]	65	47	63	45
Drug offenses	77%	65%	76%	62%
Possession	70	63	68	58
Trafficking	82	67	80	66
Weapons offenses	73%	46%	69%	55%
Other offenses[e]	72%	57%	72%	57%
Sentenced to prison				
All offenses	44%	30%	59%	38%
Violent offenses	56%	40%	71%	47%
Murder[a]	91	82	95	84
Rape	63	**	82	**
Robbery	73	57	79	57
Aggravated assault	40	27	56	34
Other violent[b]	47	24	43	54
Property offenses	45%	29%	57%	35%
Burglary	52	42	84	44
Larceny[c]	39	25	54	39
Fraud[d]	41	29	45	29
Drug offenses	35%	28%	56%	38%
Possession	30	27	46	31
Trafficking	39	29	62	44
Weapons offenses	38%	18%	50%	38%
Other offenses[e]	39%	29%	53%	38%

Note: See note on tables 1.1, 1.2, and 2.1. Detail may not sum to total because of rounding.
**Not calculated.
[a]Includes nonnegligent manslaughter.
[b]Includes offenses such as negligent manslaughter, sexual assault, and kidnaping.
[c]Includes motor vehicle theft.
[d]Includes forgery and embezzlement.
[e]Composed of nonviolent offenses such as receiving stolen property and driving while intoxicated

Table 2.11. Percent of all convicted felons sentenced to jail or probation, by sex and race, 1992

Most serious conviction offense	Percent receiving designated sentence			
	White		Black	
	Male	Female	Male	Female
Sentenced to jail				
All offenses	32%	30%	18%	21%
Violent offenses	25%	27%	16%	22%
Murder[a]	6	12	2	8
Rape	24	**	8	**
Robbery	18	19	13	22
Aggravated assault	35	30	24	26
Other violent[b]	25	40	28	23
Property offenses	28%	25%	19%	18%
Burglary	26	29	17	23
Larceny[c]	33	31	22	18
Fraud[d]	24	19	18	16
Drug offenses	42%	37%	19%	24%
Possession	41	36	22	26
Trafficking	43	38	18	22
Weapons offenses	35%	29%	19%	17%
Other offenses[e]	33%	28%	18%	19%
Sentenced to probation				
All offenses	24%	41%	23%	42%
Violent offenses	19%	34%	13%	31%
Murder[a]	3	6	3	8
Rape	14	**	10	**
Robbery	10	24	9	21
Aggravated assault	25	42	20	41
Other violent[b]	29	37	29	23
Property offenses	27%	47%	24%	48%
Burglary	22	29	19	33
Larceny[c]	29	44	24	43
Fraud[d]	35	53	37	55
Drug offenses	23%	35%	24%	38%
Possession	30	37	32	43
Trafficking	18	33	20	34
Weapons offenses	27%	54%	31%	45%
Other offenses[e]	28%	43%	28%	43%

Note: See note on tables 1.1, 1.2, and 2.1. Data on sentence type by sex and race were available for 538,669 cases.

**Not calculated.

[a]Includes nonnegligent manslaughter.

[b]Includes offenses such as negligent manslaughter, sexual assault, and kidnaping.

[c]Includes motor vehicle theft.

[d]Includes forgery and embezzlement.

[e]Composed of nonviolent offenses such as receiving stolen property and driving while intoxicated.

Table 2.12. Mean State felony sentence lengths, by sex, race, and type of felony sentences, 1992

Most serious conviction offense	Mean sentence length in months for felons who were — White Male	White Female	Black Male	Black Female
Sentenced to incarceration				
All offenses	46 mo	32 mo	65 mo	40 mo
Violent offenses	85 mo	58 mo	103 mo	65 mo
Murder[a]	212	179	245	199
Rape	120	**	148	**
Robbery	93	54	102	59
Aggravated assault	47	38	65	35
Other violent[b]	64	28	46	90
Property offenses	47 mo	34 mo	54 mo	31 mo
Burglary	59	29	59	34
Larceny[c]	33	19	42	29
Fraud[d]	43	49	76	33
Drug offenses	31 mo	26 mo	54 mo	36 mo
Possession	22	19	42	26
Trafficking	35	31	61	44
Weapons offenses	29 mo	16 mo	34 mo	244 mo
Other offenses[e]	24 mo	20 mo	59 mo	26 mo
Sentenced to prison				
All offenses	75 mo	58 mo	84 mo	59 mo
Violent offenses	121 mo	95 mo	125 mo	92 mo
Murder[a]	231	204	251	216
Rape	163	**	162	**
Robbery	112	68	117	78
Aggravated assault	82	75	89	57
Other violent[b]	95	59	73	119
Property offenses	71 mo	58 mo	70 mo	44 mo
Burglary	83	45	72	50
Larceny[c]	55	35	56	38
Fraud[d]	63	77	102	50
Drug offenses	60 mo	53 mo	71 mo	55 mo
Possession	48	41	59	45
Trafficking	65	61	76	61
Weapons offenses	51 mo	35 mo	45 mo	358 mo
Other offenses[e]	38 mo	36 mo	77 mo	36 mo

Note: See note on tables 1.1, 1.2, and 2.1. Data on sentence length by sex and race were available for 534,919 cases.
**Not calculated.
[a]Includes nonnegligent manslaughter.
[b]Includes offenses such as negligent manslaughter, sexual assault, and kidnaping.
[c]Includes motor vehicle theft.
[d]Includes forgery and embezzlement.
[e]Composed of nonviolent offenses such as receiving stolen property and driving while intoxicated.

Table 2.13. Mean State felony sentence lengths, by sex, race, and type of felony sentences, 1992

Most serious conviction offense	Mean sentence length in months for felons who were — White Male	White Female	Black Male	Black Female
Sentenced to jail				
All offenses	7 mo	6 mo	7 mo	6 mo
Violent offenses	8 mo	7 mo	9 mo	6 mo
Murder[a]	10	22	7	8
Rape	9	**	9	**
Robbery	12	9	11	8
Aggravated assault	7	5	7	5
Other violent[b]	7	8	5	2
Property offenses	8 mo	6 mo	8 mo	6 mo
Burglary	10	6	8	5
Larceny[c]	7	7	7	8
Fraud[d]	8	6	7	4
Drug offenses	7 mo	6 mo	7 mo	6 mo
Possession	4	3	4	4
Trafficking	8	8	9	8
Weapons offenses	5 mo	3 mo	5 mo	3 mo
Other offenses[e]	7 mo	4 mo	8 mo	5 mo
Sentenced to probation				
All offenses	46 mo	43 mo	50 mo	46 mo
Violent offenses	52 mo	46 mo	55 mo	50 mo
Murder[a]	76	53	76	125
Rape	74	**	62	**
Robbery	59	61	69	74
Aggravated assault	44	34	43	38
Other violent[b]	51	72	65	98
Property offenses	46 mo	41 mo	51 mo	44 mo
Burglary	53	51	64	55
Larceny[c]	42	39	43	39
Fraud[d]	41	41	43	47
Drug offenses	44 mo	49 mo	50 mo	45 mo
Possession	42	43	42	39
Trafficking	46	55	57	51
Weapons offenses	37 mo	28 mo	35 mo	29 mo
Other offenses[e]	43 mo	33 mo	48 mo	55 mo

Note: See note on tables 1.1, 1.2, and 2.1. Data on sentence length by sex and race were available for 534,919 cases.

**Not calculated.

[a]Includes nonnegligent manslaughter.

[b]Includes offenses such as negligent manslaughter, sexual assault, and kidnaping.

[c]Includes motor vehicle theft.

[d]Includes forgery and embezzlement.

[e]Composed of nonviolent offenses such as receiving stolen property and driving while intoxicated.

Table 3.6. Sex of felons sentenced to probation or nonprobation in State courts, by the most serious conviction offense, 1992

Most serious conviction offense	Percent of probation sentences			Percent of probation sentences		
	All	Male	Female	All	Male	Female
All offenses	100%	83%	17%	100%	91%	9%
Violent offenses	100%	90%	10%	100%	95%	5%
Murder[a]	100	83	17	100	92	9
Rape	100	98	3	100	99	1
Robbery	100	91	10	100	95	5
Aggravated assault	100	87	13	100	93	7
Other violent[b]	100	92	8	100	95	6
Property offenses	100%	77%	23%	100%	89%	11%
Burglary	100	93	7	100	97	3
Larceny[c]	100	78	22	100	87	13
Fraud[d]	100	57	43	100	73	27
Drug offenses	100%	82%	18%	100%	89%	11%
Possession	100	81	19	100	87	13
Trafficking	100	83	17	100	90	10
Weapons offenses	100%	95%	6%	100%	97%	3%
Other offenses[e]	100%	87%	13%	100%	93%	7%

Note: See note on tables 2.1 and 3.1. Detail may not sum to total because of rounding. Data on sentence type by sex were available for 780,835 cases.
[a]Includes nonnegligent manslaughter.
[b]Includes offenses such as negligent manslaughter, sexual assault, and kidnaping.
[c]Includes motor vehicle theft.
[d]Includes forgery and embezzlement.
[e]Composed of nonviolent offenses such as receiving stolen property and driving while intoxicated.

Table 3.7. Offenses of felons sentenced to probation or nonprobation in State courts, by sex, 1992

Most serious conviction offense	Percent of probation sentences			Percent of nonprobation sentences		
	All	Male	Female	All	Male	Female
All offenses	100%	100%	100%	100%	100%	100%
Violent offenses	15%	16%	9%	24%	25%	15%
Murder[a]	–	–	–	3	3	3
Rape	2	2	–	3	4	–
Robbery	3	4	2	10	10	5
Aggravated assault	7	7	5	7	7	5
Other violent[b]	3	3	1	2	2	1
Property offenses	34%	33%	45%	32%	31%	39%
Burglary	11	13	5	15	16	6
Larceny[c]	14	13	19	12	12	18
Fraud[d]	9	6	22	5	4	15
Drug offenses	33%	32%	34%	30%	29%	37%
Possession	14	13	15	11	10	16
Trafficking	19	19	19	19	19	21
Weapons offenses	3%	3%	1%	3%	3%	1%
Other offenses[e]	15%	16%	11%	12%	12%	9%

Note: See note on tables 2.1 and 3.1. Detail may not sum to total because of rounding. Data on sentence type by race were available for 549,740 cases.
–Less than 0.5%.
[a]Includes nonnegligent manslaughter.
[b]Includes offenses such as negligent manslaughter, sexual assault, and kidnaping.
[c]Includes motor vehicle theft.
[d]Includes forgery and embezzlement.
[e]Composed of nonviolent offenses such as receiving stolen property and driving while intoxicated.

Overall, female inmates reported lower levels of monthly income than male inmates: 55.7% of the women and 42.3% of the men reported a monthly income of less than $500. Those women who had been out of jail or prison for at least a year before their current arrest reported slightly lower monthly incomes than those who had been free for less than a year.

Current offense

The distribution of offenses for female inmates shifted dramatically between 1983 and 1989 (table 3). Over the 6 years, as the proportion of accused or convicted drug offenders among women in jail rose, the proportions of property and violent offenders fell. In 1983 about 1 of every 8 female inmates were in jail for a drug offense; in 1989 nearly 1 of every 3 were in jail for drugs. The increase in female drug offenders between 1983 and 1989 accounted for nearly half of the total increase of the female jail population.

The percentage of women in jail for property offenses decreased from 42.7% in 1983 to 31.9% in 1989. Larceny/theft and fraud, the two most prevalent crime types among female inmates in 1983, declined from 33.6% to 24.5% in 1989.

The percentage of women in jail for violent offenses also declined, from 21.3% in 1983 to 13.2% in 1989. Assault and robbery remained the two most prevalent violent crimes, accounting for more than two-thirds of violent offenses committed by the women in 1989.

Female inmates were far more likely than male inmates to be in jail for a drug offense. An estimated 33.6% of the women, compared to 21.9% of the men, were in jail for a drug offense. Male inmates, however, were nearly twice as likely as female inmates to be in jail for a violent offense and about equally likely as female inmates to be in jail for a property or public-order offense.

Table 3. Most serious offense of jail inmates, by sex, 1989 and 1983

Most serious offense	Percent of jail inmates			
	1989		1983	
	Female	Male	Female	Male
All offenses	100.0%	100.0%	100.0%	100.0%
Violent offenses	13.2%	23.5%	21.3%	31.4%
Murder[a]	1.8	2.9	3.8	4.1
Negligent manslaughter	.4	.5	1.5	.6
Kidnaping	1.1	.7	.6	1.4
Rape	0	.9	.1	1.8
Other sexual assault	.2	2.8	.2	2.2
Robbery	3.9	7.0	6.2	11.5
Assault	5.2	7.4	8.1	6.7
Other violent[b]	.6	1.1	.7	1.3
Property offenses	31.9%	29.9%	42.7%	38.3%
Burglary	4.0	11.4	5.1	15.0
Larceny/theft	12.9	7.4	18.4	11.2
Motor vehicle theft	.9	3.0	.7	2.5
Arson	.6	.7	.6	.9
Fraud	11.6	3.2	15.2	4.2
Stolen property	1.4	2.5	1.7	2.6
Other property[c]	.5	1.7	1.0	2.0
Drug offenses	33.6%	21.9%	13.1%	9.0%
Possession	14.9	9.2	7.1	4.6
Trafficking	16.9	11.5	4.6	4.0
Other/unspecified	1.9	1.2	1.4	.5
Public-order offenses	19.0%	23.2%	22.0%	20.5%
Weapons	.4	2.0	1.1	2.4
Obstruction of justice	3.6	2.8	3.1	1.9
Traffic	1.3	2.8	1.3	2.2
Driving while intoxicated[d]	3.6	9.3	5.2	7.1
Drunkenness/morals[e]	5.3	1.3	8.3	3.0
Violation of parole/probation[f]	3.6	3.0	2.0	2.3
Other public-order[g]	.2	2.0	.9	1.7
Other offenses[h]	2.2%	1.5%	.9%	.8%
Number of inmates	35,625	344,535	15,259	204,314

Note: Excludes an estimated 15,393 inmates in 1989 and 3,979 inmates in 1983 because their offense was unknown. Detail may not add to total because of rounding.
[a]Includes nonnegligent manslaughter.
[b]Includes blackmail, extortion, hit-and-run driving with bodily injury, child abuse, and criminal endangerment.
[c]Includes destruction of property, vandalism, hit-and-run driving without bodily injury, trespassing, and possession of burglary tools.
[d]Includes driving while intoxicated and driving under the influence of drugs or alcohol.
[e]Includes drunkenness, vagrancy, disorderly conduct, unlawful assembly, morals, and commercialized vice.
[f]Includes parole or probation violations, escape, AWOL, and flight to avoid prosecution.
[g]Includes rioting, abandonment, non-support, immigration violations, invasion of privacy, liquor law violations, tax evasion, and bribery.
[h]Includes juvenile offenses and unspecified offenses.

Detention status

In 1989 more than 6 in 10 women in jail were convicted of an offense (table 4). An estimated 52.2% of the female inmates were sentenced to jail or prison, while an additional 9.2% were awaiting a sentence. Nearly 39% of the female inmates were unconvicted: 22.6% had been arraigned and were awaiting or standing trial at the time of the survey, and 16.0% were awaiting arraignment.

Among jail inmates, women were somewhat more likely than men to have been convicted of an offense. About 57% of the male inmates had been convicted — 49.9% were sentenced and 7.2% were awaiting a sentence.

Table 4. Detention status of jail inmates, by sex, 1989

Detention status	Percent of jail inmates	
	Female	Male
Convicted	61.4%	57.1%
Sentenced	52.2	49.9
Awaiting sentence	9.2	7.2
Unconvicted	38.6%	43.0%
Arraigned and awaiting trial or on trial	22.6	26.5
Not yet arraigned	16.0	16.5
Number of inmates	35,625	345,441

Note: Excludes an estimated 14,488 inmates whose detention status was unknown.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Women in Jail 1989*, March 1992.

Convicted and unconvicted female inmates differed greatly in the types of offenses for which they were currently held (table 5). Convicted female inmates were more likely than those awaiting trial or arraignment to be in jail for a property or public-order offense, but less likely to be in jail for a violent offense. Nearly 20% of the unconvicted female inmates were in jail for a violent offense, compared to less than 10% of the convicted female inmates.

Among convicted female inmates, the percentage of black women in jail for a violent offense was almost twice that of white women (12.6% compared to 6.4%). More than 1 in 4 white women were convicted of a public-order offense, compared to about 1 in 8 black women.

Sentence length

About half of the female jail inmates in 1989 were sentenced. More than three-quarters of these women expected to serve their sentences in a local jail (table 6). An estimated 15.4% of the sentenced female inmates were expected to serve their time in prison, compared to 11.6% of the sentenced male inmates.

On average, women and men sentenced to jail received very similar sentences: half of both women and men reported a jail sentence of 6 months or less. Among female jail inmates sentenced to State or Federal prison, half received a maximum sentence of 60 months or less. On average, women received shorter sentences than men: the mean prison sentence for women was 72 months and for men, 103 months. This difference is explained in part by the larger percentage of violent offenders among men awaiting transfer to prison.

More than a third of the sentenced female jail inmates had special conditions imposed as part of their sentence, while about a quarter of the male inmates had a special condition imposed. Women were more likely than men to have a sentence that included drug treatment (13.7% versus 4.5%), victim restitution (9.4% versus 5.5%), or community service (7.7% versus 3.0%).

Table 5. Most serious current offense of female jail inmates, by conviction status and race, 1989

Most serious offense	Percent of convicted female inmates			Percent of unconvicted female inmates		
	All*	White	Black	All*	White	Black
All offenses	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Violent offenses	9.2%	6.4%	12.6%	19.6%	16.7%	20.0%
Homicide	1.1	.8	1.7	3.9	3.7	4.4
Robbery	3.5	2.0	5.3	4.6	3.1	6.6
Assault	3.6	2.9	4.4	7.7	7.4	8.4
Other violent	.9	.7	1.1	3.4	2.5	0.6
Property offenses	34.5%	31.6%	38.8%	27.9%	26.3%	30.1%
Burglary	2.9	3.5	2.4	5.7	5.6	5.6
Larceny/theft	15.4	13.7	17.9	9.0	7.5	11.4
Fraud	13.3	11.5	15.8	8.9	9.3	8.2
Other property	2.5	3.1	2.9	4.2	3.9	4.9
Drug offenses	32.7%	32.2%	33.8%	35.1%	36.2%	36.5%
Possession	16.5	15.1	17.7	12.3	11.4	14.5
Trafficking	15.4	16.1	15.3	19.3	21.5	18.2
Other drug	.8	.9	.8	3.5	3.3	3.8
Public-order offense	21.4%	27.9%	11.9%	15.3%	16.2%	11.7%
Obstruction of justice	2.8	3.8	1.7	5.0	5.5	4.8
Driving while intoxicated	5.3	9.4	.4	1.0	2.0	0
Commercialized vice	5.7	5.5	5.0	2.2	1.5	2.5
Violation of parole/probation	4.1	4.4	3.1	2.8	3.1	2.0
Other public-order	3.5	4.9	1.7	4.4	6.1	2.3
Other offenses	2.3%	1.7%	2.9%	2.1%	2.8%	1.8%
Number of inmates	21,854	11,596	9,637	13,771	6,703	6,457

Note: Excludes an estimated 1,758 jail inmates whose conviction status or offense was unknown.
Detail may not add to 100% because of rounding.
*Includes Asians, Pacific Islanders, American Indians, Alaska Natives, and other racial groups.

Table 6. Sentence length and special sentencing conditions of jail inmates, by sex, 1989

	Sentenced jail inmates 1989	
	Female	Male
Location where sentence was to be served		
Jail	77.0%	76.1%
Prison	15.4	11.6
Unknown	7.6	12.3
Maximum sentence length		
Sentenced to jail		
Median	6 mos.	6 mos.
Mean	16	18
Awaiting transfer to State or Federal prison		
Median	60 mos.	72 mos.
Mean	72	103
Special conditions*		
Any condition or restriction	35.6%	26.8%
Restitution	9.2	5.5
Community service	7.7	3.0
Drug treatment	13.7	4.5
Alcohol treatment	7.2	6.4
Psychiatric/psychological counseling	1.3	1.9
Regular employment	6.1	2.4
House arrest	1.6	1.0
Other	15.5	13.0
Number of inmates	16,375	147,281

Note: Data include only those inmates who were new court commitments with a valid sentence length.
*Detail may add to more than 100% because an inmate may have received more than one special sentencing condition.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Women in Jail 1989*, March 1992.

example, women currently in jail for a violent offense were more likely than those in for other offenses to have a prior sentence for a violent offense (table 10). An estimated 15.5% of the female offenders currently in jail for a violent offense had been convicted of a violent offense in the past, compared to 9.7% of the property offenders and 7.9% of the drug offenders.

The current offenses of nonviolent offenders, considered in relation to past convictions, showed the same pattern. An estimated 64.1% of the female inmates in jail for a property offense had a prior conviction for a property offense; 32.9% of the drug offenders had a prior drug conviction; and 55.9% of those in jail for a public-order offense had a prior public-order offense.

Violent female inmates and their victims

Most women in local jails who had been convicted of a violent crime reported that they had victimized either someone close to them or someone they knew (table 11). In 1989 an estimated 16.0% had victimized a relative; 15.4% had victimized an intimate (a boyfriend, girlfriend or ex-spouse); 16.8% had victimized a friend or other person they had known well; and 13.3% had victimized a casual acquaintance.

About half of the women (49.6%) and men (49.3%) in jail following conviction for a violent crime had victimized a female. A smaller percentage of female inmates than of male inmates had victimized a minor (14.4% versus 24.8%).

Table 11. Characteristics of victims of convicted violent jail inmates, by sex of inmates, 1989

Victim characteristic	Percent of convicted jail inmates: Female	Male
Sex		
Male	50.4%	50.7%
Female	48.5	40.7
Both	1.1	8.6
Race		
White	57.0%	65.7%
Black	39.0	28.3
Other	4.0	2.4
Mixed	0	3.6
Age		
Minor	13.5%	22.7%
Adult	85.6	75.2
Both	.9	2.1
Victim/offender relationship		
Close	31.4%	22.9%
Relative	16.0	16.1
Intimate	15.4	6.8
Known	30.1%	32.9%
Well-known	16.8	13.1
Casual	13.3	19.8
Stranger	38.4%	44.1%
Number of inmates	1,850	31,816

Note: For sex, race, and age of the victim, the categories "both" and "mixed" refer only to multiple-victim crimes where the characteristics of the victims differed. The victim-offender relationship is based on the closest relation from among multiple victims, if relationships differed.

Drug use

In general, female inmates used more drugs and used those drugs more frequently than male inmates (table 12). More than half of the convicted female inmates had used drugs in the month prior to their current offense. A higher percentage of women than men had used drugs daily in the month prior to the offense (40.1% compared to 28.6%) and at the time of the current offense (37.5% compared to 25.9%).

Women were more likely than men to have used a major drug (heroin, cocaine or crack, LSD, PCP, or methadone) in the month before their current offense. More than twice as many women as men had used a major drug daily. Nearly a third of the convicted women, but less than a fifth of the men, committed their offense under the influence of a major drug.

Table 12. Drug use history of convicted jail inmates, by sex, 1989

Drug use	Percent of inmates: Female	Male
Any drug[a]		
Ever used	83.6%	77.4%
Ever used on a regular basis	70.0	56.6
Used in the month before current offense	55.1	42.7
Used daily in the month before current offense	40.1	28.6
Under the influence at the time of current offense	37.5	25.9
Major drug[b]		
Ever used	70.7%	54.5%
Ever used on a regular basis	56.7	35.4
Used in the month before current offense	43.9	25.9
Used daily in the month before current offense	31.8	15.7
Under the influence at the time of current offense	31.3	16.8
Number of inmates	21,782	196,620

[a]Includes cocaine, heroin, PCP, LSD, methadone, marijuana or hashish, amphetamines, barbiturates, methaqualone, and all other drugs.
[b]Includes only cocaine, heroin, PCP, LSD, and methadone.

Table 10. Criminal history of female jail inmates, by most serious current offense, 1989

Criminal history	Total	Most serious current offense: Violent	Property	Drug	Public-order
Total	100.0%	100.0%	100.0%	100.0%	100.0%
First offense	31.5%	45.4%	23.3%	36.6%	26.0%
Previous offenses	68.5%	54.6%	76.7%	63.4%	74.0%
Violent offenses	10.0	15.5	9.7	7.9	10.8
Property offenses	40.2	27.1	64.1	30.3	30.3
Drug offenses	20.6	12.9	11.4	32.9	19.4
Public-order offenses	30.5	21.4	23.5	27.1	55.9
Number of inmates	35,087	4,656	11,233	11,771	6,642

Note: Excludes an estimated 2,296 inmates for whom data on present or prior offenses were unknown. Subtotals may add to more than total because inmates may have been sentenced more than once or for more than one type of offense.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Women in Jail 1989*, March 1992.

Drug use among female inmates changed between 1983 and 1989 (table 13). The percentage of convicted female inmates who reported using cocaine or crack in the month before their offense more than doubled, from 15.2% in 1983 to 39.3% in 1989. The percentage who had reported use of marijuana or hashish declined from 33.4% to 23.4%. The use of other types of drugs either declined or remained about the same during the period.

The percentage of convicted female inmates reporting that they were under the influence of drugs at the time of the current offense increased from 31.2% in 1983 to 37.5% in 1989. More than 3 of every 10 convicted female inmates in 1989 had been under the influence of a major drug at the time of their offense. In 1989 an estimated 24.9% had been under the influence of cocaine or crack — more than triple the percentage in 1983 (7.4%). The reported use of drugs other than cocaine or crack at the time of the offense, however, declined from 1983 to 1989.

Many women in jail have a long history of prior drug use and past treatment for drug abuse. Nearly 1 in 5 convicted female inmates in 1989 said they committed their current offense in order to get money to buy drugs. A quarter of the convicted female inmates had a prior sentence to probation,

Table 13. Drug use by convicted female jail inmates, by type of drug, 1989 and 1983

	Percent of convicted female inmates who had used drugs			
	In the month before the offense		At the time of the offense	
Type of drug	1989	1983	1989	1983
Any drug	55.1%	50.5%	37.5%	31.2%
Major drug	43.8%	27.1%	31.3%	20.9%
Cocaine or crack	39.3	15.2	24.9	7.4
Heroin	15.0	17.3	12.0	12.9
LSD	.8	1.4	.1	.7
PCP	2.1	3.7	.8	2.2
Methadone	1.1	1.7	.7	2.2
Other drug	27.4%	39.8%	9.9%	16.5%
Marijuana	23.4	33.4	5.0	8.0
Amphetamines	6.6	8.7	4.1	4.0
Barbiturates	3.0	6.9	1.4	3.1
Methaqualone	1.0	2.6	.2	1.0

Note: Detail may add to more than total because an inmate may have been using more than one drug.

How sentenced jail inmates used their time, 1989

Data on how inmates spend their time while serving their jail sentences were collected for the first time in the 1989 survey. Each respondent was asked a series of questions concerning the amount of time spent inside and outside their cells, doing physical exercise or working at an assigned job.

	Inmates sentenced to jail	
	Female	Male
Average number of hours per day spent in cell or room	16.8 hrs.	14.8 hrs.
Average number of hours per day spent doing physical exercise outside cell	1.2 hrs.	1.5 hrs.

On average, female inmates said they spend almost 17 hours a day in their cells or other housing units and about an hour a day outside of their cells doing physical exercise. Male inmates said they spent fewer hours in their cells (an average of about 15 hours per day) and slightly more time exercising (1.5 hours per day).

Women were less likely than men to have work assignments: 43.8% of the women compared to 58.9% of the men said they had work assignments inside or outside the jail facility. About an equal percentage of female (37.7%) and male inmates (41.1%) reported they had been assigned work within the facility; however, female inmates were significantly less likely than male inmates to work outside the jail (8.1% versus 23.2%).

Among jail inmates with work assignments, females reported working an average of 4.2 hours per day; males reported an average of 5.9 hours per day. The most common work assignment cited by female inmates was janitorial work (39.2%), followed by food preparation (18.0%), and then by other service jobs including work in the library, stockroom, or office (12.9%). The most common work assignment cited by male inmates was maintenance (28.5%), followed by food preparation (25.5%) and janitorial work (23.3%).

	Inmates sentenced to jail	
	Female	Male
Percent of inmates with work assignments		
Total[a]	43.8%	58.9%
Inside the jail	37.7	41.1
Outside the jail	8.1	23.2
Average number of hours per day spent working[b]	4.2 hrs.	5.9 hrs.
Percent of inmates assigned work, by type of work[a,b]		
Janitorial	39.2%	23.3%
Maintenance	5.4	28.5
Goods production/farming	4.2	5.9
Food preparation	18.0	25.5
Hospital, infirmary or other medical services	4.6	.2
Laundry	9.8	5.0
Other services (library, stockroom, store, office help, etc.)	12.9	7.7
Other	10.5	12.7

[a]Detail may add to more than total because inmates may have had work assignment both inside and outside the facility or more than one work assignment.
[b]Based on inmates with work assignments.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Women in Jail 1989*, March 1992.

jail, or prison for a drug law violation. More than a third had participated in a drug treatment program. About a 10th were receiving treatment at the time of the survey.

	Percent of convicted female inmates, 1989
Who committed offense to get money for drugs	21.8%
Who had a prior sentence for a drug offense	24.5%
Who had ever received drug treatment	36.6%
Who were in treatment at time of the survey	11.2%

Table 14. Alcohol use and treatment of jail inmates, 1989

	Percent of jail inmates	
	Female	Male
Who had ever been an alcoholic	13.2%	21.7%
Who had ever participated in an alcohol abuse treatment program	9.5%	15.3%
Who were under the influence of alcohol at the time of the current offense*	20.8%	43.5%
Who reported drinking for 5 or more hours before the current offense*	9.0%	19.2%
Who reported being drunk or very drunk at time of the current offense*	8.4%	20.8%

*Based on convicted inmates only.

Alcohol abuse and treatment

The percentages of convicted female inmates were half those of convicted male inmates for each of three measures of alcohol use — being under the influence of alcohol at the time of the offense, drinking for 5 or more hours before the current offense, or being drunk and very drunk when committing the offense (table 14). About 21% of the women in jail said that they had committed their offense under the influence of alcohol, compared to an estimated 44% of the men. Nine percent of the women reported drinking for 5 or more hours before the offense, and 8% said they were drunk. Among the men about 20% had been drinking for 5 or more hours and more than 20% reported committing their offense while drunk.

Women also had lower levels of prior alcohol abuse than men. About 1 in every 8 female inmates versus 1 in 5 male inmates said they had been alcoholics at some time before their admission to jail. A smaller percentage of the female inmates (9.5%) than male inmates (15.3%) had participated in an alcohol abuse treatment program.

Mothers in jail

A large majority of women in jail were mothers. Nearly three-quarters of the women in jail had children, and more than two-thirds of the women had a child or children under age 18 (table 15). At the time of the survey, these 25,173 women had more than 52,000 children under age 18. Two-thirds of the women with young children were living with their children before entering jail. Black women were slightly more likely than white women to have children under age 18 and to have been living with them before entering jail.

Relatives cared for most of the children of mothers in jail. About a quarter of the mothers with young children said that one or more of their children were living with the father at the time of the survey. Half of the women said their children were living with a grandparent, most often a maternal grandparent, and a fifth said their children were living with other relatives. Less than a tenth of the mothers indicated that their children were in a foster home or other institutional setting.

An estimated 84.5% of the women indicated that they intended to live with their young children after release from jail. More than 90% of the black mothers, compared to 77.7% of the white mothers, said they would live with their children after their release.

Table 15. Children of female jail inmates, by race, 1989

Characteristic	Percent of female inmates		
	All	White	Black
Have children			
No	26.2%	28.6%	23.3%
Yes	73.8	71.5	76.7
Any under age 18	67.9	64.9	71.3
Adult only	5.9	6.6	5.4
Number of inmates	37,071	19,306	16,513
Number of children under age 18[a]			
1	37.8%	38.9%	35.5%
2	33.4	37.0	31.3
3	17.9	14.9	21.1
4	6.4	5.3	7.9
5 or more	4.4	3.9	4.2
Lived with child(ren) under 18 before entering jail[a]			
No	32.8%	35.9%	27.7%
Yes	67.2	64.1	72.3
Where child(ren) under 18 live(s) now[a,b]			
Child's father	23.5%	30.1%	15.8%
Maternal grandparents	41.6	34.9	50.0
Paternal grandparents	8.7	9.3	7.1
Other relative	22.9	18.6	27.0
Friends	4.3	4.2	4.5
Foster home	6.5	7.2	5.1
Agency/institution	1.6	2.2	0.9
Other	4.0	5.0	1.9
Plan to live with child(ren) under 18 after release from jail[a]			
Yes	84.5%	77.7%	91.7%
No	12.4	18.1	6.3
Don't know	3.1	4.3	1.9

Note: Female inmates had an estimated total of 52,267 children under age 18.
*Includes Asians, Pacific Islanders, American Indians, Alaska Natives, and other racial groups.
[a]Percents are based on those inmates with children under age 18.
[b]Percents add to more than 100% because inmates with more than one child may have provided multiple responses.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Women in Jail 1989*, March 1992.

Table 1–11. New court commitments to State prison, 1992: Offense, by sex and race

Most serious offense	New court commitments to State prison			
	Male		Female	
	White	Black	White	Black
All offenses	100.0 %	100.0 %	100.0 %	100.0 %
Violent offenses	29.4 %	25.7 %	15.2 %	17.4 %
Homicide	4.0	4.1	4.2	3.9
Murder/nonnegligent manslaughter	2.5	3.0	2.4	2.4
Murder	2.1	2.6	1.9	1.7
Nonnegligent manslaughter	0.4	0.4	0.5	0.6
Negligent manslaughter	1.4	1.0	1.7	1.5
Unspecified homicide	0.1	0.1	0.1	0.1
Kidnaping	0.7	0.5	0.5	0.2
Rape	3.4	1.8	0.4	0.1
Other sexual assault	6.4	1.7	0.9	0.1
Robbery	6.7	13.2	4.3	6.1
Assault	7.4	7.6	3.6	6.2
Other violent	0.9	0.5	1.1	0.7
Property offenses	37.3 %	26.5 %	41.3 %	35.0 %
Burglary	17.4	11.5	7.3	3.7
Larceny/theft	8.6	6.9	15.2	17.5
Motor vehicle theft	3.0	2.2	1.4	0.6
Arson	0.6	0.4	0.7	0.6
Fraud	4.1	2.5	14.7	10.2
Stolen property	2.2	2.2	1.5	1.8
Other property	1.1	0.6	0.5	0.4
Drug offenses	20.5 %	35.7 %	34.7 %	42.2 %
Possession	3.5	6.7	6.1	6.8
Trafficking	13.3	21.3	20.3	25.0
Other/unspecified drug	3.6	5.7	8.3	8.4
Public–order offenses	11.8 %	7.4 %	7.1 %	4.7 %
Weapons	1.8	3.1	0.4	0.9
Driving while intoxicated	5.1	0.8	2.4	0.2
Other public–order	4.7	3.4	4.3	3.5
Other offenses	1.3 %	0.8 %	1.7 %	0.6 %
Number of admissions	108,272	129,702	9,198	13,335

Source: U.S. Department of Justice, Bureau of Justice Statistics, *National Corrections Reporting Program, 1992*, October 1994.

Table 1–22. New court commitments to State prison, 1992: Sentence length and minimum time to be served, by offense and sex

Most serious offense	New court commitments to State prison									
	Maximum sentence length in months[a]				Minimum time to be served in months[b]				Percent of sentence expected to be served[c]	
	Male		Female		Male		Female			
	Median[d]	Mean[e]	Median	Mean	Median	Mean	Median	Mean	Male	Female
All offenses	48 mos.	77 mos	36 mos	58 mos	24 mos.	38 mos	18 mos	25 mos	49.4 %	44.6 %
Violent offenses	84 mos.	120 mos.	60 mos.	101 mos.	36 mos.	63 mos	29 mos.	47 mos	52.5 %	46.5 %
Homicide	252	229	180	167	97	136	60	85	59.4	50.9
Murder/nonnegligent manslaughter	420	310	288	224	216	188	100	125	60.6	55.8
Murder	600	333	300	228	240	210	143	140	63.1	61.4
Nonnegligent manslaughter	252	226	252	215	84	80	72	71	35.4	33.0
Negligent manslaughter	120	139	84	119	48	61	36	48	43.9	40.3
Unspecified homicide	Life	175	--	--	Life	82	--	--	48.9	--
Kidnaping	120	147	83	112	40	71	36	52	48.3	48.4
Rape	120	152	180	179	53	74	44	71	48.7	39.7
Other sexual assault	72	110	67	113	30	53	30	44	48.2	36.9
Robbery	78	111	60	92	36	54	28	38	48.6	41.3
Assault	60	90	48	70	30	48	24	32	53.3	45.7
Other violent	54	67	36	51	24	40	15	26	59.7	51.0
Property offenses	42 mos.	58 mos.	30 mos.	44 mos.	20 mos.	27 mos.	15 mos.	16 mos.	48.8 %	40.9 %
Burglary	48	72	48	68	24	33	24	28	45.8	41.2
Larceny/theft	36	44	24	36	15	18	12	15	40.9	41.7
Motor vehicle theft	36	47	33	36	24	29	20	24	61.7	66.7
Arson	80	66	54	77	24	34	22	27	39.5	35.1
Fraud	36	51	34	48	18	21	15	19	41.2	39.6
Stolen property	36	43	24	35	13	19	10	15	44.2	42.9
Other property	36	45	24	27	14	25	6	14	55.6	51.9
Drug offenses	48 mos.	63 mos	36 mos	51 mos.	22 mos.	29 mos.	18 mos	22 mos	46.0 %	43.1 %
Possession	48	59	40	49	21	27	18	22	45.6	44.9
Trafficking	48	66	36	56	24	30	20	24	45.5	42.9
Other/unspecified drug	36	51	24	35	16	23	6	15	45.1	42.9
Public-order offenses	36 mos	45 mos	30 mos	36 mos.	18 mos.	24 mos.	12 mos	17 mos.	53.3 %	44.7 %
Weapons	36	49	24	33	20	26	16	18	53.1	54.5
Driving while intoxicated	36	42	36	40	12	16	12	17	38.1	42.5
Other public-order	30	41	30	38	15	24	12	17	58.5	44.7
Other offenses	48 mos.	60 mos	36 mos	38 mos	27 mos	44 mos.	24 mos.	34 mos	73.3 %	58.6 %
Number of admissions	144,841		13,819		144,841		13,819			

Note: Data are based on new court commitments for whom the most serious offense, sentence length, and sex were reported.

-- No statistic was calculated because there were fewer than 10 cases.

[a]Maximum sentence length is the sentence length that an offender may be required to serve for the most serious offense.

[b]Minimum time to be served is the jurisdiction's estimate of the shortest time that each admitted prisoner must serve before becoming eligible for release.

[c]The percent of sentence that authorities expect prisoners to serve is calculated by dividing the mean minimum time to be served by the mean maximum sentence length.

[d]Includes sentences of life without parole, life plus additional years, life, and death.

[e]Excludes sentences of life without parole, life plus additional years, life, and death.

tice, Bureau of Justice Statistics, *National Corrections Reporting Program, 1992*, October 1994.

Table 3–4. First entries to parole supervision from State prison, 1992: Offense, by sex and race

Most serious offense	First entries to parole supervision			
	Male		Female	
	White	Black	White	Black
All offenses	100.0 %	100.0 %	100.0 %	100.0 %
Violent offenses	24.4 %	27.7 %	12.6 %	16.7 %
Homicide	2.7	2.6	3.2	3.6
Murder/nonnegligent manslaughter	1.4	1.7	1.6	2.2
Murder	1.0	1.2	1.2	1.3
Nonnegligent manslaughter	0.4	0.6	0.5	0.9
Negligent manslaughter	1.2	0.8	1.6	1.4
Unspecified homicide	0.0 *	0.0 *	0.0 *	0.0
Kidnaping	0.5	0.4	0.2	0.2
Rape	2.2	1.5	0.2	0.2
Other sexual assault	4.3	1.4	0.6	0.1
Robbery	7.2	14.5	4.4	6.5
Assault	6.7	6.9	3.0	5.5
Other violent	0.7	0.5	1.0	0.6
Property offenses	37.7 %	29.0 %	41.9 %	34.7 %
Burglary	18.9	13.3	8.3	4.1
Larceny/theft	8.6	7.6	14.5	17.7
Motor vehicle theft	3.2	2.6	1.6	0.6
Arson	0.9	0.4	0.9	0.7
Fraud	3.9	2.7	15.6	10.2
Stolen property	1.4	1.6	0.6	1.2
Other property	0.9	0.6	0.3	0.3
Drug offenses	22.3 %	34.6 %	35.7 %	42.2 %
Possession	4.5	10.2	9.2	12.3
Trafficking	14.0	21.1	18.6	24.1
Other/unspecified drug	3.8	3.5	7.9	5.6
Public-order offenses	13.9 %	7.7 %	7.9 %	5.4 %
Weapons	1.7	2.6	0.4	0.8
Driving while intoxicated	7.4	1.3	2.6	0.3
Other public-order	4.8	3.6	4.6	4.2
Other offenses	1.7 %	0.6 %	2.0 %	1.0 %
Number of parole entries	65,044	77,966	6,136	8,301

*Less than 0.05%

Source: U.S. Department of Justice, Bureau of Justice Statistics, *National Corrections Reporting Program, 1992*, October 1994.

Table 4–11. Successful first State parole discharges, 1992: Time served in prison and on parole, by offense and sex

Most serious offense	Successful first State parole discharges					
	Male			Female		
	Percent of discharges	Mean time served		Percent of discharges	Mean time served	
		Prison	Parole		Prison	Parole
All offenses	100.0 %	21 mos.	17 mos.	100.0 %	15 mos.	15 mos
Violent offenses	25.7 %	35 mos.	23 mos	16.6 %	28 mos.	21 mos
Homicide	3.1	56	30	4.7	42	25
Murder/nonnegligent manslaughter	1.7	73	36	2.6	52	29
Murder	1.1	88	33	1.4	65	28
Nonnegligent manslaughter	0.6	48	40	1.2	38	31
Negligent manslaughter	1.4	34	23	2.1	29	21
Kidnaping	0.5	43	21	0.2	25	14
Rape	1.7	53	29	0.2	45	29
Other sexual assault	3.3	31	25	0.4	26	27
Robbery	9.2	37	28	5.3	25	25
Assault	7.2	21	14	5.0	17	14
Other violent	0.6	23	20	0.9	22	19
Property offenses	32.3 %	19 mos.	14 mos.	39.6 %	12 mos.	12 mos.
Burglary	14.5	24	17	5.0	16	15
Larceny/theft	6.3	13	11	17.7	10	12
Motor vehicle theft	1.9	15	12	0.6	10	9
Arson	0.7	29	21	0.6	24	18
Fraud	3.5	15	11	13.8	14	12
Stolen property	2.2	17	12	1.5	10	10
Other property	1.0	14	10	0.5	14	14
Drug offenses	27.5 %	16 mos	17 mos	35.1 %	14 mos.	16 mos.
Possession	5.6	12	15	7.3	11	15
Trafficking	18.0	18	17	21.3	16	17
Other/unspecified drug	3.6	13	16	6.6	10	15
Public–order offenses	12.9 %	12 mos.	10 mos	6.9 %	9 mos.	8 mos
Weapons	2.4	18	19	0.5	14	16
Driving while intoxicated	6.4	11	8	2.4	9	7
Other public–order	4.2	10	7	4.0	8	7
Other offenses	1.7 %	17 mos	17 mos	1.5 %	11 mos	16 mos
Number of parole discharges	59,839			8,365		

Source: U.S. Department of Justice, Bureau of Justice Statistics, *National Corrections Reporting Program, 1992*, October 1994.

Female inmates in 1991 were significantly less likely than male inmates to be employed at the time of their arrest. An estimated 47% of women in prison were working, compared to 68% of the men. More than a third of the women were unemployed and not looking for a job.

Current offense

From 1966 to 1991 a large increase occurred in the percentage of women in prison for drug offenses, and this was matched by a decline in the percentage in prison for property offenses (table 2). Nearly 1 in 3 female inmates were serving a sentence for drug offenses in 1991, compared to 1 in 8 in 1986. This increase in sentenced drug offenders accounted for 55% of the increase in the female prison population between 1986 and 1991.

The percentage of women in prison for property offenses declined from 41% in 1986 to 29% in 1991. Sentences for fraud decreased more than for any other single offense type, dropping from 17% of the women in prison to 10%.

Women incarcerated for violent offenses included about 3 in 10 female inmates in 1991, down from 4 in 10 in 1986. Despite this decrease in the proportion of violent female inmates, the number of women sentenced for a violent offense rose from 8,045 to 12,400 during the 5-year period. Murder, the most prevalent violent offense among female inmates in 1991, accounted for just over a third of the women sentenced for a violent offense.

Violent female inmates and their victims

In 1991 nearly two-thirds of the women in prison for a violent offense had victimized a relative, intimate, or someone else they knew (table 3). Women serving a sentence for a violent offense were about twice as likely as their male counterparts to have committed their offense against someone close to them (36% versus 16%). Another third of the women, but half of the men, had victimized a stranger.

Women in prison for homicide were almost twice as likely to have killed an intimate (husband, ex-husband, or boyfriend) as a relative like a parent or sibling (32% versus 17%). Female inmates were more likely to have killed relatives or intimates (49%) than nonrelatives (30%) or strangers (21%).

Relationship of victim to offender	Percent of females serving a sentence for homicide*
Intimate	31.9%
Relative	17.0
Well known	14.3
Acquaintance	12.8
Known by sight only	2.7
Stranger	21.3

*Homicide includes murder, negligent manslaughter, and nonnegligent manslaughter

Table 2. Most serious offense of State prison inmates, by sex, 1991 and 1986

Most serious offense	Percent of prison inmates 1991 Female	1991 Male	1986 Female	1986 Male
All offenses	100.0%	100.0%	100.0%	100.0%
Violent offenses	32.2%	47.4%	40.7%	55.2%
Murder[a]	11.7	10.5	13.0	11.2
Negligent manslaughter	3.4	1.7	6.8	3.0
Kidnaping	.4	1.2	.9	1.7
Rape	.4	3.7	.2	4.5
Other sexual assault	1.3	6.2	.9	4.7
Robbery	7.8	15.2	10.6	21.3
Assault	6.2	8.3	7.1	8.1
Other violent[b]	1.1	.5	1.2	.8
Property offenses	28.7%	24.6%	41.2%	30.5%
Burglary	4.5	12.9	5.9	17.0
Larceny/theft	11.1	4.5	14.7	5.6
Motor vehicle theft	.7	2.3	.5	1.4
Arson	1.0	.7	1.2	.7
Fraud	10.2	2.4	17.0	3.2
Stolen property	1.0	1.4	1.6	2.0
Other property[c]	.1	.5	.4	.5
Drug offenses	32.8%	20.7%	12.0%	8.4%
Possession	11.8	7.3	4.0	2.9
Trafficking	19.8	13.0	7.3	5.3
Other/unspecified	1.3	.4	.7	.2
Public-order offenses	5.7%	7.0%	5.1%	5.2%
Weapons	.5	1.9	.9	1.5
Other public-order[d]	5.1	5.1	4.3	3.7
Other offenses	.5%	.4%	.9%	.7%
Number of inmates	38,462	665,719	19,761	430,151

Note. Excludes an estimated 7,462 inmates in 1991 and 505 inmates in 1986 for whom offense was unknown. Detail may not add to total because of rounding.

[a]Includes nonnegligent manslaughter.

[b]Includes blackmail, extortion, hit-and-run driving with bodily injury, child abuse, and criminal endangerment.

[c]Includes destruction of property, vandalism, hit-and-run driving without bodily injury, trespassing, and possession of burglary tools.

[d]Includes escape from custody, driving while intoxicated, offenses against morals and decency, and commercialized vice.

Table 3. Relationship of violent offenders to their victims, by sex, 1991

Relationship	Percent of violent State prison inmates Female	Male
Total	100.0%	100.0%
Close	35.7%	16.3%
Intimate	19.9	6.8
Relative	15.9	9.6
Known	29.2%	33.2%
Well known	14.1	14.6
Acquaintance	10.8	12.0
By sight only	4.3	6.5
Strangers	35.1%	50.5%
Number of inmates	11,800	299,380

Note: Excludes an estimated 16,776 inmates who did not report their relationship to the victim. Detail may not add to total because of rounding.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Women in Prison*, March 1994.

Criminal history

Female inmates generally had not been sentenced to incarceration or probation as often as male inmates, and their record of past convictions was generally less violent than that of male inmates (table 4). About 28% of the women reported no previous sentences to incarceration or probation, compared to 19% of the men. Four in ten women had a history of violence, compared to more than 6 in 10 men.

Nearly half of all women in prison were currently serving a sentence for a nonviolent offense and had only nonviolent offenses for prior convictions. Among women with no prior sentences, more than half were serving a sentence for a violent offense. Among those women with a previous sentence, about a third were serving a sentence or had served a sentence for a violent offense.

Female inmates also had shorter criminal records than male inmates (table 5). An estimated 51% of all women in prison had one or no prior offenses, and 66% had two or fewer offenses, compared to 39% and 55% of the men, respectively. About 2 in 10 women had a criminal record as a juvenile, compared to 4 in 10 men. Half of all women in prison had criminal records as adults only.

Sentence length

Overall, female prisoners had shorter maximum sentences than men (table 6). Half of the women had a maximum sentence of 60 months or less, while half of the men had a sentence of 120 months or less. Excluding sentences to life or death, women in prison had received sentences that, on average, were 48 months shorter than those of men (mean sentences of 105 and 153 months, respectively). An estimated 7% of the women and 9% of the men received sentences to life or death.

Maximum sentence length	Percent of inmates Female	Male
Less than 36 months	24.2%	12.4%
36-59	18.7	15.0
60-119	20.5	22.3
120-179	11.9	13.2
180 or more	17.7	27.9
Life/death	7.0	9.2

The differences in sentence length are, partly, the result of variation in the distribution of offenses among female and male inmates. Women were more likely than men to be in prison for drug and property offenses, which had shorter average sentences than violent offenses.

For each category of offense, women received shorter average maximum sentences than men. For property offenses, female prisoners had a mean sentence 42 months shorter than men; for drug offenses, 18 months shorter; and for violent offenses, 39 months shorter.

Table 4. Criminal history of State prison inmates, by sex, 1991

Criminal history	Female	Male
No previous sentence	28.2%	18.7%
Current violent offense	15.8	12.5
Current nonviolent offense	12.4	6.2
Violent recidivists	25.7%	50.2%
Current and prior violent	6.9	17.9
Current violent only	10.8	19.3
Prior violent only	8.0	13.0
Nonviolent recidivists	46.1%	31.1%
Prior minor public-order offenses only	2.1	1.2
Other prior offenses	44.0	29.9
Number of inmates	38,158	660,007

Note: Excludes an estimated 13,477 inmates for whom current offense and prior probation/incarceration offense were unknown.

Family background

More than half of the women in prison had grown up in a household without the presence of both parents (table 7). An estimated 42% had lived in a single-parent household — 39% with their mothers and 3% with their fathers. An additional 16% had lived in a household with neither parent present.

Table 5. Prior sentences of State prison inmates, by sex, 1991

Prior sentence	Female	Male
None	28.9%	19.6%
Juvenile	3.5	6.4
Adult only	50.7	40.6
Both	17.0	31.4
Number of times		
0	28.9%	19.6%
1	22.0	19.2
2	14.9	16.3
3-5	20.1	26.2
6-10	9.1	12.7
11 or more	5.1	6.1
Number of inmates	38,038	661,021

Note: Excludes an estimated 12,584 inmates for whom data on prior sentences to probation or incarceration were unknown.

Table 6. Total maximum sentence length of State prison inmates, by most serious offense and sex, 1991

	Maximum sentence length in months					
	Female inmates			Male inmates		
Most serious offense	Number	Median	Mean	Number	Median	Mean
All offenses	37,429	60 mo	105 mo	653,292	120 mo	153 mo
Violent offenses	12,118	180 mo	178 mo	310,946	180 mo	217 mo
Murder	4,432	840	310	69,405	Life	386
Negligent manslaughter	1,309	120	158	11,333	156	188
Sexual assault*	–	–	–	65,223	180	211
Robbery	2,913	120	145	99,730	144	201
Assault	2,309	72	109	54,004	120	160
Property offenses	10,743	44 mo	74 mo	160,702	72 mo	116 mo
Burglary	1,747	60	81	84,490	96	142
Larceny/theft	4,140	36	53	29,125	48	74
Fraud	3,836	60	92	15,660	60	100
Drug offenses	12,264	54 mo	79 mo	134,539	60 mo	97 mo
Possession	4,410	36	64	47,515	56	82
Trafficking	7,379	60	89	84,310	72	106
Public-order offenses	2,075	36 mo	60 mo	44,515	48 mo	84 mo

Note: Excludes an estimated 1,367 female inmates and 19,555 male inmates for whom current offense or sentence length was unknown. Sentence length refers to the total maximum sentence for all inmates, including consecutive sentences for inmates with multiple offenses. Suspended sentences were excluded from the total.
–Too few cases to estimate.
*Includes rape and other sexual assault.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Women in Prison*, March 1994.

Relative to the general population, female inmates were nearly twice as likely to have grown up in a single-parent household. In 1975 — when most of the inmates in 1991 were between ages 10 and 18 — 80% of the 66.1 million children in the Nation's households were living with both parents.*

The composition of the childhood household differed among white, black, and Hispanic women in prison. More than half of white women and less than a third of black women grew up with both parents present. Black female inmates were the most likely to have grown up in a home with only their mothers (46%). Hispanic women were equally likely to have lived with both parents (40%) or their mothers only (41%).

Among female inmates of all races, about 17% had lived in a foster home, agency, or other institution at some time while they were growing up. White women were more likely than other women to have ever lived in such an alternative care facility when young.

Women in prison were more likely than the men to have had at least one member of their immediate family who had been incarcerated: 47% of female inmates and 37% of male inmates. About 35% of the women had a brother and 10% had a sister who had served a jail or prison sentence.

Higher percentages of black women than of white women had family members who had been in jail or prison. Among women 42% of black inmates, 36% of Hispanic inmates, and 26% of white inmates said a brother had been incarcerated. White women (11%) were more likely than black women (5%) to have had a father with jail or prison time.

A third of the female inmates and a quarter of the males said that a parent or guardian had abused drugs or alcohol while the inmate was growing up. Alcohol was more often cited than drugs. Thirty-two percent of the women had a parent who abused alcohol, and 7% had a parent who used drugs. Of white women in prison, 42% reported parental abuse of drugs or alcohol, compared to 33% of Hispanic women and 26% of black women.

*Statistical Abstract of the United States, 1978, U.S. Bureau of the Census, table 68.

Table 7. Family structure, incarceration of family members, and parental abuse of alcohol or drugs reported by State prison inmates, 1991

	Percent of female inmates				Percent of male inmates
	All[a]	White	Black	Hispanic	All[a]
Person(s) lived with most of the time while growing up:					
Both parents	42.0%	55.1%	31.9%	40.3%	43.1%
Mother only	38.9	29.3	46.1	41.0	39.2
Father only	3.4	3.7	3.0	3.8	4.0
Grandparents	9.3	6.1	11.3	10.3	7.6
Other relatives	3.0	1.1	4.7	2.8	3.0
Friends	.4	.4	.4	.5	.4
Foster home	1.8	2.7	1.5	.8	1.5
Agency or institution	.8	1.1	.6	.2	.8
Other	.5	.5	.5	.2	.5
Ever lived in a foster home, agency, or institution while growing up					
No	82.8%	78.9%	85.9%	85.6%	82.7%
Yes	17.2	21.1	14.1	14.4	17.3
Family member ever incarcerated					
No	53.4%	61.1%	47.3%	53.0%	63.1%
Yes[b]	46.6	38.9	52.7	47.0	38.9
Spouse	1.8%	3.1%	1.1%	1.4%	.2%
Mother	4.0	3.5	4.5	3.6	1.5
Father	7.8	10.9	5.4	6.7	6.3
Brother	35.1	28.1	42.0	35.9	30.9
Sister	10.0	5.8	12.4	14.6	4.2
Child	1.6	1.3	1.6	2.3	.2
Parent/guardian abused alcohol or drugs					
No	66.4%	57.7%	74.0%	67.1%	73.5%
Yes	33.6	42.3	26.0	32.9	26.5
Alcohol only	28.3%	32.7%	20.7%	25.4%	21.9%
Drugs only	1.6	1.0	2.0	2.2	.8
Both alcohol and drugs	5.7	8.6	3.2	5.2	3.6
Number of inmates	38,630	13,969	17,738	5,521	668,578

Note: Excludes 3,435 inmates for whom information on family history was missing.
[a]Includes Asians, Pacific Islanders, American Indians, Alaska Natives, and other racial groups.
[b]Detail adds to more than total because more than one family member may have been incarcerated.

Physical and sexual abuse of prisoners

In 1991 survey participants responded to a series of questions about any abuse experienced and their age at the time of abuse. For the first time in a BJS inmate survey, inmates reported their relationship to their abusers, and female inmates indicated if sexual abuse involved rape.

More than 4 in every 10 women reported that they had been abused at least once before their current admission to prison (table 8). An estimated 34% of female inmates reported being physically abused, and 34% reported being sexually abused. About 32% said the abuse had occurred before age 18, and 24% said they had been abused since age 18.

Table 8. Prior physical or sexual abuse of State prison inmates, by sex, 1991

	Percent of State prison inmates		
	Total	Female	Male
Ever physically or sexually abused before current incarceration			
No	86.1%	56.8%	87.8%
Yes	13.9	43.2	12.2
Before age 18	11.9%	31.7%	10.7%
After age 18	4.2	24.5	3.0
Physically abused	11.3	33.5	10.0
Sexually abused	6.8	33.9	5.3
Number of inmates	700,475	38,109	662,367
Relationship of abuser to inmate*			
Intimate	11.2%	49.8%	3.0%
Spouse/ex-spouse	6.1	30.5	1.0
Boyfriend/girlfriend	6.8	27.6	2.2
Relative	68.1	56.1	70.6
Parent/guardian	53.7	37.7	57.1
Other relative	22.6	26.5	21.7
Friend/acquaintance	22.8	20.1	23.4
Someone else	21.2	19.6	21.6
Refusal to answer	1.1	1.3	1.1

Note: Sexual abuse includes fondling, incest, molestation, sodomy, rape, and other types of sexual assault. Detail adds to more than total because some inmates were abused both before and after age 18 or were both sexually and physically abused; inmates may also have reported more than one abuser.
*Based on those inmates who were abused and knew their abuser.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Women in Prison*, March 1994.

Compared to men in prison, women were at least 3 times more likely to report any prior abuse and at least 6 times more likely to report sexual abuse or abuse since age 18.

Among inmates who reported prior abuse, women differed somewhat from men in their relationships to their abusers. An estimated 50% of women in prison who reported abuse said they had experienced abuse at the hands of an intimate, compared to 3% of men. While both female and male inmates were most likely to name a relative as an abuser, women were less likely than men to say that a parent had abused them (38% compared to 57%).

More than three-quarters of the female inmates who had a history of abuse reported being sexually abused. An estimated 56% of the abused women said that their abuse had involved a rape, and another 13% reported an attempted rape.

Type of abuse	Percent of female inmates who were abused
Physical only	21.2%
Sexual only	21.9
Both	56.9
Type of sexual abuse	
Total	78.8%
Completed rape	55.8
Attempted rape	13.0
Other sexual abuse	10.0
Refusal	.8

Among the women in prison, those who reported abuse had different types of offenses than those who did not. The victims of abuse were more likely to be in prison for a violent offense (42% versus 25%) and less likely to be serving a sentence for a drug offense (25% versus 38%) or a property offense (25% versus 31%).

Most serious offense	Percent of female inmates who experienced Prior abuse*	No prior abuse
Violent	41.7%	25.0%
Property	25.3	31.4
Drug	25.3	38.5
Public-order	6.9	4.6
Other	.7	.5
Number of inmates	16,385	21,439

*Includes those inmates who experienced physical or sexual abuse prior to their current incarceration.

Half of the violent female inmates who had been abused were sentenced for homicide, compared to two-fifths of other violent female inmates.

Violent offense	Percent of violent female inmates who experienced Prior abuse	No prior abuse
Homicide	50.8%	41.9%
Sexual assault	6.1	3.9
Robbery	20.1	29.4
Assault	18.0	20.7
Other violent	5.0	4.2
Number of inmates	6,827	5,369

Mothers in prison

More than three-quarters of all women in prison had children, and two-thirds of the women had children at the time of the survey (table 9). An estimated 25,700 female inmates had more than 56,000 children under age 18. Male inmates were slightly less likely to have children: 64% reported having any children and 56% had children under age 18.

Black (69%) and Hispanic (72%) female inmates were more likely than white (62%) women to have children under age 18. Black women were slightly more likely than other women to have lived with their young children before entering prison.

Among inmates with children under age 18, 25% of the women, but nearly 90% of the men, said that their children were living with the other parent. More than a third of white female inmates reported that one or more of their children were living with their fathers at the time of the interview, compared to a quarter of Hispanic women and less than a fifth of black women. Regardless of race, the children's grandparents were the most common single category of caregivers: 57% of black mothers, 55% of Hispanic mothers, and 41% of white mothers. Nearly 10% of the women reported that their children were in a foster home, agency, or other institution.

Table 9. Children of State prison inmates, by race and sex of inmates, 1991

Characteristic	Percent of female inmates All[a]	White	Black	Hispanic	Percent of male inmates All[a]
Have children					
No	21.9%	26.1%	20.4%	17.8%	36.1%
Yes	78.1	73.9	79.6	82.2	63.9
Under age 18	66.8%	61.8%	69.0%	71.6%	56.1%
Adult only	11.4	12.3	10.6	10.6	7.6
Number of inmates	38,658	13,983	17,754	5,521	669,732
Number of children under age 18[b]					
1	37.3%	40.7%	37.0%	31.2%	43.2%
2	29.9	30.8	28.4	33.3	28.9
3	18.1	17.5	18.2	19.8	15.2
4	8.5	6.5	9.0	10.0	6.8
5 or more	6.1	4.5	7.4	5.7	5.9
Lived with child(ren) under age 18 before entering prison[c]					
No	28.3%	31.3%	24.5%	34.3%	47.1%
Yes	71.7	66.7	75.5	65.7	52.9
Where child(ren) under 18 live(s) now[b,c]					
Father/mother	25.4%	35.2%	18.7%	24.4%	89.7%
Grandparents	50.6	40.6	56.7	54.9	9.9
Other relatives	20.3	14.7	23.7	22.8	2.9
Friends	4.1	5.7	2.7	4.2	.4
Foster home	8.6	12.6	5.8	6.5	1.7
Agency or institution	2.1	2.1	1.8	2.1	.5
Alone	2.0	1.9	2.3	1.5	1.1

Note. Female prison inmates had an estimated total of 56,123 children under age 18, and male inmates had 770,841 minor children.

[a]Includes Asians, Pacific Islanders, American Indians, Alaska Natives, and other racial groups.

[b]Percents are based on those inmates with children under age 18.

[c]Percents add to more than 100% because inmates with more than one child may have provided multiple responses.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Women in Prison*, March 1994.

Among inmates with children, women were more likely than men to have had contact with their children since admission to prison, regardless of the children's ages (table 10). Nearly 90% of women with children under age 18 had contact with their children, compared to about 80% of men. An estimated 87% of women with only adult children, compared to 72% of men, had contact with those children during their incarceration.

Since entering prison, half of the women had been visited by their children, four-fifths had corresponded by mail, and three-quarters had talked with them on the phone.

An estimated 46% of women with minor children said they talked with those children on the phone at least once a week; 45% had contact by mail at least once a week; and 9% were visited by their children. Female inmates with children younger than 18 were more likely than those with only adult children to make daily telephone calls to their children (16% versus 11%).

Drug use history

Women in prison in 1991 used more drugs and used those drugs more frequently than men (table 11). About 54% of the women had used drugs in the month before their current offense, compared to 50% of the men. Female inmates were also more likely than male inmates to have used drugs regularly (65% versus 62%), to have used drugs daily in the month preceding their offense (41% versus 36%), and to have been under the influence at the time of the offense (36% versus 31%). Nearly 1 in 4 female inmates reported committing their offense to get money to buy drugs, compared to 1 in 6 males.

Compared to the women in prison in 1986, higher percentages of female inmates in 1991 reported that they had used drugs in the month before their offense (54% compared to 50%) (table 12). Among women using a drug in the month before the offense, the percentage using cocaine or crack rose from 23% in 1986 to 36% in 1991. However, marijuana use during the same period declined from 30% of the women to 20%. The use of other types of drugs either declined or remained about the same during this period.

About the same percentage of women in both years said they were under the influence of drugs at the time of their offense. At the time of their offense, 23% of female inmates were using cocaine or crack in 1991, up from 12% in 1986. Marijuana use dropped from 8% to 5%. Use of heroin and other opiates remained about the same.

Table 10. State prison inmates' contact with their children, by age of children and sex of inmate, 1991

	Percent of female inmates		Percent of male inmates	
Type of contact	Children under age 18	Adult children only	Children under age 18	Adult children only
Any contact	89.6%	87.2%	79.5%	71.9%
Calls to/from children	100.0%	100.0%	100.0%	100.0%
Daily	16.4	11.0	8.2	3.1
Once a week	29.7	29.2	22.4	19.1
Once a month	17.0	19.6	16.9	16.5
Less than once a month	8.8	13.7	12.5	15.2
Never	28.1	26.6	39.9	46.0
Mail to/from children	100.0%	100.0%	100.0%	100.0%
Daily	8.9	8.4	6.9	3.6
Once a week	36.4	32.6	24.2	20.0
Once a month	22.5	24.8	22.0	21.6
Less than once a month	11.0	14.4	15.3	20.2
Never	21.3	19.8	31.6	34.4
Visits by children	100.0%	100.0%	100.0%	100.0%
Daily	.4	.2	1.0	.1
Once a week	8.7	9.5	7.4	4.0
Once a month	18.0	16.8	14.9	12.6
Less than once a month	20.6	25.2	21.8	25.9
Never	52.2	48.4	54.9	57.4
Number of inmates	25,810	4,393	373,770	50,698

Note: Detail does not add to total because inmates may have reported more than one type of contact.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Women in Prison*, March 1994.

Table 11. Drug use history of State prison inmates, by sex, 1991

	Percent of inmates	
Drug use	Female	Male
Ever used	79.5%	79.4%
Ever used regularly*	65.3	62.0
Used in the month before current offense	53.9	49.6
Used daily in the month before current offense	41.4	35.7
Under the influence at the time of the current offense	36.3	30.6
Committed offense to get money to buy drugs	23.9	16.5
Number of inmates	38,743	672,055

Note: Excludes an estimated 844 inmates who did not report their use of drugs.
*Regular use is defined as once a week or more for at least 1 month.

Among inmates, women were more likely than men to report having used a needle to inject illegal drugs: a third of female inmates, compared to a quarter of male inmates. An estimated 18% of the women and 12% of the men also said that they had shared a needle at least once in the past.

Prisoners	Ever used a needle	Ever shared a needle
Female*	34.0%	18.0%
White	41.6	25.0
Black	24.0	10.3
Hispanic	45.9	24.5
Male	24.3%	11.5%

*Includes Asians, Pacific Islanders, American Indians, Alaska Natives, and other racial groups.

Injecting drugs was more widespread among Hispanic and white women than among black women. About 46% of the Hispanic women, 42% of the white women, and 24% of the black women used a needle to inject illegal drugs before admission to prison. About a fourth of the Hispanic and white women and about a tenth of the black women had shared a needle for drugs.

Female inmates who used drugs differed from those who did not in the types of crimes they committed (table 13). Regardless of the measure of drug use, users were less likely than nonusers to be serving a sentence for a violent offense.

One in four of the women who had used drugs in the month before their offense and 2 in 5 of the nonusers were serving a sentence for a violent offense. Among women who had committed the offense under the influence of drugs, 24% were sentenced for a violent offense, and among those not under the influence, 37% were sentenced for a violent offense. Women who had not used drugs were about twice as likely as users to have committed homicide, but were less likely to have committed robbery.

Among women who said they committed their crimes to get money to buy drugs, 17% were serving a sentence for a violent offense and 43%, for a property offense. Female inmates who said that drug money was a motive for their crimes were about twice as likely as other inmates to be incarcerated for robbery, burglary, larceny, or fraud (54% versus 27%).

About half the women in prison in 1991 reported that they had never participated in a drug treatment or drug education program (table 14). Those prisoners reporting a more recent use of drugs were more likely to have been participants. Among female inmates who had ever used drugs, 64% had been in a clinic, therapy, self-help group, class, or some other treatment program. Of the women who had used drugs in the month before their offense, 71% had participated in a drug treatment program; 42% had been in treatment before admission. Twelve percent of the women using drugs in the month before their arrest were also in treatment at that time.

Table 12. Drug use by female State prison inmates, by type of drug, 1991 and 1986

Type of drug	Used in the month before the offense		Under the influence at the time of the offense	
	1991	1986	1991	1986
Any drug	53.9%	50.0%	36.3%	33.9%
Marijuana	20.5	30.5	4.6	8.5
Cocaine/crack*	36.5	23.3	22.6	[illegible]
Cocaine	26.2	23.3	14.2	[illegible]
Crack	19.1	...	10.1	...
Heroin/opiate	15.9	17.9	11.3	12.5
Heroin	14.8	17.2	10.8	12.3
Other opiates	3.4	2.1	1.0	1.0
Stimulants*	7.6	7.8	2.5	4.0
Amphetamines	4.6	7.8	.9	4.0
Methamphetamines	5.1	...	2.2	...
Depressants	5.0	9.1	1.4	4.5
Barbiturates	4.8	9.0	1.3	3.9
Methaqualone	.8	3.0	.1	.7
Hallucinogens	2.2	3.5	1.1	1.5
LSD	1.0	1.6	.4	.4
PCP	1.5	2.2	.7	1.1

Note: Detail may add to more than total because an inmate may have been using more than one drug.
...Not available.

*Percents in 1986 reflect either cocaine or amphetamines in general because the survey in that year did not ask about crack or methamphetamines separately.

Table 13. Most serious offense of female State prison inmates, by drug use history, 1991

Most serious offense	Used drugs in the month before current offense		Under the influence of drugs at the time of the offense		Committed offense to get money to buy drugs	
	Yes	No	Yes	No	Yes	No
Violent offenses	25.0%	40.8%	24.3%	37.0%	17.1%	37.0%
Homicide[a]	8.8	22.5	8.5	19.0	2.2	19.3
Sexual assault[b]	.4	3.0	.3	2.4	0	2.2
Robbery	9.8	5.7	10.7	6.1	13.2	6.0
Assault	5.2	7.3	3.7	7.6	1.5	7.7
Other violent	.9	2.2	1.0	1.8	.3	1.9
Property offenses	30.0%	27.1%	30.6%	27.6%	42.6%	24.4%
Burglary	5.7	3.2	5.4	4.1	7.2	3.7
Larceny/theft	12.9	6.9	13.9	9.5	21.9	7.8
Fraud	8.8	12.0	9.0	11.0	11.9	9.6
Other property	2.6	3.1	2.4	3.1	1.5	3.3
Drug offenses	39.0%	25.7%	38.6%	28.8%	36.0%	31.8%
Possession	15.4	7.5	15.8	9.3	11.2	11.9
Trafficking	21.9	17.4	21.7	18.7	23.3	18.7
Other drug	1.7	.7	2.1	.8	1.4	1.2
Public-order offenses	5.5%	5.8%	5.2%	5.9%	3.9%	6.1%
Weapons	.6	.4	.5	.4	.3	.5
Other public-order	4.9	5.4	4.7	5.5	3.7	5.6
Other offenses	.5%	.7%	.3%	.8%	.4%	.7%
Number of inmates	20,758	17,639	13,827	24,220	9,098	28,612

[a]Includes murder, negligent manslaughter, and nonnegligent manslaughter.
[b]Includes rape and other sexual assault.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Women in Prison*, March 1994.

After admission to prison 38% of the women had participated in a drug treatment program. The most frequently used programs were group counseling (30%) and self-help treatment groups (21%). More than half of those who had used drugs in the month before their offense had participated since admission; nearly a third were enrolled in a program at the time of the survey.

Type of treatment	Percent of female inmates in drug treatment program after admission to prison
All types*	37.7%
Inpatient	8.5%
Counseling	
Group	30.2%
Individual	10.5
Peer/self-help	21.4
Drug education	10.7%

*Detail adds to more than total because inmates may have participated in more than one type of treatment program.

Alcohol use

Although women in prison were more likely than men to have committed their offense under the influence of drugs (36% versus 30%), women were less likely to have been drinking alcohol (22% versus 32%) (table 15). Nearly half of both women and men were under the influence of either drugs or alcohol at the time of the offense.

Table 14. Drug use among female State prison inmates, by drug treatment program, 1991

Drug treatment program	Percent of female inmates		
		Using drugs	
	All	Ever in the past	In the month before offense
Participation*			
Ever	50.5%	63.6%	70.8%
Since admission	37.7	47.4	53.0
Before admission	28.6	36.1	41.8
Times			
1	16.2	20.5	23.3
2	6.0	7.6	8.8
3-5	4.8	6.1	7.3
6 or more	1.3	1.7	2.1
Participated in the month before the current admission	9.1%	11.5%	12.3%
Most recent participation was while incarcerated	40.2%	50.6%	55.9%
Participating at the time of the survey	20.7%	26.0%	30.2%
Number of inmates	38,221	30,292	20,891

*Categories of participation before and after admission include inmates who participated during both periods.

Table 15. Alcohol use of State prison inmates, by sex, 1991

	Percent of State prison inmates	
	Female	Male
Used alcohol in the year before the current offense	57.7%	72.8%
Frequency of alcohol use		
Daily	19.0%	29.5%
At least once a week	16.8	25.9
Less than once a week	6.3	6.5
At least once a month	7.1	5.6
Less than once a month	8.2	5.3
Under influence of drugs or alcohol at time of offense		
No	52.6%	52.0%
Yes	47.4	48.0
Alcohol only	11.6	17.9
Drugs only	25.5	16.2
Both	10.3	13.9

Table 16. Participation in alcohol-abuse programs by State prison inmates, by alcohol use and sex, 1991

	Percent of State prison inmates	
	Ever in alcohol-abuse or treatment program	After admission, in alcohol-related program
All inmates		
Female	30.3%	15.0%
Male	38.2	13.5
Consumed alcohol in the year before the offense		
At least once a week		
Female	40.9%	23.0%
Male	42.0	17.8
At least once a month		
Female	20.9%	12.8%
Male	25.4	11.0
Less than once a month		
Female	16.0%	12.4%
Male	24.3	9.5
Committed the offense under influence of alcohol		
Female	50.7%	28.1%
Male	51.7	22.2

HIV and AIDS

Among State prison inmates who were tested for the human immunodeficiency virus (HIV) and reported the results of that test, women were more likely than men to test positive. An estimated 3.3% of the women reported being HIV positive, compared to 2.1% of the men.

Among female inmates who were tested for HIV, 6.8% of Hispanics and 3.5% of blacks tested positive, compared to 1.9% of whites.

An estimated 6.7% of women who had used a needle to inject illegal drugs reported testing positive for HIV, compared to 4.7% of their male counterparts. Among women who reported needle use, Hispanics were most likely to be HIV positive (11.6%), followed by blacks (8.3%) and whites (3.9%).

	Percent of inmates who tested HIV positive	
	All	Ever used a needle
Female*	3.3%	6.7%
White	1.9	3.9
Black	3.5	8.3
Hispanic	6.6	11.6
Male	2.1%	4.7%

*Includes Asians, Pacific Islanders, American Indians, Alaska Natives, and other racial groups.

Among inmates who had shared a needle to inject drugs, women were more likely than men to be HIV positive (10.0% versus 6.7%).

For a more detailed discussion of HIV testing and AIDS, see *HIV in U.S. Prisons and Jails*, BJS Special Report, NCJ-143299.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Women in Prison*, March 1994.

Inmates sentenced for a drug offense accounted for 44% of the increase in the prison population from 1986 to 1991

Violent crimes accounted for the largest percentage of the inmates' most serious current offense in both 1991 and 1986

	Percent of inmates	
	1991	1986
Violent offenses	46.6%	54.6%
Murder	10.6	11.2
Negligent manslaughter	1.8	3.2
Kidnaping	1.2	1.7
Rape	3.5	4.3
Other sexual assault	5.9	4.5
Robbery	14.8	20.8
Assault	8.2	8.0
Other violent	.6	.8
Property offenses	24.8%	31.0%
Burglary	12.4	16.5
Larceny/theft	4.9	6.0
Motor vehicle theft	2.2	1.4
Arson	.7	.8
Fraud	2.8	3.8
Stolen property	1.4	2.0
Other property	.4	.5
Drug offenses	21.3%	8.6%
Possession	7.6	2.9
Trafficking	13.3	5.4
Other/unspecified	.5	.3
Public-order offenses	6.9%	5.2%
Weapons	1.8	1.4
Other public-order	5.1	3.7
Other offenses	.4%	.7%
Number of prison inmates	704,181	449,912

See page 30 for descriptions of the offense categories.
Survey numbers on which statistics are based are also reported in the *Explanatory notes*.

Fig. 1

Among the inmates in 1991 —
- fewer than half were sentenced for a violent crime
- a fourth were sentenced for a property crime
- about a fifth were sentenced for a drug crime.

Violent inmates

- The percentage of prisoners serving time for violent crimes fell from 55% in 1986 to 47% in 1991, but the number increased from 245,600 to 328,000 in 1991. This was a 34%-increase in the number of violent inmates.

Inmates convicted of homicide

- 12% of inmates in 1991 and 14% in 1986 were serving a sentence for homicide (murder or manslaughter).
- The number of inmates convicted of homicide rose from 65,000 to 87,500, a 35%-increase.

Inmates convicted of robbery

- Of the individual offense categories, robbery had the largest percentage decrease, from 21% of all inmates in 1986 to 15% in 1991.

Inmates serving time for a property offense

Property offenders were 25% of all inmates in 1991, a decrease from 31% in 1986.

- Most of this decline resulted from a decreased percentage of inmates sentenced for burglary.
- Nevertheless, the estimate of inmates in State prison for burglary in 1991 (87,500) exceeded the estimated 74,400 of 5 years earlier.

Sentenced drug offenders

- The percentage of inmates in prison for a drug crime rose from 9% in 1986 to 21% in 1991.
- Over 3 times as many inmates were serving a prison sentence for a drug charge in 1991 (150,300) as in 1986 (38,500).

In 1991 women in prison were more likely than men to be serving a sentence for drug offenses

Current offense	Women 1991	Women 1986	Men 1991	Men 1986
Violent	32%	41%	47%	55%
Property	29	41	25	31
Drug	33	12	21	8
Public-order	6	5	7	5
Number of inmates	38,462	19,761	665,719	430,151

Fig. 2

Female inmates were more likely than male inmates — and black inmates more likely than white inmates — to have used crack

Crack users identified among the inmates may have used other drugs, including powder cocaine, in the month before their offense. Powder cocaine users may have used other drugs but not crack. Users of other drugs had not used crack or cocaine.

- 19% of women in prison had used crack in the month before the offense, compared to 10% of the men. About equal percentages of female and male inmates used powder cocaine.

- 14% of black inmates, compared to 6% of white inmates, had used crack. For black inmates, cocaine users accounted for the same percentage as crack users.

- Hispanic inmates of all races were more likely than non-Hispanic inmates to have used cocaine powder (21% versus 14%).

Characteristic	Percent of inmates who in the month before the offense used: Total	Crack	Powder cocaine	Another drug	No drug
All offenders	100%	10%	15%	25%	50%
Sex					
Male	100%	10%	15%	25%	50%
Female	100	19	17	18	46
Race/Hispanic origin					
White	100%	6%	14%	29%	51%
Black	100	14	14	21	51
Other	100	5	14	29	52
Hispanic	100	8	21	25	46
Age					
18-24	100%	10%	13%	29%	48%
25-29	100	12	16	27	45
30-34	100	13	18	26	44
35-44	100	8	16	23	52
45 or older	100	3	8	10	78

Fig. 51

Characteristic	Percent of inmates who in the month before the offense used: Crack	Powder cocaine	Another drug	No drug
Current offense	100%	100%	100%	100%
Violent offenses	33%	39%	48%	51%
Homicide	5	10	14	14
Sexual assault	4	5	7	13
Robbery	19	17	17	12
Assault	5	6	8	10
Property offenses	31%	25%	26%	23%
Burglary	16	14	14	10
Larceny	7	6	5	4
Drug offenses	32%	30%	20%	17%
Possession	12	11	7	6
Trafficking	20	18	12	11
Public-order offenses	4%	5%	5%	9%
Committed current offense for money for drugs	55%	43%	20%	...

Fig. 50

- Inmates who had used crack in the month before their offense were less likely to be in prison for a violent offense than those who had used other drugs or no drug.

- About a third of the crack users were in prison for a violent offense, slightly less than a third for a property offense, and about a third for a drug offense.

- The percentage of crack users indicating that they had committed their offense to get money for drugs (55%) was over 2½ times the percentage of users of drugs other than cocaine or crack (20%).

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Survey of State Prison Inmates, 1991*, May 1993.

In age, victims and murderers did differ somewhat.[3] While often both victims and killers were young, 36% of the victims but 44% of the defendants were in their twenties (table 1). In every age category among victims, a third or more of the victims had a killer between ages 20 and 29 (table 4).

Guns and knives inflicted the injuries in 80% of the murders

Male victims (54%) were more likely than female victims (36%) to have died from a gunshot wound (table 5). Compared to 4% of male victims, 17% of the female victims died from strangulation or injuries inflicted by a killer wielding a personal weapon, such as a fist.

While half of all victims were murdered with a handgun, blacks (55%) more often than whites (44%) were handgun victims. Whites more often than blacks were victims of the use of a blunt instrument.

Victim-offender relationships and murder circumstances

Most murder victims and their killers had social ties

About 80% of murder victims and their killers were not strangers but were acquainted with or related to each other (table 6). (See *Methodology* for coding of the circumstances and the victim/killer relationship.[4]) Half of the victims had a social or romantic relationship with the murderer. Sixteen percent of the victims were related to the killer. About 12% of victims were involved with the killer in a drug relationship, while 5% of victims were involved with their killer in some type of criminal enterprise other than drugs.

How the victims were related to their killers varied by sex and race. A third of female victims (34%) were killed by their spouse or romantic partner. By contrast, 11% of males were killed by their spouse or romantic partner. Males more often than females were assailed by a friend, casual acquaintance, drug associate, or stranger.

[3]Age was available for nearly all defendants (98%) in the survey but only 16% of victims.

[4]Percentages that combine relationship categories were computed from the raw survey data. If computed by summing percentages within table 6, the result may be too large because individuals who had multiple relationships with their killers were counted more than once in the table.

Table 4. Age of murder victims and defendants in the 75 largest counties, 1988

Age of victim	Percent of victims: All	Percent of victims in cases involving at least one defendant age 20-29
All	100%	46%
12 or under	5	46
13-19	12	38
20-29	38	59
30-59	39	35
60 or over	6	44

Table 5. Sex and race of murder victims, by weapon or methods of death in the 75 largest counties, 1988

Weapon or method	Percent of victims: All	Sex: Male	Sex: Female	Race: White	Race: Black
Total	100%	100%	100%	100%	100%
Guns					
Handgun	50	54	36	44	55
Shotgun	5	5	4	4	5
Rifle	4	4	4	4	4
Knife	21	21	19	21	22
Blunt instrument	5	5	7	8	4
Personal weapon	5	3	9	6	4
Strangulation	3	1	8	3	2
Vehicle	2	2	3	3	1
Fire	2	1	3	–	2
Other	3	4	7	7	1

Note: "Other" includes asphyxiation, drowning, throwing from height, neglect, scalding, and use of machine gun.
–Less than 1%.

Table 6. Relationships of murder victims to their killer in the 75 largest counties, 1988

Relationship	Percent of victims: All	Sex: Male	Sex: Female	Race: White	Race: Black
Family member	16%	12%	31%	15%	17%
Spouse	6	4	16	6	7
Child	3	3	6	3	4
Nonfamilial relationship	52%	52%	49%	46%	52%
Casual acquaintance	28	30	21	25	30
Friend	12	13	8	13	11
Romantic partner	9	7	16	8	10
Stranger	20%	21%	16%	26%	15%
Felony victim	5	5	6	8	3
Drug user/buyer	12%	14%	4%	9%	14%
Collaborator in a criminal enterprise other than drugs	5%	5%	3%	8%	4%
Other	4%	3%	4%	3%	4%
Relationship not known	5%	5%	2%	4%	4%

Note: The number in a cell equals percent of victims of that race or sex who had that particular relationship with the killer. In some cases more than one type of relationship was found; hence, an individual may be counted in more than one cell of the table. Percents may add to more than 100% in some columns of the table. Most detail relationship categories that account for fewer than 10% of victims are not shown in the table. Individuals counted in detail categories are also counted in the summary categories.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Murder in Large Urban Counties, 1988*, May 1993.

Whites were more likely than blacks to have been killed by a stranger or someone committing another felony. Blacks more often than whites were victimized by a casual acquaintance or a drug associate.

44% of all victims died during a personal conflict

Personal conflict was followed by criminal activity (a quarter of the cases) as the most frequent type of circumstance involving victims and their killers at the time of the murder (table 7). Premeditated murder accounted for 4% of murders.

As in the case of relationships, the circumstances generally differed between male and female victims (table 7).[5] Half of female victims, compared to a fifth of male victims, died during commission of another felony or as a result of conflict over romantic or domestic issues. The deaths of 35% of men and 21% of women involved illegitimate activities, property disputes, or drugs.

White and black victims differed in regard to the circumstances of the murder. White victims more often than black victims died during robberies. Blacks more often than whites were victims in circumstances associated with illegitimate business or drugs.

Collateral crimes categorized 30% of murder victims and 50% of murder defendants

Murder circumstances and the relationships between victims and offenders can be used to create a typology for murder (table 8). When the typology is limited to circumstances and relationships of a *similar* nature (and thereby applies to only some victims and offenders), the combined category of sexual or romantically intimate relationships and sexual assault circumstances included 22% of victims and 16% of defendants. Drug relationships and circumstances together accounted for about the same percentage of victims (16%) and defendants (18%). Crime other than drugs accounted for 13% of victims, versus 30% of defendants.

[5]Percentages that combine circumstance categories were computed from the raw survey data rather than by summing percentages in table 7. See footnote 4.

Table 7. Circumstances surrounding murders in the 75 largest counties, 1988

Circumstance	Percent of victims: All	Sex: Male	Sex: Female	Race: White	Race: Black
Criminal activity	22%	25%	13%	20%	24%
Drugs	11	12	6	8	13
Other than drugs	12	13	7	12	12
Felony-murder	16%	14%	21%	20%	12%
Robbery	12	12	14	15	9
Sexual assault	2	–	6	2	1
Burglary	1	1	2	–	–
Arson	1	1	2	–	–
Personal conflict	44%	41%	52%	42%	45%
Property dispute	18	20	14	14	22
Love/sex dispute	19	14	39	19	20
Domestic issues	17	12	34	14	19
Redress of insult	10	12	6	10	10
On-going feud	3	4	1	3	2
Dispute at the scene	6	7	1	7	5
Other activity	16%	16%	14%	16%	15%
Act of retaliation	5	6	2	4	5
Child abuse	3	2	5	3	3
Premeditated violence	4	4	4	4	3
Circumstances not known	5%	5%	4%	5%	3%

Note. See note on table 6.
–Less than 0.5%.

Table 8. Typology of relationships and circumstances in murder cases in the 75 largest counties, 1988

General type relationship/ circumstance	Percent of victims	Percent of defendants	Specific kinds of relationships*	Specific kinds of circumstances*
Male and female involvement	22%	16%	Spouse Common-law spouse Lover (heterosexual) Lover (homosexual) Lover (cohabitant) Ex-lover or ex-spouse Boyfriend or girlfriend Rival	Romantic triangle Jealousy Lover/spouse quarrel Rebuff sex advance Sex assault Prostitution
Illegal drugs	16%	18%	User/buyer Partner Rival Employer/employee Co-worker Interloper	Drug manufacture Dispute over drugs Steal drugs/money Drug scam Bad deal Punish drug theft Illegal recreation
Crime other than drugs	13%	30%	Criminal syndicate Gang member Prostitute/pimp Prostitute/client	Applicable to defendants only Felony murder Contract killing Premeditated killing Applicable to victims only Reverse felony Larceny Auto theft Sex offense Mafia Gangland
Child victim	4%	3%	Child or stepchild of killer	Child abuse
Gangs	4%	6%	Gang member Juvenile gang	Gangland Gang fight Turf gang Drive-by shooting

Note. An individual could be counted under a general category in this table based either on the relationship or the circumstance findings in this case. Individuals whose relationships and circumstances do not come within any of the above types are not included in this table.
*Exact wording used by the survey data coders. See "Coding of circumstances and victim/killer relationships" in Methodology. The percents are based on individuals rather than events; the number of defendants exceeded the number of victims.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Murder in Large Urban Counties, 1988*, May 1993.

Table 5

GENDER OF DEFENDANT BY PRIMARY OFFENSE CATEGORY[1]
(October 1, 1995, through September 30, 1996)

PRIMARY OFFENSE	TOTAL	MALE		FEMALE	
		Number	Percent	Number	Percent
TOTAL	42,359	35,832	84.6	6,527	15.4
Murder	89	80	89.9	9	10.1
Manslaughter	53	43	81.1	10	18.9
Kidnapping/Hostage-Taking	85	83	97.6	2	2.4
Sexual Abuse	171	168	98.2	3	1.8
Assault	456	411	90.1	45	9.9
Robbery	1,674	1,584	94.6	90	5.4
Arson	105	99	94.3	6	5.7
Drugs - Trafficking	16,251	14,294	88.0	1,957	12.0
Drugs - Communication Facility	395	301	76.2	94	23.8
Drugs - Simple Possession	614	484	78.8	130	21.2
Firearms	2,546	2,440	95.8	106	4.2
Burglary/B&E	87	84	96.6	3	3.4
Auto Theft	127	124	97.6	3	2.4
Larceny	2,430	1,652	68.0	778	32.0
Fraud	6,028	4,534	75.2	1,494	24.8
Embezzlement	787	277	35.2	510	64.8
Forgery/Counterfeiting	730	559	76.6	171	23.4
Bribery	256	218	85.2	38	14.8
Tax	851	707	83.1	144	16.9
Money Laundering	827	642	77.6	185	22.4
Racketeering/Extortion	548	502	91.6	46	8.4
Gambling/Lottery	138	123	89.1	15	10.9
Civil Rights	109	99	90.8	10	9.2
Immigration	4,930	4,593	93.2	337	6.8
Pornography/Prostitution	191	184	96.3	7	3.7
Prison Offenses	339	315	92.9	24	7.1
Administration of Justice Offenses	755	537	71.1	218	28.9
Environmental/Wildlife	130	122	93.8	8	6.2
National Defense	24	23	95.8	1	4.2
Antitrust	15	15	100.0	0	0.0
Food & Drug	44	39	88.6	5	11.4
Other Miscellaneous Offenses	574	496	86.4	78	13.6

))))))))))))

[1]Of the 42,436 cases, 77 were excluded due to one or both of the following reasons: missing primary offense category (75) or missing gender (3). Descriptions of variables used in this table are provided in Appendix A.

SOURCE: U.S. Sentencing Commission, 1996 Datafile, MONTY96

Table 7

AGE, RACE, AND GENDER OF DEFENDANTS[1]
(October 1, 1995, through September 30, 1996)

AGE	TOTAL		WHITE		BLACK		HISPANIC		OTHER	
	Number	Percent	Male	Female	Male	Female	Male	Female	Male	Female
Under 18	15	0.0	1	0	11	0	1	0	2	0
18	220	0.5	34	10	71	13	64	7	19	2
19	706	1.7	131	33	241	34	198	15	49	5
20	923	2.2	172	45	300	43	275	37	43	8
21	1,199	2.8	173	54	444	61	354	37	65	11
22	1,363	3.2	219	63	471	91	414	43	51	11
23	1,619	3.8	235	73	543	92	543	51	65	17
24	1,705	4.1	275	74	610	105	511	45	71	14
25	1,715	4.1	291	88	588	94	534	52	57	11
26	1,689	4.0	291	69	543	96	581	47	51	11
27	1,679	4.0	279	78	514	113	572	41	67	15
28	1,575	3.7	282	78	426	77	582	65	53	12
29	1,561	3.7	321	81	432	96	518	48	54	11
30	1,523	3.6	318	80	431	88	490	44	62	10
31	1,585	3.8	390	81	373	84	547	49	45	16
32	1,567	3.7	395	97	347	69	515	61	73	10
33	1,498	3.6	412	103	319	75	483	45	48	13
34	1,351	3.2	373	97	290	63	416	47	52	13
35	1,429	3.4	428	99	300	61	412	64	53	12
36	1,259	3.0	390	91	272	61	340	55	46	4
37	1,221	2.9	388	90	241	79	331	35	51	6
38	1,190	2.8	387	89	200	72	341	42	49	10
39	1,082	2.6	342	84	209	59	287	41	48	12
40	1,079	2.6	373	76	196	37	287	46	52	12
41	1,022	2.4	391	77	166	51	246	42	35	14
42	934	2.2	366	69	157	55	214	34	25	14
43	822	2.0	342	62	149	31	174	23	27	14
44	770	1.8	319	64	119	30	177	20	32	9
45	783	1.9	330	64	136	48	150	21	25	9
46	717	1.7	308	61	126	34	132	19	33	4
47	646	1.5	305	59	78	32	125	15	23	9
48	701	1.7	352	68	92	18	132	15	18	6
49	520	1.2	269	48	68	10	85	18	13	9
50	457	1.1	220	43	50	9	95	18	18	4
51	436	1.0	225	32	50	18	73	14	20	4
52	447	1.1	240	48	53	10	61	17	17	1
53	377	0.9	209	33	36	9	63	9	14	4
54	305	0.7	187	34	20	7	46	4	7	0
55	299	0.7	177	22	30	10	41	7	11	1
56	252	0.6	152	29	19	8	30	4	9	1
57	232	0.6	127	20	22	7	41	7	7	1
58	213	0.5	129	20	20	3	30	6	4	1
59	192	0.5	119	14	20	4	25	3	5	2
60	185	0.4	105	15	19	4	29	9	3	1
61	152	0.4	95	10	17	4	18	3	5	0
62	151	0.4	90	15	12	3	24	3	4	0
63	109	0.3	77	9	7	0	8	5	2	1
64	96	0.2	65	9	8	2	6	2	4	0
65	94	0.2	59	4	8	3	14	0	4	2
Over 65	422	1.0	297	27	30	8	42	6	9	3
TOTAL	42,087	100.0	12,455	2,689	9,884	2,081	11,677	1,341	1,600	360
Percent		100.0	29.6	6.4	23.5	4.9	27.7	3.2	3.8	0.9
Race Column Total			15,144		11,965		13,018		1,960	
Race Percent			(36.0%)		(28.4%)		(30.9%)		(4.7%)	

))))))))))))))

[1]Of the 42,436 cases, 349 were excluded due to one or more of the following reasons: missing age (155), missing race (254), or missing gender (3). Descriptions of variables used in this table are provided in Appendix A.

SOURCE: U.S. Sentencing Commission, 1996 Datafile, MONFY96.

Table 30

GENDER OF DRUG DEFENDANT BY DRUG TYPE[1]
(October 1, 1995, through September 30, 1996)

DRUG TYPE	TOTAL	MALE Number	MALE Percent	FEMALE Number	FEMALE Percent
TOTAL	17,166	14,987	87.3	2,179	12.7
Powder Cocaine	4,471	3,889	87.0	582	13.0
Crack Cocaine	4,603	4,102	89.1	501	10.9
Heroin	1,766	1,471	83.3	295	16.7
Marijuana	4,249	3,754	88.4	495	11.7
Methamphetamine[2]	1,623	1,384	85.3	239	14.7
LSD	93	86	92.5	7	7.5
Other	361	301	83.4	60	16.6

))))))))))))

[1]Of the 42,436 cases, 17,267 were sentenced under USSG Chapter Two, Part D (drugs). Of these, 17,170 were sentenced under §§2D1.1 (Drug Trafficking), 2D1.2 (Protected Locations), 2D1.5 (Continuing Criminal Enterprise), 2D1.8 (Rent/Manage Drug Establishment), or 2D2.1 (Simple Possession). Of these 17,170 cases, four were excluded due to missing information on drug type.

[2]In FY96, the category methamphetamine includes methamphetamine mixture, methamphetamine actual, ICE, and methamphetamine precursors. Prior to FY96, the category methamphetamine did not include ICE. The number of ICE cases (which were eligible for inclusion in this table) for each year are as follows: 130 (1996), 48 (1995), 1 (1994), 9 (1993), and 1 (1992). Descriptions of variables used in this table are provided in Appendix A.

SOURCE: U.S. Sentencing Commission, 1996 Datafile, MONFY96

Table 31

CITIZENSHIP OF DRUG DEFENDANT BY DRUG TYPE[1]
(October 1, 1995, through September 30, 1996)

DRUG TYPE	TOTAL	U.S. Citizen Number	U.S. Citizen Percent	Non-U.S. Citizen Number	Non-U.S. Citizen Percent
TOTAL	17,120	12,345	72.1	4,775	27.9
Powder Cocaine	4,444	2,866	64.5	1,578	35.5
Crack Cocaine	4,595	4,182	91.0	413	9.0
Heroin	1,759	791	45.0	968	55.0
Marijuana	4,244	2,828	66.6	1,416	33.4
Methamphetamine[2]	1,623	1,270	78.3	353	21.8
LSD	93	91	97.8	2	2.2
Other	362	317	87.6	45	12.4

))))))))))))

[1]Of the 42,436 cases, 17,267 were sentenced under USSG Chapter Two, Part D (drugs). Of these, 17,170 were sentenced under §§2D1.1 (Drug Trafficking), 2D1.2 (Protected Locations), 2D1.5 (Continuing Criminal Enterprise), 2D1.8 (Rent/Manage Drug Establishment), or 2D2.1 (Simple Possession). Of these 17,170 cases, four were excluded due to missing information on drug type, and 46 due to missing information on citizenship.

[2]In FY96, the category methamphetamine includes methamphetamine mixture, methamphetamine actual, ICE, and methamphetamine precursors. Prior to FY96, the category methamphetamine did not include ICE. The number of ICE cases (which were eligible for inclusion in this table) for each year are as follows: 130 (1996), 48 (1995), 1 (1994), 9 (1993), and 1 (1992). Descriptions of variables used in this table are provided in Appendix A.

SOURCE: U.S. Sentencing Commission, 1996 Datafile, MONFY96

Figure K

RACE BY DRUG TYPE AND YEAR FOR DRUG DEFENDANTS [1]

(October 1, 1991, through September 30, 1996)

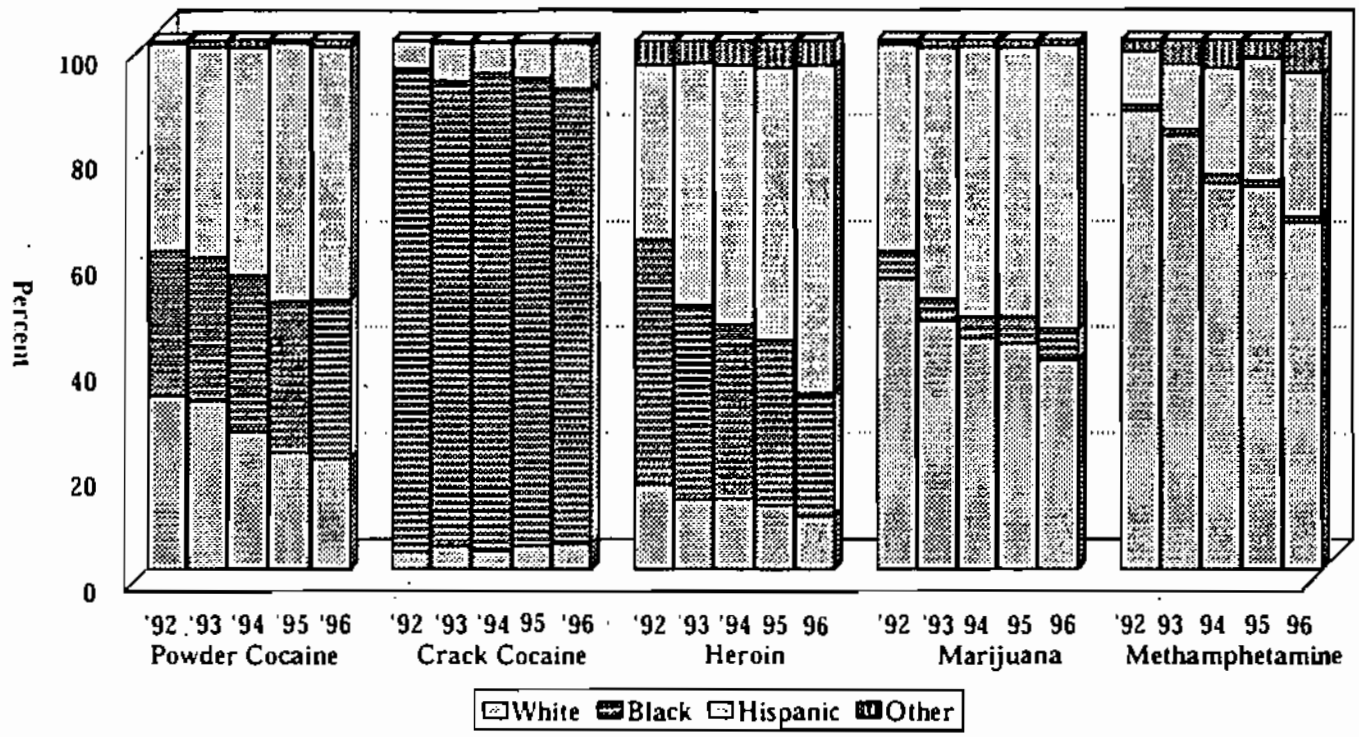
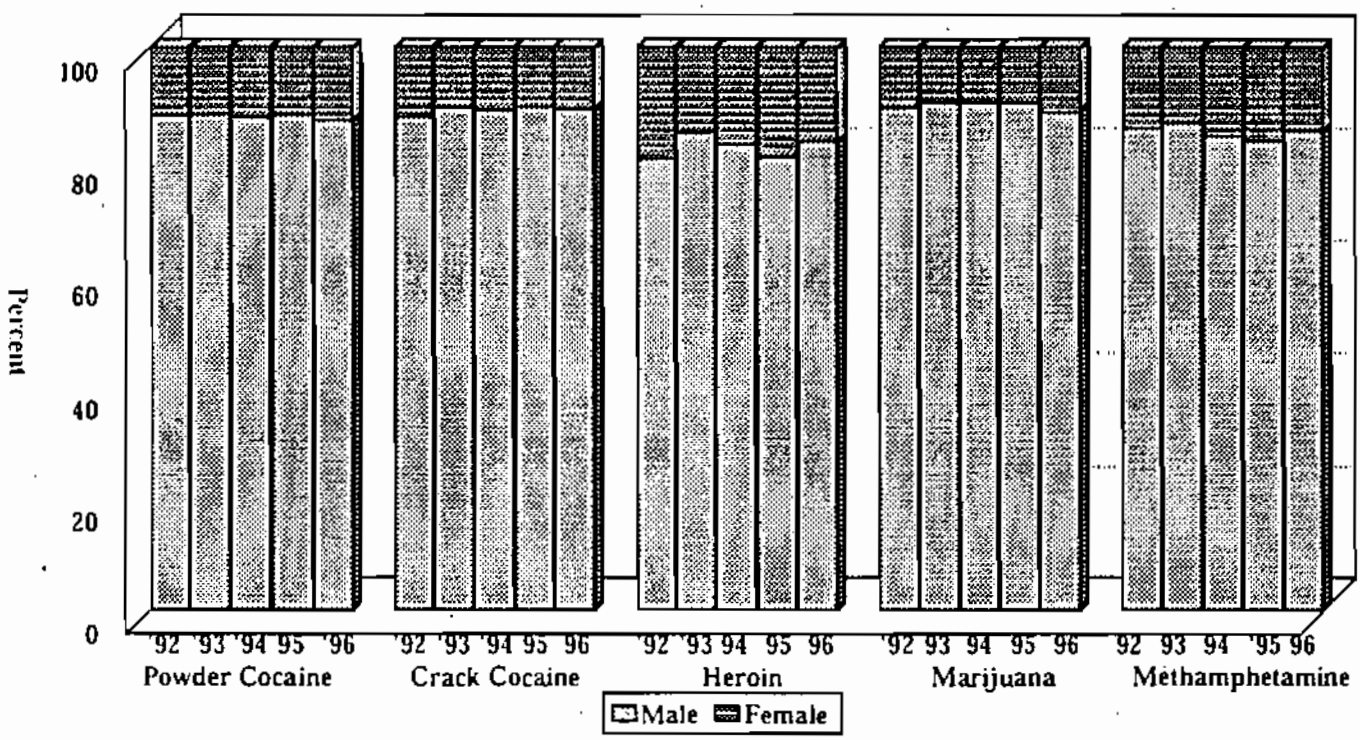


Figure L

GENDER BY DRUG TYPE AND YEAR FOR DRUG DEFENDANTS[1]

(October 1, 1991, through September 30, 1996)



[1] Only cases sentenced under §§2D1.1 (Drug Trafficking), 2D1.2 (Protected Locations), 2D1.5 (Continuing Criminal Enterprise), 2D1.8 (Rent/Manage Drug Establishment), or 2D2.1 (Simple Possession) are depicted in this figure. Additional cases were excluded due to missing information on type of drug or demographic information.

SOURCE: U.S. Sentencing Commission, 1992-1996 Datafiles, MONTY92-MONTY96

TABLE 14

NUMBER OF DRUG CLIENT TREATMENT ADMISSIONS BY SEX AND BY STATE FOR FISCAL YEAR 1995

STATE	MALE	FEMALE	NOT REPORTED BY SEX	TOTAL
ALABAMA	4,784	2,395	624	7,803
ALASKA	1,129	777	0	1,906
ARIZONA	5,522	3,660	0	9,182
ARKANSAS	4,580	1,678	0	6,258
CALIFORNIA	79,836	52,328	0	132,164
COLORADO	7,675	3,944	417	12,036
CONNECTICUT	16,273	8,072	0	24,345
DELAWARE	2,353	1,262	0	3,615
DISTRICT OF COL	8,562	4,114	0	12,676
FLORIDA	27,041	12,854	0	39,895
GEORGIA	20,741	11,019	0	31,760
HAWAII	1,504	978	3	2,485
IDAHO	1,648	948	0	2,596
ILLINOIS	39,420	24,273	0	63,693
INDIANA	7,470	4,197	0	11,667
IOWA	5,759	3,001	0	8,760
KANSAS	4,583	2,408	0	6,991
KENTUCKY	4,277	2,388	0	6,665
LOUISIANA	7,457	2,572	5,413	15,442
MAINE	993	553	0	1,546
MARYLAND	12,403	7,276	0	19,679
MASSACHUSETTS	31,461	16,728	0	48,189
MICHIGAN	22,927	13,027	11	35,965
MINNESOTA	N/A	N/A	N/A	N/A
MISSISSIPPI	4,322	1,696	0	6,018
MISSOURI	9,040	5,751	0	14,791
MONTANA	1,202	670	0	1,872
NEBRASKA	2,244	1,255	0	3,499
NEVADA	2,144	1,556	0	3,700
NEW HAMPSHIRE	830	341	0	1,171
NEW JERSEY	21,650	11,223	0	32,873
NEW MEXICO	1,653	1,108	0	2,761
NEW YORK	44,284	19,787	0	64,071
NORTH CAROLINA	13,985	7,157	13	21,155
NORTH DAKOTA	268	166	0	434
OHIO	18,010	10,811	0	28,821
OKLAHOMA	1,665	1,105	483	3,253
OREGON	11,710	8,814	0	20,524
PALAU	4	0	0	4
PENNSYLVANIA	21,909	10,867	0	32,776
PUERTO RICO	11,702	1,409	0	13,111
RHODE ISLAND	3,161	1,890	0	5,051
SOUTH CAROLINA	5,553	2,851	0	8,404
SOUTH DAKOTA	1,190	670	0	1,860
TENNESSEE	3,204	1,812	0	5,016
TEXAS	23,820	10,421	4	34,245
UTAH	4,641	2,625	10	7,276
VERMONT	1,027	377	3	1,407
VIRGINIA	11,617	6,427	0	18,044
VIRGIN ISLANDS	36	15	0	51
WASHINGTON	11,167	7,394	0	18,561
WEST VIRGINIA	1,541	771	0	2,312
WISCONSIN	7,629	3,912	0	11,541
WYOMING	N/A	N/A	N/A	N/A
TOTALS	559,606	303,333	6,981	869,920
PERCENT OF TOTALS	64.3%	34.9%	0.8%	100.0%

N/A = Information not available.

Source: State Alcohol and Drug Abuse Profile (SADAP), FY 1995; data are included for "ONLY THOSE PROGRAMS that received at least some funds administered by the State Alcohol/Drug Agency during the State's Fiscal Year (FY) 1995."

FOR MORE INFORMATION

Full copies of publications used to produce this information packet may be obtained by contacting the agencies below:

ONDCP Drug Policy Information Clearinghouse
PO Box 6000
Rockville, MD 20849-6000
1-800-666-3332
http://www.whitehousedrugpolicy.gov

U.S. Department of Justice, Bureau of Justice Statistics, *Survey of State Prison Inmates, 1991*, May 1993. Order # NCJ-136949.
http://ncjrs.org/drgscorr.htm

U.S. Department of Justice, National Institute of Justice, *1996 Drug Use Forecasting Annual Report on Adult and Juvenile Arrestees*, June 1996. Order # NCJ-163691.
http://www.ncjrs.org/pdffiles/163691.pdf

U.S. Department of Justice, Bureau of Justice Statistics, *Felony Sentences in State Courts, 1994*, January 1997. Order # NCJ-163391.
http://www.ncjrs.org/courdocs.htm

U.S. Department of Justice, Bureau of Justice Statistics, *Characteristics of Adults on Probation, 1995*, December 1997. Order # NCJ-164267.

U.S. Department of Justice, Bureau of Justice Statistics, *Felony Defendants in Large Urban Counties, 1994*, January 1998. Order# NCJ-164616.
http://www.ncjrs.org/courdocs.htm

U.S. Department of Justice, Bureau of Justice Statistics, *Women in Jail 1989*, March 1992. Order# NCJ-134732.

U.S. Department of Justice, Bureau of Justice Statistics, *Women in Prison*, March 1994. Order# NCJ-145321.

U.S. Department of Justice, Bureau of Justice Statistics, *Murder in Large Urban Counties, 1988*, May 1993. Order# NCJ-140614.

U.S. Department of Justice, Bureau of Justice Statistics, *National Corrections Reporting Program, 1992*, October 1994. Order# NCJ-145862.

U.S. Department of Justice, National Institute of Justice, *Drug Abusing Women Offenders: Results of a National Survey*, October 1994. Order# NCJ-149261.

National Clearinghouse for Alcohol and Drug Information
PO Box 2345
Rockville, MD 20847-2345
1-800-729-6686 or
301-468-2600 in the metropolitan Washington, DC area
http://www.health.org

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *Drug Abuse Warning Network, Annual Medical Examiner Data, 1995*, May 1997.

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *Year-End Preliminary Estimates from the 1996 Drug Abuse Warning Network*, November 1997.
http://www.samhsa.gov/oas/dawn/

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *Preliminary Results from the 1996 National Household Survey on Drug Abuse*, July 1997.
http://www.samhsa.gov/oas/nhsda/

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *National Household Survey on Drug Abuse: Population Estimates, 1996*, July 1997.
http://www.samhsa.gov/oas/nhsda/

U.S. Department of Health and Human Services, National Institute on Drug Abuse, *Substance Abuse Among Women and Parents*, July 1994. Order# RP0873.

Department of Health and Human Services
Division of Children and Youth Policy
(202) 690-6461 phone
(202) 690-5514 fax

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *Patterns of Substance Use and Program Participation*, December 1994.

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *Patterns of Substance Use and Substance-Related Impairment Among Participants in the Aid to Families with Dependent Children Program (AFDC)*, December 1994.

U.S. Government Printing Office
Superintendent of Documents
Mail Stop: SSOP
Washington, DC 20402-9328
202-512-8100

U.S. Department of Justice, Federal Bureau of Investigation, *Crime in the United States, 1996, Uniform Crime Reports*, September 1997.
http://www.fbi.gov/ucr/ucr96.htm

U.S. Sentencing Commission
Office of Legislative and Public Affairs
One Columbus Circle, NE
Washington, DC 20002-8002
(202) 273-4500
http://www.ussc.gov/

United States Sentencing Commission, *1996 Sourcebook of Federal Sentencing Statistics*, 1997.
http://www.ussc.gov/annrpt/1996/sourcbk.htm

National Association of State Alcohol and Drug Abuse Directors
444 North Capitol Street, NW, Suite 642
Washington, DC 20001
202-783-6868
http://www.nasasad.org

Gustafson, John S., et al., *State Resources and Services Related to Alcohol and Other Drug Problems for Fiscal Year 1995*, July 1997.

University of Michigan
Institute for Social Research
Survey Research Center
Ann Arbor, MI 48109-1399
(313) 763-5043
http://www.isr.umich.edu/src/mtf

University of Michigan, Institute for Social Research, *The Monitoring the Future Study*, December 18, 1997 press release.

ONDCP

The Drug Policy Information Clearinghouse

1-800-666-3332

email: ondcp@ncjrs.org
World Wide Web:
http://www.whitehousedrugpolicy.gov
fax: 301-519-5212

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Rockville, MD 20849-6000

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- operates a toll-free 800 number staffed by drugs and crime information specialists
- distributes Office of National Drug Control Policy and Department of Justice publications about drugs and crime
- answers requests for specific drug-related data
- performs customized bibliographic searches
- advises requesters on data availability and of other information resources that may meet their needs
- maintains a public reading room

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Methamphetamine

Facts and Figures

April 1998

PK 29

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INTRODUCTION

This information packet includes excerpts from selected Federal government publications which contain information on methamphetamine. These data include prevalence of methamphetamine, production estimates, laboratory seizures, and trafficking and distribution patterns. Information from the following publications is presented in this packet:

1997 Drugs of Abuse
Methamphetamine Situation in the United States
1995 National Household Survey on Drug Abuse: Main Findings
The Monitoring the Future Study, 1997Pulse Check, National Trends in Drug Abuse, Winter 1997
Pulse Check, National Trends in Drug Abuse, Summer 1997
CEWG Epidemiologic Trends in Drug Abuse, Executive Summary, June 1997
CEWG Epidemiologic Trends in Drug Abuse, Advance Report, December 1996
Year-End Preliminary Estimates the 1996 Drug Abuse Warning Network
Drug Abuse Warning Network, Annual Medical Examiner Data, 1995
1996 Sourcebook on Federal Sentencing Statistics
Survey of State Prison Inmates, 1991
Drug Enforcement and Treatment in Prisons, 1990
State Resources and Services Related to Alcohol and Other Drug Problems for Fiscal Year 1995
DEA Annual Statistical Report, 1995
Illegal Drug Price/Purity Report: United States, January 1993-December 1996
The NNICC Report 1996: The Supply of Illicit Drugs to the United States
Methamphetamine Precursor Chemical Control in the 1990's
Provisions of the Comprehensive Methamphetamine Control Act of 1996

Complete citations and ordering instructions for full copies of publications used in producing this information packet may be found on the last page.

This information packet was prepared by Frank Piñol at the ONDCP Drug Policy Information Clearinghouse. This Clearinghouse is funded by the White House Office of National Drug Control Policy and is a component of the National Criminal Justice Reference Service. For further information concerning the contents of this publication packet or other drug policy issues, call 1-800-666-3332, or write ONDCP Drug Policy Information Clearinghouse, PO Box 6000 Rockville, MD 20849-6000. You may also visit the ONDCP World Wide Web site at http://www.whitehousedrugpolicy.gov.

U.S. Department of Justice
Drug Enforcement Administration

Amphetamines

Amphetamine, dextroamphetamine, and methamphetamine are collectively referred to as amphetamines. Their chemical properties and actions are so similar that even experienced users have difficulty knowing which drug they have taken.

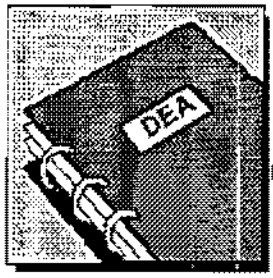
Amphetamine was first marketed in the 1930s as Benzedrine in an over-the-counter inhaler to treat nasal congestion. By 1937, amphetamine was available by prescription in tablet form and was used in the treatment of the sleeping disorder narcolepsy and the behavioral syndrome called minimal brain dysfunction (MBD), which today is called attention deficit hyperactivity disorder (ADHD). During World War II, amphetamine was widely used to keep the fighting men going; both dextroamphetamine (Dexedrine) and methamphetamine (Methedrine) became readily available.

As use of amphetamines spread, so did their abuse. Amphetamines became a cure-all for helping truckers to complete their long routes without falling asleep, for weight control, for helping athletes to perform better and train longer, and for treating mild depression. Intravenous amphetamine abuse spread among a subculture known as "speed freaks." With experience, it became evident that the dangers of abuse of these drugs outweighed most of their therapeutic uses.

Increased control measures were initiated in 1965 with amendments to the federal food and drug laws to curb the black market in amphetamines. Many pharmaeutical amphetamine products were removed from the market and doctors prescribed those that remained less freely. In order to meet the ever-increasing black market demand for amphetamines, clandestine laboratory production mushroomed, especially methamphetamine laboratories on the West Coast. Today, most amphetamines distributed to the black market are produced in clandestine laboratories.

Amphetamines are generally taken orally or injected. However, the addition of "ice," the slang name for crystallized methamphetamine hydrochloride, has promoted smoking as another mode of administration. Just as "crack" is smokable cocaine, "ice" is smokable methamphetamine. Both drugs are highly addictive and toxic.

The effects of amphetamines, especially methamphetamine, are similar to cocaine, but their onset is slower and their duration is longer. In general, chronic abuse produces a psychosis that resembles schizophrenia and is characterized by paranoia, picking at the skin, preoccupation with one's own thoughts, and auditory and visual hallucinations. Violent and erratic behavior is frequently seen among chronic abusers of amphetamines.



DEA

Methamphetamine Situation in the United States

Executive Summary

Methamphetamine trafficking and abuse in the United States have been on the rise over the past few years, as indicated by investigative, seizure, price, purity, and abuse data. As a result, this drug is having a devastating impact in many communities across the nation. Although more common in western areas of the country, this impact increasingly is being felt in areas not previously familiar with the harmful effects of this powerful stimulant.

Clandestine production accounts for almost all of the methamphetamine trafficked and abused in the United States. The illicit manufacture of methamphetamine can be accomplished in a variety of ways, but is produced most commonly using the ephedrine/pseudoephedrine reduction method. Large-scale production of methamphetamine using this method is dependent on ready access to bulk quantities of ephedrine and pseudoephedrine. During the past two years, several bulk ephedrine seizures destined for Mexico focused attention on the magnitude of ephedrine acquisition by organized crime drug groups operating from Mexico and in the United States, and set in motion an effort to focus international attention on the ephedrine diversion problem and to take action to prevent such diversion.

Drug law enforcement efforts against clandestine methamphetamine producers constitute a "cat and mouse" game between efforts to cut off chemical supplies and efforts to obtain them from non-regulated sources. Past experience has demonstrated that methamphetamine traffickers are relentless, flexible, and creative in finding new ways to obtain chemicals by evading the network of international controls that has been established. The Federal Government currently is preparing regulations to further reduce the diversion of pharmaceutical products containing chemicals, such as ephedrine and pseudoephedrine, that can be used to produce illegal drugs. It has consulted with corporations within the pharmaceutical industry to develop a solution to the diversion problem that does not unduly restrict the availability of these chemicals for legitimate use.

Domestically, large-scale production of methamphetamine is centered in California. In addition, methamphetamine increasingly is produced in Mexico and smuggled into the United States. Methamphetamine laboratory operators often are well-armed, and their laboratories occasionally are booby-trapped and equipped with scanning devices employed as security precautions. Weaponry, ranging from single firearms to arsenals of high-powered weapons and explosives, are commonly found at laboratory sites. Not only are methamphetamine laboratories used to manufacture illegal, often deadly drugs, but the clandestine nature of the manufacturing process and the presence of ignitable, corrosive, reactive, and toxic chemicals at the sites have resulted in explosions, fires, toxic fumes, and irreparable damage to human health and to the environment.

Traditionally, the suppliers of methamphetamine throughout the United States have been outlaw motorcycle gangs and numerous other independent trafficking groups. Although these groups continue to produce and distribute methamphetamine, organized crime drug groups operating from Mexico currently dominate wholesale methamphetamine trafficking in the United States for several reasons: these

organizations established access to wholesale ephedrine sources of supply on the international market; these organizations are producing unprecedented quantities of high-purity methamphetamine on a regular basis; and, they already control well-established cocaine, heroin, and marijuana distribution networks throughout the western United States, enabling them to supply methamphetamine to a large retail level market. Their expansion into the methamphetamine trade has added a new dimension to their role in the U.S. drug market and has redefined the methamphetamine problem in the United States. Presently, these organizations are poised to supply methamphetamine to the rest of the country in response to any increases in demand.

DEA

Methamphetamine Situation in the United States

Methamphetamine: A Growing Domestic Threat

Contents

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Methamphetamine trafficking and abuse in the United States have been on the rise over the past few years and, as a result, this drug is having a devastating impact in many communities across the nation. Although more common in western areas of the country, this impact increasingly is being felt in areas not previously familiar with the harmful effects of this powerful stimulant. Methamphetamine trafficking is increasing in the southwest, midwest, and southeast regions of the United States. In the Northeast, for example, in areas like New York, New Jersey, and Delaware, methamphetamine use in the past has been confined to a small group of older users typically associated with motorcycle gangs. In the past year, however, methamphetamine has become a drug of choice at "raves" (all-night dance gatherings) and one of a number of drugs used by college-aged students. Following are snapshots of methamphetamine-related events.

- In the last 3 years, there has been a 518 percent increase in the amount of methamphetamine seized in *California*.

- In *Contra Costa County*, near San Francisco, police have found that methamphetamine is involved in 89 percent of the reported domestic dispute cases.

- In April 1995, the *San Jose* Airport Task Force seized 10 pounds of methamphetamine destined for Atlanta, Georgia.

- In November 1995, DEA Los Angeles agents seized 500 pounds of methamphetamine, 1,500 pounds of ephedrine, and laboratory equipment in *Southgate, California*, from an organization

middle-class teenagers and young adults who have no links to the crack scene and who are afraid of crack because of its negative image as an almost immediately addictive drug. Ethnographic data indicate that methamphetamine is becoming more popular and available in the Atlanta suburbs.

The Methamphetamine Problem

Traditionally, the suppliers of methamphetamine throughout the United States have been outlaw motorcycle gangs and numerous other independent trafficking groups. Although these groups continue to produce and distribute methamphetamine, organized crime polydrug trafficking groups operating from Mexico currently dominate wholesale methamphetamine trafficking in the United States. Over the past few years, these groups have revolutionized the production of this drug by operating large-scale laboratories both in Mexico and the United States capable of producing unprecedented quantities of high-purity methamphetamine and have saturated the western U.S. market with this product.

Relatively small quantities of methamphetamine are produced by licit drug manufacturers in the United States. There is little diversion of these legitimate products because they are subject to strict controls. Clandestine production accounts for almost all of the methamphetamine trafficked and abused in the United States.

Domestic methamphetamine production, trafficking, and abuse are concentrated primarily in the western and southwestern regions of the United States. The cities in these regions encountering the most significant problems with abuse include Los Angeles, Phoenix, San Diego, San Francisco, and, to a lesser degree, Dallas, Denver, and Seattle. Much of the clandestine laboratory activity remains centered in California where the methamphetamine problem is most acute. Methamphetamine also is available consistently in wholesale quantities in some cities in the Midwest and the South.

Within certain areas of Arizona, Colorado, Nevada, Utah, and portions of the Pacific Northwest, methamphetamine traditionally has been the drug of choice among a portion of the illicit drug user population. The involvement of criminal organizations based in Mexico in methamphetamine trafficking clearly has expanded the market in those areas and beyond. Moreover, according to reporting from DEA Honolulu and the local Honolulu Police Department, traffickers from Mexico have become the primary source for methamphetamine in Hawaii, reportedly replacing traditional suppliers from Asia.

Areas of the Pacific Northwest, Midwest, and some portions of the South, particularly Georgia and the surrounding States, and Southeast have experienced a dramatic increase in the availability of methamphetamine supplied by organized crime groups operating from Mexico. For example, organized crime drug groups operating from Mexico transporting large quantities of the drug to the Midwest led to the expansion of the existing methamphetamine market. Within the Midwest, Kansas and Missouri are experiencing an increase in the number of methamphetamine laboratories operating in those States, which would indicate that methamphetamine production is expanding eastward. However, these laboratories are small-scale operations, particularly when compared to the large-scale laboratories operating in California. The rise in laboratory seizures in these states does not reflect a concerted effort by major traffickers to shift production from sites in California. Rather, it reflects the increasing effort by local entrepreneurs, who operate on the periphery of the methamphetamine market, to exploit the expanding demand for the drug. Laboratories in California, controlled by organized crime drug trafficking groups operating from Mexico , remain the predominant sources of supply for the West, Midwest and much of the United States.

Other evidence also suggests that availability is increasing domestically. The increasing frequency of large, high-purity methamphetamine seizures over the past few years provides strong evidence of

directed from Mexico that was capable of producing up to 1,000 pounds of methamphetamine per month.

- The discovery of a laboratory dump site by two *Redlands, California*, police officers on routine patrol in April 1995 led to the seizure of 246 pounds of methamphetamine, 500 pounds of ephedrine, $300,000, and the arrest of seven individuals.

- Reports from *Los Angeles* indicate that methamphetamine is more popular than cocaine in some areas.

- A *Los Angeles* doctor says he studies as many as five methamphetamine-related murders a week.

- In *San Diego*, the number of methamphetamine-related deaths increased 56 percent from 110 in 1993 to 172 in 1994.

- During 1994, in *San Diego*, there were more admissions to treatment facilities for methamphetamine than for alcohol.

- In the past 2 years, *San Diego* has reported more hospital emergency room episodes for methamphetamine than for any other controlled drug, including cocaine.

- In *San Diego*, methamphetamine is popular with adolescent females because of its anorexic properties. It is popular with construction workers and truck drivers because the drug enables them to work long, tedious hours without becoming fatigued.

- During a recent investigation by agents from DEA Boise, the Immigration and Naturalization Service, and the Idaho Bureau of Narcotics in southwestern *Idaho*, approximately 40 pounds of methamphetamine were seized and 17 traffickers were arrested.

- Law enforcement officials in *Phoenix* report that methamphetamine is largely responsible for the 40 percent jump in that city's homicide rate in 1994.

- In *Phoenix*, methamphetamine-related hospital emergency room episodes nearly tripled between 1992 and 1994. Likewise, methamphetamine-related deaths increased from 20 in 1992 to 122 in 1994 more than a six-fold increase.

- According to a drug treatment official in *Phoenix*, methamphetamine sales have become as profitable as cocaine sales.

- Reports from treatment centers, crisis centers, law enforcement, schools, and parents in *Phoenix* describe increased use of methamphetamine by all ages and sexes.

- U.S. Customs Service inspectors seized 5.7 metric tons of ephedrinea key chemical used to produce methamphetamine destined for Mexico in two incidents in 1994 at *Dallas-Ft. Worth International Airport*.

- In Iowa's Polk County, which includes Des Moines, the number of drug arrests, with methamphetamine accounting for 65 percent of the total, now surpass drunk driving arrests.

- A drug treatment official in *Atlanta* reports that methamphetamine tends to be used by white

significantly increased availability of the drug. Although methamphetamine seizures have increased noticeably in midwestern and southeastern States, most still occur in western States, primarily California. (See Appendix A for a discussion of methamphetamine removals.)

Price

Currently, methamphetamine prices nationwide range from $6,500 to $20,000 per pound, $500 to $2,700 per ounce, and $50 to $150 per gram. The price of methamphetamine is heavily influenced by the supply of ephedrine/pseudoephedrine-key methamphetamine precursors. For example, through mid-1995, when ephedrine/pseudoephedrine supplies were readily available, a pound of methamphetamine sold for as low as $3,000 in Los Angeles and San Francisco. Lately, however, pound prices have increased, most likely as a result of recent domestic and international efforts to curtail ephedrine/pseudoephedrine supplies. Currently, a pound of methamphetamine sells for $6,500 to $10,000 in both cities.

Purity

In 1995, the purity of methamphetamine purchases reported by DEA nationwide at both the gram and ounce levels was 54 percent, substantially below the peaks reported in 1994. As with the recent increase in price, the decrease in purity could be due in part to law enforcement efforts to reduce traffickers' access to ephedrine/pseudoephedrine. Despite this decrease, methamphetamine purity has remained at approximately 50 percent or more over the past 4 years, indicating relatively stable availability of the drug. Representative purity levels for one-pound quantities are not available due to the infrequency of purchases at that level.

Methamphetamine Use

Traditionally, methamphetamine users have suffered the same addiction cycle and withdrawal reactions as those suffered by crack cocaine users. Both drugs, after prolonged use, lead to *binging*, consuming the drug continuously for up to 3 days without sleep. The user then is driven into a severe depression, followed by worsening paranoia, belligerence, and aggression, a period known as *tweaking*. Finally, the user collapses from exhaustion, only to awaken days later to begin the cycle again. However, the new ephedrine-based methamphetamine has a usage pattern unlike that of traditional methamphetamine or crack cocaine. Several times more potent than its other forms, today's methamphetamine produces a reaction far more severe than even crack cocaine, with sleepless binges that last up to 15 days and end with intolerable crashes.

The most frequent method of methamphetamine use is injection. Chronic, high-dose methamphetamine abusers, often called "speed freaks," are generally undernourished with a gaunt appearance, poor hygiene, and rotten teeth. These individuals inject methamphetamine every 2 to 3 hours and often as much as 1,000 milligrams each time. Due to the high level of methamphetamine in their systems, "speed freaks" are extremely paranoid.

According to the latest information available from DAWN, the estimated number of nationwide emergency room drug abuse episodes involving methamphetamine has increased steadily since 1992, following significant decreases that had begun in 1990. In fact, the number of methamphetamine related episodes recorded during 1994 was almost double the number of episodes in 1989, the year prior to the decline.

According to DAWN statistics, the areas hardest hit by methamphetamine abuse include San Diego, Phoenix, San Francisco, Los Angeles, Dallas, Denver, and Seattle.

The increase in methamphetamine-related hospital emergency room episodes was most pronounced in Phoenix, where they nearly tripled from 1992 to 1994. Likewise, methamphetamine-related deaths reported to DAWN by Phoenix-area medical examiners also indicated a considerable increase in the abuse of this substance; 20 such deaths were reported in 1992, compared to 122 in 1994 more than a six-fold increase.

Methamphetamine-related emergency room episodes in the Los Angeles area rose from 827 in 1992 to 1,227 in 1993, representing an increase of 48 percent. This upward trend continued during 1994 but at a more moderate rate. The increases in emergency room episodes were paralleled by increases in methamphetamine-related deaths reported by Los Angeles-area medical examiners; such deaths nearly tripled from 1992 to 1993, rising from 68 to 198.

San Diego-area emergency room episodes resulting from the abuse of methamphetamine increased significantly, from 516 in 1991 to 931 in 1992 an 80 percent increase. The number of such episodes remained fairly stable during 1993 and 1994. The number of methamphetamine-related deaths reported by San Diego-area medical examiners, however, increased 56 percent from 110 in 1993 to 172 in 1994.

Methamphetamine User Profile

Traditionally, methamphetamine use has been most pronounced among males between the ages of 19 and 40. As shown in the graphs that follow, DAWN reporting reflects that this population continues to dominate the data. However, reporting from epidemiologists and treatment personnel reveals possible modifications in the methamphetamine user profile. There is reporting that methamphetamine use is increasing somewhat among college students and young professionals involved in the club scene or participating at rave parties, where the drug has emerged among a battery of "party drugs" that often include LSD, marijuana, Ketamine, and alcohol.

As shown in the graph below, the most common route of administration among methamphetamine-related hospital emergency room episodes in major U.S. metropolitan areas is injection, largely due to the number of episodes reported in San Francisco. In fact, due to increased use by injection and the drug's capacity to lower inhibition, methamphetamine has become a major catalyst in the spread of AIDS in San Francisco. However, in other cities that have a significant methamphetamine problem, snorting is the most common route of administration.

Pharmacology

Methamphetamine, like cocaine, is a potent central nervous system stimulant. It can be smoked, snorted, injected, or taken orally. It increases the heart rate, blood pressure, body temperature, and rate of breathing; it dilates the pupils; and produces euphoria, increased alertness, a sense of increased energy, and tremors. High doses or chronic use have been associated with increased nervousness, irritability, and paranoia. Withdrawal from high doses produces severe depression. Methamphetamine can be a lethal, dangerous, and unpredictable drug.

Effects: In large doses, irritability, aggressive behavior, anxiety, excitement, auditory hallucinations, and paranoia (delusions and psychosis) are frequent effects. Abusers tend to engage in violent behavior; mood changes are common and the abuser can change from friendly to hostile rapidly. The paranoia produced by methamphetamine use results in suspiciousness, hyperactive behavior, and dramatic mood swings.

Duration: Compared with cocaine, which is rapidly metabolized in the body, methamphetamine is slowly

metabolized, with up to 2 days required to eliminate a single dose. Rapidly absorbed when taken orally, the effects of the drug peak within 2 to 3 hours and are measurably effective in the body for up to 8 hours.

Addiction: One of the main arguments in determining whether or not a substance is capable of producing physical addiction (dependence) is the ability to produce a withdrawal syndrome similar to that of narcotics and central nervous system depressants. Once it was discovered that each drug produces its own unique pattern of effects, more drugs were then identified as having addiction potential. Repeated use of high dose methamphetamine produces such a pattern. Several hours after last use, the individual experiences a drastic drop in mood and energy level. Sleep begins and may last for a long period and, upon awakening, severe depression exists that may last for days. While users are in this depressed state, suicide is a major concern. These symptoms occur after use and may be reversed by once again taking methamphetamine, thereby fitting the definition for a withdrawal syndrome.

Ice
Crystal methamphetamine - commonly called "ice" - first appeared domestically in Hawaii and, to a lesser extent, on the West Coast in the late 1980's. The availability of ice currently is limited to Hawaii and to some Asian-American communities in Seattle and California. Ice trafficking and availability are very limited throughout the rest of the continental United States. Ice is high-purity methamphetamine. It is not an analogue of methamphetamine nor a "designer" drug. The name is derived from the drug's appearance, that of clear, large chunky crystals resembling rock candy. Samples of ice have been found to be highly concentrated, with purities as high as 98 to 100 percent. Ice is smoked in a manner similar to crack cocaine and about 10 to 15 "hits" can be obtained from a single gram of the substance. Users have referred to smoking ice as a "cool" smoke, while the smoking of crack is a "hot" smoke. The euphoric effect lasts longer than that of cocaine.

Methods of Production

The illicitmanufacture of methamphetamine can be accomplished in a variety of ways, but it is produced most commonly by using either of two primary synthesis methods. The fundamental difference between the two methods is in the use of precursor chemicals. The first method requires the use of ephedrine or pseudoephedrine as the precursor (known as the ephedrine/pseudoephedrine reduction method), while the second method uses phenyl-2-propanone (commonly called P2P).

The ephedrine/pseudoephedrine reduction method is most widely employed and accounted for 89 percent of all methamphetamine laboratory seizures reported to DEA in 1995. This method is common among traffickers from Mexico. The P2P method was used in 6 percent of the methamphetamine laboratories seized by DEA during 1995.

The ephedrine/pseudoephedrine reduction method is preferred over the P2P method for several reasons. First, it is a simpler route of synthesis. Second, ephedrine/pseudoephedrine is less strictly controlled than P2P, and, therefore, is more readily available to clandestine laboratory operators. Third, it produces a more potent form of methamphetamine.[1]

The use of P2P, an immediate precursor for both amphetamine and methamphetamine, was the preferred

route of synthesis prior to the emergence of the ephedrine/pseudoephedrine reduction method. As an immediate precursor for the manufacture of both amphetamine and methamphetamine, P2P is controlled under Schedule II of the Controlled Substances Act of 1970 (CSA). As a result, clandestine laboratory operators occasionally manufacture their own P2P from phenylacetic acid.

Clandestine Laboratories

Clandestine methamphetamine laboratories in the United States usually are operated on an irregular basis rather than on a consistent production schedule. Operators often produce a batch of finished product, disassemble the laboratory, and either store or move it to another location while they acquire additional chemicals. Relocating the laboratory affords some protection against detection by drug law enforcement authorities. Storage facilities often are used to house or safeguard chemicals, glassware, and finished product. It is not uncommon for operators to have multiple laboratory sites.

Cooperative efforts by law enforcement agencies and chemical suppliers have made it more difficult for methamphetamine laboratory operators to obtain the necessary chemicals. In order to circumvent these joint efforts, laboratory operators have sought alternative chemicals, routes of synthesis, and sources of supply to fulfill their needs. Laboratory operators have manufactured their own chemicals, employed "runners" to purchase necessary chemicals under the "threshold amount" (the amount at which record-keeping and reporting of chemical transactions are required), or experimented with alternative, non-regulated chemicals. They also have obtained chemicals from rogue chemical companies, from sources of supply located in States without strict chemical regulations, or from other countries.

Currently, a significant portion of the methamphetamine available in the United States is produced domestically and large-scale production of methamphetamine remains centered in California. In 1995, 241 methamphetamine laboratory seizures have been reported to DEA, most occurring in the western and southwestern United States. This figure is derived solely from reporting by DEA field divisions and laboratories. Seizures made by State and local authorities independent of DEA participation are not included in this figure.

In addition to domestic manufacture, methamphetamine increasingly is being produced in Mexico and smuggled into the United States. This is confirmed by seizure data from the El Paso Intelligence Center (EPIC) and the DEA Mexico City Country Office. According to EPIC, the amount of methamphetamine seized in transit from Mexico to the United States increased dramatically beginning in 1993. In 1993 and 1994, 306 and 682 kilograms, respectively, were seized along the border. During 1995, 653 kilograms were seized. By comparison, only 6.5 kilograms were seized in all of 1992. Likewise, the amount of methamphetamine seized in Mexico has increased in the past 3 years.

Locations: Small-scale methamphetamine laboratories are being operated increasingly in single and multifamily residences in urban and suburban neighborhoods, where they pose a significant threat to public health and safety. Although traditionally located in sparsely populated or isolated rural areas to avoid detection, as laboratory seizures reported to DEA indicate, 52 percent of the clandestine laboratories seized in 1995 were located in urban and suburban sites. Rural locations were reported in 38 percent of the seizures and industrial or commercial sites in 5 percent. (Locality information was not available for 5 percent of the laboratory seizures.)

Operators: Methamphetamine laboratory operators often are well-armed, and their laboratories occasionally are booby-trapped and equipped with scanning devices employed as security precautions. Weaponry, ranging from single firearms to arsenals of high-powered weapons and explosives, are commonly found at laboratory sites. Laboratory operators, or "cooks," frequently display little concern

for public safety or the environment. Cooks vary from high school dropouts with no real chemistry education to professionals with graduate degrees in chemistry. Typically, however, these cooks have little formal training. Instead, they follow a handwritten recipe or have learned to produce methamphetamine from underground publications, apprenticeships, or fellow inmates during periods of incarceration.

Chemists: Some laboratory operators act as their own chemists, while others hire chemists to run the laboratories for them. Many manufacturers are independent producers who cook for various organized groups. This is particularly true of larger organizations that may hire or contract chemists to manufacture methamphetamine in return for cash, finished product, or a combination of both. Other cooks manufacture for themselves rather than for a particular organization.

Network: Leasing storage facilities, procuring chemicals, securing the laboratory site, and setting up glassware and equipment may be the responsibility of one person or many different individuals. Several individuals may simply work together to combine their expertise, chemicals, etc., on an ad hoc basis. The number of individuals that comprise an operation, and the function each performs, differs from one organization to the next. Illicit manufacturers often develop and maintain associations with other laboratory operators. In certain areas, they function as a loosely interconnected community or network, sharing, selling, or exchanging chemicals, recipes, glassware, or the finished product.

Laboratories Operated by Traffickers from Mexico

Typically, laboratories operated by traffickers from Mexico are set up in remote areas throughout southern and parts of northern California. Organizations may purchase property or pay for the short-term use of a site to acquire a secure location where they can manufacture. In the Fresno area, for example, laboratories usually are constructed on property rented out by farm laborers who are paid up to $10,000 for use of the property. Cooking most frequently occurs during the weekend when the farms are not in operation. An organization may utilize one location many times. The same location may be used by numerous organizations. Some individuals make money simply by renting out laboratory sites to various organizations. Organizations assist each other in obtaining chemicals, glassware, and the finished product. Chemists may manufacture for numerous organizations. Chemical brokers supply numerous manufacturing organizations with chemicals.

An individual, acting in a supervisory capacity, may be responsible for the overall management of the laboratory, such as ensuring that the necessary chemicals and equipment are present and are set up for the operation to proceed. Generally, chemicals are stored in stash houses and brought to the laboratory site on a limited basis. The amount of chemicals present at the laboratory usually is restricted to that amount required to complete a particular cook. Once the process is complete, the laboratories are dismantled, and the equipment is put into storage.

Numerous 22-liter setups are used frequently in laboratories operated by traffickers from Mexico to produce up to 100 pounds during each manufacturing process. Furthermore, these organizations may operate many laboratories simultaneously. Illegal aliens are encountered most frequently at the laboratory site. In some cases, they are hired as helpers or to maintain the reaction process, while the actual chemist visits periodically to ensure the operation is functioning properly. In others, they are responsible for all facets of the manufacturing process.

Clandestine methamphetamine laboratories in Mexico appear to be run in a manner similar to their counterparts in the United States. For example, temporary laborers typically are hired to perform the production process, laboratories often are located in remote areas (e.g., ranches), and large-capacity laboratory equipment is used.

The increase in production in Mexico is a result of an increased demand in the United States and ongoing enforcement efforts in California. It is likely that increasingly strict chemical controls and enforcement efforts in the United States will result in an additional increase in production of methamphetamine in Mexico, depending upon access to chemicals in that country.

Health Hazards/Hazardous Waste and Materials Encountered at Laboratory Sites

Not only are methamphetamine laboratories used to manufacture illegal, often deadly drugs, but the clandestine nature of the manufacturing process and the presence of ignitable, corrosive, reactive, and toxic chemicals at the sites, have resulted in explosions, fires, toxic fumes, and irreparable damage to human health and to the environment. Every year, fires or explosions occur at a number of clandestine laboratory sites, which lead to their discovery.

Hazardous chemical wastes, the by-products of the clandestine drug manufacturing process, are disposed of by unsafe and illegal methods - operators dump them on the ground or in nearby streams and lakes, pour them into local sewage systems or septic tanks, or bury them. Law enforcement personnel engaged in clandestine drug laboratory seizure and analysis require specialized training in the investigation of such facilities, including training in appropriate health and safety procedures and in the use of personal protective equipment. Cleaning up a seized clandestine drug laboratory site is a complex, dangerous, expensive, and time-consuming undertaking. The amount of waste material from a clandestine laboratory may vary from a few pounds to several tons depending on the size of the laboratory and its manufacturing capabilities.

When a methamphetamine laboratory is seized, hazardous waste/materials, such as chemicals and contaminated glassware and equipment, must be disposed of properly. These materials weigh from a few pounds to several tons and include solvents, reagents, precursors, by-products, and the drug products themselves. Many of these materials are reactive, explosive, flammable, corrosive, and/or toxic. The danger is compounded by the fact that many Federal, State, and local law enforcement officers lack adequate training in clandestine laboratory safety procedures and regulations, hazards, and other related health and safety issues. The table below provides examples of chemicals associated with methamphetamine laboratories and lists some of their hazardous properties.

Although the quantities of hazardous materials found at a typical methamphetamine laboratory are relatively small when compared to waste generated from a major industry, the substances to which law enforcement personnel and others may be exposed present very real public health concerns. Methamphetamine laboratories present both acute and chronic health risks to individuals involved in the seizure and cleanup of the facility, to those who live and work nearby, and to the violator operating the facility.

California law enforcers in recent years have discovered dozens of industrial-sized laboratories, capable of producing five times the amount of methamphetamine than that of conventional laboratories. While investigating these "superlabs," found mostly on remote stretches of farm lands, law officers learned that most of them are erected by Mexican organizations and are operated much like franchises. After erecting a laboratory, these organizations rent the facility to other criminal groups for methamphetamine production, charging them up to $20,000 per use, and increasingly taking product as payment. California Bureau of Narcotic Enforcement (BNE) officials estimate some of these laboratories generate up to $2 million a week.

In 1994, the BNE seized a total of 419 laboratories, 52 of which were industrial-sized. The

methamphetamine seized from these 52 exceeded the amount seized from the other 367 combined.

BNE seizures of methamphetamine and clandestine laboratories have increased dramatically. Methamphetamine seizures surged from 1,400 pounds in 1991 to over 18,000 pounds in 1995. Also, last year, BNE's laboratory seizures reached 465 - one every 19 hours.

Site Contamination and the Environmental Impact

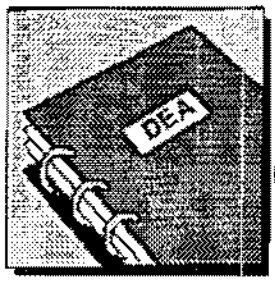
The chemical reactions that occur during the manufacture of illegal drugs may produce toxic vapors that permeate into the plaster and wood of buildings or may be vented outside. The problems are further complicated when the chemicals are stored at off-site locations such as rental lockers. The lack of proper ventilation and temperature controls at these off-site locations adds to the potential for fire, explosion, and exposure to humans.

Methamphetamine laboratories may contaminate water sources and/or soil. In some cases, contamination may spread off-site. Careless or intentional dumping by the laboratory operator is one source of contamination. Spilling chemicals on the floor or dumping waste into bathtubs, sinks, toilets, or on the grounds surrounding the laboratories, and along roads and creeks are common practices. Surface and groundwater drinking supplies could be contaminated, potentially affecting large numbers of people. Perhaps the greatest risk of long-term exposure is assumed by unsuspecting inhabitants of buildings formerly used by clandestine drug laboratory operators where residual contamination may exist inside and outside the structure.

Footnotes

1) There are two stereoisomers of methamphetamine, dextro or *d* and levo or *l*. The dextro or *d*-isomer is the more potent, pharmacologically active stimulant of the two. Synthesis of methamphetamine by one of the P2P methods yields a racemic mixture (*dl*-methamphetamine, a 50-50 mixture of the d- and l-isomers), while the reduction of ephedrine yields *d*-methamphetamine. Because the *d*-isomer accounts for most of the stimulant effects associated with methamphetamine, the ephedrine/pseudoephedrine reduction route of synthesis produces substantially more of the active isomer than does the P2P method.

2) As reported to DEA Headquarters by teletype, DEA Reports of Investigation, and Clandestine Laboratory Report, pursuant to DEA Agents Manual reporting requirements. DEA defines a clandestine laboratory as "an illicit operation consisting of a sufficient combination of apparatus and chemicals that either has been or could be used in the manufacture or synthesis of controlled substances." This definition does not include the seizure of chemicals, glassware, or other equipment by themselves as constituting a laboratory.



DEA

Methamphetamine Situation in the United States

Chemical Diversion

Contents

- Trafficking of Chemicals
- Chemical Control Initiatives

Acquisition of chemicals is a vital and readily identifiable component of the illicit trafficking cycle. It generally is agreed that the most effective way of controlling the traffic in methamphetamine is to control the diversion of chemicals from the licit market. Chemical control legislation enacted at the Federal and State levels increasingly has made it difficult for operators to obtain needed chemicals. Consequently, trafficking organizations constantly are seeking new sources and developing novel ways in which to circumvent the law. Therefore, tightening the existing chemical control laws (i.e., closing legislative loopholes) remains a critical component of the law enforcement effort to disrupt methamphetamine trafficking.

The amending of the *Controlled Substances Act of 1970 (CSA)* in 1988 to include the provisions of the *Chemical Diversion and Trafficking Act (CDTA)* provided law enforcement with an effective tool to attack the clandestine methamphetamine production problem. The CDTA imposed reporting, record keeping, and import/export notification requirements for regulated transactions in controlled chemicals. With the passage of this law, the United States became the first major chemical-producing nation to adopt mandatory controls over the chemicals used in the illicit production of controlled substances. Under this law, DEA has the authority to stop shipments of controlled chemicals from U.S. suppliers to companies outside the United States suspected of reselling or diverting them to drug traffickers.

Under the CDTA, bulk ephedrine and pseudoephedrine transactions were regulated; however, the law exempted over-the-counter ephedrine and pseudoephedrine drug products such as tablets and capsules from the record-keeping and reporting requirements. Under strong pressure from companies involved in the over-the-counter market of this product, the exemption was provided for ephedrine and pseudoephedrine products lawfully marketed under the Food, Drug, and Cosmetic Act.

Trafficking of Chemicals

Traffickers and clandestine laboratory operators quickly discovered the ease with which ephedrine tablets could be converted to methamphetamine and began to take advantage of this loophole in the law. Within a month following enactment of the CDTA and the controls it placed upon ephedrine powder, the first encounter in the United States with ephedrine tablets at a clandestine methamphetamine laboratory seizure occurred. Traffickers had quickly realized that non-controlled ephedrine tablets could be

purchased easily in large quantities for subsequent conversion to methamphetamine.

Without the regulatory controls to prevent the diversion of ephedrine tablets, law enforcement efforts were directed toward investigations of rogue chemical companies that supplied the clandestine laboratory operators. For example, one mail-order distributor in Pittsburgh, Pennsylvania, diverted over 9,000 pounds of ephedrine tablets to a criminal organization in southern California. The owner and employees of the company were subsequently prosecuted, as well as the operator of the clandestine laboratory. The criminal prosecution of violative tablet distributors, at that time, was the exception and not the rule. The demand for ephedrine tablets by clandestine laboratory operators was met by a number of rogue tablet manufacturers and mail-order distributors who took full advantage of the loophole in the law.

When Congress passed the *Domestic Chemical Diversion Control Act of 1993*, it closed the loophole for single-entity ephedrine drug products and instituted DEA registration requirements of all importers, exporters, and distributors of the most important chemicals used in the manufacture of controlled substances. Pseudoephedrine tablets, however, remain unregulated. Other chemicals used in the manufacture of methamphetamine which are not under Federal regulation include iodine, used to make hydriodic acid, and phenylpropanolamine tablet products.

However, it soon was determined that the rogue chemical companies that were supplying ephedrine tablets were not the primary source of ephedrine for methamphetamine trafficking organizations operating from Mexico. Large shipments of ephedrine powder were encountered along the border and within the interior of Mexico. Unfortunately, because Mexico has no chemical control laws, the foreign sources could not be identified.

Major Ephedrine Seizures
The extent of the international diversion of ephedrine powder was not fully realized until 1994, when U.S. Customs Service inspectors seized at Dallas/Ft. Worth International Airport two bulk shipments of ephedrine that were destined for non-existent firms in Mexico: a 3.4 metric ton shipment was seized in March 1994, and, four months later, an additional 2.3 metric tons were seized. In addition, Dutch authorities seized a suspicious 6.4 metric ton shipment of ephedrine in October 1994, also destined for Mexico. These three ephedrine seizures focused attention on the magnitude of ephedrine acquisition by the organized crime groups operating from Mexico, and set in motion an effort to focus international attention on the ephedrine diversion problem and to take action to prevent such diversion. Subsequent investigation revealed that these chemicals were part of more than 70 tons of chemicals produced in the Czech Republic and brokered through three firms in Switzerland. Other large-volume ephedrine shipments - originating in India and China and transiting the United Arab Emirates, the Netherlands, Germany, Guatemala, and other Latin American countries - also were identified. Traffickers from Mexico had established a virtually unlimited supply of chemicals for their clandestine methamphetamine laboratory operations.

Domestically, 20 shipments - totaling almost 31 metric tons of ephedrine and pseudoephedrine - have been aborted (shipment seized, company ordered to suspend shipment, or company voluntarily suspends shipment). Many of these shipments were destined for rogue tablet manufacturers and mail-order distributors responsible for diverting ephedrine and pseudoephedrine tablets to clandestine laboratory operators. In addition, through voluntary cooperation with legitimate chemical companies, another 11 shipments - totaling 15.5 metric tons - were prevented from reaching these same rogue chemical companies.

From May to December 1995, DEA seized from three major rogue chemical companies over 25 metric

tons of ephedrine and pseudoephedrine that were destined for illicit use in the clandestine manufacture of methamphetamine. In one of the more recent cases, records seized during the execution of Federal search warrants indicated that one rogue manufacturer had purchased approximately 191 metric tons of bulk ephedrine and pseudoephedrine between January 1994 and the end of May 1995. The investigation confirmed that the majority of these chemicals were converted to ephedrine and pseudoephedrine tablets and diverted to methamphetamine traffickers.

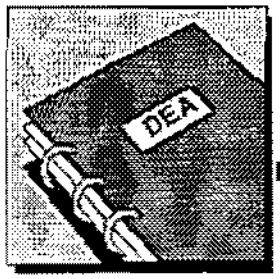
Over the past several years, authorities from the major ephedrine and pseudoephedrine source countries have been alerted to these massive chemical diversions. As a result, tighter export controls of ephedrine and pseudoephedrine have been enacted in India and the Czech Republic, and, in some instances, drug law enforcement authorities in these countries have cooperated to make ephedrine "controlled deliveries" to Mexico. In addition, authorities in Mexico, India, the Czech Republic, Thailand, Slovenia, and other European countries, with the assistance of the International Narcotics Control Board, have been cooperating in halting chemical diversion to Mexico and establishing monitoring programs to detect and prevent future diversion.

Chemical Control Initiatives

Unfortunately, at this time, very few States have any type of chemical control legislation. From State to State, chemicals are regulated/controlled by different authorities. For example, ephedrine is controlled as a drug product in 20 States and others only regulate sales or purchases of ephedrine as a chemical.

The Federal Government currently is preparing regulations to further reduce the diversion of pharmaceutical products containing chemicals, such as ephedrine and pseudoephedrine, that can be used to produce illegal drugs. DEA has consulted with corporations within the pharmaceutical industry to develop a solution to the diversion problem that does not unduly restrict the availability of these chemicals for legitimate use.

DEA published a Proposed Rule in the Federal Register on October 31, 1995, that is designed to place controls on certain pseudoephedrine drug products. This proposed action will effectively preclude the diversion of over-the-counter pseudoephedrine drug products. The regulation has been formulated so that retail sales of legitimate pseudoephedrine products for normal medical use will not be affected.



DEA

Methamphetamine Situation in the United States

Production and Trafficking

Contents

- Major Methamphetamine Trafficking Organizations
- Regional Trafficking Trends
  - Northeast
  - Southeast
  - Midwest
  - West
- Violence

The suppliers of methamphetamine in the United States traditionally have been outlaw motorcycle gangs and numerous other independent trafficking groups. While they continue to produce methamphetamine and control a share of the market, methamphetamine smuggling into the United States from Mexico is controlled primarily by the same major organizations that dominate the production/trafficking of other illicit drugs from Mexico into the United States. These groups are composed of combinations of Mexican nationals residing in Mexico and the United States, Mexican-Americans who operate on either side of the border, and illegal aliens residing in the United States. Often, these organizations are directed by well-established families that have been involved in smuggling contraband for decades. They produce and/or transport large quantities of cocaine, heroin, and marijuana into the United States on a daily basis. They regularly demonstrate their flexibility and adaptability, modifying smuggling routes and methods as needed to handle virtually any drug. Currently, the younger generation within some of these families has expanded into methamphetamine trafficking.

These groups almost exclusively use the ephedrine reduction method and have become large-scale importers of ephedrine into Mexico, some of which is transported into the United States.

There are numerous border points of entry for Mexican-produced methamphetamine and ephedrine into the United States. The most common method of transporting methamphetamine across the border is via passenger vehicles. The passenger vehicles most frequently used to smuggle methamphetamine are cars, but also include pickup trucks and 4-wheel drive vehicles.

Domestically, methamphetamine is distributed by a wide array of organizations that vary greatly in size, structure, and degree of sophistication - from small, local independent groups that operate on a limited scale to large organizations that control all aspects of the traffic. Intelligence indicates that many of the newly established distribution networks around the country are being supplied by sources in California that receive methamphetamine and ephedrine. In addition, as previously described, there are organizations

involved solely in chemical acquisition. Organized crime drug groups operating from Mexico control distribution in many areas of the West and Southwest. For example, these groups operating from Mexico have been identified as operating in areas of the Denver, Houston, Phoenix, Seattle, and St. Louis Field Divisions, beyond their strongholds in California and Mexico. As previously stated, recent intelligence indicates that traffickers from Mexico are supplying Asian organizations/gangs on the West Coast and Hawaii with ephedrine and methamphetamine for the manufacture of ice.

There can be no question but that the large-scale move by these organized crime drug groups operating from Mexico into methamphetamine production is a conscious decision of the leaders of these powerful organizations. Should demand for methamphetamine in the United States continue to increase, these trafficking organizations are in a position to control the smuggling and distribution of the drug into and within the United States.

The upsurge in methamphetamine trafficking has been accompanied by an increase in violence. For example, in San Diego a methamphetamine distribution organization was implicated in at least 26 murders committed during a 6 month period in 1993. This violence was fueled by an ongoing turf battle between two rival methamphetamine distribution organizations that began with the murder of one of the organizations' leaders.

Major Methamphetamine Trafficking Organizations

The extensive involvement of polydrug trafficking organizations from Mexico in methamphetamine production and distribution has redefined the methamphetamine problem in the United States. There are several reasons why organized crime groups operating from Mexico have been able to achieve dominance of the methamphetamine market: these organizations established access to wholesale ephedrine sources of supply on the international market; these organizations are producing unprecedented quantities of high-purity methamphetamine on a regular basis; and, these polydrug organizations control well-established cocaine, heroin, and marijuana distribution networks throughout the western United States, enabling them to supply methamphetamine to a large retail-level market. Presently, these organizations are poised to supply methamphetamine to the rest of the country in response to any increases in demand. The major methamphetamine trafficking organizations operating from Mexico include:

- The ARELLANO-Felix organization, the most violent of the gangs from Mexico, supplies methamphetamine to distributors in U.S. cities such as San Ysidro and San Diego, routinely employing gang members from Mexico to act as U.S. distributors. They operate on both sides of the U.S./Mexican border and smuggle between 50 and 100 pounds of methamphetamine into the United States monthly.

- The Amado CARRILLO-Fuentes organization is currently the most powerful drug group in Mexico and operates from Hermosillo in the west across the border to Arizona and from Juarez into Texas. A seizure in Las Cruces, New Mexico, in 1995 of 315 kilograms of methamphetamine was tied to the CARRILLO-Fuentes organization. At least parts of this shipment were destined for Washington, Oklahoma, Illinois, and Georgia. The methamphetamine was analyzed at 98 percent pure and had an estimated street value of over $50 million. This organization also is tied to a 3 metric ton shipment of ephedrine destined for Nicaragua in concert with the AMEZCUA organization. The CARRILLO-Fuentes organization provides large quantities of methamphetamine to the Phoenix, Arizona, area through the Jorge ORTIZ-Caro organization, which operates in Sonora, Mexico, as well as Phoenix. The ORTIZ-Caro organization has been identified as a methamphetamine source of supply for organizations based in the Chicago and Milwaukee areas.

ORTIZ-Caro reportedly is a supplier of methamphetamine to associates and members of the Aryan Brotherhood prison gang in Phoenix.

- The AMEZCUA-Contreras organization has been identified as the largest known importer of ephedrine into Mexico and across the U.S. border. Since September, 1992, in excess of 5 tons of ephedrine ordered by Jesus and his brother, Luis AMEZCUA, have been seized. These brothers have been documented since 1988 as trafficking in cocaine and methamphetamine in both the San Diego and the Los Angeles areas. This organization operates primarily out of Guadalajara, but, through agreements with other Mexican gangs, has extended its trafficking operations all along the border. It controls methamphetamine laboratories in Guadalajara and Tijuana and employs associates across the border in ephedrine and methamphetamine trafficking, especially in Southern California. Luis was indicted in the Central District of California in December 1994 for methamphetamine-related violations. Jesus was indicted in the Southern District of California in February 1993 for cocaine-related violations in a joint DEA/FBI investigation. Although indictments and arrest warrants have been issued for both individuals, investigations continue to indicate that they and their organization remain deeply involved in methamphetamine trafficking from Mexico to the United States.

- The CARO-Quintero organization, a major transporter of cocaine and marijuana, has expanded to methamphetamine trafficking and may be aligning with the ARELLANO-Felix organization. This organization operates from Hermosillo, Agua Prieta, Guadalajara, and Culiacan as well as the Mexican states of San Luis Potosi, Sinaloa, and Sonora. Its smuggling routes extend into California, Arizona, Texas, and Nevada and it is responsible for trafficking hundred-pound quantities through Arizona ports of entry.

The major Mexican trafficking groups outlined above operate within a fluid, flexible, and elastic system. Alliances shift or shake-ups in the hierarchy occur with the divergence of interests and eruptions of internecine violence. But while the precise roles of specific groups and individual group members often blur, there is an overarching structure within which drug trafficking operates: the Federation.

The Federation evolved from the Guadalajara cartel, which was formed in the 1980's by Rafael CARO-Quintero and Miguel FELIX-Gallardo in order to ship heroin and marijuana to the United States. Among the first of the Mexican drug trafficking groups to work with the Colombian cocaine mafias, the Guadalajara cartel prospered from the cocaine trade, eventually broadening into today's Federation. Currently, its leadership consists of Chapo GUZMAN and Hector PALMA-Salazar (both jailed in Mexico) and Amado CARRILLO-Fuentes, now the dominant force. The ARELLANO-Felix brothers - laying claim to FELIX-Gallardo's former leadership position and by virtue of their control over smuggling in Sonora - also are battling for influence.

As a loose consortium of smuggling groups, the Federation generally functions in the following manner:

- Cartel heads make the major decisions, broker security with corrupt officials, and negotiate at the international level. They retain overall authority over land, sea, and air movement of all drugs, liaise with the influential political families, establish major front operations, and generally facilitate cocaine, heroin, marijuana, and now methamphetamine movement to major U.S. markets.

- Division chiefs, the working arm of the Federation, are responsible for all stages of smuggling into the United States. It is this level on down that law enforcement confronts directly through investigations, seizures, and arrests.

- Gatekeepers, who control major ports of entry, facilitate trafficking on both sides of the border. Although they may owe allegiance to a certain division chief or cartel head, they will move drugs for other gangs at a price.

- Family syndicates, small time brokers at the bottom of this informal structure, operate along the border and in the United States and are employed to off-load, transport, store, and distribute drugs.

Regional Trafficking Trends

Northeast

In general, most methamphetamine is transported into the Northeast from outside suppliers, distribution remains in the hands of traditional outlaw motorcycle gangs, such as the Hell's Angels, and the user population has remained stable. Nevertheless, there are slight indications of an emerging group of younger, independent entrepreneurs distributing methamphetamine. A handful of recent investigations, for instance, have demonstrated local distributors' connections to California- and Mexico-based methamphetamine suppliers.

The region's current methamphetamine problem pales in comparison to that experienced in other regions of the country. Only in the Philadelphia area has methamphetamine surfaced as a serious concern. Four groups have been identified as active in its manufacture (primarily using the P2P method) and distribution: traditional organized crime groups operating in southern New Jersey as well as Philadelphia; Afro-American criminal gangs; outlaw motorcycle gangs, namely the Pagans, Breed, and Warlocks; and independent operators. Some production spilled over into New Jersey, where six laboratories were seized in 1995. But, overall, the New Jersey-New York area has remained relatively untouched by methamphetamine trafficking. Case statistics from New York for 1995 typify the limited scope of the problem in the region: of the over 3,000 cases initiated by DEA's New York Field Division, only 25 involved methamphetamine; the New York State Police had only 15 methamphetamine-related cases during the year, all stemming from motor vehicle stops; and of the over 45,000 drug-related arrests made by the New York City Police Department, only 5 involved methamphetamine. Methamphetamine trafficking in the Boston area still is controlled by outlaw motorcycle gangs, but availability is limited.

Despite limited methamphetamine trafficking and production in the Northeast, the large number of chemical companies in the region makes it difficult for law enforcement to deny methamphetamine manufacturers access to precursor chemicals.

Southeast

Methamphetamine availability has increased significantly throughout the Southeast over the last 2 years. Law enforcement agencies in Alabama, Arkansas, Georgia, Mississippi, South Carolina, and Tennessee all reported increases in methamphetamine seizures and case initiations. The Arkansas State Police, for example, reported that methamphetamine-related cases rose from 543 in 1988 to over 2,000 in 1995. In Atlanta, methamphetamine has been transformed from "poor man's cocaine" to the drug of choice in upscale nightclubs. It is more profitable for sellers than cocaine.

Methamphetamine supplied from the West Coast has surpassed local production as the leading source for regional distribution. Florida law enforcement officials indicate that the current methamphetamine problem is fueled by Mexican trafficking groups that engage California-based suppliers and exploit existing marijuana distribution channels. Florida officials, who have witnessed a decline in clandestine methamphetamine laboratories since 1992, anticipate an increase in clandestine manufacture activity as

drug trafficking organizations from Mexico become further entrenched in regional methamphetamine distribution. In Atlanta and other regional cities, Mexican drug trafficking organizations are using established cocaine distribution networks to move methamphetamine. Traffickers most commonly transport methamphetamine by vehicle along interstate highways. In addition, couriers traveling on commercial airlines are used to smuggle the drug from the West Coast, particularly into Florida where couriers using rail services also are being encountered.

In contrast to the general regional trend toward reliance on outside suppliers, clandestine methamphetamine production continues in Arkansas, south Alabama, and sections of Tennessee. Manufacturers in these areas tend to be rural, low-income whites. In Alabama, white supremacists are active in methamphetamine production, while in Tennessee some third generation bootleggers have taken to methamphetamine production as their grandfathers took to moonshining and their fathers took to the marijuana trade. Regional groups involved in methamphetamine production are increasingly violent, well-armed, and knowledgeable about explosives.

Midwest

Areas of the upper Midwest have been hard hit by the spiraling growth of methamphetamine trafficking and use. In Iowa, methamphetamine is cited as a contributing factor in an estimated 80 percent of domestic violence cases, and as a major reason behind violent crime. The user population consists primarily of young white adults from lower-middle income families. Many start by snorting methamphetamine and progress to injecting. In one year, from 1993 to 1994, methamphetamine seizures rose 4,000 percent in the city of Des Moines. Methamphetamine cases now account for 80 percent of the police department's drug investigations. Most of the methamphetamine available in the upper Midwest is trafficked by Mexican-controlled criminal organizations - connected to sources of supply in California and Mexico - that are based in smaller Midwestern cities with existing Mexican-American populations. Smuggling routes into the region incorporate a variety of transportation means, but the profit is a constant: a pound of methamphetamine purchased in California for $5,000 sells for as much as $16,000 in Iowa.

Methamphetamine is also a leading drug of abuse in Missouri. Local clandestine manufacture furnishes most of the supply, and it is supplemented by California-based sources. Law enforcement agencies regularly seize clandestine methamphetamine laboratories throughout Missouri, where, without exception, they encounter caches of weapons.

West

Arizona's methamphetamine problem has exploded recently. As noted in the national overview above, in Phoenix methamphetamine-related deaths increased from 20 in 1992 to 122 in 1994, a 570 percent jump. Law enforcement officials blame the upsurge in trafficking and related violence on Mexican trafficking groups and their associates, who now make up 80 percent of methamphetamine arrests. The California-Arizona border has become the focus for law enforcement, as interstate highways are used increasingly to move methamphetamine from suppliers in California to Arizona.

In the Pacific Northwest, Mexican-based drug trafficking organizations are spearheading methamphetamine distribution along established black tar heroin and cocaine networks. Since 1993, methamphetamine traffickers have stretched their routes from California to Oregon in 1994 to suppliers, now purchase from the Mexican trafficking organizations. Accompanying the influx into the Northwest have been drive-by shootings, assaults, and other acts of violence spawned by the methamphetamine trade. Parts of Colorado similarly have been inundated in methamphetamine and violence. In Lakewood,

a Denver suburb, as much as 90 percent of the city's assaults and weapons crimes in 1995 were linked to methamphetamine trafficking and use. The escalation in local methamphetamine trafficking has generated its own criminal subculture. Violence - not only homicides, but kidnappings, mutilations, and torture - is a core element.

Officer safety and health are top priorities for the California Bureau of Narcotic Enforcement (BNE). The Hazardous Materials Transportation Act governs how hazardous materials (hazmat) are to be moved, stored, and transported. To protect officials, the law requires adequate and appropriate equipment to safeguard against chemical contaminants. The law also ensures that officials undergo periodic medical testing, beginning with a "baseline test," which provides a profile of the employee's health before he or she ever is exposed to a laboratory. In addition, the law mandates that hazmat teams be given 40 hours of initial training, followed by 3 days of field experience, and a one-time 8-hour refresher course. Finally, the law requires that the medical files of officers be kept for 30 years after their retirement.

California has one of the nation's most progressive chemical control programs, backed by aggressive laws. Together, Federal and California controls have disrupted the illicit drug and chemical trades. California authorities, for instance, say that since ephedrine was placed under control, illicit chemical markets have been depleted. This has forced traffickers to search for ways to preserve their ephedrine supplies. Typically, clandestine laboratory sites contain only empty premeasured bags that once contained the chemical.

In over 20 years, while fighting methamphetamine trafficking, BNE and other State agencies have learned many of the needs and challenges of an effective counterdrug strategy. BNE has adopted a comprehensive strategy for clandestine laboratory enforcement, an aggressive chemical control program, a progressive laboratory safety program, and improved information sharing with Federal, State, and local counterparts. Still, BNE warns other law enforcers to prepare for the direct and indirect costs of fighting methamphetamine. Among them are the dangers of clandestine laboratories, environmental damage, difficulties in storing laboratory evidence, and the enormous cost of cleanup and chemical removal. The initial cost just to remove a chemical from a laboratory averages $7,000. In 1988, BNE budgeted $147,000 for cleanup of clandestine laboratories. In 1995, the agency spent $2.4 million dollars for cleanup.

Violence

Drug-related violence usually appears in one of three ways: by users under the influence of the drug, by users who commit violent acts to obtain money or more of the drug, and by distributors who use violence in the course of conducting their business.

Every community with a methamphetamine abuse problem has experienced violence in some form, most commonly appearing as domestic disputes. For example, police in Contra Costa County, California, report that methamphetamine is involved in almost 90 percent of the domestic dispute cases investigated by that agency. The extreme agitation and paranoia associated with use of the stimulant often lead to situations where violence is more likely to occur. Chronic use of methamphetamine can cause delusions and auditory hallucinations that precipitate violent behavior or response.

However, due to the expansion of the methamphetamine trade by organized crime drug groups operating from Mexico, violence associated with distribution of the drug - used as a means of intimidation, retaliation, and discipline - also has been on the rise in many areas of the country.

Methamphetamine traffickers' disputes, acts of retribution, and attempts to eliminate competition have led

to violence and murder that echo the gruesomeness of the mid-1980's crack gang turf wars. For example, in 1993, Victor Marron was found dead in Chula Vista, California, shot execution-style. The intended victim in this attack actually was his brother, Nico Marron, a former gang member who - through use of violence - had become a major methamphetamine trafficker and distributor in the San Diego area. Nico responded to his brother's killing by launching a bloodbath that resulted in 26 deaths in San Diego and Mexico within a 6-month period.

Violence of this magnitude has become an alarming characteristic of the methamphetamine trade. Increasingly, the major methamphetamine traffickers operating from Mexico recruit local U.S. street gangs to distribute methamphetamine in many areas of the country.

also obtaining marijuana through the mail. There have been seizures in Mid-Atlantic cities of marijuana mailed from Arizona and New Mexico via Federal Express and regular mail. In Trenton, there is evidence of increased selling of marijuana by crack distributors, a new phenomenon in that area.

Marijuana is inexpensive in Texas and in the Southwest Border region due to recent harvests of local crops. Prices have dropped in other areas as well (i.e., Cleveland, Washington, D.C., Trenton). New York police report that expensive chemically treated marijuana is available, and sells for $2,000–4,000/pound, or $10-15 for individual cigarettes.

Treatment Providers (Table 9)

In all regions except the West/Southwest, there has been a slight increase in clients entering treatment for marijuana abuse since the last *Pulse Check*. The change is most evident in the Mid-Atlantic and South, where 79 percent of programs reported an increase. Treatment providers describe a younger treatment population for marijuana than for heroin or cocaine. Almost one third are under twenty, and more than one half have no prior treatment experience. In Texas, 70 percent of the adolescent admissions name marijuana as their primary drug of abuse.

Alcohol is the most common secondary drug used by marijuana clients in all regions, followed by cocaine. One treatment provider comments that the real question is how many people whose "real problem is alcohol, but who also use other drugs" enter substance abuse treatment. This is illustrated clearly by the case of Alaska, where all of the treatment providers state that while marijuana is their most common illegal drug problem, its abuse is almost always secondary to severe alcohol problems.

Several treatment providers mention an increased use of inhalants among their young treatment clients, often in conjunction with marijuana. "Huffing" of glue, aerosols, paint and cleaning fluids is becoming popular among adolescents and some young adults, particularly in the Mid-Atlantic and the West/Southwest. Huffing entails placing a substance in a bag or soda can to sniff or inhale the fumes. This produces a drunken, disoriented or sometimes hallucinogenic effect. Depending on the toxicity of substance inhaled, repeated use can also produce nausea, headaches and loss of consciousness. One Ohio source commented that young teens are particularly susceptible to inhalant abuse because they have less access to the illegal drugs used by older peers and almost unlimited access to the many household substances which can be inhaled. Parents who are aware of the dangers of sniffing glue may not realize the popularity of sniffing other substances like aerosols, Freon or common cleansers.

PART IV: EMERGING DRUGS (Tables 10 & 11)

Methamphetamine and **hallucinogens** continue to be mentioned as emerging drugs in many areas across the country. Ethnographic sources in Denver, Seattle, and Austin cite the presence of meth in their areas, as do law enforcement sources in Washington, DC and Columbia. In Colorado, meth is the only drug for which treatment admissions have risen consistently over the past few years. The Denver ethnographic source reports that there are different groups of users: street users who

Source: Office of National Drug Control Policy. *Pulse Check: National Trends in Drug Abuse*. Winter 1997.

inject repeatedly and are "going after the high continuously;" working class users who smoke the drug both recreationally and to stay awake or alert; and transient street youth who inject methamphetamine and use heroin sporadically. However, while patterns of use differ, all groups consist primarily of White males. The drug is readily available in that area and street sales of a gram ($120) are not uncommon. It is also available in smaller units costing $20, $40, and $60.

Methamphetamine is also increasing in popularity in Atlanta and Seattle. Street dealers in Atlanta tout the drug as longer lasting than crack and vie for the same customers. The Atlanta source also reports that there is more methamphetamine in the rural areas of Georgia where production laboratories are located. Again, in this area, the methamphetamine market is dominated by Whites, who are the majority of buyers, manufacturers, and sellers. In Seattle, the majority of users are blue collar workers. There also is considerable use in the gay community and meth is found in many gay bars or clubs in the area. The Seattle source notes the dangerous upward trend in unprotected sex and intravenous use of methamphetamine in the gay community, where HIV seroprevalence rates are already close to 50 percent.

In Hawaii, treatment providers describe methamphetamine as a companion drug "for everything" in their area, where the drug has been well-established for several years. It is inhaled or smoked in its crystalline form ("ice") and attracts a more diverse group of users than it does in any other State. As noted in the special methamphetamine report in the last *Pulse Check*, it is the major illicit drug of abuse for treatment admissions in Hawaii.

Texas sources also report a substantial problem with methamphetamine, particularly in the northern part of the state. Police report that they expect to find more home laboratories or locally produced meth based on recent large seizures of ephedrine and pseudoephedrine, two base substances in methamphetamine production. Texas sources report that two types of methamphetamine are being produced: a yellow product that is made in stainless steel equipment and preferred by injectors, and a white product, that is made in glass equipment and preferred by snorters.

Methamphetamine has turned up less frequently in other areas. Although methamphetamine has traditionally been limited to the Western states, law enforcement sources report that the drug has been involved in arrests in suburban Maryland, New York City and Chicago.

Hallucinogens and a variety of other club drugs were cited as emerging drugs by sources in many areas. Ethnographers and police sources in New York, Miami, Seattle, Cleveland and Baltimore all report the presence of LSD, MDMA ("Ecstasy"), or other club drugs. Police sources in suburban Maryland, Washington, D.C. and Baltimore describe a variety of drugs related to raves including MDMA, LSD and LSD-look alikes, Ketamine, and various legal and illegal drugs used in combination. For example, Maryland police described a rave-related arrest that involved prescription drugs, Ketamine, calcium tablets, methamphetamine, cocaine, caffeine, and a coffee grinder (presumably to concoct various combinations) in a single seizure. Baltimore and Washington, D.C. sources mentioned an unusual combination called "red rock Opium" that consists of caffeine, Robitussin cough syrup, sugar and a combination of tobacco and

Source: Office of National Drug Control Policy, *Pulse Check: National Trends in Drug Abuse*, Winter 1997.

Table 10 Ethnographers and Epidemiologists Report on Emerging Drugs	
City	**Emerging Drugs**
Bridgeport, CT	mescaline
Atlanta, GA	methamphetamine
San Francisco, CA	
New York State	LSD; Ketamine; MDMA
Denver, CO	methamphetamine
San Antonio/El Paso, TX	Rohypnol; inhalants, including paint
Miami, FL	Rohypnol; club drugs
Seattle, WA	methamphetamine MDMA
Austin, TX	ephedrine & pseudoephedrine; Clonapin; Lexotan; GHB; methamphetamine; Rohypnol; Ritalin

Source: Office of National Drug Control Policy. *Pulse Check: National Trends in Drug Abuse*, Winter 1997.

Table 11 Law Enforcement Report on Emerging Drugs	
City	**Emerging Drugs**
Baltimore, MD	LSD; prescription drugs; Tylenol sticks (prescription Tylenol and liquid opium combined in a stick that looks like a Slim Jim); psilocybin; Ketamine
Chicago, IL	
New York, NY	MDMA; Ketamine; other club drugs
Bridgeport, CT	methadone
Miami, FL	
San Antonio, TX	Rohypnol
Trenton, NJ	
Washington, DC	methamphetamine; LSD; inhalants
Columbia, MD	opium gum; inhalants (Freon); methamphetamine; LSD; MDMA; Ketamine
Cleveland, OH	LSD; tranquilizers

PULSE CHECK
National Trends in Drug Abuse

Appendix A

PULSE CHECK: Special Report

Methamphetamine Trends in Five Western States and Hawaii

Executive Office of the President
Office of National Drug Control Policy
Barry R. McCaffrey, *Director*

Office of Programs, Budget, Research, and Evaluation
For Distribution Summer 1997

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Introduction

Methamphetamine, a powerful central nervous system stimulant, has been part of the drug culture for many years. It was developed early in this century from its parent drug amphetamine and was originally used in nasal decongestants, bronchial inhalers, and in the treatment of narcolepsy and obesity. Legally produced by pharmaceutical houses, amphetamine and methamphetamine were widely available in the 1950s and '60s through prescriptions as well as from a booming black market. The Food and Drug Administration estimated in 1962 that over 8 billion tablets were legally produced each year with as much as half of that production going to unauthorized users.[1] In the 1970s methamphetamine became a Schedule II drug; that is, a drug with little medical use and a high potential for abuse.

Almost from their first appearance, amphetamine and methamphetamine were abused.

Valued for the ability to keep a user awake for long periods of time and producing a false sense of energy and enhanced physical and mental performance, these drugs were used in the 1950s and early 1960s among groups such as students, long distance truckers, and sports figures. In addition to the tablet form, in the late 1960s methamphetamine in crystal or liquid form suitable for injection became popular and the terms "crystal," "speed" and "speed freak" became part of the drug vernacular.

Increased Federal regulation of these drugs produced important changes in their availability, and the 1970s saw a marked decline in their use. Often, what was sold on the street as methamphetamine was actually another stimulant like caffeine or ephedrine. Illegal dealers began to rely on domestic illegal laboratories to manufacture supplies for distribution. Highly dangerous, both because of the highly volatile chemicals used in the manufacturing process and the high potential for explosions and fire, methamphetamine production and distribution in the 1970s came to be dominated by outlaw motorcycle gangs operating out of mobile clandestine operations in the California and the Pacific Northwest. Methamphetamine use declined nationwide throughout the 1970s, concentrated in a few cities or regions. However, beginning in the late 1980s it appeared to be spreading from these isolated areas to other new markets and gaining popularity among a larger number of users.

Methamphetamine is a unique drug. In its conventional form, it can be snorted, injected or even eaten. It can also be processed into a potent smokeable form known as "ice," which, starting in Hawaii, gained popularity in recent years in other areas. Methamphetamine is both domestically produced and imported into the U.S. in already processed form. Once dominated by local producers in remote areas of California and the Northwest, the market now includes both locals and, increasingly, Mexican sources providing finished product to stateside distributors. For the local producers the processing required to make methamphetamine from precursor substances is not only easier than it once was, but also more accessible. There are literally thousands of recipes and discussions concerning how to make batches of methamphetamine on the Internet. These entries range from fairly simplistic recipes to highly technical and detailed instructions written by experts.

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Sources for this Report

Since its first publication in 1992, the *Pulse Check* has reported the rise in methamphetamine use in the West and Southwest and the increasing mention of its use in other parts of the country. This special edition of the ONDCP *Pulse Check* looks at methamphetamine use in six States -- New Mexico, Arizona, California, Washington, Oregon and Hawaii -- those States which appear to be the hardest hit by the reappearance of methamphetamine.

For this report, a random sample of treatment providers from the National Drug Abuse Treatment Unit Survey was taken, and a brief telephone interview with them conducted during the third and fourth weeks of December 1996. A total of 115 treatment providers were interviewed. The geographic distribution of those providers is illustrated in Figure 1. In addition; drug ethnographers, researchers and law enforcement officials in each State were interviewed. These sources are listed in the Appendix. The interview covers topics

such as: who is using the drug; how is it used; what other drugs dominate the area; the price of methamphetamine; how is the drug manufactured and sold.

Each State has a unique experience with the re-emergence of methamphetamine. In the sections which follow, we summarize the results of the study by State.

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Methamphetamine in Selected States

CALIFORNIA

For many years methamphetamine abuse was highly localized in specific areas of California, notably San Francisco and San Diego County. In 1990 reports to the Community Epidemiology Work Group, methamphetamine was the most commonly abused drug in the population of persons entering treatment in San Diego. According to the San Diego researcher, in 1996, 45 percent of treatment admissions were due to methamphetamine. In addition, in 1995 arrestees in San Diego represented proportionately more methamphetamine users than at any other Drug Use Forecasting (DUF) site. In San Francisco over the past five years, methamphetamine has been consistently the third most commonly abused drug of clients admitted to treatment (behind heroin and cocaine) in the five counties that make up San Francisco; much of the abuse in the past was concentrated among the male gay community. Increases in other areas and among a wider spectrum of users has continued to the present. For example, Los Angeles, not associated with methamphetamine abuse in the past, currently reports that methamphetamine ranks second after cocaine as the primary drug of abuse at admission to treatment and is second nationwide in the number of emergency room mentions related to methamphetamine.

Methamphetamine use in California is still concentrated in some areas, though surveys of treatment providers show a far wider dispersion of the drug's reach than ever before. The mode of ingestion (snorting and smoking versus injection) and the level of involvement of non-local manufacturers and distributors also differs significantly from the northern to the southern parts of the State.

The prevalence of methamphetamine reported by all California sources reached for this report is consistent with recent DAWN data which places San Diego, San Francisco, and Los Angeles in the top five cities nationwide in emergency room mentions for methamphetamine in 1995. These three cities also lead the nation in the number of medical examiner reports (deaths) related to methamphetamine. There are interesting differences in route of administration reflected in DAWN data between these cities.[2] In San Francisco almost two-thirds of the methamphetamine mentions involve injection, whereas in the other two cities only 10-12 percent of mentions involve injection.

Ethnographic and epidemiologic sources in Los Angeles, San Diego and San Francisco substantiate the DAWN reports. In San Francisco, ethnographic sources report that methamphetamine, while once most popular in the gay community, is now increasingly used by blue collar workers, young professionals, and college students. Putting methamphetamine into coffee in what is termed "biker's coffee" is reported as popular among young professionals interested in the drug's energizing and appetite suppressant effects, but not interested in snorting or injecting the drug. There are reports that in some

segments of the gay community use of methamphetamine is related to "marathon sex," often unprotected, where the drug allows the user to stay awake for long stretches of time. As the DAWN data indicate, in this area it is often injected, doubling the risk of transmission of blood borne viruses and sexually transmitted diseases.

With the wider variety of users now evident, there is also a wider variety of sellers and distributors. While supplies had previously been part of a "close distribution network" when motorcycle clubs dominated production, there are now different kinds of distributors targeting each of the user populations (college students, young professionals, blue collar workers, and the gay and club communities).

In Southern California, methamphetamine continues to be the number one or two drug problem. DUF data indicate that after a slight drop in the number of arrestees testing positive for methamphetamine in San Diego in 1995, use rose again in 1996, particularly among women and juveniles. In August 1996, 41 percent of women arrested tested positive for methamphetamine. In September 1995, 5 percent of juvenile male arrestees tested positive for methamphetamine. By September 1996 that number had more than doubled to 13 percent. There is also increasing use among Hispanics in this area.

Methamphetamine in the San Diego area comes from two sources: some "Mom and Pop" operations out in rural areas of the county and, more commonly, from Mexican nationals bringing already manufactured methamphetamine across the border. The drug is typically sold in 1/4 gram ($20-25), gram ($50-75) and 1/8 ounce ($140-180) units though larger amounts are available. In this area, sources estimate that less than 10 percent of users inject, most preferring snorting or smoking the drug.

Methamphetamine appears to be second only to crack cocaine in popularity in the Los Angeles area. As in San Diego, there is a growing use among Hispanics, though the majority of users are white males. Methamphetamine is available from individual, local manufacturers in inland areas like Riverside, but the market is increasingly dominated by established Mexican Nationals with more efficient, well-organized distribution routes. In Los Angeles, methamphetamine is most often smoked or snorted rather than injected.

Treatment providers from across the State uniformly report that methamphetamine is one of their most serious problems. Treatment admissions in 1995 for methamphetamine abuse San Francisco, for example, were double the 1992 level. In our survey of providers, 57 percent of programs report that it is continuing to rise in their area; 25 percent feel that it has stabilized and 7 percent report it declining. While methamphetamine is a commonly reported drug, it may not be the primary drug problem which brings their clients to treatment. 39 percent of programs report alcohol as the most common problem among clients at entry into treatment, followed by opiates (18%), methamphetamine (18%), cocaine (14%) and marijuana (11%). However, on average 38 percent of treatment admissions are abusers of methamphetamine. Some programs, like one Northern California adolescent program, report far higher figures: 50 percent of the adolescent clients enter with methamphetamine as their primary drug of abuse and 80 percent report that they regularly use it.

Who is using methamphetamine? There are two basic profiles of users reported by treatment providers:

1) students, both high school and college age, males and females, and

2) white, blue collar workers or unemployed persons in their twenties.

Several providers in Southern California also mention an increase in the number of Hispanic methamphetamine users, though whites still appear to dominate this user group. They are also likely to be users of alcohol and marijuana along with methamphetamine rather than users of drugs like heroin. For example, two methadone programs reported that less than 10 percent of their clients enter treatment reporting that they use methamphetamine. In contrast, programs where alcohol or marijuana are the primary drugs of abuse at entry report that as many as 70-80 percent of their clients also use methamphetamine. 61 percent of treatment providers also felt that there was some substitution of methamphetamine for the less accessible and more expensive cocaine, but many also noted that methamphetamine has a clear following of its own.

What prompts methamphetamine users to enter treatment? Methamphetamine can cause a variety of mental, physical, and social problems which may prompt entry into treatment. Though it is not as expensive as heroin or cocaine, its cost might also produce financial problems for users and prompt them to seek help. Because so many clients in treatment for methamphetamine abuse are also unemployed, one might assume that it could eventually produce difficulties on the job. It is interesting to note, however, that the most commonly reported reason methamphetamine clients enter treatment is trouble with the law. 46 percent of programs report that legal problems are the most common reasons for entry; 29 percent report mental or emotional problems most common and 14 percent report problems on the job or at school.

Several providers also describe methamphetamine abusers as "the hardest to treat." They are often overly excitable and "extremely resistant to any form of intervention once the acute effects of meth use have gone away," e.g., malnourishment, depression, chronic sleeplessness, headaches.

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WASHINGTON STATE

For the information concerning methamphetamine in Washington State, two law enforcement officials, a drug researcher at the University of Washington, and a random sample of 16 treatment providers around the State were interviewed.

In addition, we reviewed 1995 DAWN data, available only for Seattle. DAWN data indicate a 7 percent increase from 1994-1995 in the number of medical examiner mentions for Seattle, about 4 percent of all ME deaths reported for 1995. Of the 10,729 ER mentions for Seattle in 1995, approximately 3 percent involved methamphetamine.

All sources describe a rising trend in methamphetamine availability and use, though problems with heroin and cocaine are still dominant in the urban areas of the State. Epidemiologic data indicate that there has been a 252 percent increase in the number of treatment admissions with methamphetamine as the primary drug of abuse between 1992 and 1995. The overwhelming majority of methamphetamine admissions are of whites (almost 90%); 40 percent are in their late twenties and early thirties and 37 percent are injecting the drug.

Epidemiologic sources point out that while the majority of users continues to be rural bikers and blue collar workers, there are also a number of other groups now using. For example, it is reported that the drug is becoming increasingly popular among street youth, among Native American populations and among Hispanic immigrants. This source describes this as a diffusion from rural to urban, from gay populations to heterosexuals and from white to minorities.

Sellers and manufacturers in Washington State, including both local residents and Mexican Nationals, are reported to be increasing in number. One Seattle law enforcement source describes the increase in distribution and use as "remarkable in the last 18 months." The increase in the number of prosecutions from seven in 1991 to 52 in 1995 indicate the growth in the sheer number of dealers. Labs are reported as springing up in a variety of places: hotels, motels, backrooms of other facilities. DEA sources report that, as in California, Mexican meth dealers are using the same routes and distributors for meth as they use or have used for heroin and cocaine. This source also reports the practice of "eating" meth; that is, putting it on paper or food and chewing it, though injecting and snorting are the most common modes of ingestion.

Among **treatment providers** interviewed around the State, 94 percent reported that methamphetamine use is increasing in their area. The remaining 6 percent report that it has stabilized. Though no programs reported that methamphetamine use was the primary drug of abuse for most of their clients at treatment entry, on average, approximately 30 percent of those in treatment use the drug. As is reported in California, the most common reason cited for meth using clients to seek treatment is trouble with the law (50%), followed by mental and family problems.

There is a wider variety of methods of using methamphetamine in the Washington area than in some of the other States. Providers report that clients are equally likely to smoke, inject, or snort it. 81 percent of Washington treatment providers also reported that methamphetamine is substituting for the more expensive and far less accessible cocaine. Almost 70 percent reported that use is up because methamphetamine is cheap and/or readily available throughout the State. Methamphetamine, like marijuana, is considered a "local" or "homemade" drug.

Who is using meth in Washington State? The typical user is described as white, high school educated, in his or her twenties and thirties, and a blue collar or service worker. Several providers stress that this is not someone who also uses heroin and cocaine. Two directors of Seattle programs which serve heroin users state that less than 5 percent of their clients use methamphetamine. Most often the companion drugs used by methamphetamine users are alcohol and marijuana. As one provider comments, "It is the alcohol that brings them in here. Once in treatment, we see the problems with speed, pot, and hallucinogens."

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OREGON

All sources describe methamphetamine as a "continuing problem" in Oregon. Methamphetamine has been part of the drug scene there since the 1960s -- a part that did

not disappear completely as it did in many other areas of the country. Oregon has also been one of the States with steady activity in the production of methamphetamine and distribution to other areas of the West. Whereas other States may report only a handful of laboratory busts or supply seizures over the last twenty years, Oregon law enforcement reports consistent activity surrounding the drug.

DAWN data from medical examiners in Portland indicates a decline in deaths due to methamphetamine from 1994-1995. Similarly, data gathered from police sources in Eugene, regional DEA agents and treatment providers indicates that, while there may be some stabilization, methamphetamine use is still a major drug problem in the State.

Law enforcement sources report that methamphetamine continues to plague the area. July of1995 brought one of the largest laboratory busts in an area of rural Oregon where manufacturers were producing as much as 100 pounds of methamphetamine per batch. This bust led to related police action involving distributors across the Canadian border. While a portion of the drug is still produced locally, police sources report that currently the bulk of the supply now comes from California and Mexico. Production of methamphetamine is described as having "always been around" in rural Oregon. However, it is now no longer just a local operation managed by a handful of producers in small labs.

Treatment providers throughout the State describe methamphetamine as a problem. 47 percent of those interviewed reported that methamphetamine is the primary drug of abuse of their clients, followed by 40 percent reporting alcohol and 13 percent reporting marijuana as the primary problem. A average of 52 percent of clients across all programs use methampbetamine. In one small rural Oregon town, the treatment director commented that these are areas where "people don't use cocaine -- wouldn't think of it -- but speed is widely accepted, particularly among 18-25 year olds." Another program which dealt only with adolescents reports that only 10 percent come into treatment with meth as the primary problem (that is usually alcohol or marijuana), but 70-80 percent use it. Many providers also commented on its availability due to "homemade" sources. 80 percent of providers reported the prevalence of meth in their area as due primarily to its low cost and/or wide availability.

Who is using meth in Oregon? The typical Oregon user is quite similar to that reported in other States: white, often male, a blue collar worker now unemployed, in his/her twenties and early thirties. Adolescent programs also report methamphetamine use among students, sometimes as young as ninth graders. The most common reason for treatment entry is legal troubles. The most common method of ingestion in this area is snorting, followed by injecting and, to a far lesser degree, smoking.

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ARIZONA

Like Southern California, Arizona has reported problems with methamphetamine use and trafficking for several years. Sitting at the southwest border, Arizona has been struggling with the traffic in what one source described as "first the makings for the cake (chemicals) and now the cake itself (processed methamphetamine)" for many years.

DAWN data indicate that Phoenix ranks third nationwide in the number of

methamphetamine ER mentions in 1995 with 732 mentions, about 10 percent of all Phoenix ER mentions, though this number has been decreasing over the last few years. Medical examiner data from Phoenix is also somewhat encouraging, indicating a substantial decline (29%) in the number of deaths attributable to methamphetamine. Approximately 42 percent of these mentions involve smoking of the drug, the most common method reported in the State by all sources.

Ethnographic sources report that methamphetamine in both urban and rural areas is a widely prevalent, and may be increasingly popular among young users where "it has not received the attention cocaine has, does not have the 'mystique' cocaine has." Users tend to be either White, rural blue collar workers who have used the drug for many years or urban cocaine users who are switching to methamphetamine. The latter users are described as people who can not get cocaine and/or those who burn out on the drug and "need the stronger, longer lasting and cheaper high meth can provide." The problem noted by this source is that users burn out even faster often developing even higher levels of paranoia or other dysfunctional behavior than they experience with cocaine.

Law enforcement sources in Phoenix report that methamphetamine continues as the "drug of choice" in Arizona, the number one street trafficking drug problem. Though this source describes adult use as stabilizing somewhat, like the ethnographic source, he feels that adolescent use appears to be increasing as adolescents "feel more confident of its safety," perceiving it safer than cocaine. These users are more likely to snort the drug, though some are injecting.

Street level trade in methamphetamine is brisk in Phoenix. Prices range from $20–$25 for a 1/4 gram unit to $160-$180 for 1/8 ounce. Sellers tend to be U.S. citizens selling their own local product or Mexican nationals selling methamphetamine produced across the border. Many local labs continue to spring up in the area and it is estimated that police uncover one or even two a week.

Of the 24 Arizona **treatment providers** interviewed, 71 percent felt that methamphetamine use was up in their area, overwhelmingly (72%) because it is cheap and/or available. While alcohol (46%) and cocaine (17%) are the primary drugs of abuse at entry in most programs, methamphetamine (13%) ranks third. In addition, these programs report an average of 40 percent of their clientele using methamphetamine at entry. Smoking and snorting the drug are most common routes of administration.

As in other States, providers in Arizona report troubles with the law (63%) as the most common catalyst to treatment entry, followed by family problems (21%) and financial problems (8%). Most of the clients they see who are abusing methamphetamine are young (twenties) and either unemployed or employed in a blue collar occupation. While the typical user is still currently white, several providers noted the increase in methamphetamine abuse among young Hispanics and Native American populations. Urban areas like Phoenix and Tucson also reported the popularity of methamphetamine among the gay population due its image as an enhancer of sexual stamina.

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NEW MEXICO

Law enforcement sources in New Mexico report that methamphetamine is readily available in that State, both from heavy trafficking across the border and from the local operations which spring up, particularly in rural or remote areas. Though there are many "match book" or "do-it-yourself" operations in the area, the bulk of the supplies to New Mexico come from the larger and more efficient Mexican based producers. The number of seizures of methamphetamine has increased dramatically since the early 1990s, including an almost 700 pound seizure in New Mexico in 1994.

The demand is both the traditional older "biker" users as well as former cocaine and crack users switching to the cheaper, longer lasting high. When cocaine is available, it is preferred by many of these users. This source reports that in fact, many users buy methamphetamine marketed as cocaine.

Half of the 16 **treatment providers interviewed** report that methamphetamine use has increased in the past year, while 44 percent report that it has stabilized in their areas. Three-fourths of the programs report that the primary drug of abuse at entry for most of their clients is alcohol, followed by opiates (13%). No program reported that the majority of their clients report methamphetamine as the primary drug problem, and the average proportion of clients using meth at entry is 27 percent.

Several providers report that the stabilization in use is due to crackdowns on local labs in their area as well as a rise in the popularity of heroin in the State. Methamphetamine is described as widely available, however. As one provider commented, "They think they won't become addicted and it is cheaper than anything but pot." Programs in remote or very rural areas of the State often report users who value the drug for its ability to keep them working on farms or in oil fields for long periods of time allowing them to accumulate extra or overtime pay. Too often, that pay is spent on the common companion or primary drug problem, alcohol.

The typical users in New Mexico are white, unemployed, and in their twenties. They are as likely to snort the drug as they are to inject it. As in the other States, the most common reason for seeking treatment among meth abusers is trouble with the law. One provider describes a male client who abuses alcohol and methamphetamine and routinely gets into brawls as a result. The aggression produced by inebriation, heightened by the paranoia and sense of physical prowess produced by methamphetamine, combine to make him a regular with the local authorities. Methamphetamine also, however, makes him a difficult arrestee to manage in small facilities.

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HAWAII

Sources in Hawaii report the greatest prevalence of methamphetamine use and the widest range in types of users of all the States surveyed. Most often in the smokeable crystalline form called "ice" in the mainland but a number of other names in Hawaii, methamphetamine is reported among whites, Asians, males and females, students, blue collar workers, and professionals. It is smoked in expensive glass pipes, mixed with tobacco, or even in pipes made from soda cans.

Drug research sources in Honolulu report that while methamphetamine has wide appeal

in that area, it is also associated with violent episodes and difficulty in successful treatment. In a study in the early 1990s, 40 percent of prisoners admitted to local facilities had used methamphetamine. Sources of the drug are both local and from other areas in the Pacific, though the drug is distributed and readily available through local dealers of other drugs like cocaine and heroin.

69 percent of **treatment providers** interviewed felt that methamphetamine use had increased over the past year and 25 percent felt it was stabilizing. It is the primary drug of abuse at entry for 38 percent of programs interviewed, second only to alcohol (44%) and followed by marijuana (19%). An average of 55 percent of the clients at entry use methamphetamine, and, as in other States, it is trouble with the law which prompts them to seek treatment most of the time (44%). Several providers receive clients through employee assistance programs which refer employees who have exhibited inappropriate or aggressive behavior on the job or chronic absenteeism.

The typical user profile is harder to draw for Hawaii. While many programs report that users are young (teens and twenties), there is a range of jobs, ethnicities, and education levels reported. No program reports that clients inject; users either smoke methamphetamine (81%) or inhale it (25%). A commonly reported problem in treating these clients is that they "rarely admit to methamphetamine abuse. They will tell you about "huffing" (inhalant abuse) if they are kids or about alcohol if they are adults, but fail to mention the meth until *you* ask them." Methamphetamine users do, however, need extended treatment, according to several treatment providers, particularly if they have been smoking for a year or more.

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SUMMARY

Methamphetamine abuse is a continuing problem in these Western states and in Hawaii. While the drug has been used in these States for many years by a small number of users, it has gradually become the drug of choice and primary drug of abuse at entry to treatment in many areas, even overtaking the more common drug problems of heroin and cocaine in treatment populations. Even in areas where alcohol is cited as the most common treatment problem, methamphetamine is often the companion drug, along with marijuana, in anywhere from 25 to 80 percent of the cases.

Methamphetamine is a drug with particular appeal to students and to blue collar workers, using it for recreation, to increase job or school performance, or simply to stay energized for long periods of time. It is cheaper and more accessible than cocaine and appears not to have the same stigma associated with it. As one ethnographer comments, "These users are too young to remember the 'Speed Kills' campaigns of the late 60s and early 70s, and seem to think it is pretty harmless." It can be injected, snorted, smoked or even eaten, making it more versatile drug to administer. However, it is also a drug which has high burnout potential. Treatment providers in all States report users enter treatment more rapidly with methamphetamine than with either heroin or cocaine.

One particularly interesting finding from these surveys is the uniformity of response in terms of why users decide to enter treatment. Over 50 percent of providers in each State cited legal problems as the catalyst for most of their methamphetamine clients' entry into

treatment. These legal problems are described as aggressive behaviors like fighting or bizarre or inappropriate behaviors which prompt others to call the police. Police sources also note that arrestees under the influence of methamphetamine are some of the most difficult to manage due to high levels of hostility, paranoia and agitation.

This report also finds that methamphetamine is readily available in these six States. It is both locally manufactured by small producers operating in a variety of places and using recipes widely circulated in the drug culture and, increasingly (on the U.S. mainland), manufactured and distributed by Mexican nationals through local networks already established in the distribution of other drugs. This more efficient routing may be in part responsible for its increased popularity in many areas.

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Cities Represented in Sample of Treatment Providers

Washington

Kirkland
Seattle
Wenatchee
Spokane
Yakima
Everett
Longview
Pasco
Tacoma

Arizona

Phoenix
Tempe
Tucson
Holbrook
Kingman
Chinle
Chandler

New Mexico

Albuquerque
Carlsbad
Alamogordo
Hobbs
Santa Fe

Hawaii

Honolulu
Kailua
Wahiawa

Oregon

John Day
Eugene
Medford
Portland
Pendleton
Albany
Salem
Hillsboro

California

Desert Hot Springs
Fresno
San Francisco
Los Angeles
Hawaiian Gardens
Berkeley
Chico
Hayward
Bakersfield
Modesta
Sacramento
Redwood City
Culver City
Bellevue
Canoga Park
San Mateo
Compton
Cypress
Long Beach
Chula Vista

Wahiawa
Waianae
Lihue
Pearl Harbor
Ewa Beach
Makawao
Wailuku

Inglewood
Costa Mesa
Sonora

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Ethnographic/Drug Research Sources

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[1] For a complete discussion of the history of amphetamine use see Grinspoon and Hedblom *The Speed Culture: Amphetamine Use and Abuse in America*, Cambridge MA., Harvard University Press, 1975.

[2] These data should be interpreted with caution as they have problems due to large numbers of unspecified answers.

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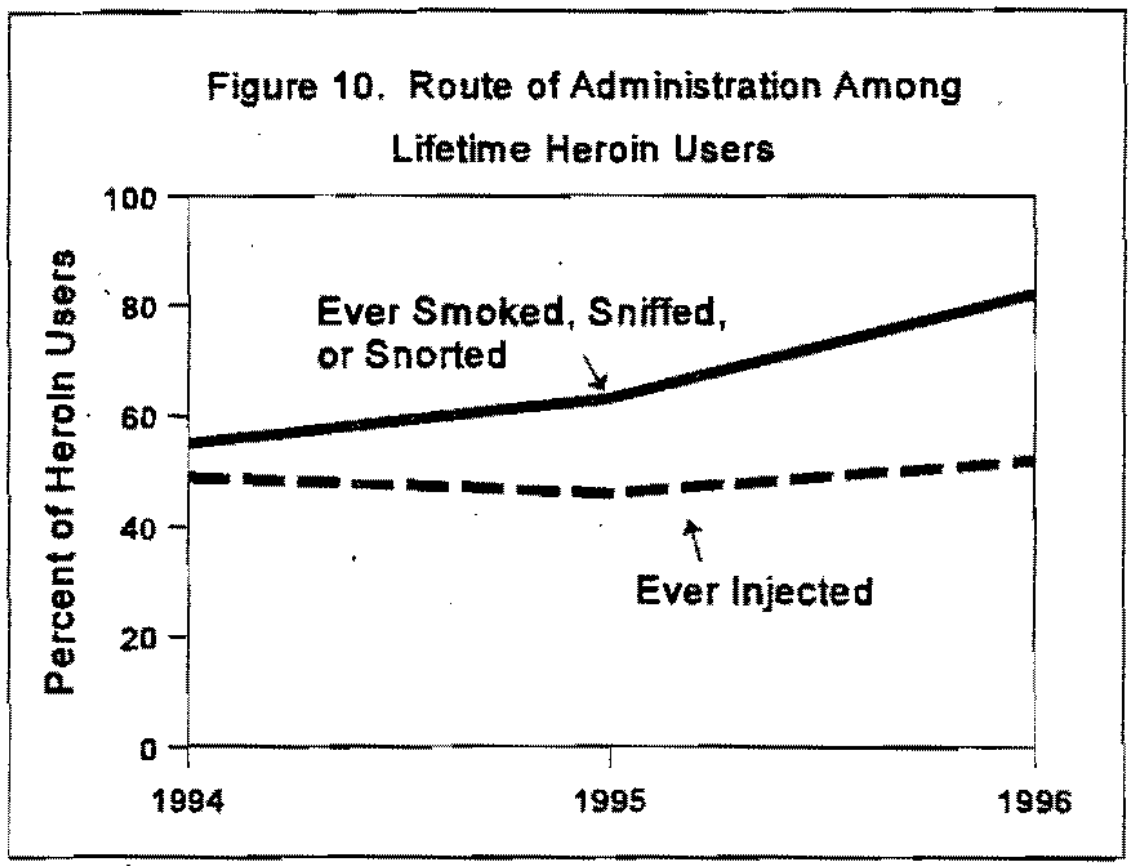
5. OTHER ILLICIT DRUG USE

There were no major changes in the prevalence of the use of inhalants, hallucinogens, heroin or non-medical use of psychotherapeutics between 1995 and 1996. However, between 1993 and 1996 there was a significant increase in the estimated number of past month heroin users, and between 1994 and 1996 there was a significant increase in hallucinogen use among youth.

- Estimates of heroin use from the NHSDA are considered very conservative due to the probable undercoverage of the population of heroin users. Estimates of lifetime heroin prevalence have ranged from 2.3 million in 1979 to 1.5 million in 1990 and 2.4 million in 1996. The estimated number of current heroin users was 68,000 in 1993, 117,000 in 1994, 196,000 in 1995, and 216,000 in 1996, representing a statistically significant increase from 1993 to 1996. A ratio adjustment procedure that partially adjusts for underreporting and undercoverage results in estimates of 144,000 in 1993 and 342,000 in 1996 (See Appendix 2, "Estimation of Heavy Drug Use").

- Among lifetime heroin users, the proportion who had ever smoked, sniffed, or snorted heroin increased from 55 percent in 1994 to 63 percent in 1995, and 82 percent in 1996. At the same time, the proportion who had ever used heroin with a needle remained unchanged (49 percent in 1994, 47 percent in 1995, and 52 percent in 1996) (Figure 10).



U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. *National Household Survey on Drug Abuse: Preliminary Estimates*, 1996.

- The rate of current use of hallucinogens did not change between 1995 and 1996 (0.7 percent in 1995 and 0.6 percent in 1996). However, among youth age 12-17, the rate has nearly doubled in two years (1.1 percent in 1994, 1.7 percent in 1995, and 2.0 percent in 1996).

- For inhalants, the overall rate of past month use has remained steady since 1994 (0.4 percent in 1994 through 1996).

- The estimated prevalence rate of nonmedical use of psychotherapeutics (tranquilizers, sedatives, analgesics, or stimulants) in the past month was 1.2 percent in 1995 and 1.4 percent in 1996, not a statistically significant change.

- The estimated number of persons who have tried methamphetamine in their lifetime was 4.9 million (2.3 percent of the population) in 1996. In 1994, the estimate had been 3.8 million (1.8 percent) and in 1995 it was 4.7 million (2.2 percent). These changes are not statistically significant.

6. ALCOHOL USE

Estimates of the prevalence of alcohol use are presented primarily for three levels of use, defined for this report as follows:

> Current Use - At least one drink in the past month (includes binge and heavy use).
> Binge use - Five or more drinks on the same occasion at least once in the past month (includes heavy use).
> Heavy use - Five or more drinks on the same occasion on at least five different days in the past month.

- In 1996, approximately 109 million persons age 12 and over were current alcohol users, which was about 51 percent of the total population age 12 and older. About 32 million persons (15.5 percent) engaged in binge drinking, and about 11 million Americans (5.4 percent of the population) were heavy drinkers.

- About 9.5 million current drinkers were age 12-20 years old in 1996. Of these, 4.4 million were binge drinkers, including 1.9 million heavy drinkers.

- Alcohol usage rates for all ages 12 years and older did not change significantly between 1995 and 1996. This was true for all three measures of drinking.

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.
National Household Survey on Drug Abuse: Preliminary Estimates, 1996.

Table 38A. Estimated Numbers (in Thousands) of Lifetime Users of Specific Hallucinogens, Inhalants, Methamphetamine, Needles, and Heroin by Smoking or Sniffing/Snorting It in the U.S. Population Aged 12 and Older, By Age Group: 1995 and 1996

Drug or Method of Administration	AGE GROUP (Years)								Total	
	12-17		18-25		26-34		35 and Older			
	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996
Hallucinogens	1,190	1,265	3,921*	4,544	5,466	5,474	9,553	9,415	20,129	20,699
PCP	356	273	829	636	1,641	1,477	3,892	4,369	6,718	6,755
LSD	965	970	3,346*	3,850	4,224	4,148	7,317	7,431	15,852	16,400
Peyote	121	99	276	421	734*	449	3,133	3,060	4,264	4,030
Mescaline	82	66	512	604	1,291	1,094	4,918	4,323	6,802	6,087
Psilocybin (Mushrooms)	369	451	1,871*	2,516	2,974	3,058	5,252	5,405	10,468	11,430
"Ecstasy" (MDMA)	267	242	960	1,164	1,007	875	1,199	853	3,433	3,134
Inhalants	1,639	1,337	3,110	3,006	3,132	2,951	4,135	4,613	12,016	11,909
Amyl Nitrite, "Poppers," Locker Room Odorizers, or "Rush"	143	135	832	631	1,855	1,637	2,623	2,936	5,453	5,360
Correction Fluid, Degreaser, or Cleaning Fluid	365	399	475	285	140	179	449	123	1,429	986
Gasoline or Lighter Fluid	693*	417	655	655	511	331	402	314	2,260*	1,717
Glue, Shoe Polish, or Toluene	654	490	704	488	570	392	778	594	2,706*	1,964
Halothane, Ether, or Other Anesthetics	80	39	147	117	94	114	335	165	655	435
Lacquer Thinner or Other Paint Solvents	407	322	246	313	181	143	188	182	1,021	960
Lighter Gases (Butane, Propane)	335*	198	276	282	93	121	33	53	737	655
Nitrous Oxide or "Whippets"	312	403	1,729	1,993	1,166	1,429	1,450	1,223	4,656	5,050
Spray Paints	468	319	257	265	163	239	193	297	1,082	1,120
Other Aerosol Sprays	332	319	303	270	108	181	221	110	964	879
Methamphetamine	169	145	515*	702	1,385	1,477	2,607	2,364	4,676	4,888
Needle Use[1,2]	88	71	190	284	743	589	1,703	1,561	2,723	2,505
Heroin	151	103	208	365	523	464	1,568	1,511	2,451	2,444
Smoke Heroin[2]	101	84	144	160	263	287	879	1,140	1,387	1,672
Sniff or Snort Heroin[2]	71	48	139	223	317	316	848	1,261	1,374	1,847

*Low precision; no estimate reported

[1] Refers to lifetime use of a needle to inject a drug that was not prescribed, or that was taken only for the experience or feeling it caused.

[2] These drug estimates are generated from data collected on a "non-core" section of the NHSDA questionnaire. Therefore, these estimates may be somewhat inconsistent with drug estimates based on data collected from the "core" answer sheets because NHSDA data are not edited for consistency across the "core" and "non-core" sections of the interview.

*Difference between 1995 and 1996 is statistically significant at the .05 level

*Difference between 1995 and 1996 is statistically significant at the .01 level

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 1995 and 1996

Table 38B. Percentages Reporting Lifetime Use of Specific Hallucinogens, Inhalants, Methamphetamine, Needles, and Heroin by Smoking or Sniffing/Snorting It in the U.S. Population Aged 12 and Older, by Age Group: 1995 and 1996

Drug or Method of Administration	AGE GROUP (Years)								Total	
	12-17		18-25		26-34		35 and Older			
	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996
Hallucinogens	5.4	5.6	14.1[a]	16.3	15.2	15.4	7.6	7.3	9.5	9.7
PCP	1.6	1.2	3.0	2.3	4.6	4.2	3.1	3.4	3.2	3.2
LSD	4.3	4.3	12.0[a]	13.9	11.7	11.7	5.8	5.8	7.5	7.7
Peyote	0.5	0.4	1.0	1.5	2.0[a]	1.3	2.5	2.4	2.0	1.9
Mescaline	0.4	0.3	1.8	2.2	3.6	3.1	3.9	3.4	3.2	2.8
Psilocybin (Mushrooms)	1.7	2.0	6.7[b]	9.1	8.3	8.6	4.2	4.2	4.9	5.3
"Ecstasy" (MDMA)	1.2	1.1	3.5	4.2	2.8	2.5	1.0	0.7	1.6	1.5
Inhalants	7.4	5.9	11.2	10.8	8.7	8.3	3.3	3.6	5.7	5.6
Amyl Nitrite, "Poppers," Locker Room Odorizers, or "Rush"	0.6	0.6	3.0	2.3	5.2	4.7	2.1	2.3	2.6	2.5
Correction Fluid, Degreaser, or Cleaning Fluid	1.6	1.8	1.7	1.0	0.4	0.5	0.4	0.1	0.7	0.5
Gasoline or Lighter Fluid	3.1[b]	1.9	2.4	2.4	1.4	0.9	0.3	0.2	1.1[a]	0.8
Glue, Shoe Polish, or Toluene	2.9	2.2	2.5	1.8	1.6	1.1	0.6	0.5	1.3[b]	0.9
Halothane, Ether, or Other Anesthetics	0.4	0.2	0.5	0.4	0.3	0.3	0.3	0.1	0.3	0.2
Lacquer Thinner or Other Paint Solvents	1.8	1.4	0.9	1.1	0.5	0.4	0.1	0.1	0.5	0.4
Lighter Gases (Butane, Propane)	1.5[a]	0.9	1.0	1.0	0.3	0.3	0.0	0.0	0.3	0.3
Nitrous Oxide or "Whippets"	1.4	1.8	6.2	7.2	3.2	4.0	1.2	1.0	2.2	2.4
Spray Paints	2.1	1.4	0.9	1.0	0.5	0.7	0.2	0.2	0.5	0.5
Other Aerosol Sprays	1.5	1.4	1.1	1.0	0.3	0.5	0.2	0.1	0.5	0.4
Methamphetamine	0.8	0.6	1.9[a]	2.5	3.8	4.2	2.1	2.0	2.2	2.3
Needle Use[1,2]	0.4	0.3	0.7	1.0	2.1	1.7	1.4	1.2	1.3	1.2
Heroin	0.7	0.5	0.7	1.3	1.5	1.3	1.2	1.2	1.2	1.1
Smoke Heroin[2]	0.5	0.4	0.5	0.6	0.7	0.8	0.7	0.9	0.7	0.8
Sniff or Snort Heroin[2]	0.3	0.2	0.5	0.8	0.9	0.9	0.7	1.0	0.6	0.9

*Low precision, no estimate reported

[1] Refers to lifetime use of a needle to inject a drug that was not prescribed, or that was taken only for the experience or feeling it caused

[2] These drug estimates are generated from data collected on a "non-core" section of the NHSDA questionnaire. Therefore, these estimates may be somewhat inconsistent with drug estimates based on data collected from the "core" answer sheets because NHSDA data are not edited for consistency across the "core" and "non-core" sections of the interview

[a] Difference between 1995 and 1996 is statistically significant at the .01 level

[b] Difference between 1995 and 1996 is statistically significant at the .01 level

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 1995 and 1996

Table 11.8 Percentage Reporting Anabolic Steroid and Ice Use in Their Lifetime, by Age Group and Demographic Characteristics: 1993

Demographic Characteristic	Use in Lifetime: Anabolic Steroids	Use in Lifetime: Ice[2]
Total	0.4	0.7
Number of Users (in 1000s)	746	1,352
Age		
12-17	0.2	0.3
18-25	1.5	0.9
26-34	0.6	0.7
35+	*	0.7
Sex		
Male	0.7	0.7
Female	0.1	0.6
Race/Ethnicity[1]		
White	0.4	0.6
Black	0.3	0.4
Hispanic	0.5	0.8
Population Density		
Large metro	0.4	0.9
Small metro	0.3	0.4
Nonmetro	0.4	0.5
Region		
Northeast	0.3	0.2
North Central	0.5	0.6
South	0.3	0.7
West	0.4	1.0

* Low Precision; no estimate reported.

[1] The category "other" for Race/Ethnicity is not included.

[2] Question asked was: Now, let's talk about a form of methamphetamine that can be smoked, say in a cigarette or pipe. Have you ever used the smokable form of methamphetamine called "ice"?

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1993.

TABLE 1a

Trends in Lifetime Prevalence of Use of Various Drugs for Eighth, Tenth, and Twelfth Graders

(Entries are percentages)

	Lifetime								
	1991	1992	1993	1994	1995	1996	1997	'96–'97 change	'91–'97 change
Any Illicit Drug[a]									
8th Grade	16.7	20.6	22.5	25.7	28.5	31.2	29.4	-1.8	+10.7sss
10th Grade	30.6	29.8	32.8	37.4	40.9	45.4	47.3	+1.9	+16.7sss
12th Grade	44.1	40.7	42.9	45.6	48.4	50.8	54.3	+3.5s	+10.2sss
Any Illicit Drug Other Than Marijuana[a]									
8th Grade	14.3	16.6	16.8	17.6	18.8	19.2	17.7	-1.5	+3.4sss
10th Grade	19.1	19.2	20.9	21.7	24.3	25.5	25.0	-0.5	+5.9sss
12th Grade	26.9	25.1	26.7	27.6	28.1	28.5	30.0	+1.5	+3.1s
Any Illicit Drug Including Inhalants[a,b]									
8th Grade	28.5	29.6	32.3	35.1	38.1	39.4	38.1	-1.3	+9.6sss
10th Grade	36.1	36.2	38.7	42.7	45.9	49.8	50.9	+1.1	+14.8sss
12th Grade	47.6	44.4	46.6	49.1	51.5	53.5	56.3	+2.8	+8.7sss
Marijuana/Hashish									
8th Grade	10.2	11.2	12.6	16.7	19.9	23.1	22.6	-0.5	+12.4sss
10th Grade	23.4	21.4	24.4	30.4	34.1	39.8	42.3	+2.5s	+18.9sss
12th Grade	36.7	32.6	36.3	38.2	41.7	44.9	49.6	+4.7ss	+12.9sss
Inhalants[b,c]									
8th Grade	17.6	17.4	19.4	19.9	21.6	21.2	21.0	-0.2	+3.4sss
10th Grade	15.7	16.6	17.5	18.0	19.0	19.3	18.3	-1.0	+2.6ss
12th Grade	17.8	16.6	17.4	17.7	17.4	16.6	16.1	-0.5	-1.5
Nitrites[d]									
8th Grade	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—
12th Grade	1.5	1.5	1.4	1.7	1.5	1.8	2.0	+0.2	+0.4
Hallucinogens[e]									
8th Grade	3.2	3.8	3.9	4.3	5.2	5.9	5.4	-0.5	+2.2sss
10th Grade	6.1	8.4	6.8	8.1	9.3	10.5	10.5	0.0	+4.4sss
12th Grade	9.6	9.2	10.9	11.4	12.7	14.0	15.1	+1.1	+5.5sss
LSD									
8th Grade	2.7	3.2	3.5	3.7	4.4	5.1	4.7	-0.4	+2.0sss
10th Grade	5.6	5.6	6.2	7.2	8.4	9.4	9.5	+0.1	+3.9sss
12th Grade	8.8	8.6	10.3	10.5	11.7	12.6	13.6	+1.0	+4.8sss

(Table continued on next page)

Source: Monitoring The Future Study, The University of Michigan

TABLE 1b

Trends in Annual and 30-Day Prevalence of Use of Various Drugs for Eighth, Tenth, and Twelfth Graders

	Annual									30-Day								
	1991	1992	1993	1994	1995	1996	1997	'96-'97 change	'91-'97 change	1991	1992	1993	1994	1995	1996	1997	'96-'97 change	'91-'97 change
Any Illicit Drug[a]																		
8th Grade	11.3	12.9	15.1	18.5	21.4	23.6	22.1	-1.5	+10.8sss	5.7	6.8	8.4	10.9	12.4	14.6	12.9	-1.7ss	+7.2sss
10th Grade	21.4	20.4	24.7	30.0	33.3	37.5	38.5	+1.0	+17.1sss	11.6	11.0	14.0	18.5	20.2	23.2	23.0	-0.2	+11.4sss
12th Grade	29.4	27.1	31.0	35.8	39.0	40.2	42.4	+2.2	+13.0sss	16.4	14.4	18.3	21.9	23.8	24.6	26.2	+1.6	+9.8sss
Any Illicit Drug Other Than Marijuana[a]																		
8th Grade	8.4	9.3	10.4	11.3	12.6	13.1	11.8	-1.3s	+3.4sss	3.8	4.7	5.3	5.6	6.5	6.9	6.0	-0.9s	+2.2sss
10th Grade	12.2	12.3	13.9	15.2	17.5	18.4	18.2	-0.3	+6.0sss	5.6	5.7	6.6	7.1	8.9	8.9	8.8	-0.1	+3.3sss
12th Grade	16.2	14.9	17.1	18.0	19.4	19.8	20.7	+0.9	+4.5sss	7.1	6.3	7.9	8.8	10.0	9.5	10.7	+1.2	+3.6sss
Any Illicit Drug Including Inhalants[a,b]																		
8th Grade	15.7	18.2	21.1	24.2	27.1	28.7	27.2	-1.5	+10.5sss	8.8	10.0	12.0	14.3	15.1	17.5	16.0	-1.5s	+7.2sss
10th Grade	23.9	23.5	27.4	32.5	35.5	39.6	40.3	+0.7	+16.4sss	13.1	12.6	15.5	20.0	21.6	24.5	24.1	-0.4	+11.0sss
12th Grade	31.2	28.8	32.5	37.6	40.2	41.9	43.3	+1.4	+12.1sss	17.8	15.6	19.3	23.0	24.8	25.5	26.9	+1.4	+9.1sss
Marijuana/Hashish																		
8th Grade	6.2	7.2	9.2	13.0	15.6	18.3	17.7	-0.6	+11.5sss	3.2	3.7	5.1	7.8	9.1	11.3	10.2	-1.1	+7.0sss
10th Grade	16.5	15.2	19.2	25.2	28.7	33.6	34.8	+1.2	+18.3sss	8.7	8.1	10.9	15.8	17.2	20.4	20.5	+0.1	+11.8sss
12th Grade	23.9	21.9	26.0	30.7	34.7	35.8	38.5	+2.7	+14.6sss	13.8	11.9	15.6	19.0	21.2	21.9	23.7	+1.8	+9.9sss
Inhalants[b,c]																		
8th Grade	9.0	9.5	11.0	11.7	12.8	12.2	11.8	-0.4	+2.8sss	4.4	4.7	5.4	5.6	6.1	5.6	5.6	-0.2	+1.2sss
10th Grade	7.1	7.5	8.4	9.1	9.6	9.5	8.7	-0.8	+1.6ss	2.7	2.7	3.3	3.6	3.5	3.3	3.0	-0.3	+0.3
12th Grade	6.6	6.2	7.0	7.7	8.0	7.6	6.7	-0.9	+0.1	2.4	2.3	2.5	2.7	3.2	2.5	2.5	0.0	+0.1
Nitrites[d]																		
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	0.9	0.5	0.9	1.1	1.1	1.6	1.2	-0.4	+0.3	0.4	0.3	0.6	0.4	0.4	0.7	0.7	0.0	+0.3
Hallucinogens[a]																		
8th Grade	1.9	2.6	2.6	2.7	3.6	4.1	3.7	-0.4	+1.8sss	0.8	1.1	1.2	1.3	1.7	1.9	1.8	-0.1	+1.0sss
10th Grade	4.0	4.3	4.7	5.8	7.2	7.8	7.6	-0.2	+3.8sss	1.8	1.8	1.9	2.4	3.3	2.8	3.3	+0.5	+1.7sss
12th Grade	5.8	5.9	7.4	7.6	9.3	10.1	9.8	-0.3	+4.0sss	2.2	2.1	2.7	3.1	4.4	3.5	3.9	+0.4	+1.7sss
LSD																		
8th Grade	1.7	2.1	2.3	2.4	3.2	3.5	3.2	-0.3	+1.6sss	0.6	0.9	1.0	1.1	1.4	1.5	1.5	0.0	+0.9sss
10th Grade	3.7	4.0	4.2	5.2	6.5	6.9	6.7	-0.2	+3.0sss	1.6	1.6	1.6	2.0	3.0	2.4	2.8	+0.4	+1.3sss
12th Grade	5.2	5.6	6.8	6.9	8.4	8.8	8.4	-0.4	+3.2sss	1.9	2.0	2.4	2.6	4.0	2.5	3.1	+0.6s	+1.2sss
Hallucinogens Other Than LSD																		
8th Grade	0.7	1.1	1.0	1.3	1.7	2.0	1.8	-0.2	+1.1sss	0.3	0.4	0.5	0.7	0.8	0.9	0.7	-0.2	+0.4sss
10th Grade	1.3	1.4	1.9	2.4	2.8	3.3	3.3	0.0	+2.0sss	0.4	0.5	0.7	1.0	1.0	1.0	1.2	+0.2	+0.8sss
12th Grade	2.0	1.7	2.2	3.1	3.8	4.4	4.6	+0.2	+2.6sss	0.7	0.5	0.8	1.2	1.3	1.6	1.7	+0.1	+1.0sss

(Table continued on next page)

Source: Monitoring The Future Study, The University of Michigan

NOTES: Level of significance of difference between the two years: s = .05, ss = .01, sss = .001. '—' indicates data not available. '*' indicates less than .05 percent.
Any apparent inconsistency between the change estimate and the prevalence estimates for the two years is due to rounding error.

SOURCE: The Monitoring the Future Study, the University of Michigan.

Approximate Weighted Ns	1991	1992	1993	1994	1995	1996	1997
8th Grade	17,500	18,600	18,300	17,300	17,500	17,800	18,600
10th Grade	14,800	14,800	15,300	15,800	17,000	15,600	15,500
12th Grade	15,000	15,800	16,300	15,400	16,400	14,300	15,400

[a]For 12th graders only: Use of "any illicit drug" includes any use of marijuana, LSD, other hallucinogens, crack, other cocaine, or heroin, or any use of other opiates, stimulants, barbiturates, or tranquilizers not under a doctor's orders. For 8th and 10th graders: The use of other opiates and barbiturates has been excluded, because these younger respondents appear to overreport use (perhaps because they include the use of nonprescription drugs in their answers).

[b]For 12th graders only: Data based on five of six forms; N is five-sixths of N indicated.

[c]Inhalants are unadjusted for underreporting of amyl and butyl nitrites; hallucinogens are unadjusted for underreporting of PCP.

[d]For 8th and 10th graders only: Smokeless data based on one of two forms for 1991–96 and on two of four forms beginning in 1997; N is one-half of N indicated. MDMA data based on one-third of N indicated due to changes on the questionnaire forms. For 12th graders only: Data based on one form; N is one-sixth of N indicated.

[e]For 12th graders only: Data based on four of six forms; N is four-sixths of N indicated.

[f]In 1995, the heroin question was changed in three of six forms for 12th graders and in one of two forms for 8th and 10th graders. Separate questions were asked for use with injection and without injection. Data presented here represent the combined data from all forms. In 1996, the heroin question was changed in the remaining 8th and 10th grade form.

[g]Only drug use which was not under a doctor's orders is included here.

[h]For 12th graders only: Data based on two of six forms; N is two-sixths of N indicated.

[i]For all grades: In 1993, the question text was changed slightly in half of the forms to indicate that a "drink" meant "more than a few sips." The data in the upper line for alcohol came from forms using the original wording, while the data in the lower line came from forms using the revised wording. In 1993, each line of data was based on one of two forms for the 8th and 10th graders and on three of six forms for the 12th graders. N is one-half of N indicated for all groups. Data for 1994–97 were based on all forms for all grades.

[j]For 8th, 10th and 12th graders: The changes in the '91–'97 change columns for alcohol are actually the '93–'97 changes.

[k]For 12th graders only: The changes in the '91–'97 change columns for smokeless tobacco are actually the '92–'97 changes.

[l]Daily use is defined as use on twenty or more occasions in the past thirty days except for 5+ drinks, cigarettes, and smokeless tobacco, for which actual daily use is measured.

TABLE 3

Long-Term Trends in Lifetime Prevalence of Use of Various Drugs for Twelfth Graders

	Percent ever used																						
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989	Class of 1990	Class of 1991	Class of 1992	Class of 1993	Class of 1994	Class of 1995	Class of 1996	Class of 1997	'96–'97 change
Approx. N =	*9400*	*15100*	*17100*	*17800*	*15500*	*15900*	*17500*	*17700*	*16300*	*15900*	*16000*	*15200*	*16300*	*16300*	*16700*	*15200*	*15000*	*15800*	*16300*	*15400*	*15400*	*14300*	*15400*	
Any Illicit Drug[a,b]	55.2	58.3	61.6	64.1	65.1	65.4	65.6	64.4	62.9	61.6	60.6	57.6	56.6	53.9	50.9	47.9	44.1	40.7	42.9	45.6	48.4	50.8	54.3	+3.5s
Any Illicit Drug Other Than Marijuana[a,b]	36.2	36.4	35.8	36.5	37.4	38.7	42.8	41.1	40.4	40.3	39.7	37.7	35.8	32.5	31.4	29.4	26.9	25.1	26.7	27.6	28.1	28.5	30.0	+1.5
Marijuana/Hashish	47.3	52.8	56.4	59.2	60.4	60.3	59.5	58.7	57.0	54.9	54.2	50.9	50.2	47.2	43.7	40.7	36.7	32.6	36.3	38.2	41.7	44.9	49.6	+4.7ss
Inhalants[i]	—	10.3	11.1	12.0	12.7	11.9	12.3	12.8	13.6	14.4	16.4	15.9	17.0	16.7	17.6	18.0	17.6	16.6	17.4	17.7	17.4	16.6	16.1	-0.5
Inhalants, Adjusted[i,4]	—	—	—	—	18.2	17.3	17.2	17.7	18.2	18.0	18.1	20.1	18.6	17.5	18.6	18.5	18.0	17.0	17.7	18.3	17.8	17.5	16.9	-0.6
Amyl/Butyl Nitrites[i,l]	—	—	—	—	11.1	11.1	10.1	9.8	8.4	8.1	7.9	8.6	4.7	3.2	3.3	2.1	1.6	1.5	1.4	1.7	1.5	1.8	2.0	+0.2
Hallucinogens	16.3	15.1	13.9	14.3	14.1	13.3	13.3	12.5	11.9	10.7	10.3	9.7	10.3	8.9	9.4	9.4	9.6	9.2	10.9	11.4	12.7	14.0	15.1	+1.1
Hallucinogens, Adjusted[4]	—	—	—	—	17.7	15.6	15.3	14.3	13.6	12.3	12.1	11.9	10.6	9.2	9.0	9.7	10.0	9.4	11.3	11.7	13.1	14.5	15.4	+0.9
LSD	11.3	11.0	9.8	9.7	9.5	9.3	9.8	9.6	8.9	8.0	7.5	7.2	8.4	7.7	8.3	8.7	8.8	8.6	10.3	10.5	11.7	12.6	13.6	+1.0
PCP[i,l]	—	—	—	—	12.8	9.6	7.8	6.0	5.6	5.0	4.9	4.8	3.0	2.9	3.9	2.8	2.9	2.4	2.9	2.8	2.7	4.0	3.9	-0.1
MDMA (Ecstasy)[i]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.1	6.9	+0.8
Cocaine	9.0	9.7	10.8	12.9	15.4	15.7	16.5	16.0	16.2	16.1	17.3	16.9	15.2	12.1	10.3	9.4	7.8	6.1	6.1	5.9	6.0	7.1	8.7	+1.6s
Crack[h]	—	—	—	—	—	—	—	—	—	—	—	—	5.4	4.8	4.7	3.5	3.1	2.6	2.6	3.0	3.0	3.3	3.9	+0.6s
Other Cocaine[i]	—	—	—	—	—	—	—	—	—	—	—	—	14.0	12.1	8.5	8.6	7.0	5.3	5.4	6.2	5.1	6.4	8.2	+1.8s
Heroin[i]	2.2	1.8	1.8	1.6	1.1	1.1	1.1	1.2	1.2	1.3	1.2	1.1	1.2	1.1	1.3	1.3	0.9	1.2	1.1	1.2	1.6	1.8	2.1	+0.3
Other Opiates[k]	9.0	9.6	10.3	9.9	10.1	9.8	10.1	9.6	9.4	9.7	10.2	9.0	9.2	8.6	8.3	8.3	6.6	6.1	6.4	6.6	7.2	8.2	9.7	+1.5ss
Stimulants[b,k]	22.3	22.6	23.0	22.9	24.2	26.4	32.2	27.9	26.9	27.9	26.2	23.4	21.6	19.8	19.1	17.5	15.4	13.9	15.1	15.7	15.3	15.3	16.5	+1.2
Crystal Meth. (Ice)[i]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.7	3.3	2.9	3.1	3.4	3.9	4.4	4.4	0.0
Sedatives[b,m]	18.2	17.7	17.4	16.0	14.6	14.9	16.0	15.2	14.4	13.3	11.8	10.4	8.7	7.8	7.4	7.5	6.7	6.1	6.4	7.3	7.6	8.2	8.7	+0.5
Barbiturates[k]	16.9	16.2	15.6	13.7	11.8	11.0	11.3	10.3	9.9	9.9	9.2	8.4	7.4	6.7	6.5	6.6	6.2	5.5	6.3	7.0	7.4	7.6	8.1	+0.5
Methaqualone[b,m]	6.1	7.8	8.5	7.9	8.3	9.5	10.6	10.7	10.1	8.3	6.7	5.2	4.0	3.3	2.7	2.3	1.3	1.6	0.8	1.4	1.2	2.0	1.7	-0.3
Tranquilizers[k]	17.0	16.8	18.0	17.0	16.3	15.2	14.7	14.0	13.3	12.4	11.9	10.9	10.9	9.4	7.6	7.2	7.2	6.0	6.4	6.6	7.1	7.2	7.8	+0.6
Alcohol[n]	90.4	91.9	92.5	93.1	93.0	93.2	92.6	92.8	92.6	92.6	92.2	91.3	92.2	92.0	90.7	80.5	88.0	87.5	87.0	—	—	—	—	—
																			80.0	80.4	80.7	79.2	81.7	+2.5ss
Been Drunk[i]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65.4	63.4	62.5	62.9	63.2	61.8	64.2	+2.4
Cigarettes	73.6	75.4	75.7	75.3	74.0	71.0	71.0	70.1	70.6	69.7	68.8	67.6	67.2	66.4	65.7	64.4	63.1	61.8	61.9	62.0	64.2	63.5	65.4	+1.9
Smokeless Tobacco[o]	—	—	—	—	—	—	—	—	—	—	—	31.4	32.2	30.4	29.2	—	—	32.4	31.0	30.7	30.9	29.8	25.3	-4.5
Steroids[i]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0	2.9	2.1	2.1	2.0	2.4	2.3	1.9	2.4	+0.5

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available.
SOURCE: The Monitoring the Future Study, the University of Michigan.

TABLE 4

Long-Term Trends in Annual Prevalence of Use of Various Drugs for Twelfth Graders

	Percent who used in last twelve months																							
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989	Class of 1990	Class of 1991	Class of 1992	Class of 1993	Class of 1994	Class of 1995	Class of 1996	Class of 1997	'96–'97 change
Approx. N =	*9400*	*15400*	*17100*	*17800*	*15500*	*15900*	*17500*	*17700*	*16300*	*15900*	*16000*	*15200*	*16300*	*16300*	*16700*	*15200*	*15000*	*15800*	*16300*	*15400*	*15400*	*14300*	*15400*	
Any Illicit Drug[a,b]	45.0	48.1	51.1	53.8	54.2	53.1	52.1	49.4	47.4	45.8	46.3	44.3	41.7	38.6	35.4	32.5	29.4	27.1	31.0	35.8	39.0	40.2	42.4	+2.2
Any Illicit Drug Other Than Marijuana[a,b]	26.2	25.4	26.0	27.1	28.2	30.4	34.0	30.1	28.4	28.0	27.4	25.9	21.1	21.1	20.0	17.9	16.2	14.9	17.1	18.0	19.4	19.8	20.7	+0.9
Marijuana/Hashish	40.0	44.5	47.6	50.2	50.8	48.8	46.1	44.3	42.3	40.0	40.6	38.8	36.3	33.1	29.6	27.0	23.8	21.9	26.0	30.7	34.7	35.8	38.5	+2.7
Inhalants[i]	—	3.0	3.7	4.1	5.4	4.6	4.1	4.5	4.3	5.1	5.7	6.1	6.9	6.5	5.9	6.9	6.6	6.2	7.0	7.7	8.0	7.6	6.7	-0.9
Inhalants, Adjusted[i,d]	—	—	—	—	8.9	7.9	6.1	6.6	6.2	7.2	7.5	8.9	8.1	7.1	6.9	7.5	6.9	6.4	7.4	8.2	8.4	8.5	7.3	-1.2s
Amyl/Butyl Nitrites[e,i]	—	—	—	—	6.5	5.7	3.7	3.6	3.6	4.0	4.0	4.7	2.6	1.7	1.7	1.4	0.9	0.5	0.9	1.1	1.1	1.6	1.2	-0.4
Hallucinogens	11.2	9.4	8.8	9.6	9.9	9.3	9.0	8.1	7.3	6.5	6.3	6.0	6.4	5.5	5.6	5.9	5.8	5.9	7.4	7.6	9.3	10.1	9.8	-0.3
Hallucinogens, Adjusted[d]	—	—	—	—	11.8	10.4	10.1	9.0	8.3	7.3	7.6	7.6	6.7	5.8	6.2	6.0	6.1	6.2	7.8	7.8	9.7	10.7	10.0	-0.7
LSD	7.2	6.4	5.5	6.3	6.6	6.5	6.5	6.1	5.4	4.7	4.4	4.5	5.2	4.8	4.9	5.4	5.2	5.0	6.6	6.9	8.4	8.8	8.4	-0.4
PCP[e,f]	—	—	—	—	7.0	4.4	3.2	2.2	2.6	2.3	2.9	2.4	1.3	1.2	2.4	1.2	1.4	1.4	1.4	1.6	1.8	2.6	2.3	-0.3
MDMA (Ecstasy)[f]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.6	4.0	-0.6
Cocaine	5.6	6.0	7.2	9.0	12.0	12.3	12.4	11.5	11.4	11.6	13.1	12.7	10.3	7.9	6.5	5.3	3.5	3.1	3.3	3.6	4.0	4.9	5.5	+0.6
Crack[h]	—	—	—	—	—	—	—	—	—	—	—	4.1	3.9	3.1	3.1	1.9	1.5	1.5	1.5	1.9	2.1	2.1	2.4	+0.3
Other Cocaine[i]	—	—	—	—	—	—	—	—	—	—	—	—	9.8	7.4	5.2	4.6	3.2	2.6	2.9	3.0	3.4	4.2	5.0	+0.8
Heroin[i]	1.0	0.8	0.8	0.8	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.4	0.6	0.5	0.6	1.1	1.0	1.2	+0.2
Other Opiates[k]	5.7	5.7	6.4	6.0	6.2	6.3	5.9	5.3	5.1	5.2	5.9	5.2	5.3	4.6	4.4	4.5	3.5	3.3	3.6	3.8	4.7	5.4	6.2	+0.8s
Stimulants[k,k]	16.2	15.8	16.3	17.1	18.3	20.6	26.0	20.3	17.9	17.7	15.8	13.4	12.2	10.9	10.8	9.1	8.2	7.1	8.4	9.4	9.3	9.5	10.2	+0.7
Crystal Meth. (Ice)[i]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.3	1.4	1.3	1.7	1.8	2.4	2.8	2.3	-0.5
Sedatives[k,m]	11.7	10.7	10.8	9.9	9.9	10.3	10.5	9.1	7.9	6.6	5.8	5.2	4.1	3.7	3.7	3.6	3.6	2.9	3.4	4.2	4.9	5.3	5.4	+0.1
Barbiturates[k]	10.7	9.6	9.3	8.1	7.5	6.8	6.6	5.5	5.2	4.9	4.6	4.2	3.6	3.2	3.3	3.4	3.4	2.8	3.4	4.1	4.7	4.9	5.1	+0.2
Methaqualone[k,m]	5.1	4.7	5.2	4.9	5.9	7.2	7.6	6.8	5.4	3.8	2.8	2.1	1.5	1.3	1.3	0.7	0.5	0.6	0.2	0.8	0.7	1.1	1.0	-0.1
Tranquilizers[k]	10.6	10.3	10.8	9.9	9.6	8.7	8.0	7.0	6.9	6.1	6.1	5.8	5.5	4.8	3.8	3.5	3.6	2.8	3.5	3.7	4.4	4.6	4.7	+0.1
Alcohol[n]	84.8	85.7	87.0	87.7	88.1	87.9	87.0	86.8	87.3	86.0	85.6	84.5	85.7	85.3	82.7	80.6	77.7	76.8	76.0	—	—	—	—	—
																			72.7	73.0	73.7	72.5	74.8	+2.3s
Been Drunk[i]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	52.7	50.3	49.6	51.7	52.5	51.9	53.2	+1.3
Cigarettes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smokeless Tobacco[i,o]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Steroids[i]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.9	1.7	1.4	1.1	1.2	1.3	1.5	1.4	1.4	0.0

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available. See Table 3 for relevant footnotes.
SOURCE: The Monitoring the Future Study, the University of Michigan.

TABLE 6

Long-Term Trends in Thirty-Day Prevalence of Use of Various Drugs for Twelfth Graders

	Percent who used in last thirty days																							
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989	Class of 1990	Class of 1991	Class of 1992	Class of 1993	Class of 1994	Class of 1995	Class of 1996	Class of 1997	'96–'97 change
Approx. N =	*9400*	*15400*	*17100*	*17800*	*15500*	*15900*	*17500*	*17700*	*16300*	*15900*	*16000*	*15200*	*16300*	*16300*	*16700*	*15200*	*15000*	*15800*	*16300*	*15400*	*15400*	*14700*	*15400*	
Any Illicit Drug[a,b]	30.7	34.2	37.6	38.9	38.9	37.2	36.9	32.5	30.5	29.2	29.7	27.1	24.7	21.3	19.7	17.2	16.4	14.4	18.3	21.9	23.8	24.6	26.2	+1.6
Any Illicit Drug Other Than Marijuana[a,b]	15.4	13.9	15.2	15.1	16.8	19.4	21.7	17.0	15.4	15.1	14.9	13.2	11.6	10.0	9.1	8.0	7.1	6.3	7.9	8.8	10.0	9.6	10.7	+1.2
Marijuana/Hashish	27.1	32.2	35.4	37.1	36.5	33.7	31.6	28.5	27.0	25.2	25.7	23.4	21.0	18.0	16.7	14.0	13.8	11.9	15.6	19.0	21.2	21.9	23.7	+1.8
Inhalants[c]	—	0.9	1.3	1.5	1.7	1.4	1.5	1.5	1.7	1.9	2.2	2.5	2.8	2.6	2.3	2.7	2.4	2.3	2.5	2.7	3.2	2.5	2.5	0.0
Inhalants, Adjusted[c,d]	—	—	—	—	3.2	2.7	2.5	2.5	2.5	2.6	3.0	3.2	3.5	3.0	2.7	2.9	2.6	2.5	2.8	2.9	3.5	2.9	2.9	0.0
Amyl/Butyl Nitrites[e,f]	—	—	—	—	2.4	1.8	1.4	1.1	1.4	1.4	1.6	1.3	1.3	0.6	0.6	0.5	0.4	0.3	0.6	0.4	0.4	0.7	0.7	0.0
Hallucinogens	4.7	3.4	4.1	3.9	4.0	3.7	3.7	3.4	2.8	2.6	2.5	2.5	2.5	2.2	2.2	2.2	2.2	2.1	2.7	3.1	4.4	3.5	3.9	+0.4
Hallucinogens, Adjusted[d]	—	—	—	—	5.3	4.4	4.5	4.1	3.5	3.2	3.8	3.5	2.8	2.3	2.9	2.3	2.4	2.3	3.3	3.2	4.6	3.8	4.1	+0.3
LSD	2.3	1.9	2.1	2.1	2.4	2.3	2.5	2.4	1.9	1.5	1.6	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.4	2.6	4.0	2.5	3.1	+0.6s
PCP[e,f]	—	—	—	—	2.4	1.4	1.4	1.0	1.3	1.0	1.6	1.3	0.6	0.3	1.4	0.4	0.5	0.6	1.0	0.7	0.6	1.3	0.7	-0.6
MDMA (Ecstasy)[g]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.0	1.6	-0.4
Cocaine	1.9	2.0	2.9	3.9	5.7	5.2	5.8	5.0	4.9	5.8	6.7	6.2	4.3	3.4	2.8	1.9	1.4	1.3	1.3	1.5	1.8	2.0	2.3	+0.3
Crack[h]	—	—	—	—	—	—	—	—	—	—	—	—	1.3	1.6	1.4	0.7	0.7	0.6	0.7	0.8	1.0	1.0	0.9	-0.1
Other Cocaine[i]	—	—	—	—	—	—	—	—	—	—	—	—	4.1	3.2	1.9	1.7	1.2	1.0	1.2	1.3	1.3	1.6	2.0	+0.4
Heroin[j]	0.4	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.6	0.5	0.6	0.0
Other Opiates[k]	2.1	2.0	2.8	2.1	2.4	2.4	2.1	1.8	1.8	1.8	2.3	2.0	1.8	1.6	1.6	1.5	1.1	1.2	1.3	1.5	1.8	2.0	2.3	+0.3
Stimulants[b,k]	8.5	7.7	8.8	8.7	9.9	12.1	15.8	10.7	8.9	8.3	6.8	5.5	5.2	4.6	4.2	3.7	3.2	2.8	3.7	4.0	4.0	4.1	4.8	+0.7s
Crystal Meth. (Ice)[l]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.6	0.6	0.6	0.6	0.7	1.1	1.1	0.8	-0.3
Sedatives[k,m]	5.4	4.5	5.1	4.2	4.4	4.8	4.6	3.4	3.0	2.3	2.4	2.2	1.7	1.4	1.6	1.4	1.5	1.2	1.3	1.8	2.3	2.3	2.1	-0.2
Barbiturates[k]	4.7	3.9	4.3	3.2	3.2	2.9	2.6	2.0	2.1	1.7	2.0	1.8	1.4	1.2	1.4	1.3	1.4	1.1	1.3	1.7	2.2	2.1	2.1	0.0
Methaqualone[k,m]	2.1	1.6	2.3	1.9	2.3	3.3	3.1	2.4	1.8	1.1	1.0	0.8	0.6	0.5	0.6	0.2	0.2	0.4	0.1	0.4	0.4	0.6	0.3	-0.3
Tranquilizers[k]	4.1	4.0	4.6	3.4	3.7	3.1	2.7	2.4	2.5	2.1	2.1	2.1	2.0	1.5	1.3	1.2	1.4	1.0	1.2	1.4	1.8	2.0	1.8	-0.2
Alcohol[n]	68.2	68.3	71.2	72.1	71.8	72.0	70.7	69.7	69.4	67.2	65.9	65.3	68.4	63.9	60.0	57.1	54.0	51.3	51.0	—	—	—	—	—
																			48.6	50.1	51.3	50.8	52.7	+1.9
Been Drunk[l]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.6	29.9	28.9	30.8	33.2	31.3	34.2	+2.9
Cigarettes	36.7	38.8	38.4	36.7	34.4	30.5	29.4	30.0	30.3	29.3	30.1	29.6	29.4	28.7	28.6	29.4	28.3	27.8	29.9	31.2	33.5	34.0	36.5	+2.5s
Smokeless Tobacco[o,p]	—	—	—	—	—	—	—	—	—	—	—	11.5	11.3	10.3	8.4	—	—	11.4	10.7	11.1	12.2	9.8	9.7	-0.1
Steroids[l]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.8	1.0	0.8	0.6	0.7	0.9	0.7	0.7	1.0	+0.3

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available. See Table 3 for relevant footnotes.
SOURCE: The Monitoring the Future Study, the University of Michigan

TABLE 6

Long-Term Trends in Thirty-Day Prevalence of Daily Use of Various Drugs for Twelfth Graders

	Percent who used daily in last thirty days																							
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989	Class of 1990	Class of 1991	Class of 1992	Class of 1993	Class of 1994	Class of 1995	Class of 1996	Class of 1997	'96–'97 change
Approx. N =	*9100*	*15400*	*17100*	*17800*	*15500*	*15900*	*17500*	*17700*	*16300*	*15900*	*16000*	*15200*	*16300*	*16300*	*16700*	*15200*	*15000*	*15800*	*16300*	*16400*	*15400*	*14300*	*15400*	
Marijuana/Hashish	6.0	8.2	9.1	10.7	10.3	9.1	7.0	6.3	5.5	5.0	4.9	4.0	3.3	2.7	2.9	2.2	2.0	1.9	2.4	3.5	4.6	4.9	5.8	+0.9s
Inhalants[1]	—	*	*	0.1	*	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.1	-0.1
Inhalants, Adjusted[1,4]	—	—	—	—	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.3	0.3	0.3	0.5	0.2	0.2	—	—	0.4	0.2	-0.3s
Amyl/Butyl Nitrites[1]	—	—	—	—	*	0.1	0.1	0.0	0.2	0.1	0.3	0.5	0.3	0.1	0.3	0.1	0.2	0.1	0.1	0.2	0.2	0.4	0.1	-0.3s
Hallucinogens	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	*	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	+0.1s
Hallucinogens, Adjusted[4]	—	—	—	—	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.2	*	0.3	0.3	0.1	0.1	0.1	—	—	0.4	0.4	-0.1
LSD	*	*	*	*	*	*	0.1	*	0.1	0.1	0.1	*	0.1	*	*	0.1	0.1	0.1	0.1	0.1	0.1	*	0.2	+0.1s
PCP[1]	—	—	—	—	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.1	-0.2
MDMA (Ecstasy)[1]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0	0.1	+0.1
Cocaine	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.4	0.3	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	-0.1
Crack[k]	—	—	—	—	—	—	—	—	—	—	—	—	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0
Other Cocaine[1]	—	—	—	—	—	—	—	—	—	—	—	—	0.2	0.2	0.1	0.1	0.1	*	0.1	0.1	0.1	0.1	0.1	-0.1
Heroin[1]	0.1	*	*	*	*	*	*	*	0.1	*	*	*	*	*	0.1	*	*	*	*	*	0.1	0.1	0.1	-0.1
Other Opiates[k]	0.1	0.1	0.2	0.1	*	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	*	*	0.1	0.1	0.2	0.2	0.0
Stimulants[k,l]	0.5	0.4	0.5	0.5	0.6	0.7	1.2	0.7	0.8	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.0
Crystal Meth. (Ice)[1]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.1	0.1	0.1	0.1	*	0.1	0.1	0.1	0.0
Sedatives[k,m]	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	*	0.1	0.1	0.1	0.0
Barbiturates[k]	0.1	0.1	0.2	0.1	*	0.1	0.1	0.1	0.1	*	0.1	0.1	0.1	*	0.1	0.1	0.1	*	0.1	*	0.1	0.1	0.1	0.0
Methaqualone[k,m]	*	*	*	*	*	0.1	0.1	0.1	*	*	*	*	*	0.1	*	*	*	0.1	0.0	0.1	0.1	0.0	0.1	+0.1
Tranquilizers[k]	0.1	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	*	*	0.1	*	0.1	0.1	0.1	*	*	0.1	*	0.2	0.1	-0.1s
Alcohol																								
Daily[n]	5.7	5.6	6.1	5.7	6.9	6.0	6.0	5.7	5.5	4.8	5.0	4.8	4.8	4.2	4.2	3.7	3.6	3.4	2.5	—	—	—	—	—
																			3.4	2.9	3.5	3.7	3.9	+0.2
Been drunk daily[1]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.9	0.8	0.9	1.2	1.3	1.6	2.0	+0.4
5+ drinks in a row in last 2 weeks	36.8	37.1	39.4	40.3	41.2	41.2	41.4	40.5	40.8	38.7	36.7	36.8	37.5	34.7	33.0	32.2	29.8	27.9	27.5	28.2	29.8	30.2	31.3	+1.1
Cigarettes																								
Daily	26.9	28.8	28.8	27.5	25.4	21.3	20.3	21.1	21.2	18.7	19.5	18.7	18.7	18.1	18.9	19.1	18.5	17.2	19.0	19.4	21.6	22.2	24.6	+2.4s
Half-pack or more per day	17.9	19.2	19.4	18.8	16.5	14.3	13.5	14.2	13.8	12.3	12.5	11.4	11.4	10.6	11.2	11.3	10.7	10.0	10.9	11.2	12.4	13.0	14.3	+1.3
Smokeless Tobacco[o]	—	—	—	—	—	—	—	—	—	—	—	4.7	5.1	4.3	3.3	—	—	4.3	3.3	3.9	3.6	3.3	4.4	+1.0
Steroids[1]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.1	0.2	0.1	0.1	0.1	0.4	0.2	0.3	0.3	0.0

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available. '*' indicates less than .05 percent.
Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent classes is due to rounding error.
See Table 3 for relevant footnotes.
Daily use is defined as use on twenty or more occasions in the past thirty days except for 5+ drinks, cigarettes, and smokeless tobacco, for which actual daily use is measured.

SOURCE: The Monitoring the Future Study, the University of Michigan

TABLE 7
Trends in Harmfulness of Drugs as Perceived by Eighth, Tenth, and Twelfth Graders, 1991–97

How much do you think people risk harming themselves (physically or in other ways), if they . . .	Percentage saying "great risk"[a]																							
	8th Grade								10th Grade								12th Grade							
	1991	1992	1993	1994	1995	1996	1997	'96–'97 change	1991	1992	1993	1994	1995	1996	1997	'96–'97 change	1991	1992	1993	1994	1995	1996	1997	'96–'97 change
Try marijuana once or twice	40.4	39.1	36.2	31.6	28.9	27.9	25.3	-2.6sss	30.0	31.9	29.7	24.4	21.5	20.0	18.8	-1.2	27.1	24.5	21.9	19.5	16.3	15.6	14.9	-0.7
Smoke marijuana occasionally	57.9	56.3	53.8	48.6	45.9	44.3	43.1	-1.2	48.6	48.9	46.1	38.9	35.4	32.8	31.9	-0.9	40.6	39.6	35.6	30.1	25.6	25.9	24.7	-1.2
Smoke marijuana regularly	83.8	82.0	79.6	74.3	73.0	70.9	72.7	+1.8	82.1	81.1	78.5	71.3	67.9	65.9	65.9	0.0	78.6	76.5	72.5	65.0	60.8	59.9	58.1	-1.8
Try inhalants once or twice[b]	35.9	37.0	36.5	37.9	36.4	40.8	40.1	-0.7	37.8	38.7	40.9	42.7	41.6	47.2	47.5	+0.3	—	—	—	—	—	—	—	—
Try inhalants regularly[b]	65.0	64.4	64.6	65.5	64.8	68.2	68.7	+0.5	69.8	67.9	69.6	71.5	71.8	75.8	74.5	-1.3	—	—	—	—	—	—	—	—
Take LSD once or twice[c]	—	—	42.1	38.3	36.7	36.5	37.0	+0.5	—	—	48.7	46.5	44.7	45.1	44.5	-0.6	46.6	42.3	39.5	38.8	36.4	36.2	34.7	-1.5
Take LSD regularly[c]	—	—	68.3	65.8	64.4	63.6	64.1	+0.5	—	—	78.9	75.9	75.5	75.3	73.8	-1.5	84.3	81.8	79.4	79.1	78.1	77.8	76.6	-1.2
Try crack once or twice[b]	62.8	61.2	57.2	54.4	50.8	51.0	49.9	-1.1	70.4	69.6	66.6	64.7	60.9	60.9	59.2	-1.7	60.6	62.4	57.6	58.4	54.6	56.0	54.0	-2.0
Take crack occasionally[b]	82.2	79.6	76.8	74.4	72.1	71.5	71.2	-0.4	87.4	86.4	84.4	83.1	81.2	80.3	78.7	-1.6	76.5	76.3	73.9	73.8	72.8	71.4	70.3	-1.1
Try cocaine powder once or twice[b]	55.5	54.1	50.7	46.4	44.9	45.2	45.0	-0.2	59.1	59.2	57.5	56.4	53.5	53.6	52.2	-1.4	53.6	57.1	53.2	56.4	52.0	53.2	51.4	-1.8
Take cocaine powder occasionally[b]	77.0	74.3	71.8	69.1	66.4	65.7	65.8	+0.1	82.2	80.1	79.1	77.8	75.6	75.0	73.9	-1.1	69.8	70.9	68.6	70.6	69.1	68.8	67.7	-1.1
Try heroin once or twice without using a needle[c]	—	—	—	—	60.1	61.3	63.0	+1.7	—	—	—	—	70.7	72.1	73.1	+1.0	—	—	—	—	55.6	58.6	60.5	+1.9
Take heroin occasionally without using a needle[c]	—	—	—	—	76.8	76.6	79.2	+2.6	—	—	—	—	85.1	85.8	86.5	+0.7	—	—	—	—	71.2	71.0	74.3	+3.3s
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	11.0	12.1	12.4	11.6	11.6	11.8	10.4	-1.4s	9.0	10.1	10.9	9.4	9.3	8.9	9.0	+0.1	9.1	8.6	8.2	7.6	5.9	7.3	6.7	-0.6
Take one or two drinks nearly every day	31.8	32.4	32.8	29.9	30.5	28.6	29.1	+0.5	36.1	36.8	35.9	32.5	31.7	31.2	31.8	+0.6	32.7	30.6	28.2	27.0	24.8	25.1	24.8	-0.3
Have five or more drinks once or twice each weekend	59.1	58.0	57.7	54.7	54.1	51.8	55.6	+3.8sss	54.7	55.0	54.9	52.9	52.0	50.9	51.8	+0.9	48.6	49.0	48.3	46.6	45.2	49.5	43.0	-6.5sss
Smoke one or more packs of cigarettes per day	51.6	50.8	52.7	50.8	49.8	50.4	52.6	+2.2	60.3	59.3	60.7	59.0	57.0	57.9	59.9	+2.0	69.4	69.2	69.5	67.6	65.6	68.2	68.7	+0.5
Use smokeless tobacco regularly	35.1	35.1	36.9	35.5	33.5	34.0	35.2	+1.2	40.3	39.6	44.2	42.2	38.2	41.0	42.2	+1.2	37.4	35.5	38.9	36.6	33.2	37.4	38.6	+1.2
Take steroids[d]	64.2	69.5	70.2	67.6	—	—	—	—	67.1	72.7	73.4	72.5	—	—	—	—	65.6	70.7	69.1	66.1	66.4	67.6	67.2	-0.4
Approx. N =	*17437*	*18662*	*18366*	*17394*	*17501*	*17926*	*18765*		*14719*	*14808*	*15298*	*15880*	*17006*	*15670*	*15640*		*2549*	*2684*	*2759*	*2591*	*2603*	*2449*	*2579*	

NOTES: Level of significance of difference between the two most recent classes: s =.05, ss =.01, sss =.001. '—' indicates data not available.
SOURCE: The Monitoring the Future Study, the University of Michigan.

[a]Answer alternatives were: (1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, (5) Can't say, drug unfamiliar.
[b]8th and 10th grade: Data based in 1997 on two-thirds of N indicated due to changes in questionnaire forms.
[c]8th and 10th grade: Data based on one of two forms in 1993–96; N is one-half of N indicated. Data based in 1997 on one-third of N indicated due to changes in questionnaire forms.
[d]8th and 10th grade: Data based on two forms in 1991 and 1992. Data based on one of two forms in 1993 and 1994; N is one-half of N indicated.

TABLE 12

Long-Term Trends in Perceived Availability of Drugs, Twelfth Graders

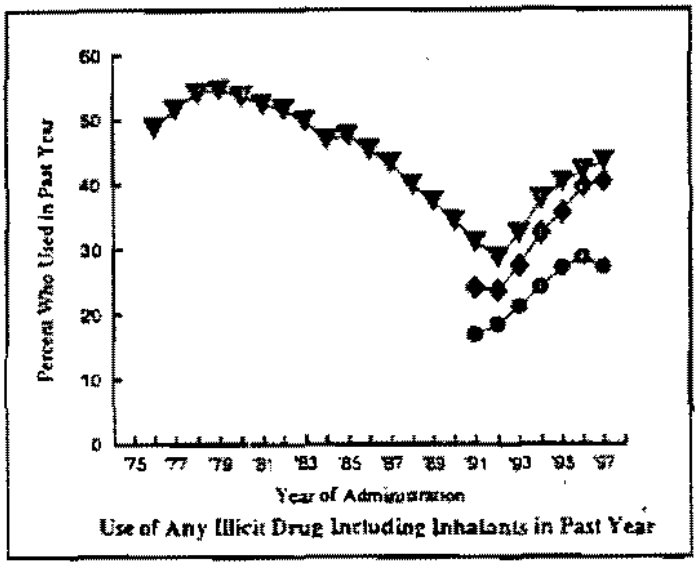
How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?	Percent saying "fairly easy" or "very easy" to get*																							
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	Class of 1988	Class of 1989	Class of 1990	Class of 1991	Class of 1992	Class of 1993	Class of 1994	Class of 1995	Class of 1996	Class of 1997	'96-'97 change
Marijuana	87.8	87.4	87.9	87.8	90.1	89.0	89.2	88.5	86.2	84.6	85.5	85.2	84.8	85.0	84.3	84.4	83.3	82.7	83.0	85.5	88.5	88.7	89.6	+0.9
Amyl/Butyl Nitrites	—	—	—	—	—	—	—	—	—	—	—	—	23.9	25.9	26.8	24.4	22.7	25.9	25.9	26.7	26.0	23.9	23.8	-0.1
LSD	46.2	37.4	34.5	32.2	34.2	35.3	35.0	34.2	30.9	30.6	30.5	28.5	31.4	33.3	38.3	40.7	39.5	44.5	49.2	50.8	53.8	51.3	50.7	-0.6
Some other psychedelic	47.8	35.7	33.8	33.8	34.6	35.0	32.7	30.6	26.6	26.6	26.1	24.9	25.0	26.2	28.2	28.3	28.0	29.9	33.5	33.8	35.8	33.9	33.9	0.0
PCP	—	—	—	—	—	—	—	—	—	—	—	—	22.8	24.9	28.9	27.7	27.6	31.7	31.7	31.4	31.0	30.5	30.0	-0.5
MDMA (Ecstasy)	—	—		—	—	—	—	—	—	—	—	—	—	—	21.7	22.0	22.1	24.2	28.1	31.2	34.2	30.9	30.8	+1.9
Cocaine	37.0	34.0	33.0	37.8	45.5	47.9	47.5	47.4	43.1	45.0	48.9	51.5	54.2	55.0	58.7	54.5	51.0	52.7	48.5	46.6	47.7	48.1	48.5	+0.4
Crack	—	—	—	—	—	—	—	—	—	—	—	—	41.1	42.1	47.0	42.4	39.9	43.5	43.6	40.5	41.9	40.7	40.6	-0.1
Cocaine powder	—	—	—	—	—	—	—	—	—	—	—	—	52.9	50.3	53.7	49.0	46.0	48.0	45.4	43.7	43.8	44.4	43.3	-1.1
Heroin	24.2	18.4	17.9	16.4	18.9	21.2	19.2	20.8	19.3	19.9	21.0	22.0	23.7	28.0	31.4	31.9	30.6	34.9	33.7	34.1	35.1	32.2	33.8	+1.6
Some other narcotic (including methadone)	34.5	26.9	27.8	26.1	28.7	29.4	29.6	30.4	30.0	32.1	33.1	32.2	33.0	35.8	38.3	38.1	34.6	37.1	37.5	38.0	39.8	40.0	38.9	-1.1
Amphetamines	67.8	61.8	58.1	58.5	59.9	61.3	69.5	70.8	68.5	68.2	66.4	64.3	64.5	63.9	64.3	69.7	57.3	58.8	61.5	62.0	62.8	59.4	59.8	+0.4
Crystal meth. (ice)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24.1	24.3	26.0	26.6	25.6	27.0	26.9	27.6	+0.7
Barbiturates	60.0	54.4	52.4	50.6	49.8	49.1	54.9	56.2	52.5	51.9	51.3	48.3	48.2	47.8	48.4	45.9	42.4	44.0	44.5	43.3	42.3	41.4	40.0	-1.4
Tranquilizers	71.8	65.5	64.9	64.3	61.4	59.1	60.8	58.9	55.3	54.5	54.7	51.2	48.6	48.1	45.3	44.7	40.8	40.9	41.1	39.2	37.8	36.0	35.4	-0.6
Steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	46.7	46.8	44.8	42.9	45.5	40.3	41.7	+1.4
Approx. N =	*2627*	*2865*	*3065*	*3598*	*3172*	*3240*	*3578*	*3602*	*3385*	*3269*	*3274*	*3077*	*3271*	*3231*	*2806*	*2549*	*2476*	*2586*	*2670*	*2526*	*2552*	*2340*	*2517*	

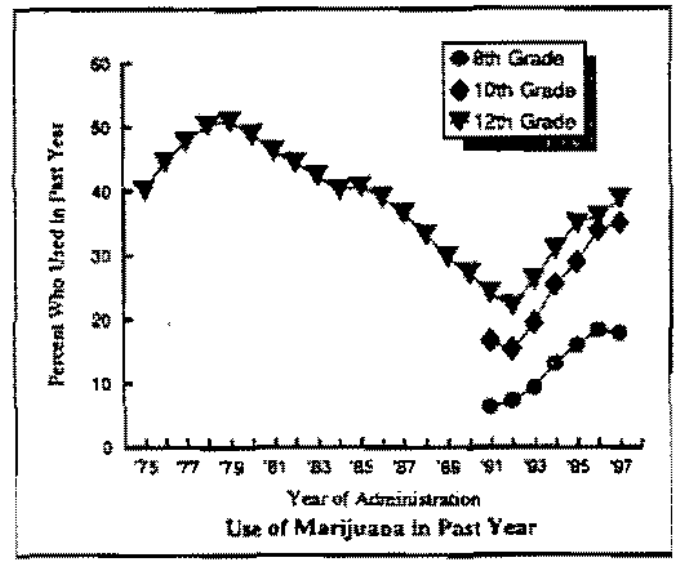
NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available.
SOURCE: The Monitoring the Future Study, the University of Michigan.

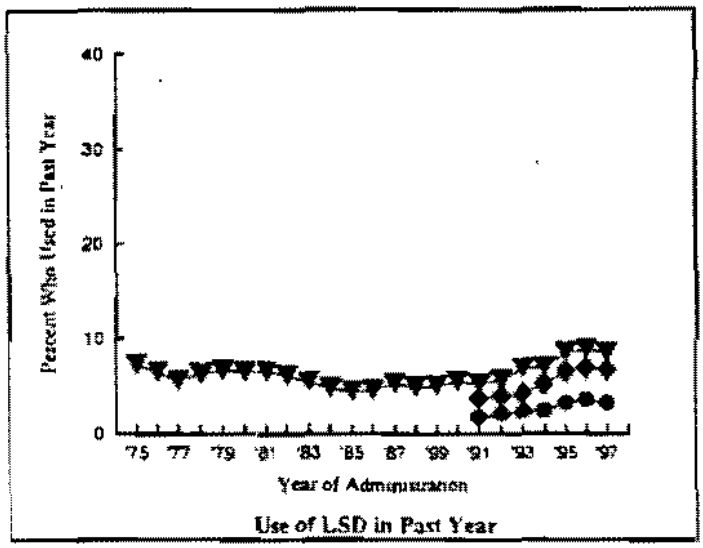
*Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, and (5) Very easy.

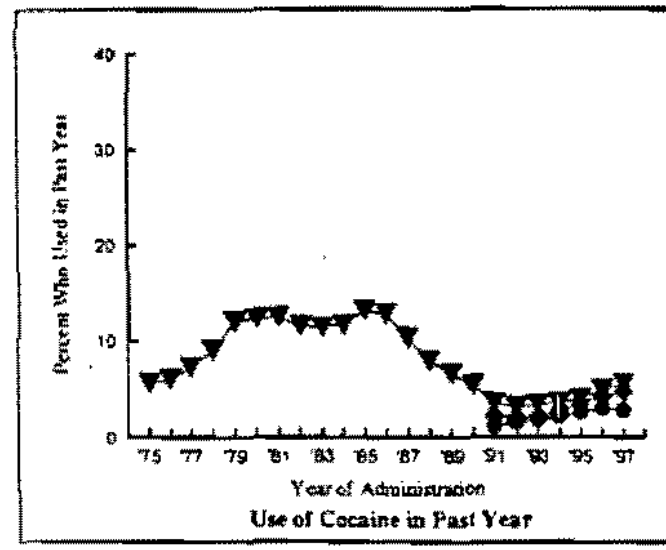
FIGURE 7

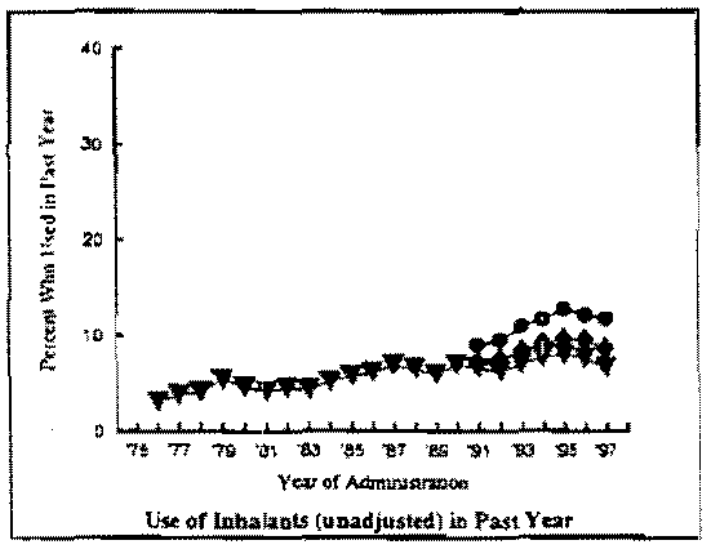
Trends in Annual Use of Selected Drugs by Grade, 1975-1997

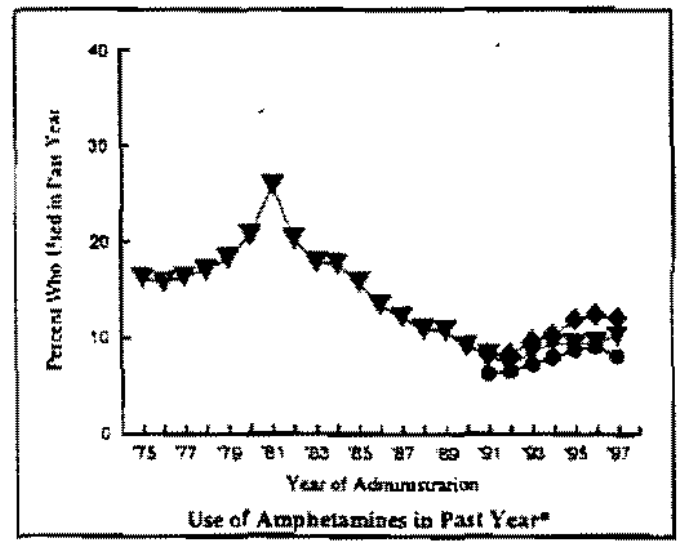












*Beginning in 1982, the question about stimulant use (i.e., amphetamines) was revised to get respondents to exclude the inappropriate reporting of non-prescription stimulants. The prevalence rate dropped slightly as a result of this methodological change.

Source: Monitoring The Future Study, The University of Michigan.

U.S. Department of Justice
Drug Enforcement Administration

DEA

Methamphetamine/Speed Abuse

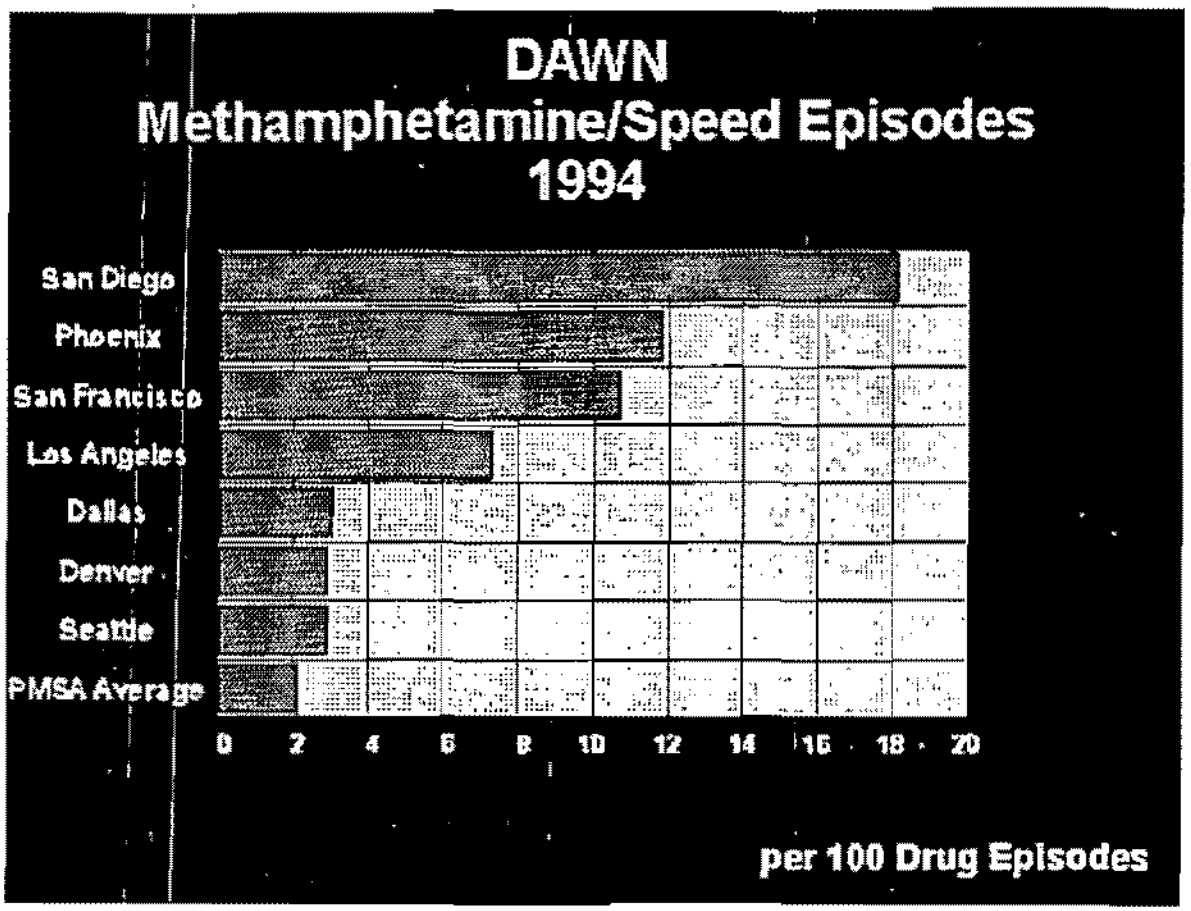
JANUARY 1996

Introduction

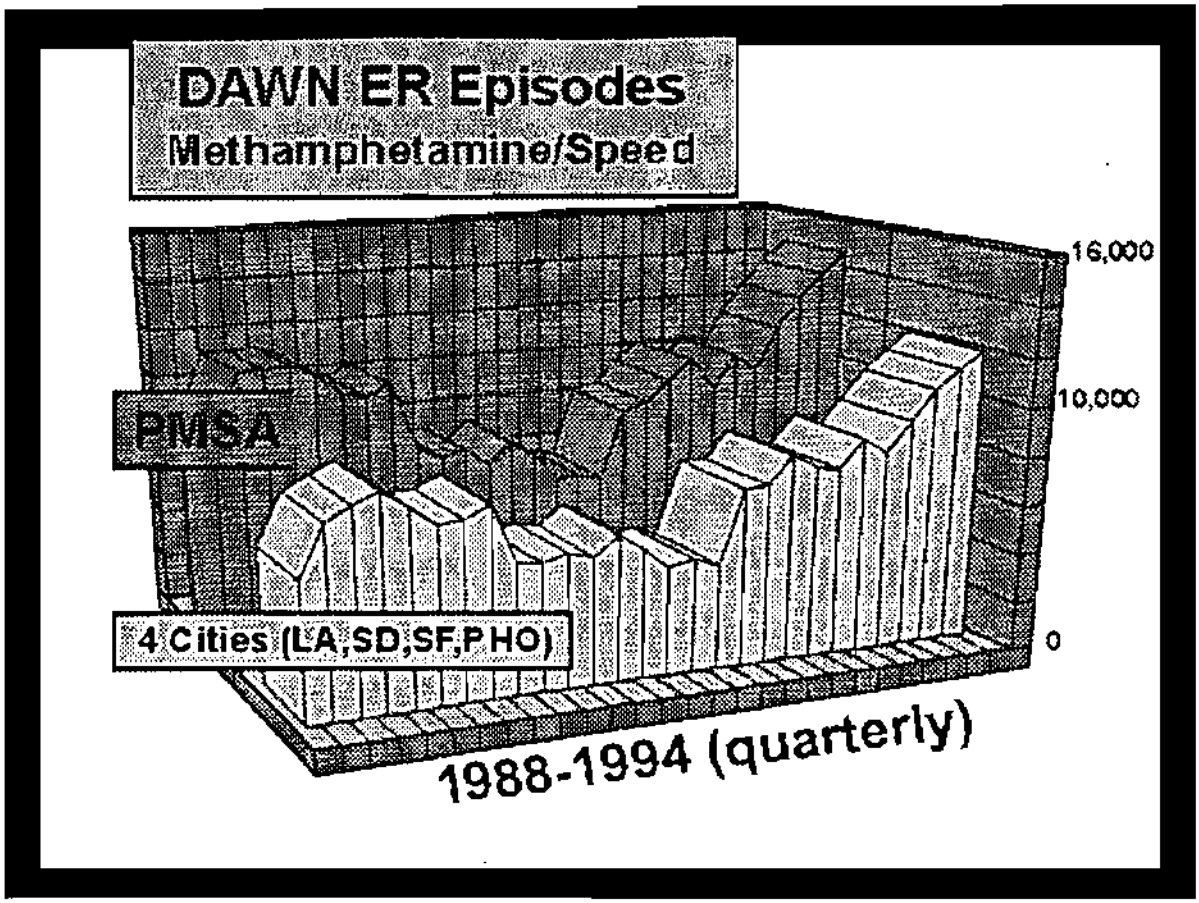
The following is a brief summary of the abuse of methamphetamine/speed as reported by emergency rooms (ERs) and medical examiners (MEs) from the Drug Abuse Warning Network (DAWN). ER data are estimates and the information is based only on data from metropolitan areas called PMSAs. Data from the suburban areas referred to as the national panel was excluded since it possibly skews the data. ME data are reported deaths from approximately 42 MEs who are located in major cities in the contiguous 48 states.

ER Episodes

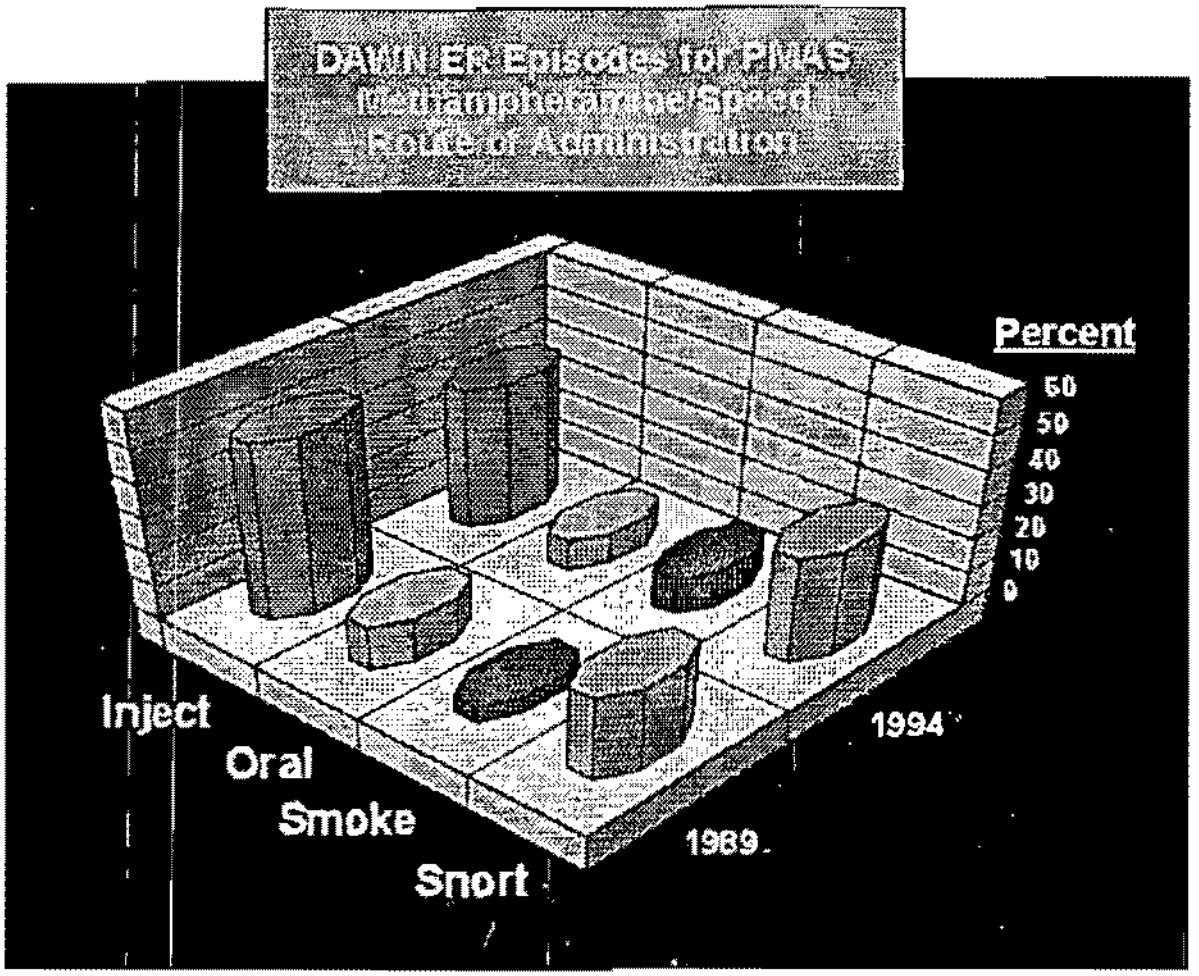
There are three salient points with respect to the data. First, after normalizing for total drug episodes, it is seen that abuse is concentrated primarily in the west and southwest.



The second point is that episodes have increased significantly in the last two years. The decrease after the passage of the Chemical Diversion and Trafficking Act (CDTA) has been erased and the peak levels of 1989 have been exceeded. (Note the degree of activity in four Western cities.)

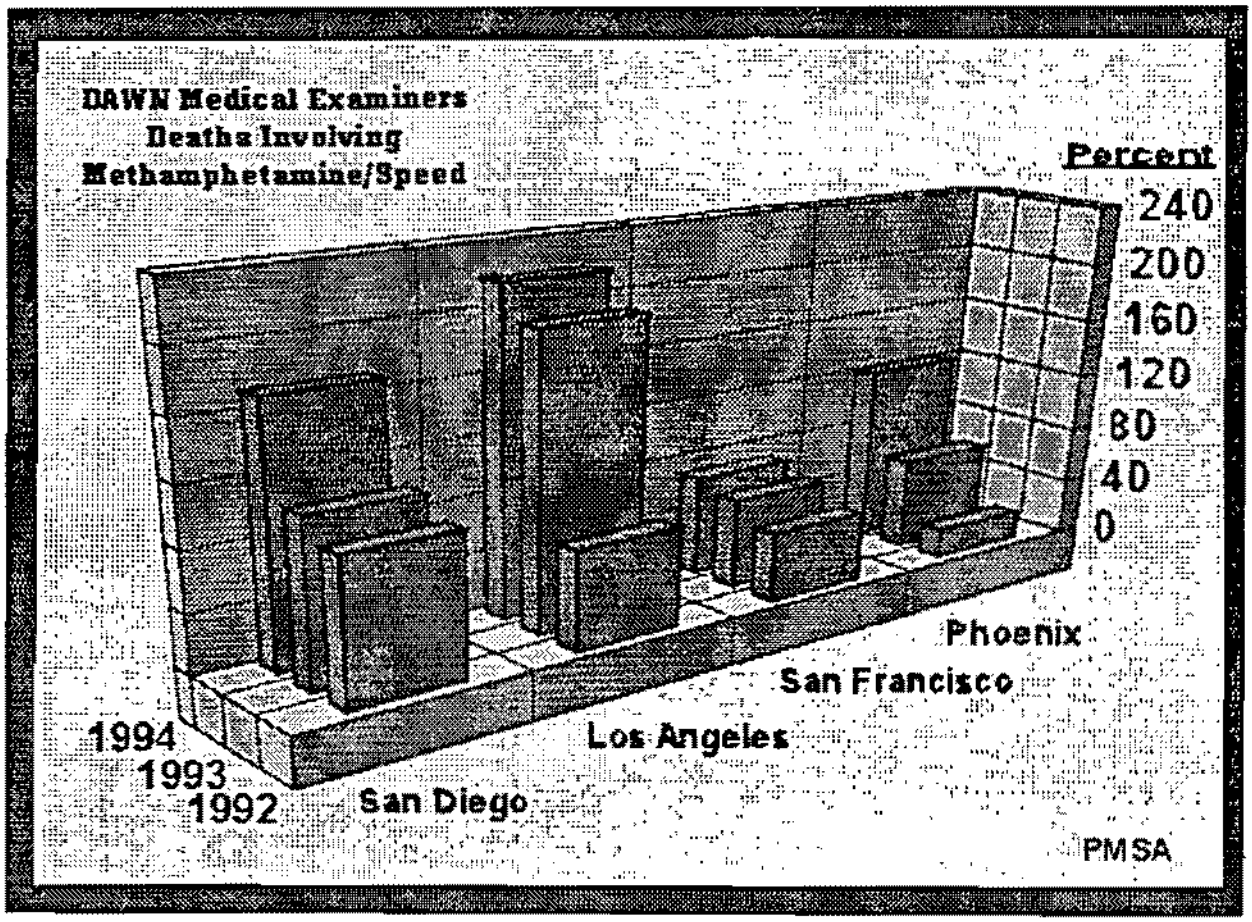


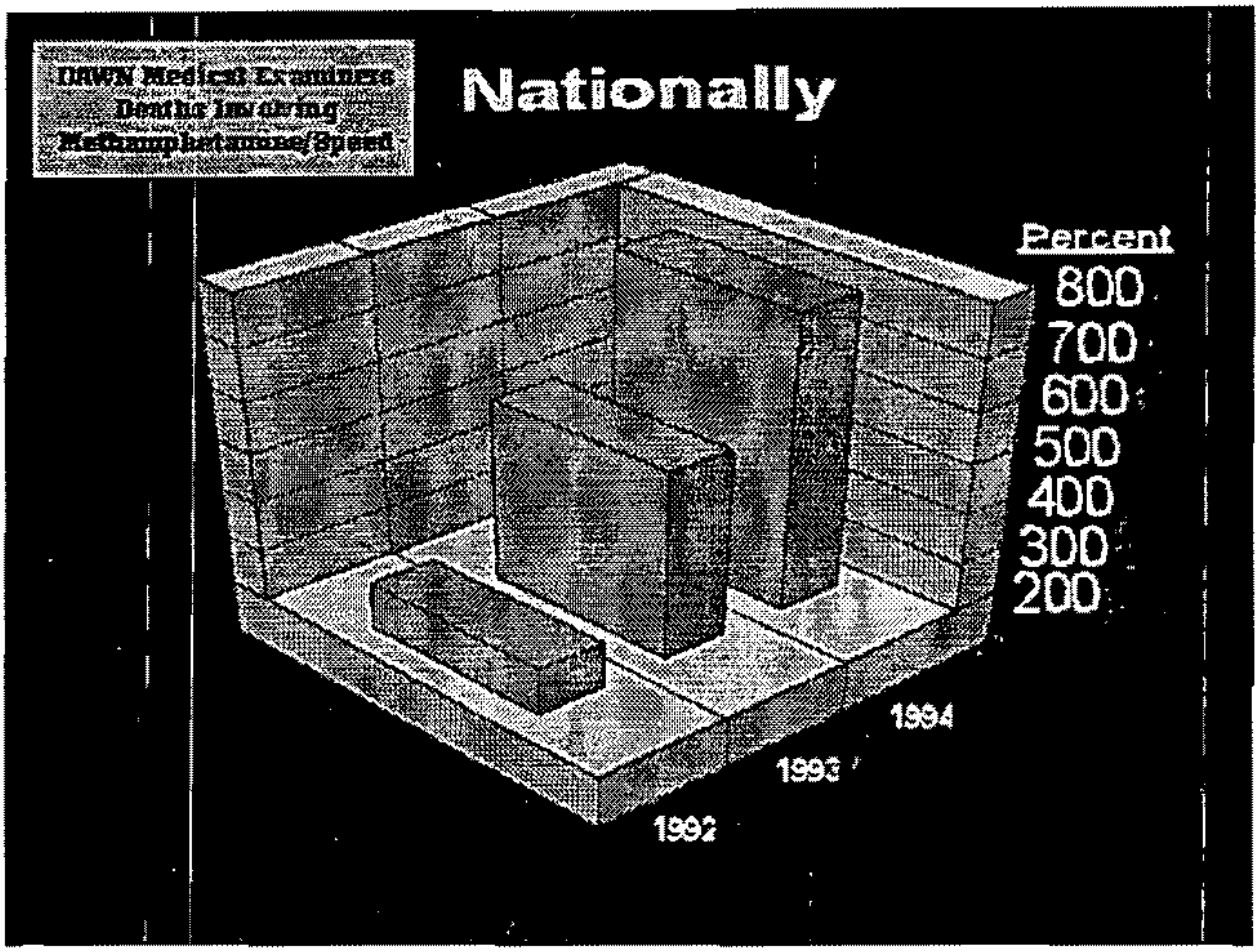
The final point concerns route of administration which shows that while injection is still predominant both snorting and smoking have increased.



ME Episodes

Several points are noted. First, nationally deaths increased 145% from 1992 to 1994. Los Angeles and Phoenix showed the most significant increase.


DAWN Medical Examiners
Deaths Involving
Methamphetamine/Speed
Percent
240
200
160
120
80
40
0
Phoenix
San Francisco
Los Angeles
San Diego
1994
1993
1992
PMSA



The following are some salient points with respect to the data.

- Nationally, episodes ranked seventh among controlled substances after cocaine, heroin, codeine, diazepam, marijuana, and methadone.
- Nationally there were 1816 episodes for the period 1991-1994.
- Eighty percent or 1459 of the 1816 deaths were reported by the areas of Los Angeles, San Diego, San Francisco, and Phoenix.
- Approximately 90% of all deaths involved multiple drugs. Those seen most often in combination were amphetamine (probably the metabolite) (71%), alcohol (31%), cocaine (22%), and heroin (18%). Ephedrine was present in about 5% of the decedents.
- The manner of death was predominantly reported to be accidental (47%), while suicide was reported in only 13% of the episodes.
- The characteristics of the decedents indicates the following. Most of the individuals were age 25-39 (57%). While about three out of every four (75%) were white, a substantial percentage (17%) were Hispanic. Males account for about 82% of the incidences.
- The following table list deaths for Los Angeles, Phoenix, San Diego, and San Francisco for 1991 through 1994 with the percentage change for 1992 and 1994.

City	1992	1993	1994	Change
Los Angeles	68	198	219	222%
Phoenix	20	63	122	510%
San Diego	97	110	172	77%
San Francisco	48	62	69	44%

Questions regarding the data should be directed to the:

Drug Enforcement Administration
Public Affairs Section
700 Army Navy Drive
Arlington, VA 22202

among students in Chicago, Dallas, Massachusetts, Miami, Minneapolis/St. Paul, and Newark. In Massachusetts, 33% of youth in grades 9–12 reported marijuana use in the past month—almost as many as reported current cigarette use. In Minneapolis/St. Paul, more than 18% of 12th graders reported using marijuana in the past month, compared with 10% in 1992. The 1995 Chicago Youth Risk Behavior Survey shows that 34% of high school students had used marijuana during their lifetime, compared with 27% in 1993.

Use of marijuana rolled and smoked in cigar wrappers—*blunts*—also continued to rise. In many cities, *blunts* sell for $3–$5 each. In Boston, recent survey data show that 34% of students in grades 7–12 reported use of *blunts* at some time in their lives.

CEWG field reports indicate that marijuana is being mixed with other substances. In Atlanta, Dallas, Chicago, Miami, New York City, Philadelphia, St. Louis, and Texas, *blunts* and *joints* containing marijuana and crack are sold on inner-city street corners. In Chicago, Philadelphia, Texas, and Washington, D.C., marijuana and PCP are frequently mixed. The mixture is called *loveboat*.

Methamphetamine

CEWG reports on methamphetamine use demonstrate the value of this ongoing drug abuse surveillance system. CEWG data over the years show that patterns of methamphetamine use have been constantly changing. Trends have varied dramatically within and across sites at different points in time. The most current available indicator data (for 1995 and 1996) reflect the variability. They show:

- a current decrease in some metropolitan areas where methamphetamine use has been and continues to be a serious problem
- increases in some areas in the West and in Hawaii
- no apparent increases in areas of the South where increases were expected
- continuing low levels in Chicago and East Coast areas.

The CEWG has been closely monitoring and reporting on methamphetamine patterns and trends since indicators showed sharp increases in methamphetamine ED mentions and treatment admissions in Philadelphia in 1983. Soon thereafter, outbreaks were identified in San Diego (1984) and Dallas (1986), followed in 1987 by Phoenix, and in 1988 by Los Angeles, San Francisco, and Seattle. Honolulu, Hawaii, which was added to the CEWG in 1990, began reporting on *ice* (crystal methamphetamine) use in that State at CEWG meetings.

During the early 1990s, indicators showed increases in methamphetamine use had occurred in the West and Southwest and had subsequently spread to both metropolitan and rural areas in the South and Midwest.

The 1995–1996 indicator data show declines in methamphetamine in two high-use cities—Phoenix and San Diego. While methamphetamine (primary drug of abuse) still accounted for 32% of all treatment admissions in San Diego in 1996, positive screens for adult arrestees declined to 29.9% (from 37.1% in 1995). In Phoenix, there were declines not only in treatment admissions and methamphetamine-positive urine toxologies among adult arrestees (from 1995 to 1996) but also in ED methamphetamine mentions and deaths (from 1994 to 1995).

There was no evidence from the 1995-1996 indicator data that methamphetamine use had spread to Miami, although increases in use had been documented in areas on the west coast of Florida. Indicators show declines in Minneapolis/St. Paul, despite the reported resurgence of methamphetamine use in some nearby midwestern States. In 1996, increases in methamphetamine use (based on indicators) were reported in Denver, Honolulu, Los Angeles, San Francisco, and Seattle.

Source: National Institutes of Health, National Institute on Drug Abuse, Community Epidemiologic Work Group (CEWG). *Advance Report*, June 1997.

Advance Report of the 41st meeting of the CEWG[1]

This Advance Report is a synthesis of findings presented at the 41st meeting of the Community Epidemiology Work Group (CEWG) held in Austin, Texas, December 10-13, 1996. The CEWG is a network of epidemiologists and researchers, sponsored by the National Institutes of Health, National Institute on Drug Abuse, that meets biannually to review current and emerging substance abuse problems. Members present drug abuse indicator data and other quantitative information gathered from local, city, State, and Federal sources. These data are enhanced with qualitative information obtained through cthnographic research, focus groups, interviews, and other community sources.

Drug Abuse Highligbts for the United States

National trends include the continuing predominance of cocaine as the major drug problem, although at a stable level. Marijuana use is rising rapidly, particularly among youth, and often in combination with other drugs. Younger users also are contributing to an increase in heroin use in many CEWG cities. Methamphetamine is appearing in new areas of the country.

National drug abuse indicators include the Drug Abuse Warning Network (DAWN) emergency department (ED) drug-related mentions, drug-related deaths reported by medical examiners, drugs reported by clients entering treatment, Drug Use Forecasting (DUF) urinalyses data on arrestees/detainees, and Drug Enforcement Agency (DEA) price, purity, and seizure data. These indicators show little overall change in patterns of use for crack, powder cocaine, methamphetamine, PCP, and LSD from 1994 to the present. These same indicators show increases in marijuana use during this same period. ED data show more heroin users being treated in 1995 than in prior years. Although total methamphetamine DAWN ED mentions did not show an increase, other indicators strongly suggest that the use of this drug is spreading to the Midwest and South.

In examining the data, CEWG members reported geographic/regional differences in patterns and trends by age, gender, and ethnic group. Comparisons were made across areas, thus identifying emerging trends and the potential spread of drugs from one community to another.

[1] Source: U.S. Department of Health and Human Services, National Institute on Drug Abuse. *Epidemiologic Trends in Drug Abuse, Advance Report*. December 1996.

Methamphetamine[2]

Methamphetamine, produced and used in many different ways and forms, is difficult to identify, monitor, and control. Indicator data presented at the CEWG meeting show that methamphetamine use is still highest in western and southwestern areas, but that use is spreading to other areas (the Midwest, South, and Southeast). Between 1994 and 1995, there was a slight decline in overall DAWN methamphetamine-related mentions and relatively little change in the percentage of arrestees who tested positive for methamphetamine in the DUF data system. This change was attributed to a crackdown on sources of supply in some areas and a resultant decrease in the availability of this drug in the last 6 months of 1995. DEA reports show that agents became increasingly aware of the role of organized Mexican drug groups in establishing clandestine laboratories, especially in rural areas along trafficking routes used to distribute other drugs.

However, in some cities data sources showed increased methamphetamine use. Methamphetamine-related DAWN mentions increased in San Francisco, Atlanta, Dallas, and
Denver but decreased sharply in San Diego, perhaps as a result of actions of the San Diego Strike Force, which was implemented to address the growing use of methamphetamine. DUF data suggest that areas such as Denver, Omaha (not a CEWG site), and St. Louis could experience significant increases in methamphetamine-positive rates if current trends continue.

In 1995, approximately 6% of all DUF adult and juvenile arrestees tested positive for methamphetamine. In the 8 sites with the highest percentages, white male and female arrestees (26% and 28% respectively) were much more likely than Black male and female arrestees (both 3%) and Hispanic male (11%) and female arrestees (15%) to test positive for methamphetamine. The form of methamphetamine use varies according to user population and geographic area. For example, although injection is the most common route of administration in San Francisco, ice (generally smoked) is reportedly popular among Asian Americans and Pacific Islanders in San Francisco. Ice continues to be a problem of primary concern in Honolulu and other parts of Hawaii.

According to DEA reports, the street price of methamphetamine, which ranges from $50 to $150 per gram nationwide, has undergone little change in the past 6 years. The street price is heavily influenced by the supply of the precursors-ephedrine and pseudoephedrine.

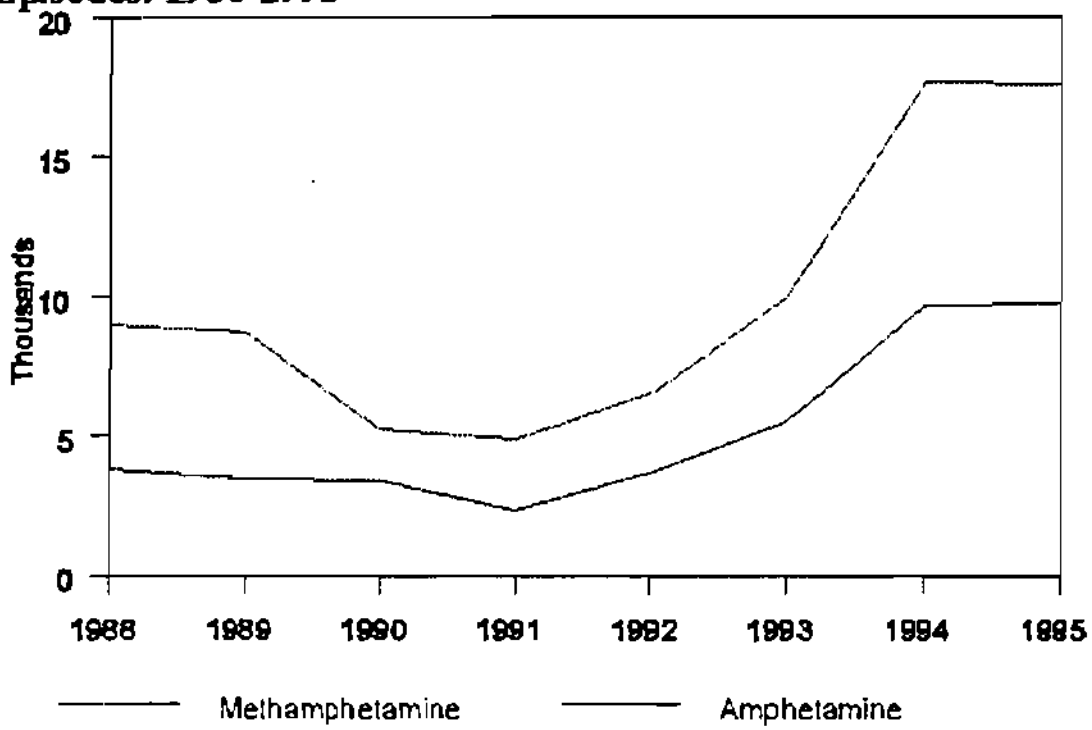
[2] Source: U.S. Department of Health and Human Services. National Institute on Drug Abuse. *Epidemiologic Trends in Drug Abuse, Advance Report*, December 1996.

Clandestine methamphetamine laboratories are, reportedly, being established in rural areas near CEWG metropolitan sites. Since 1995, an unprecedented 9 methamphetamine labs have been seized in Michigan, mostly in rural areas. There is growing concern that methamphetamine use may be increasing in rural areas because of the location of labs. Treatment and ED data, as well as anecdotal reports, show increases in methamphetamine use in rural areas in 1995. Methamphetamine production was also reported as a major law enforcement problem in the rural Midwest.

Source: U.S. Department of Health and Human Services, National Institute on Drug Abuse. *Epidemiologic Trends in Drug Abuse, Advance Report*. December 1996.

Methamphetamine and Amphetamine

Number of Methamphetamine and Amphitamine -Related Episodes: 1988-1995



o Between 1988 and 1991, there was a decrease in methamphetamine-related emergency department episodes (from 9,000 to 4,900). However, from 1991 through 1994, methamphetamine-related episodes rose 261 percent to 17,600. There was a corresponding increase of 322 percent in the number of amphetamine-related episodes (from 2,300 in 1991 to 9,700 in 1994). Between 1994 and 1995, there was no change in the number of methamphetamine- or amphetamine-related episodes reported. However, the half-year estimates indicate that the number of episodes rose in the first half of 1995 and decreased in the last half of 1995. (See Discussion of Results section for an analysis of this finding.)

ESTIMATED RATE OF EMERGENCY DEPARTMENT METHAMPHETAMINE/SPEED MENTIONS PER 100,000 POPULATION, BY METROPOLITAN AREA BY HALF YEAR, 1ST HALF 1991 - 2ND HALF 1996

CATEGORY: Methamphetamine/SPEED

	JAN-JUN 91	JUL-DEC 91	JAN-JUN 92	JUL-DEC 92	JAN-JUN 93	JUL-DEC 93	JAN-JUN 94	JUL-DEC 94	JAN-JUN 95*	JUL-DEC 95*	JAN-JUN 96*	JUL-DEC 96*
CATEGORY												
TOTAL U.S.	1.1	1.1	1.1	1.7	1.8	2.5	3.4	4.3	4.2	2.7	1.7	2.9
ATLANTA	1.2	...	0.4	0.4	...	1.7	1.9	1.9	2.3	3.1	1.3	3.0
BALTIMORE	...	...	...	...	...	...	...	...	...	...	...	...
BOSTON(NECMA)	...	...	...	...	...	...	...	...	...	...	...	...
BUFFALO	...	...	...	...	...	...	...	...	...	...	...	...
CHICAGO	...	0.2	...	...	0.2	...	...	0.2	0.5	...	0.3	...
DALLAS	2.7	1.7	1.6	1.4	2.1	...	2.7	3.9	5.0	3.2	2.1	2.5
DENVER	1.6	1.0	0.9	1.2	1.9	1.7	3.8	5.8	6.2	6.5	2.5	4.3
DETROIT	0.6	...	...	...	0.3	0.3	0.3	...	...	...	...	...
LOS ANGELES-LB	3.6	2.8	3.8	6.6	7.5	7.7	8.3	8.9	10.1	5.6	6.7	8.4
MIAMI-HIALEAH	...	...	...	...	...	...	...	...	...	...	...	...
MINNEAPOLIS-SP	0.6	...	0.6	1.2	0.7	1.2	1.6	1.2	2.1	1.3	1.8	2.1
NEW ORLEANS	2.0	1.5	...	1.1	...	...	...	0.9	...	1.0	0.9	0.9
NEW YORK	...	...	0.2	...	0.1	...	0.1	...	0.2	...	...	0.2
NEWARK	...	...	...	...	...	...	...	...	...	...	...	...
PHILADELPHIA	1.0	1.1	1.8	1.4	1.3	1.1	1.3	0.7	0.5	1.4	0.4	0.9
PHOENIX	4.9	3.7	6.1	8.4	11.8	12.9	19.4	22.1	22.1	16.4	18.3	16.2
ST LOUIS-MO-IL	0.7	0.5	...	...	0.4	0.8	1.2	1.1	2.6	0.8	0.6	1.0
SAN DIEGO	12.3	10.7	18.2	22.8	18.5	22.2	21.2	18.5	17.7	11.7	10.2	16.0
SAN FRANCISCO	31.4	25.1	21.8	24.0	35.5	29.8	31.2	51.1	44.7	34.7	27.8	38.3
SEATTLE	2.6	2.4	2.0	3.5	4.5	5.1	6.9	9.3	10.0	4.3	3.6	6.6
WASHINGTON DC	...	0.4	...	...	...	...	...	0.9	...	0.3	...	...
2-NAT PANEL	0.7	0.8	...	1.3	1.3	2.1	3.2	4.1	4.0	2.6	1.2	2.5

... ESTIMATE DOES NOT MEET STANDARD OF PRECISION OR IS LESS THAN 10.
* ESTIMATES FOR THIS TIME PERIOD ARE PRELIMINARY. FINAL ESTIMATES WILL BE PRODUCED LATER AND MAY BE HIGHER OR LOWER THAN PRELIMINARY ESTIMATES DUE TO NONRESPONSE ADJUSTMENT AND OTHER FACTORS.
NOTE: THESE ESTIMATES ARE BASED ON A REPRESENTATIVE SAMPLE OF NON-FEDERAL SHORT STAY HOSPITALS WITH 24-HOUR EMERGENCY DEPARTMENTS.
SOURCE: SAMHSA, DRUG ABUSE WARNING NETWORK, APR. 97 FILES.

ESTIMATED RATE OF EMERGENCY DEPARTMENT METHAMPHETAMINE/SPEED MENTIONS PER 100,000 POPULATION, BY METROPOLITAN AREA BY YEAR, 1989 - 1996

CATEGORY: Methamphetamine/SPEED

	TOTAL 1989	TOTAL 1990	TOTAL 1991	TOTAL 1992	TOTAL 1993	TOTAL 1994	TOTAL 1995*	TOTAL 1996*
CATEGORY								
TOTAL U.S.	4.0	2.4	2.2	2.9	4.3	7.7	7.0	4.6
ATLANTA	2.9	3.8	1.5	0.8	2.1	3.8	5.4	4.4
BALTIMORE	...	0.5	...	...	...	...	...	...
BOSTON(NECMA)	0.7	0.4	0.4	0.3	0.4	...	...	...
BUFFALO	...	...	...	...	...	...	...	...
CHICAGO	0.6	0.5	0.3	0.2	0.4	0.4	0.6	0.4
DALLAS	15.4	7.0	4.3	2.9	3.4	6.6	8.2	4.6
DENVER	8.1	5.2	2.6	2.1	3.7	9.6	12.6	6.9
DETROIT	0.8	0.6	0.7	0.2	0.6	0.4	...	...
LOS ANGELES-LB	6.9	5.6	6.4	10.3	15.2	17.2	15.7	15.1
MIAMI-HIALEAH	...	...	...	...	...	...	...	...
MINNEAPOLIS-SP	2.7	2.0	1.0	1.9	1.9	2.8	3.5	3.9
NEW ORLEANS	1.4	3.9	3.6	1.6	0.9	1.0	1.6	1.8
NEW YORK	0.5	0.3	0.2	0.3	0.2	0.3	0.3	0.2
NEWARK	...	...	...	0.7	...	...	...	...
PHILADELPHIA	3.8	1.9	2.1	3.2	2.4	2.0	1.9	1.3
PHOENIX	16.6	9.5	8.6	14.5	24.7	41.5	38.4	34.5
ST LOUIS-MO-IL	0.8	2.9	1.2	0.7	1.3	2.3	3.4	1.6
SAN DIEGO	47.2	34.1	22.9	41.1	40.6	39.7	29.3	26.3
SAN FRANCISCO	77.3	50.4	56.5	45.8	65.3	82.4	79.4	66.1
SEATTLE	11.7	3.3	5.0	5.5	9.6	16.2	14.2	10.3
WASHINGTON DC	0.9	0.5	0.6	...	0.5	0.9	0.7	0.3
2-MAT PANEL	2.9	1.5	1.4	2.0	3.4	7.4	6.6	3.7

... ESTIMATE DOES NOT MEET STANDARD OF PRECISION OR IS LESS THAN 10.
* ESTIMATES FOR THIS TIME PERIOD ARE PRELIMINARY. FINAL ESTIMATES WILL BE PRODUCED LATER AND MAY BE HIGHER OR LOWER THAN PRELIMINARY ESTIMATES DUE TO NONRESPONSE ADJUSTMENT AND OTHER FACTORS.
NOTE: THESE ESTIMATES ARE BASED ON A REPRESENTATIVE SAMPLE OF NON-FEDERAL SHORT STAY HOSPITALS WITH 24-HOUR EMERGENCY DEPARTMENTS.
SOURCE: SAMHSA, DRUG ABUSE WARNING NETWORK, APR. 97 FILES.

Table 2.06e - Drugs mentioned most frequently by medical examiners in 1995 according to gender of decedent

(Drugs with fewer than 10 mentions are excluded)

Rank	Drug name	Number of mentions	Percent of total episodes	Rank	Drug name	Number of mentions	Percent of total episodes
Male decedents				**Female decedents**			
1	Heroin/Morphine [1]	3,485	49.75	1	Cocaine	837	38.64
2	Cocaine	3,346	47.77	2	Heroin/Morphine [1]	675	31.16
3	Alcohol-in-combination	2,957	42.21	3	Alcohol-in-combination	641	29.59
4	Codeine	909	12.98	4	Codeine	245	11.31
5	Marijuana/Hashish	617	8.81	5	Amitriptyline	210	9.70
6	Diazepam	476	6.82	6	Diazepam	178	8.22
7	Methamphetamine/Speed	394	5.62	7	Diphenhydramine	171	7.89
8	Methadone	336	4.80	8	Methadone	158	7.29
9	Diphenhydramine	285	4.07	9	Nortriptyline	149	6.88
10	Amitriptyline	249	3.55	10	Acetaminophen	148	6.83
11	Amphetamine	226	3.23	11	D-Propoxyphene	142	6.56
12	D-Propoxyphene	222	3.17	12	Marijuana/Hashish	101	4.66
13	Quinine	220	3.14	13	Methamphetamine/Speed	94	4.34
14	Acetaminophen	215	3.07	14	Fluoxetine	69	3.19
15	Lidocaine	175	2.50	15	Doxepin	67	3.09

[1] Includes opiates not specified as to type.

NOTES: Percentages are based on raw medical examiner drug abuse case counts of 7,005 male decedents and 2,166 female decedents.

In using this table the reader should be aware that individual drugs are frequently mentioned in combination with other drugs and that the population at risk of an adverse consequence relating to the abuse of any particular drug is unknown, i.e., the number of people abusing a particular substance, either alone or in any combination, is unknown. Thus the relative frequency of mentions of any drug pertains only to the DAWN system and not to the larger population at risk.

The drug categories represented in this table are more detailed than those in other tables in this report. Specifically, codeine combination drugs and individual inhalants are listed separately in this table but are grouped in aggregate categories in the main tables of this report. Diphenylhydantoin sodium is listed as hydantoin. Also the benzodiazepine category includes benzodiazepines other than alprazolam, chlordiazepoxide, clonazepam, clorazepate, diazepam, flurazepam, lorazepam, nitrazepam, oxazepam, prazepam, triazolam, and temazepam.

Within the context of the DAWN drug classification scheme, some specific drugs, e.g., certain combination drugs, are not grouped together at the roughly generic level reflected in most of the tables in this report. Some of these "ungrouped" drugs were reported frequently enough to meet the criteria for inclusion in this table but are not shown. These drugs, however, are included in the other tables in this report under the categories of "other/unspecified" drugs within therapeutic classes or under "all other drugs," as appropriate.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file).

MEDICAL EXAMINER DATA[1]

Table 2.07 - Number of mentions and percent distribution of total deaths by selected drug group according to gender: 1995

Drug groups[1] (Therapeutic class by drug category) (Examples of commonly encountered brands.)	TOTAL[2]		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
TRANQUILIZERS	1,251		877		373	
Diazepam (Valium)	650	7.2	478	6.8	178	8.2
Alprazolam (Xanax)	130	1.4	78	1.1	51	2.4
Chlordiazepoxide (Librium)	99	1.1	71	1.0	26	1.2
Lorazepam (Ativan)	25	0.3	16	0.2	9	0.4
Meprobamate	83	0.9	56	0.8	26	1.2
Other/unspecified tranquilizers	265	2.9	178	2.5	83	3.8
NARCOTIC ANALGESICS	6,492		5,142		1,322	
Heroin/Morphine[3]	4,178	45.3	3,485	49.8	675	31.2
d-Propoxyphene (Darvocet-N, Darvon)	366	4.0	222	3.2	142	6.6
Methadone	497	5.4	336	4.8	158	7.3
Oxycodone (Percocet-5, Percodan, Tylox)	51	0.6	37	0.5	13	0.6
Codeine	1,156	12.5	909	13.0	245	11.3
Meperidine HCl (Demerol)	41	0.4	24	0.3	17	0.8
Hydromorphone (Dilaudid)	16	0.2	10	0.1	5	0.2
Other/unspecified narcotic analgesics	187	2.0	119	1.7	67	3.1
NON-NARCOTIC ANALGESICS	534		311		217	
Aspirin	105	1.1	58	0.8	45	2.1
Acetaminophen (Tylenol)	367	4.0	215	3.1	148	6.8
Pentazocine (Talwin, Talacen)	2	*	1	*	1	*
Other/unspecified non-narcotic analgesics	60	0.7	37	0.5	23	1.1
NON-BARBITURATE SEDATIVES	123		85		38	
Flurazepam (Dalmane)	32	0.3	15	0.2	17	0.8
Ethchlorvynol (Placidyl)	2	0.1	2	0.1	*	*
Glutethimide (Doriden)	1	*	1	*	*	*
Chloral hydrate	2	*	*	*	2	0.1
Other/unspecified non-barbiturate sedatives	81	0.9	42	0.6	39	1.8
ANTIDEPRESSANTS	1,397		764		644	
Amitriptyline (Elavil)	463	5.0	249	3.6	210	9.7
Doxepin (Sinequan)	155	1.7	87	1.2	67	3.1
Fluoxetine (Prozac)	154	1.7	85	1.2	69	3.2
Imipramine (Tofranil)	76	0.8	34	0.5	42	1.9
Desipramine (Norpramin)	86	0.9	41	0.6	43	2.0
Other/unspecified antidepressants	463	5.0	248	3.5	213	9.8
ANTIPSYCHOTICS	176		103		73	
Chlorpromazine (Thorazine)	33	0.4	22	0.3	11	0.5
Thioridazine (Mellaril)	69	0.7	38	0.5	31	1.4
Haloperidol (Haldol)	12	0.1	10	0.1	2	0.1
Trifluoperazine (Stelazine)	7	0.1	2	*	5	0.2
Other/unspecified antipsychotics	55	0.6	31	0.4	24	1.1
BARBITURATE SEDATIVES	394		244		147	
Phenobarbital	157	1.7	103	1.3	53	2.4
Secobarbital (Seconal)	56	0.6	37	0.5	19	0.8
Pentobarbital (Nembutal)	34	0.4	25	0.4	8	0.4
Other/unspecified barbiturate sedatives	147	1.6	79	1.1	68	3.1
AMPHETAMINES	783		627		156	
Amphetamine	286	3.1	226	3.2	60	2.8
Methamphetamine/Speed	488	5.3	394	5.6	94	4.3
Other/unspecified amphetamines	9	0.1	7	0.1	2	0.1
HALLUCINOGENS	196		165		31	
PCP/PCP combinations	192	2.1	163	2.3	29	1.3
LSD	2	*	1	*	1	*
Other/unspecified hallucinogens	2	*	1	*	1	*
OTHER DRUGS						
Alcohol in combination	3,613	39.7	2,957	42.2	641	29.6
Cocaine	4,222	46.4	3,346	47.8	837	38.6
Marijuana/Hashish	773	8.5	672	9.6	101	4.7
Diphenylhydantoin sodium (Dilantin)	86	1.0	64	0.9	24	1.1
Diphenhydramine (Benadryl)	454	5.0	285	4.1	171	7.9
Inhalants/Solvents/Aerosols	124	1.4	99	1.4	25	1.2
All other drugs	1,804		1,186		618	
DRUG UNKNOWN	12		11		1	
TOTAL DRUG MENTIONS	27,382	242.9	16,843	240.4	3,431	250.7
Total drug abuse deaths	8,715	100.0	7,005	100.0	2,166	100.0

[1] Excludes deaths in which AIDS was reported and deaths in which "drug unknown" was the only drug mentioned

[2] Includes episodes for which gender was unknown or not reported

[3] Includes opiates not specified as to type

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file)

Table 2.08 - Number of mentions and percent distribution of total deaths by selected drug group according to race/ethnicity: 1995

Drug groups therapeutic class by drug category (Examples of commonly encountered brands.)	TOTAL[2]		White		Black		Hispanic		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
TRANQUILIZERS	1,261		1,035		149		52		35	
Diazepam (Valium)	660	7.2	544	10.1	80	3.1	25	2.3	11	5.6
Alprazolam (Xanax)	130	1.4	120	2.2	7	0.3	3	0.3	-	-
Chlordiazepoxide (Librium)	98	1.1	75	1.4	17	0.7	6	0.6	-	-
Lorazepam (Ativan)	25	0.3	20	0.4	2	0.1	2	0.2	1	0.5
Meprobamate	83	0.9	68	1.3	8	0.3	3	0.3	4	2.1
Other/unspecified tranquilizers	265	2.9	208	3.9	35	1.4	13	1.2	9	4.6
NARCOTIC ANALGESICS	6,482		3,959		1,378		848		107	
Heroin/Morphine[3]	4,178	45.3	2,383	44.3	1,120	43.8	607	55.9	68	34.9
d-Propoxyphene (Darvocet N, Darvon)	366	4.0	310	5.8	29	1.1	17	1.6	10	5.1
Methadone	497	5.4	270	5.0	139	5.4	80	7.4	8	4.1
Oxycodone (Percocet 5, Percodan, Tylox)	51	0.6	44	0.8	6	0.2	-	-	1	0.5
Codeine	1,156	12.5	748	13.9	256	10.0	140	12.9	12	6.2
Meperidine HCl (Demerol)	41	0.4	28	0.5	7	0.3	3	0.3	3	1.5
Hydromorphone (Dilaudid)	16	0.2	13	0.2	3	0.1	-	-	-	-
Other/unspecified narcotic analgesics	187	2.0	163	3.0	18	0.7	1	0.1	5	2.6
NON-NARCOTIC ANALGESICS	534		422		76		22		14	
Aspirin	105	1.1	83	1.5	12	0.5	5	0.5	5	2.6
Acetaminophen (Tylenol)	367	4.0	290	5.4	55	2.1	13	1.2	9	4.6
Pentazocine (Talwin, Talacen)	2	-	2	-	-	-	-	-	-	-
Other/unspecified non-narcotic analgesics	60	0.7	47	0.9	9	0.4	4	0.4	-	-
NON-BARBITURATE SEDATIVES	123		103		9		4		7	
Flurazepam (Dalmane)	32	0.3	24	0.4	2	0.1	3	0.3	3	1.5
Ethchlorvynol (Placidyl)	7	0.1	7	0.1	-	-	-	-	-	-
Glutethimide (Doriden)	1	-	-	-	1	-	-	-	-	-
Chloral hydrate	2	-	2	-	-	-	-	-	-	-
Other/unspecified non-barbiturate sedatives	81	0.9	70	1.3	6	0.2	1	0.1	4	2.1
ANTIDEPRESSANTS	1,397		1,066		197		93		21	
Amitriptyline (Elavil)	463	5.0	338	6.3	76	3.0	43	4.0	6	3.1
Doxepin (Sinequan)	155	1.7	111	2.1	32	1.3	9	0.8	3	1.5
Fluoxetine (Prozac)	154	1.7	140	2.6	10	0.4	2	0.2	2	1.0
Imipramine (Tofranil)	76	0.8	65	1.2	4	0.2	5	0.5	2	1.0
Desipramine (Norpramin)	86	0.9	72	1.3	10	0.4	3	0.3	1	0.5
Other/unspecified antidepressants	463	5.0	360	6.7	65	2.5	31	2.9	7	3.6
ANTIPSYCHOTICS	176		130		33		10		3	
Chlorpromazine (Thorazine)	33	0.4	28	0.5	3	0.1	1	0.1	1	0.5
Thioridazine (Mellaril)	69	0.7	49	0.9	13	0.5	5	0.5	2	1.0
Haloperidol (Haldol)	12	0.1	5	0.1	5	0.2	2	0.2	-	-
Trifluoperazine (Stelazine)	7	0.1	4	0.1	3	0.1	-	-	-	-
Other/unspecified antipsychotics	55	0.6	44	0.8	9	0.4	2	0.2	-	-
BARBITURATE SEDATIVES	394		323		38		19		14	
Phenobarbital	157	1.7	127	2.4	18	0.7	9	0.8	3	1.5
Secobarbital (Seconal)	56	0.6	51	0.9	2	0.1	1	0.1	2	1.0
Pentobarbital (Nembutal)	34	0.4	25	0.5	6	0.2	1	0.1	2	1.0
Other/unspecified barbiturate sedatives	147	1.6	120	2.2	12	0.5	8	0.7	7	3.6
AMPHETAMINES	783		596		38		123		26	
Amphetamine	286	3.1	213	4.0	13	0.5	48	4.4	12	6.2
Methamphetamine/Speed	468	5.3	375	7.0	24	0.9	75	6.9	14	7.2
Other/unspecified amphetamines	9	0.1	8	0.1	1	-	-	-	-	-
HALLUCINOGENS	105		75		78		41		3	
PCP/PCP combinations	193	2.1	71	1.3	78	3.0	41	3.8	3	1.5
LSD	3	-	2	-	-	-	-	-	-	-
Other/unspecified hallucinogens	2	-	2	-	-	-	-	-	-	-
OTHER DRUGS										
Alcohol in combination	3,613	39.2	2,066	38.4	954	37.5	324	48.3	69	35.4
Cocaine	4,207	45.6	1,753	32.6	1,782	69.6	598	55.1	59	30.2
Marijuana/hashish	723	7.8	432	8.0	183	7.2	82	7.6	26	14.4
Diphenhydramine sodium (Diamine)	89	1.0	55	1.0	25	1.0	7	0.6	2	1.0
Diphenhydramine (Benadryl)	458	5.0	330	6.1	81	3.2	31	2.9	16	8.2
Inhalants Solvents/Aerosols	125	1.4	83	1.5	22	0.9	14	1.3	6	3.1
All other drugs	1,804		1,145		495		118		50	
DRUG UNKNOWN	12		12		-		-		-	
TOTAL DRUG MENTIONS	22,383	242.6	13,608	253.1	5,738	224.2	2,367	238.2	450	230.8
Total drug abuse deaths	9,216	100.0	5,376	100.0	2,559	100.0	1,066	100.0	195	100.0

[1] Excludes deaths in which AIDS was reported and deaths in which "drug unknown" was the only drug mentioned.

[2] Includes decedents for which race/ethnicity was unknown or not reported.

[3] Includes opiates not specified as to type.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file).

Table 2.09 - Number of mentions and percent distribution of total deaths by selected drug group according to age: 1995

Drug groups: therapeutic class by drug category	6-17 years		18-25 years		26-34 years		35-44 years		45-54 years		55 years and older	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
TRANQUILIZERS	7		67		251		528		244		152	
Diazepam	2	2.0	31	3.8	148	6.8	281	7.6	128	7.7	69	9.8
Alprazolam	1	1.0	14	1.7	30	1.4	53	1.4	18	1.1	14	2.0
Chlordiazepoxide	-	-	1	0.1	12	0.5	46	1.2	25	1.5	13	1.8
Lorazepam	-	-	1	0.1	1	*	14	0.4	4	0.2	5	0.7
Meprobamate	-	-	4	0.5	14	0.6	38	1.0	21	1.3	6	0.8
Other/unspecified tranquilizers	4	4.0	16	1.9	56	2.6	96	2.6	45	2.8	45	6.4
NARCOTIC ANALGESICS	30		438		1,505		2,914		1,206		378	
Heroin/Morphine[2]	20	20.0	327	39.7	1,036	47.3	1,865	50.9	708	42.8	186	26.3
d-Propoxyphene	-	-	10	1.2	59	2.7	164	4.4	77	4.7	55	7.8
Methadone	1	1.0	10	1.2	92	4.2	229	6.2	131	7.9	32	4.5
Oxycodone	-	-	4	0.5	14	0.6	15	0.4	8	0.5	10	1.4
Codeine	5	5.0	76	9.2	252	11.5	517	14.0	227	13.7	77	10.9
Meperidine HCl	-	-	2	0.2	12	0.5	14	0.4	9	0.5	4	0.6
Hydromorphone	-	-	2	0.2	5	0.2	4	0.1	4	0.2	1	0.1
Other/unspecified narcotic analgesics	4	4.0	7	0.9	35	1.6	86	2.3	42	2.5	13	1.8
NON-NARCOTIC ANALGESICS	9		34		85		197		116		87	
Aspirin	1	1.0	4	0.5	13	0.6	38	1.0	26	1.6	21	3.0
Acetaminophen	6	6.0	26	3.2	61	2.8	136	3.7	78	4.7	58	8.2
Pentazocine	-	-	-	-	-	-	1	*	1	0.1	-	-
Other/unspecified non-narcotic analgesics	2	2.0	4	0.5	11	0.5	22	0.6	13	0.8	8	1.1
NON-BARBITURATE SEDATIVES	-		5		16		45		27		28	
Flurazepam	-	-	-	-	4	0.2	10	0.3	7	0.4	11	1.6
Ethchlorvynol	-	-	1	0.1	-	-	3	0.1	3	0.2	-	-
Glutethimide	-	-	-	-	1	-	-	-	-	-	-	-
Chloral hydrate	-	-	-	-	-	-	1	*	1	0.1	-	-
Other/unspecified non-barbiturate sedatives	-	-	4	0.5	13	0.6	31	0.8	16	1.0	17	2.4
ANTIDEPRESSANTS	17		54		231		572		328		185	
Amitriptyline	2	2.0	16	1.9	75	3.4	197	5.3	115	7.0	54	7.6
Doxepin	2	2.0	7	0.9	25	1.1	60	1.6	42	2.5	19	2.7
Fluoxetine	2	2.0	6	0.7	23	1.1	70	1.9	33	2.0	19	2.7
Imipramine	4	4.0	5	0.6	15	0.7	26	0.7	15	0.9	10	1.4
Desipramine	4	4.0	5	0.7	14	0.6	33	0.9	17	1.0	10	1.4
Other/unspecified antidepressants	3	3.0	14	1.7	79	3.6	188	5.0	105	6.4	73	10.3
ANTIPSYCHOTICS	-		13		34		69		43		16	
Chlorpromazine	-	-	1	0.1	9	0.4	15	0.4	5	0.3	3	0.4
Thioridazine	-	-	5	0.6	14	0.6	26	0.7	20	1.2	4	0.6
Haloperidol	-	-	1	0.1	3	0.1	6	0.2	2	0.1	-	-
Trifluoperazine	-	-	-	-	-	-	5	0.1	1	0.1	1	0.1
Other/unspecified antipsychotics	-	-	6	0.7	8	0.4	17	0.5	15	0.9	8	1.1
BARBITURATE SEDATIVES	4		20		75		142		82		67	
Phenobarbital	2	2.0	8	1.0	31	1.4	59	1.6	36	2.2	21	3.0
Secobarbital	-	-	1	0.1	5	0.2	15	0.4	14	0.8	21	3.0
Pentobarbital	2	2.0	3	0.4	7	0.3	6	0.2	6	0.4	9	1.3
Other/unspecified barbiturate sedatives	-	-	8	1.0	35	1.6	62	1.7	26	1.6	16	2.3
AMPHETAMINES	16		105		239		293		99		16	
Amphetamine	7	7.0	39	4.7	87	4.0	109	2.9	34	2.1	6	0.8
Methamphetamine/Speed	9	9.0	64	8.1	149	6.8	182	4.9	64	3.9	12	1.7
Other/unspecified amphetamines	-	-	3	0.4	3	0.1	2	0.1	1	0.1	-	-
HALLUCINOGENS	6		52		69		53		9		7	
PCP/PCP combinations	6	6.0	50	6.1	66	3.1	53	1.4	9	0.5	6	0.8
LSD	-	-	1	0.1	1	*	-	-	-	-	-	-
Other/unspecified hallucinogens	-	-	1	0.1		-	-	-	-	-	1	0.1
OTHER DRUGS												
Alcohol in combination	13	13.0	301	36.9	937	42.6	1,529	41.3	632	38.2	188	26.6
Cocaine	20	20.0	342	41.6	1,154	52.6	1,775	48.0	713	43.1	177	25.0
Marijuana/hashish	33	33.0	177	21.5	190	8.7	228	6.2	78	4.7	16	2.3
Diphenhydramine sodium	1	1.0	4	0.5	22	1.0	33	0.9	17	1.0	12	1.7
Diphenhydramine	8	8.0	41	5.0	95	4.3	181	4.9	74	4.5	54	7.6
Inhalants/Solvents/Aerosols	4	4.0	10	1.2	30	1.4	39	1.1	21	1.3	20	2.8
All other drugs	15		130		403		680		366		196	
DRUG UNKNOWN	-		5		3		4		-		-	
TOTAL DRUG MENTIONS	182	182.0	1,834	219.3	5,316	244.6	9,281	250.8	4,057	245.4	1,601	226.4
Total drug abuse deaths	100	100.0	821	100.0	2,192	100.0	3,701	100.0	1,652	100.0	707	100.0

[1] Excludes deaths in which AIDS was reported and deaths in which "drug unknown" was the only drug mentioned.

[2] Includes opiates not specified as to type.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file).

Table 2.10 - Number of mentions and percent distribution of total deaths by selected drug group according to cause of death: 1995

Drug groups: therapeutic class by drug category	Direct - single drug		Direct - multiple drugs		Drug and physiological condition		Drug and external physical event		Drug and medical disorder	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
TRANQUILIZERS	15		889		104		212		19	
Diazepam	5	0.5	490	9.0	30	5.4	106	6.5	12	5.6
Alprazolam	3	0.3	111	2.1	4	0.4	12	0.7	-	-
Chlordiazepoxide	-	-	69	1.3	8	0.9	17	1.0	1	0.5
Lorazepam	-	-	20	0.4	4	0.4	1	0.1	-	-
Meprobamate	2	0.2	63	1.2	7	0.8	9	0.6	-	-
Other/unspecified tranquilizers	5	0.5	144	2.7	31	3.4	67	4.1	6	2.8
NARCOTIC ANALGESICS	423		5,258		336		309		117	
Heroin/Morphine[2]	335	36.1	3,414	63.7	167	18.2	159	9.8	58	27.2
d-Propoxyphene	12	1.2	295	5.5	23	2.5	28	1.7	5	2.3
Methadone	39	4.0	317	5.9	73	7.9	33	2.0	25	11.7
Oxycodone	1	0.1	46	0.9	4	0.4	-	-	-	-
Cocaine	3	0.3	1,015	18.9	44	4.8	62	3.8	23	10.8
Meperidine HCl	2	0.2	22	0.4	9	1.0	5	0.3	3	1.4
Hydromorphone	-	-	13	0.2	1	0.1	1	0.1	-	-
Other/unspecified narcotic analgesics	11	1.1	136	2.5	15	1.6	21	1.3	3	1.4
NON-NARCOTIC ANALGESICS	35		349		58		65		19	
Aspirin	24	2.4	63	1.2	9	1.0	8	0.5	-	-
Acetaminophen	10	1.0	245	4.6	44	4.8	46	2.8	12	5.6
Pentazocine	-	-	2	-	-	-	-	-	-	-
Other/unspecified non-narcotic analgesics	1	0.1	39	0.7	5	0.5	11	0.7	1	0.5
NON-BARBITURATE SEDATIVES	5		95		6		14		1	
Flurazepam	-	-	26	0.5	2	0.2	3	0.2	-	-
Ethchlorvynol	1	0.1	5	0.1	-	-	1	0.1	-	-
Glutethimide	-	-	1	-	-	-	-	-	-	-
Chloral hydrate	-	-	2	-	-	-	-	-	-	-
Other/unspecified non-barbiturate sedatives	4	0.4	61	1.1	4	0.4	10	0.6	1	0.5
ANTIDEPRESSANTS	71		1,071		100		127		14	
Amitriptyline	21	2.1	375	7.0	35	3.8	23	1.4	5	2.3
Doxepin	11	1.1	123	2.3	9	1.0	9	0.6	3	1.4
Fluoxetine	1	0.1	119	2.2	8	0.9	24	1.5	1	0.5
Imipramine	11	1.1	51	1.0	3	0.3	11	0.7	-	-
Desipramine	9	0.9	60	1.1	3	0.3	14	0.9	-	-
Other/unspecified antidepressants	18	1.8	343	6.4	42	4.6	46	2.8	5	2.3
ANTIPSYCHOTICS	6		142		12		14		1	
Chlorpromazine	1	0.1	27	0.5	1	0.1	4	0.2	-	-
Thioridazine	5	0.5	53	1.0	4	0.4	6	0.4	-	-
Haloperidol	-	-	8	0.1	2	0.2	2	0.1	-	-
Trifluoperazine	-	-	7	0.1	-	-	-	-	-	-
Other/unspecified antipsychotics	-	-	47	0.9	5	0.5	2	0.1	1	0.5
BARBITURATE SEDATIVES	25		287		23		56		2	
Phenobarbital	10	1.0	117	2.2	9	1.0	17	1.0	1	0.5
Secobarbital	8	0.8	41	0.8	-	-	7	0.4	-	-
Pentobarbital	5	0.5	19	0.4	4	0.4	5	0.3	-	-
Other/unspecified barbiturate sedatives	2	0.2	106	2.0	10	1.1	27	1.7	1	0.5
AMPHETAMINES	24		365		116		256		16	
Amphetamine	1	0.1	134	2.5	43	4.7	102	6.3	5	2.3
Methamphetamine/Speed	22	2.2	225	4.2	73	7.9	152	9.4	11	5.3
Other/unspecified amphetamines	1	0.1	6	0.1	-	-	2	0.1	-	-
HALLUCINOGENS	9		105		11		65		2	
PCP/PCP combinations	9	0.9	104	1.9	11	1.2	63	3.9	2	0.9
LSD	-		-	-	-	-	1	0.1	-	
Other/unspecified hallucinogens	-		1	-	-	-	1	0.1	-	-
OTHER DRUGS										
Alcohol-combination	-		2,591	48.4	223	24.3	725	44.7	45	21.1
Cocaine	265	26.9	2,573	48.0	474	51.6	739	45.5	115	54.0
Marijuana/hashish	3	0.3	184	3.3	120	13.1	388	23.9	6	2.8
Diphenhydramine sodium	1	0.1	52	0.9	18	2.0	12	0.7	3	1.4
Diphenhydramine	15	1.5	314	5.9	42	4.6	63	3.9	11	5.2
Inhalants/Solvents/Aerosols	25	2.5	56	1.0	21	2.3	23	1.4	-	
All other drugs	67		1,239		207		234		31	
DRUG UNKNOWN	-		8		-		4		-	
TOTAL DRUG MENTIONS	984	100.0	15,575	290.7	1,871	203.6	3,306	203.7	396	185.9
Total drug abuse deaths	984	100.0	5,358	100.0	919	100.0	1,623	100.0	213	100.0

[1] Excludes deaths in which AIDS was reported and deaths in which "drug unknown" was the only drug mentioned

[2] Includes opiates not specified as to type

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file)

MEDICAL EXAMINER DATA[1]

Table 2.11 - Number of mentions and percent distribution of total deaths by selected drug group according to manner of death: 1995

Drug group: therapeutic class by drug category	Accidental/unexpected		Suicide		Other/unknown	
	Number	Percent	Number	Percent	Number	Percent
TRANQUILIZERS	621		359		281	
Diazepam	356	6.7	162	8.9	152	7.0
Alprazolam	49	0.9	62	3.6	19	0.9
Chlordiazepoxide	45	0.8	30	1.8	23	1.1
Lorazepam	8	0.2	9	0.5	8	0.4
Meprobamate	47	0.9	20	1.2	16	0.7
Other/unspecified tranquilizers	116	2.2	86	5.0	63	2.9
NARCOTIC ANALGESICS	4,344		538		1,610	
Heroin/Morphine[2]	3,005	56.4	183	10.7	990	45.4
d-Propoxyphene	158	3.0	130	7.6	78	3.6
Methadone	325	6.1	19	1.1	153	7.0
Oxycodone	17	0.3	21	1.2	13	0.6
Codeine	728	13.7	118	6.9	310	14.2
Meperidine HCl	13	0.3	11	0.6	15	0.7
Hydromorphone	9	0.2	4	0.2	3	0.1
Other/unspecified narcotic analgesics	87	1.6	52	3.1	48	2.2
NON-NARCOTIC ANALGESICS	147		217		170	
Aspirin	25	0.5	50	2.9	30	1.4
Acetaminophen	99	1.9	143	8.4	125	5.7
Pentazocine	-	-	2	0.1	-	-
Other/unspecified non-narcotic analgesics	23	0.4	22	1.3	15	0.7
NON-BARBITURATE SEDATIVES	44		64		15	
Flurazepam	9	0.2	18	1.1	5	0.2
Ethchlorvynol	2	*	5	0.3	-	-
Glutethimide	1	*	*	-	-	-
Chloral hydrate	-	-	2	0.1	-	-
Other/unspecified non-barbiturate sedatives	32	0.6	39	2.3	10	0.5
ANTIDEPRESSANTS	492		603		302	
Amitriptyline	189	3.5	179	10.5	95	4.4
Doxepin	53	1.0	62	3.6	40	1.8
Fluoxetine	51	1.0	61	3.5	42	1.9
Imipramine	20	0.4	50	2.9	5	0.3
Desipramine	17	0.3	62	3.6	7	0.3
Other/unspecified antidepressants	162	3.0	189	11.1	112	5.1
ANTIPSYCHOTICS	61		71		44	
Chlorpromazine	12	0.2	13	0.8	8	0.4
Thioridazine	26	0.5	24	1.4	19	0.9
Haloperidol	4	0.1	6	0.4	2	0.1
Trifluoperazine	4	0.1	1	0.1	2	0.1
Other/unspecified antipsychotics	15	0.3	27	1.6	13	0.6
BARBITURATE SEDATIVES	136		170		86	
Phenobarbital	60	1.1	52	3.1	45	2.1
Secobarbital	10	0.2	42	2.5	4	0.2
Pentobarbital	12	0.2	17	1.0	5	0.2
Other/unspecified barbiturate sedatives	56	1.1	59	3.5	32	1.5
AMPHETAMINES	500		155		125	
Amphetamine	177	3.3	62	3.6	47	2.2
Methamphetamine/Speed	316	5.9	93	5.6	77	3.5
Other/unspecified amphetamines	7	0.1	1	0.1	1	*
HALLUCINOGENS	130		30		37	
PCP/PCP combinations	128	2.4	28	1.6	37	1.7
LSD	2	*	-	-	-	-
Other/unspecified hallucinogens		-	2	0.1	-	-
OTHER DRUGS						
Alcohol-in-combination	2,263	42.5	575	33.7	773	35.4
Cocaine	2,756	52.5	399	23.4	1,005	46.0
Marijuana/Hashish	412	7.7	151	8.9	160	7.3
Diphenhydramine sodium	32	0.6	26	1.5	31	1.4
Diphenhydramine	174	3.3	175	10.3	109	5.0
Inhalants/Solvents/Aerosols	53	1.0	50	2.9	22	1.0
All other drugs	619		480		705	
DRUG UNKNOWN	5		5		1	*
TOTAL DRUG MENTIONS	12,835	240.9	4,072	239.0	5,476	250.8
Total drug abuse deaths	5,329	100.0	1,704	100.0	2,183	100.0

[1] Excludes deaths in which AIDS was reported and deaths in which "drug unknown" was the only drug mentioned.

[2] Includes opiates not specified as to type.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file).

MEDICAL EXAMINER DATA[1]

Table 2.12 - Percent distribution of drug mentions by gender and race/ethnicity according to drug group: 1995

Drug groups therapeutic class by drug category	Gender				Race/ethnicity						Number of mentions
	Male	Female	Unknown	TOTAL	White	Black	Hispanic	Other	Unknown	TOTAL	
TRANQUILIZERS	69.5	29.8	0.5	100.0	62.1	11.8	4.1	0.3	1.7	100.0	1,261
Diazepam	72.4	27.0	0.6	100.0	62.4	12.1	3.8	0.3	1.4	100.0	650
Alprazolam	60.0	39.2	0.8	100.0	92.3	3.4	2.3	-	-	100.0	130
Chlordiazepoxide	72.4	26.5	1.0	100.0	76.5	17.3	6.1	-	-	100.0	98
Lorazepam	64.0	36.0	-	100.0	60.0	8.0	8.0	4.0	-	100.0	25
Meprobamate	87.5	31.3	1.2	100.0	81.9	9.6	3.6	1.2	3.6	100.0	83
Other/unspecified tranquilizers	67.2	31.3	1.5	100.0	78.5	13.2	4.9	-	3.4	100.0	265
NARCOTIC ANALGESICS	79.2	20.4	0.4	100.0	61.0	24.3	13.1	0.6	0.9	100.0	6,492
Heroin/Morphine[2]	83.4	16.2	0.4	100.0	57.0	26.8	14.5	0.8	0.9	100.0	4,178
d-Propoxyphene	60.7	38.8	0.5	100.0	84.7	7.9	4.8	1.6	1.1	100.0	366
Methadone	67.6	31.6	0.8	100.0	54.0	28.0	16.1	0.4	1.2	100.0	497
Oxycodone	72.5	25.5	2.0	100.0	86.3	11.8	-	-	2.0	100.0	51
Codeine	76.8	21.2	0.2	100.0	84.7	22.1	12.1	0.6	0.4	100.0	1,156
Meperidine HCl	58.5	41.5	-	100.0	68.3	17.1	7.3	4.9	2.4	100.0	41
Hydromorphone	82.5	31.2	6.2	100.0	81.2	18.8	-	-	-	100.0	16
Other/unspecified narcotic analgesics	63.6	35.8	0.5	100.0	87.2	9.6	0.5	1.1	1.6	100.0	187
NON-NARCOTIC ANALGESICS	58.2	40.6	1.1	100.0	79.0	14.2	4.1	0.8	1.7	100.0	534
Aspirin	55.2	42.9	1.9	100.0	78.0	11.4	4.8	1.9	2.9	100.0	105
Acetaminophen	58.8	40.3	1.1	100.0	79.0	15.0	3.5	0.8	1.6	100.0	357
Pentazocine	50.0	50.0	-	100.0	100.0	-	-	-	-	100.0	2
Other/unspecified non-narcotic analgesics	61.7	38.3	-	100.0	76.3	15.0	8.7	-	-	100.0	60
NON-BARBITURATE SEDATIVES	52.8	47.2	-	100.0	83.7	7.3	3.3	4.9	0.8	100.0	123
Flurazepam	46.9	53.1	-	100.0	75.0	6.2	9.4	6.2	3.1	100.0	32
Ethchlorvynol	100.0	-	-	100.0	100.0	-	-	-	-	100.0	7
Glutethimide	100.0	-	-	100.0	-	100.0	-	-	-	100.0	1
Chloral hydrate	-	100.0	-	100.0	100.0	-	-	-	-	100.0	2
Other/unspecified non-barbiturate sedatives	51.9	48.1	-	100.0	86.4	7.4	1.2	4.9	-	100.0	81
ANTIDEPRESSANTS	53.3	46.1	0.6	100.0	77.7	14.1	5.7	0.8	0.7	100.0	1,397
Amitriptyline	53.8	45.4	0.9	100.0	73.0	16.4	5.3	0.9	0.4	100.0	463
Doxepin	56.1	43.2	0.6	100.0	71.6	20.6	5.8	0.6	1.3	100.0	155
Fluoxetine	55.2	44.8	-	100.0	90.9	5.5	1.3	0.6	0.6	100.0	154
Imipramine	44.7	55.3	-	100.0	85.5	5.3	6.6	2.6	-	100.0	76
Desipramine	47.7	50.0	2.3	100.0	83.7	11.6	3.5	1.2	-	100.0	86
Other/unspecified antidepressants	53.6	46.0	0.4	100.0	77.8	14.0	6.7	0.4	1.1	100.0	463
ANTIPSYCHOTICS	58.5	41.5	-	100.0	73.9	18.8	5.7	0.6	1.1	100.0	176
Chlorpromazine	66.7	33.3	-	100.0	84.8	9.1	3.0	3.0	-	100.0	33
Thioridazine	55.1	44.9	-	100.0	71.0	18.8	7.2	-	2.9	100.0	69
Haloperidol	83.3	16.7	-	100.0	41.7	41.7	16.7	-	-	100.0	12
Trifluoperazine	28.6	71.4	-	100.0	57.1	42.9	-	-	-	100.0	7
Other/unspecified antipsychotics	56.4	43.6	-	100.0	80.0	16.4	3.6	-	-	100.0	55
BARBITURATE SEDATIVES	61.9	37.3	0.8	100.0	82.0	9.6	4.8	1.0	2.5	100.0	394
Phenobarbital	65.8	33.8	0.6	100.0	80.9	11.5	5.7	1.3	0.6	100.0	157
Secobarbital	66.1	32.1	1.8	100.0	91.1	3.6	1.8	1.8	1.8	100.0	56
Pentobarbital	73.5	23.5	2.9	100.0	73.5	17.6	2.9	-	5.9	100.0	34
Other/unspecified barbiturate sedatives	53.7	46.3		100.0	81.6	8.2	5.4	0.7	4.1	100.0	147
AMPHETAMINES	80.1	19.9	-	100.0	76.1	4.9	15.7	1.7	1.7	100.0	783
Amphetamine	79.2	21.2		100.0	74.6	4.5	16.8	1.7	2.4	100.0	286
Methamphetamine/Speed	80.7	19.3		100.0	75.6	4.9	15.4	1.6	1.2	100.0	488
Other/unspecified amphetamines	77.8	22.2		100.0	88.9	11.1	-	-	-	100.0	9
HALLUCINOGENS	83.8	15.7	0.5	100.0	38.1	39.6	20.8	-	1.5	100.0	197
PCP/PCP combinations	84.5	15.5	0.5	100.0	36.8	40.4	21.2	-	1.6	100.0	193
LSD	50.0	50.0		100.0	100.0	-	-	-	-	100.0	2
Other/unspecified hallucinogens	50.0	50.0		100.0	100.0	-	-	-	-	100.0	2
OTHER DRUGS	75.2	24.3	0.5	100.0	60.8	25.6	11.6	1.0	1.0	100.0	22,383
Alcohol in combination	81.9	17.7	0.4	100.0	57.2	26.4	14.5	1.0	0.9	100.0	3,813
Cocaine	79.6	19.9	0.5	100.0	42.8	42.4	14.2	0.7	0.7	100.0	4,262
Marijuana/hashish	85.3	14.2	0.5	100.0	59.5	25.3	11.3	1.1	2.8	100.0	723
Diphenylhydantoin sodium	71.9	27.6	0.5	100.0	61.8	26.1	7.9	1.1	1.1	100.0	89
Diphenhydramine	82.2	17.3	0.4	100.0	72.1	17.7	6.8	3.1	0.4	100.0	458
Inhalants/Solvents/Aerosols	79.2	20.0	0.8	100.0	66.4	17.6	11.2	3.2	1.6	100.0	125
All other drugs	65.7	33.8	0.5	100.0	63.2	27.4	6.6	1.9	0.9	100.0	1,804
DRUG UNKNOWN	91.7	8.3		100.0	100.0	-	-	-	-	100.0	12
TOTAL DRUG MENTIONS	75.2	24.2	0.6	100.0	60.8	25.6	11.6	1.0	1.0	100.0	22,363

[1] Excludes deaths in which AIDS was recorded and deaths in which "drug unknown" was the only drug mentioned

[2] Includes opiates not specified as to type

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file)

MEDICAL EXAMINER DATA[1]

Table 2.13 - Percent distribution of drug mentions by age according to drug group: 1995

Drug groups (therapeutic class) by drug category	Age (in years) 6-17	18-25	26-34	35-44	45-54	55+	Unknown	TOTAL	Number of mentions
TRANQUILIZERS	0.6	5.3	20.7	41.9	19.3	12.1	0.2	100.0	1,261
Diazepam	0.3	4.7	22.4	42.6	19.4	10.5	0.2	100.0	660
Alprazolam	0.8	10.8	23.1	40.8	13.8	10.8	-	100.0	130
Chlordiazepoxide	-	1.0	12.2	46.9	25.5	13.3	1.0	100.0	98
Lorazepam	-	4.0	4.0	36.0	16.0	20.0	-	100.0	25
Meprobamate	-	4.8	16.9	45.8	25.3	7.2	-	100.0	83
Other/unspecified tranquilizers	1.5	5.0	21.1	36.2	18.1	17.0	-	100.0	265
NARCOTIC ANALGESICS	0.5	6.7	23.2	44.9	18.6	5.6	0.3	100.0	6,492
Heroin/Morphine[2]	0.5	7.8	24.8	45.1	16.9	4.5	0.4	100.0	4,178
d-Propoxyphene	-	2.7	15.1	44.8	21.0	15.0	0.3	100.0	366
Methadone	0.2	2.0	18.5	46.1	26.4	6.4	0.4	100.0	497
Oxycodone	-	7.8	27.5	29.4	15.7	19.6	-	100.0	51
Codeine	0.4	6.6	21.6	44.7	19.6	6.7	0.2	100.0	1,156
Meperidine HCl	-	4.9	29.3	34.1	22.0	9.8	-	100.0	41
Hydromorphone	-	12.5	31.2	25.0	25.0	6.2	-	100.0	16
Other/unspecified narcotic analgesics	2.1	3.7	18.7	46.0	22.5	7.0	-	100.0	187
NON-NARCOTIC ANALGESICS	1.2	6.4	15.9	36.9	22.1	16.3	0.2	100.0	534
Aspirin	1.0	3.8	12.4	36.2	24.8	20.0	1.9	100.0	105
Acetaminophen	1.6	7.1	16.6	37.1	21.3	15.8	0.5	100.0	367
Pentazocine	-	-	-	50.0	50.0	-	-	100.0	2
Other/unspecified non-narcotic analgesics	3.3	6.7	18.3	36.7	21.7	13.3	-	100.0	60
NON-BARBITURATE SEDATIVES	-	4.1	14.6	36.6	22.0	22.8	-	100.0	123
Flurazepam	-	-	12.5	31.2	21.9	34.4	-	100.0	32
Ethchlorvynol	-	14.3	-	42.9	42.9	-	-	100.0	7
Glutethimide	-	-	100.0	-	-	-	-	100.0	1
Chloral hydrate	-	-	-	50.0	50.0	-	-	100.0	2
Other/unspecified non-barbiturate sedatives	-	4.9	16.0	38.3	19.8	21.0	-	100.0	81
ANTIDEPRESSANTS	1.2	3.9	16.5	40.9	23.5	13.2	0.7	100.0	1,397
Amitriptyline	0.4	3.5	16.2	42.5	25.1	11.7	0.6	100.0	463
Doxepin	1.3	4.5	16.1	38.7	27.1	12.3	-	100.0	155
Fluoxetine	1.3	3.9	14.9	45.5	21.4	12.3	0.6	100.0	154
Imipramine	5.3	6.6	19.7	34.2	19.7	13.2	1.3	100.0	76
Desipramine	4.7	7.0	16.3	38.4	19.8	11.6	2.3	100.0	86
Other/unspecified antidepressants	0.6	3.0	17.1	40.2	22.7	15.8	0.6	100.0	463
ANTIPSYCHOTICS	-	7.4	19.3	39.2	24.4	9.1	0.6	100.0	176
Chlorpromazine	-	3.0	27.3	45.5	15.2	9.1	-	100.0	33
Thioridazine	-	7.2	20.3	37.7	29.0	5.8	-	100.0	69
Haloperidol	-	8.3	25.0	50.0	16.7	-	-	100.0	12
Trifluoperazine	-	-	-	71.4	14.3	14.3	-	100.0	7
Other/unspecified antipsychotics	-	10.9	14.5	30.9	27.3	14.5	1.8	100.0	55
BARBITURATE SEDATIVES	1.0	5.1	19.8	36.0	20.6	17.0	0.3	100.0	394
Phenobarbital	1.3	5.1	19.7	37.6	22.9	13.4	-	100.0	157
Secobarbital	-	1.8	8.9	26.8	25.0	37.5	-	100.0	56
Pentobarbital	5.9	8.8	20.6	17.6	17.6	26.5	2.9	100.0	34
Other/unspecified barbiturate sedatives	-	5.4	23.8	42.2	17.7	10.9	-	100.0	147
AMPHETAMINES	2.0	13.9	30.5	37.4	12.6	2.3	1.1	100.0	783
Amphetamine	2.4	13.6	30.4	38.1	11.9	2.1	1.4	100.0	286
Methamphetamine/Speed	1.6	13.7	30.5	37.3	13.1	2.5	1.0	100.0	458
Other/unspecified amphetamines	-	33.3	33.3	22.2	11.1	-	-	100.0	9
HALLUCINOGENS	3.0	26.4	35.0	26.9	4.6	3.6	0.5	100.0	197
PCP/PCP combinations	3.1	25.9	35.7	27.5	4.7	3.1	0.5	100.0	193
LSD	-	50.0	50.0	-	-	-	-	100.0	2
Other/unspecified hallucinogens	-	50.0		-	-	50.0	-	100.0	2
OTHER DRUGS	0.8	8.1	23.9	41.5	18.1	7.2	0.5	100.0	22,383
Alcohol in combination	0.4	8.3	25.9	42.3	17.5	5.2	0.4	100.0	3,613
Cocaine	0.5	8.1	27.5	42.2	17.0	4.2	0.5	100.0	4,202
Marijuana/hashish	4.4	24.5	26.3	31.5	10.8	2.2	0.3	100.0	723
Dextromethorphan sodium	1.1	4.5	24.7	36.0	19.1	13.5	1.1	100.0	89
Diphenhydramine	2.2	9.4	20.7	39.5	16.2	11.8	0.7	100.0	456
Inhalants/Solvents/Aerosols	3.2	8.5	24.0	31.2	16.8	16.0	0.8	100.0	125
All other drugs	0.8	7.3	22.3	31.7	20.3	16.9	0.7	100.0	1,804
DRUG UNKNOWN		41.7	25.0	33.3	-	-	-	100.0	12
TOTAL DRUG MENTIONS	0.8	8.1	23.9	41.5	18.1	7.2	0.5	100.0	22,383

[1] Excludes deaths in which AIDS was reported and deaths in which "drug unknown" was the only drug mentioned.

[2] Includes opiates not specified as to type.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file)

MEDICAL EXAMINER DATA[1]

Table 2.14 - Percent distribution of drug mentions by cause of death according to drug group: 1995

Drug groups: therapeutic class by drug category	Cause of death: Direct - single drug	Direct - multiple drugs	Drug and physiological condition	Drug and external physical event	Drug and medical disorder	Unknown	TOTAL	Number of mentions
TRANQUILIZERS	1.2	70.5	8.2	16.8	1.5	1.7	100.0	1,261
Diazepam	0.8	72.7	7.6	16.1	1.8	1.1	100.0	660
Alprazolam	2.3	85.4	3.1	9.2	-	-	100.0	130
Chlordiazepoxide	-	70.4	8.2	17.3	1.0	3.1	100.0	98
Lorazepam	-	80.0	16.0	4.0	-	-	100.0	25
Meprobamate	2.4	76.3	8.4	10.8	-	-	100.0	83
Other/unspecified tranquilizers	1.9	54.3	11.7	25.3	2.3	4.5	100.0	265
NARCOTIC ANALGESICS	6.5	61.0	5.2	4.8	1.8	0.8	100.0	6,432
Heroin/Morphine[2]	8.5	81.7	4.0	3.8	1.4	0.6	100.0	4,178
d-Propoxyphene	3.3	80.6	6.3	7.7	1.4	0.8	100.0	366
Methadone	7.6	63.8	14.7	8.6	5.0	2.0	100.0	497
Oxycodone	2.0	90.2	7.8	-	-	-	100.0	51
Codeine	0.3	87.8	3.8	5.4	2.0	0.8	100.0	1,156
Meperidine HCl	4.9	53.7	22.0	12.2	7.3	-	100.0	41
Hydromorphone	-	81.2	6.2	6.2	-	6.2	100.0	16
Other/unspecified narcotic analgesics	5.9	72.7	8.0	11.2	1.6	0.5	100.0	187
NON-NARCOTIC ANALGESICS	6.6	65.4	10.9	12.2	2.4	2.6	100.0	534
Aspirin	22.9	80.0	8.6	7.6	-	1.0	100.0	105
Acetaminophen	2.7	66.8	12.0	12.3	3.3	2.7	100.0	367
Pentazocine	-	100.0	-	-	-	-	100.0	2
Other/unspecified non-narcotic analgesics	1.7	65.0	8.3	18.3	1.7	5.0	100.0	60
NON-BARBITURATE SEDATIVES	4.1	77.2	4.9	11.4	0.8	1.6	100.0	123
Flurazepam	-	81.2	6.2	9.4	-	3.1	100.0	32
Ethchlorvynol	14.3	71.4	-	14.3	-	-	100.0	7
Glutethimide	-	100.0	-	-	-	-	100.0	1
Chloral hydrate	-	100.0	-	-	-	-	100.0	2
Other/unspecified non-barbiturate sedatives	4.9	75.3	4.9	12.3	1.2	1.2	100.0	81
ANTIDEPRESSANTS	5.1	76.7	7.2	9.1	1.0	1.0	100.0	1,397
Amitriptyline	4.5	81.0	7.6	5.0	1.1	0.9	100.0	463
Doxepin	7.1	79.4	5.8	5.8	1.9	-	100.0	155
Fluoxetine	0.6	77.3	5.2	15.6	0.6	0.6	100.0	154
Imipramine	14.5	67.1	3.9	14.5	-	-	100.0	76
Desipramine	10.5	63.8	3.5	18.3	-	-	100.0	86
Other/unspecified antidepressants	3.9	74.1	9.1	9.9	1.1	1.9	100.0	463
ANTIPSYCHOTICS	3.4	80.7	5.6	8.0	0.6	0.6	100.0	176
Chlorpromazine	3.0	81.8	3.0	12.1	-	-	100.0	33
Thioridazine	7.2	76.8	5.8	8.7	-	1.4	100.0	69
Haloperidol	-	66.7	16.7	16.7	-	-	100.0	12
Trifluoperazine	-	100.0	-	-	-	-	100.0	7
Other/unspecified antipsychotics	-	83.5	9.1	3.6	1.8	-	100.0	55
BARBITURATE SEDATIVES	6.3	71.6	5.8	14.2	0.5	1.5	100.0	394
Phenobarbital	6.4	74.5	5.7	10.8	0.6	1.9	100.0	157
Secobarbital	14.3	73.2	-	12.5	-	-	100.0	56
Pentobarbital	14.7	55.9	11.8	14.7	-	2.9	100.0	34
Other/unspecified barbiturate sedatives	1.4	71.4	8.8	16.4	0.7	1.4	100.0	147
AMPHETAMINES	3.1	46.6	14.8	32.7	2.0	0.8	100.0	783
Amphetamine	0.3	46.9	15.0	35.7	1.7	0.3	100.0	265
Methamphetamine/Speed	4.5	46.1	15.0	31.1	2.3	1.0	100.0	466
Other/unspecified amphetamines	11.1	66.7	-	22.2	-	-	100.0	9
HALLUCINOGENS	4.8	53.3	5.6	33.0	1.0	2.5	100.0	197
PCP/PCP combinations	6.7	53.9	3.7	32.6	1.0	2.1	100.0	193
LSD			-	50.0	-	50.0	100.0	2
Other/unspecified hallucinogens		50.0	-	50.0	-	-	100.0	2
OTHER DRUGS	4.4	55.6	8.4	14.8	1.8	1.1	100.0	22,383
Alcohol in combination		71.7	6.2	20.1	1.2	0.8	100.0	3,613
Cocaine	8.5	61.2	11.3	17.6	2.1	0.9	100.0	4,202
Marijuana/Hashish	0.4	24.0	18.6	53.7	0.8	2.5	100.0	723
Diphenylhydantoin sodium	1.1	56.7	20.2	13.5	3.4	5.6	100.0	89
Diphenhydramine	3.3	68.6	9.2	13.8	2.4	2.8	100.0	456
Inhalants/Solvents/Aerosols	20.7	44.6	16.8	16.4	-	-	100.0	125
All other drugs	3.4	68.7	11.9	13.0	1.7	1.7	100.0	1,804
DRUG UNKNOWN	-	66.7	-	33.3	-	-	100.0	12
TOTAL DRUG MENTIONS	4.4	59.6	8.4	14.8	1.8	1.1	100.0	22,383

[1] Excludes deaths in which AIDS was reported and deaths in which "drug unknown" was the only drug mentioned.

[2] Includes opiates not specified as to type.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file).

MEDICAL EXAMINER DATA[1]

Table 2.15 - Percent distribution of drug mentions by manner of death according to drug group: 1995

Drug group: therapeutic class by drug category	Manner of death				Number of mentions
	Accidental/ unexpected	Suicide	Other/unknown	TOTAL	
TRANQUILIZERS	49.2	28.5	22.3	100.0	1,261
Diazepam	53.8	23.0	23.0	100.0	660
Alprazolam	37.7	47.7	14.6	100.0	130
Chlordiazepoxide	45.9	30.6	23.5	100.0	98
Lorazepam	32.0	36.0	32.0	100.0	25
Meprobamate	56.6	24.1	19.3	100.0	83
Other/unspecified tranquilizers	43.8	32.5	23.8	100.0	265
NARCOTIC ANALGESICS	66.9	8.3	24.8	100.0	6,492
Heroin/Morphine [2]	71.9	4.4	23.7	100.0	4,175
d-Propoxyphene	43.2	35.5	21.3	100.0	366
Methadone	65.4	3.8	30.8	100.0	487
Oxycodone	33.3	41.2	25.5	100.0	51
Codeine	63.0	10.2	26.8	100.0	1,156
Meperidine HCl	36.6	26.8	36.6	100.0	41
Hydromorphone	56.2	25.0	18.8	100.0	16
Other/unspecified narcotic analgesics	46.5	27.8	25.7	100.0	187
NON-NARCOTIC ANALGESICS	27.5	40.6	31.8	100.0	534
Aspirin	23.8	47.6	28.6	100.0	105
Acetaminophen	27.0	39.0	34.1	100.0	367
Pentazocine	-	100.0	-	100.0	2
Other/unspecified non-narcotic analgesics	38.3	36.7	25.0	100.0	60
NON-BARBITURATE SEDATIVES	35.8	52.0	12.2	100.0	123
Flurazepam	28.1	56.2	15.6	100.0	32
Ethchlorvynol	28.6	71.4	-	100.0	7
Glutethimide	100.0	-	-	100.0	1
Chloral hydrate	-	100.0	-	100.0	2
Other/unspecified non-barbiturate sedatives	39.5	48.1	12.3	100.0	81
ANTIDEPRESSANTS	35.2	43.2	21.6	100.0	1,397
Amitriptyline	40.8	38.7	20.5	100.0	463
Doxepin	34.2	40.0	25.8	100.0	155
Fluoxetine	33.1	39.6	27.3	100.0	154
Imipramine	26.3	65.8	7.9	100.0	76
Desipramine	19.8	72.1	8.1	100.0	86
Other/unspecified antidepressants	35.0	40.8	24.2	100.0	463
ANTIPSYCHOTICS	34.7	40.3	25.0	100.0	176
Chlorpromazine	36.4	39.4	24.2	100.0	33
Thioridazine	37.7	34.8	27.5	100.0	69
Haloperidol	33.3	50.0	16.7	100.0	12
Trifluoperazine	57.1	14.3	28.6	100.0	7
Other/unspecified antipsychotics	27.3	49.1	23.6	100.0	55
BARBITURATE SEDATIVES	35.0	43.1	21.8	100.0	394
Phenobarbital	38.2	33.1	28.7	100.0	157
Secobarbital	17.9	75.0	7.1	100.0	56
Pentobarbital	35.3	50.0	14.7	100.0	34
Other/unspecified barbiturate sedatives	38.1	40.1	21.8	100.0	147
AMPHETAMINES	63.9	20.2	16.0	100.0	783
Amphetamine	61.9	21.7	16.4	100.0	286
Methamphetamine/Speed	64.8	19.5	15.8	100.0	488
Other/unspecified amphetamines	77.8	11.1	11.1	100.0	9
HALLUCINOGENS	66.0	15.2	18.8	100.0	197
PCP/PCP combinations	66.3	14.5	19.2	100.0	193
LSD	100.0	-	-	100.0	2
Other/unspecified hallucinogens	-	100.0	-	100.0	2
OTHER DRUGS	57.3	18.2	24.5	100.0	22,383
Alcohol in combination	62.4	15.9	21.4	100.0	5,613
Cocaine	66.6	9.5	23.9	100.0	4,202
Marijuana/Hashish	57.0	20.9	22.1	100.0	723
Diphenhydramine sodium	36.0	29.2	34.8	100.0	89
Dextromethorphan	38.0	38.2	23.8	100.0	458
Inhalants/Solvents/Aerosols	42.4	40.0	17.6	100.0	125
All other drugs	34.3	26.6	39.1	100.0	1,804
DRUG UNKNOWN	41.7	50.0	8.3	100.0	12
TOTAL DRUG MENTIONS	57.3	18.2	24.5	100.0	22,383

[1] Excludes deaths in which AIDS was reported and deaths in which "drug unknown" was the only drug mentioned.

[2] Includes powders not specified as to type.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file)

Table 2.16 - Percent distribution of drug mentions by route of administration according to drug group: 1995

Drug groups therapeutic class by drug category	Route of drug administration								Number of mentions
	Oral	Injection	Inhaled	Smoked[2]	Sniffed	Other multiple	Unknown	TOTAL	
TRANQUILIZERS	35.2	1.7	0.1	-	0.1	2.7	60.3	100.0	1,261
Diazepam	35.5	2.3	0.2	-	-	3.3	58.8	100.0	660
Alprazolam	49.2	-	-	-	-	-	50.8	100.0	130
Chlordiazepoxide	27.6	2.0	-	-	-	-	70.4	100.0	98
Lorazepam	36.0	-	-	-	-	-	64.0	100.0	25
Meprobamate	45.8	1.2	-	-	-	10.8	42.2	100.0	83
Other/unspecified tranquilizers	27.2	1.1	-	-	0.4	1.1	70.2	100.0	265
NARCOTIC ANALGESICS	7.4	15.8	0.2	0.2	1.1	2.5	72.6	100.0	6,492
Heroin/Morphine[3]	2.0	21.1	0.2	0.3	1.7	2.2	72.5	100.0	4,179
d-Propoxyphene	41.5	0.6	-	-	-	1.9	55.7	100.0	366
Methadone	17.1	1.2	-	-	-	0.2	81.5	100.0	497
Oxycodone	27.5	-	-	-	-	-	72.5	100.0	51
Codeine	6.8	10.6	0.1	0.2	0.2	5.5	76.6	100.0	1,156
Meperidine HCl	31.7	4.9	-	-	-	-	63.4	100.0	41
Hydromorphone	6.2	18.8	-	-	-	-	75.0	100.0	16
Other/unspecified narcotic analgesics	28.3	5.5	-	-	-	-	65.8	100.0	187
NON-NARCOTIC ANALGESICS	34.6	0.2	-	-	-	-	65.2	100.0	534
Aspirin	35.2	-	-	-	-	-	64.8	100.0	105
Acetaminophen	34.3	-	-	-	-	-	65.7	100.0	367
Pentazocine	100.0	-	-	-	-	-	-	100.0	2
Other/unspecified non-narcotic analgesics	33.3	1.7	-	-	-	-	65.0	100.0	60
NON-BARBITURATE SEDATIVES	39.8	-	-	-	0.8	3.3	56.1	100.0	123
Flurazepam	43.8	-	-	-	-	-	56.2	100.0	32
Ethchlorvynol	14.3	-	-	-	-	-	85.7	100.0	7
Glutethimide	-	-	-	-	-	-	100.0	100.0	1
Chloral hydrate	50.0	-	-	-	-	-	50.0	100.0	2
Other/unspecified non-barbiturate sedatives	40.7	-	-	-	1.2	4.9	53.1	100.0	81
ANTIDEPRESSANTS	32.4	1.1	-	-	-	1.1	65.4	100.0	1,397
Amitriptyline	33.7	1.3	-	-	-	-	65.0	100.0	463
Doxepin	33.5	1.9	-	-	-	0.6	63.9	100.0	155
Fluoxetine	29.9	0.6	-	-	-	-	69.5	100.0	154
Imipramine	36.2	-	-	-	-	-	61.8	100.0	76
Desipramine	32.6	2.3	-	-	-	-	65.1	100.0	86
Other/unspecified antidepressants	30.7	0.6	-	-	-	3.2	65.4	100.0	463
ANTIPSYCHOTICS	20.5	-	-	-	-	0.6	79.0	100.0	175
Chlorpromazine	30.3	-	-	-	-	-	69.7	100.0	33
Thioridazine	23.2	-	-	-	-	-	76.8	100.0	69
Haloperidol	8.3	-	-	-	-	-	91.7	100.0	12
Trifluoperazine	14.3	-	-	-	-	-	85.7	100.0	7
Other/unspecified antipsychotics	14.5	-	-	-	-	1.8	83.6	100.0	55
BARBITURATE SEDATIVES	32.5	1.5	-	-	0.3	1.8	64.0	100.0	394
Phenobarbital	29.3	1.9	-	-	-	1.3	67.5	100.0	157
Secobarbital	55.4	-	-	-	-	-	44.6	100.0	56
Pentobarbital	26.5	5.9	-	-	-	14.7	52.9	100.0	34
Other/unspecified barbiturate sedatives	28.6	0.7	-	-	0.7	-	70.1	100.0	147
AMPHETAMINES	7.4	6.5	0.8	0.3	0.1	0.6	89.3	100.0	783
Amphetamine	3.5	3.1	1.0	0.3	-	1.7	90.2	100.0	286
Methamphetamine/Speed	1.6	8.4	0.5	0.2	0.2	-	88.9	100.0	488
Other/unspecified amphetamines	11.1	11.1	-	-	-	-	77.8	100.0	9
HALLUCINOGENS	-	0.5	0.5	1.0	-	-	98.0	100.0	197
PCP/PCP combinations	-	0.5	0.5	1.0	-	-	97.9	100.0	193
LSD	-	-	-	-	-	-	100.0	100.0	2
Other/unspecified hallucinogens	-	-	-	-	-	-	100.0	100.0	2
OTHER DRUGS	26.5	6.5	0.5	1.2	0.9	2.7	61.7	100.0	22,383
Alcohol-in-combination	100.0	-	-	-	-	-	-	100.0	3,613
Cocaine	0.5	7.3	0.2	1.3	3.0	8.4	78.6	100.0	4,202
Marijuana/Hashish	0.8		1.7	25.3	-	0.4	72.2	100.0	722
Diphenhydramine/sodium	19.1	3.4	-	-	-	1.1	76.4	100.0	89
Dextromethorphan	21.6	0.4	-	-	-	0.7	77.3	100.0	458
Inhalants, Solvents/Aerosols	4.8		39.2	-	4.8	0.8	50.4	100.0	125
All other drugs	19.8	1.2	0.1	0.5	-	0.6	77.3	100.0	1,804
DRUG UNKNOWN	8.3		-	-	-	8.3	83.3	100.0	12
TOTAL DRUG MENTIONS	26.5	6.5	0.5	1.2	0.9	2.7	61.7	100.0	22,383

[1] Excludes deaths in which AIDS was reported and deaths in which "drug unknown" was the only drug mentioned

[2] Includes freebase

[3] Includes opiates not specified as to type

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file)

Table 2.17 - Percent distribution of drug mentions by number of other drugs used in combination according to drug group[1] 1995

Drug groups[1] therapeutic class by drug category	Number of other drugs used in episode					Number of mentions
	None	One	Two	Three or more	TOTAL	
TRANQUILIZERS	3.3	14.2	25.0	57.6	100.0	1,261
Diazepam	2.0	13.8	27.6	56.7	100.0	660
Alprazolam	3.8	12.3	19.2	64.6	100.0	130
Chlordiazepoxide	1.0	13.3	25.5	60.2	100.0	98
Lorazepam	-	32.0	12.0	56.0	100.0	25
Meprobamate	2.4	3.6	21.7	72.3	100.0	83
Other/unspecified tranquilizers	7.5	18.1	23.4	50.9	100.0	265
NARCOTIC ANALGESICS	8.6	26.0	32.2	31.2	100.0	8,492
Heroin/Morphine[2]	10.6	33.2	31.5	24.4	100.0	4,178
d-Propoxyphene	8.6	21.3	23.1	46.7	100.0	356
Methadone	11.9	23.7	30.4	34.0	100.0	497
Oxycodone	2.0	13.7	17.6	66.7	100.0	51
Codeine	0.4	16.7	40.6	42.3	100.0	1,156
Meperidine HCl	12.2	22.0	22.0	43.9	100.0	41
Hydromorphone	-	16.8	25.0	58.2	100.0	16
Other/unspecified narcotic analgesics	7.5	12.3	19.5	61.0	100.0	187
NON-NARCOTIC ANALGESICS	10.3	18.0	24.2	47.6	100.0	534
Aspirin	26.7	13.3	21.9	38.1	100.0	105
Acetaminophen	6.5	17.2	23.7	52.6	100.0	367
Pentazocine	-	-	100.0	-	100.0	2
Other/unspecified non-narcotic analgesics	5.0	31.7	28.3	35.0	100.0	60
NON-BARBITURATE SEDATIVES	5.7	13.8	20.3	60.2	100.0	123
Flunitrazepam	-	15.6	25.0	59.4	100.0	32
Ethchlorvynol	14.3	28.6	14.3	42.9	100.0	7
Glutethimide	-	-	100.0	-	100.0	1
Chloral hydrate	-	-	-	100.0	100.0	2
Other/unspecified non-barbiturate sedatives	7.4	12.3	18.5	61.7	100.0	81
ANTIDEPRESSANTS	6.7	16.6	23.1	53.6	100.0	1,397
Amitriptyline	5.0	16.8	23.5	54.6	100.0	463
Doxepin	16.8	15.5	21.9	45.8	100.0	155
Fluoxetine	7.3	15.6	21.4	61.7	100.0	154
Imipramine	14.5	18.4	27.6	39.5	100.0	76
Desipramine	11.6	23.3	22.1	43.0	100.0	86
Other/unspecified antidepressants	4.5	15.6	23.1	56.8	100.0	463
ANTIPSYCHOTICS	4.5	17.0	13.6	64.8	100.0	176
Chlorpromazine	3.0	24.2	15.2	57.6	100.0	33
Thioridazine	8.7	15.9	7.2	68.1	100.0	69
Haloperidol	8.3	25.0	16.7	50.0	100.0	12
Trifluoperazine	-	14.3	14.3	71.4	100.0	7
Other/unspecified antipsychotics	-	12.7	20.0	67.3	100.0	55
BARBITURATE SEDATIVES	8.1	16.0	23.9	51.0	100.0	394
Phenobarbital	8.3	16.6	22.9	52.2	100.0	157
Secobarbital	16.1	19.6	23.2	41.1	100.0	56
Pentobarbital	14.7	14.7	41.2	29.4	100.0	34
Other/unspecified barbiturate sedatives	8.1	14.3	21.1	56.5	100.0	147
AMPHETAMINES	10.3	38.7	25.4	25.5	100.0	783
Amphetamine	0.7	43.0	28.3	28.0	100.0	285
Methamphetamine/Speed	16.0	38.1	23.6	34.4	100.0	488
Other/unspecified amphetamines	11.1	44.4	33.3	11.1	100.0	9
HALLUCINOGENS	14.3	25.4	31.2	26.9	100.0	197
PCP/PCP combinations	7.4	22.8	31.1	26.9	100.0	193
LSD	50.0	50.0	-	-	100.0	2
Other/unspecified hallucinogens		50.0	50.0	-	100.0	2
OTHER DRUGS	9.9	25.3	27.7	33.0	100.0	22,383
Alcohol in combination		41.1	33.0	21.7	100.0	3,613
Cocaine	27.4	33.2	21.2	19.7	100.0	4,202
Marijuana/Hashish	27.4	9.1	15.6	47.7	100.0	725
Diphenhydramine sodium	7.1	24.7	21.3	46.9	100.0	89
Diphenhydramine	4	25.3	26.0	42.6	100.0	438
Inhalants/Solvents/Aerosols	2.4	44.8	12.8	39.0	100.0	125
All other drugs	9.4	23.4	22.2	54.2	100.0	1,804
DRUG UNKNOWN		75.0	16.7	8.3	100.0	12
TOTAL DRUG MENTIONS	9.9	25.3	27.7	33.0	100.0	22,383

[1] Excludes deaths in which AIDS was reported and deaths in which "drug unknown" was the only drug mentioned.

[2] Includes heroin not specified as to type.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network (October 1996 data file).

Table 28

GUIDELINE OF DRUG DEFENDANTS BY DRUG TYPE[1]
(October 1, 1995, through September 30, 1996)

DRUG TYPE	TOTAL	2D1.1 Drug Trafficking		2D1.2 Protected Locations		2D1.5 Continuing Criminal Enterprise		2D1.8 Rent/Manage Drug Establishment		2D2.1 Simple Possession	
		n	%	n	%	n	%	n	%	n	%
TOTAL	17,172	16,192	94.3	329	1.9	60	0.3	41	0.2	550	3.2
Powder Cocaine	4,471	4,350	97.3	47	1.1	17	0.4	6	0.1	51	1.1
Crack Cocaine	4,603	4,355	94.6	178	3.9	18	0.4	12	0.3	40	0.9
Heroin	1,766	1,653	93.6	75	4.2	4	0.2	5	0.3	29	1.6
Marijuana	4,249	3,874	91.2	12	0.3	10	0.2	4	0.1	349	8.2
Methamphetamine[2]	1,623	1,555	95.8	12	0.7	4	0.2	7	0.4	45	2.8
LSD	93	89	95.7	0	0.0	0	0.0	0	0.0	4	4.3
Other	367	316	86.1	5	1.4	7	1.9	7	1.9	32	8.7

))))))))))))))

[1]Of the 42,436 cases, 17,267 were sentenced under USSG Chapter Two, Part D (drugs). Of these, 17,170 were sentenced under §§2D1.1 (Drug Trafficking), 2D1.2 (Protected Locations), 2D1.5 (Continuing Criminal Enterprise), 2D1.8 (Rent/Manage Drug Establishment), or 2D2.1 (Simple Possession). Of these 17,170 cases, four were excluded due to missing information on drug type.

[2]In FY96, the category methamphetamine includes methamphetamine mixture, methamphetamine actual, ICE, and methamphetamine precursors. Prior to FY96, the category methamphetamine did not include ICE. The number of ICE cases (which were eligible for inclusion in this table) for each year are as follows: 130 (1996), 48 (1995), 1 (1994), 9 (1993), and 1 (1992).
Descriptions of variables used in this table are provided in Appendix A.

SOURCE: U.S. Sentencing Commission, 1996 Datafile, MONFY96.

Table 33

MODE OF CONVICTION OF DRUG DEFENDANT BY DRUG TYPE[1]
(October 1, 1995, through September 30, 1996)

		PLEA		TRIAL	
DRUG TYPE	TOTAL	Number	Percent	Number	Percent
TOTAL	**17,148**	**15,473**	**90.2**	**1,675**	**9.8**
Powder Cocaine	**4,464**	3,988	89.3	476	10.7
Crack Cocaine	**4,598**	3,953	86.0	645	14.0
Heroin	**1,763**	1,641	93.1	122	6.9
Marijuana	**4,246**	3,994	94.1	252	5.9
Methamphetamine[2]	**1,623**	1,474	90.8	149	9.2
LSD	**93**	92	98.9	1	1.1
Other	**361**	331	91.7	30	8.3

))))))))))))

[1]Of the 42,436 cases, 17,267 were sentenced under USSG Chapter Two, Part D (drugs). Of these, 17,170 were sentenced under §§2D1.1 (Drug Trafficking), 2D1.2 (Protected Locations), 2D1.5 (Continuing Criminal Enterprise), 2D1.8 (Rent/Manage Drug Establishment), or 2D2.1 (Simple Possession). Of these 17,170 cases, 18 were excluded due to missing information on mode of conviction, and four due to missing information on drug type.

[2]In FY96, the category methamphetamine includes methamphetamine mixture, methamphetamine actual, ICE, and methamphetamine precursors. Prior to FY96, the category methamphetamine did not include ICE. The number of ICE cases (which were eligible for inclusion in this table) for each year are as follows: 130 (1996), 48 (1995), 1 (1994), 9 (1993), and 1 (1992). Descriptions of variables used in this table are provided in Appendix A.

SOURCE: U.S. Sentencing Commission, 1996 Datafile, MONFY96.

Table 34

WEAPON INVOLVEMENT OF DRUG DEFENDANT BY DRUG TYPE[1]
(October 1, 1995, through September 30, 1996)

		No Weapon Involved		Weapon Involved[2]	
DRUG TYPE	TOTAL	Number	Percent	Number	Percent
TOTAL	**17,166**	**14,672**	**85.5**	**2,494**	**14.5**
Powder Cocaine	**4,471**	3,981	89.0	490	11.0
Crack Cocaine	**4,603**	3,466	75.3	1,137	24.7
Heroin	**1,766**	1,676	94.9	90	5.1
Marijuana	**4,249**	3,896	91.7	353	8.3
Methamphetamine[3]	**1,623**	1,227	75.6	396	24.4
LSD	**93**	88	94.6	5	5.4
Other	**361**	338	93.6	23	6.4

))))))))))))

[1]Of the 42,436 cases, 17,267 were sentenced under USSG Chapter Two, Part D (drugs). Of these, 17,170 were sentenced under §§2D1.1 (Drug Trafficking), 2D1.2 (Protected Locations), 2D1.5 (Continuing Criminal Enterprise), 2D1.8 (Rent/Manage Drug Establishment), or 2D2.1 (Simple Possession).
Additionally, four cases were excluded due to missing information on drug type. Descriptions of variables used in this table are provided in Appendix A.

[2]Includes an adjustment for weapon possession under §2D1.1(b)(1) or a conviction under 18 U.S.C. § 924(c).

[3]In FY96, the category methamphetamine includes methamphetamine mixture, methamphetamine actual, ICE, and methamphetamine precursors. Prior to FY96, the category methamphetamine did not include ICE. The number of ICE cases (which were eligible for inclusion in this table) for each year are as follows: 130 (1996), 48 (1995), 1 (1994), 9 (1993), and 1 (1992). Descriptions of variables used in this table are provided in Appendix A.

SOURCE: U.S. Sentencing Commission, 1996 Datafile, MONFY96.

Table 37

MEAN AND MEDIAN DRUG AMOUNTS (IN GRAMS) OF DRUG TRAFFICKING DEFENDANTS BY BASE OFFENSE LEVEL AND DRUG TYPE[1]
(October 1, 1995, through September 30, 1996)

	Base Offense Level and Quantity Range			
DRUG TYPE	12	26	32	38
Powder Cocaine	Less than 25G	500G - 1,999G	5,000G - 14,999G	At Least 150,000G
Number	51	594	436	313
Mean	7.8	1,152.8	8,542.8	3,742,702.1
Median	5.6	1,000.0	8,373.5	442,000.0
Crack Cocaine	Less Than 0.25G	5G - 19G	50G - 149G	At Least 1,500G
Number	24	386	530	447
Mean	0.2	11.3	89.3	267,180.5
Median	0.2	11.0	83.8	2,452.4
Heroin	Less Than 5G	100G - 399G	1,00G - 2,999G	At Least 30,000G
Number	53	212	213	11
Mean	2.0	236.4	1,643.7	84,800.0
Median	1.6	226.5	1,480.5	74,500.0
Marijuana	Less Than 5,000G	100,000G - 399,999G	1,000,000G - 2,999,999G	At Least 30,000,000G
Number	56	876	153	3
Mean	3,731.8	202,863.8	1,742,424.0	407,263,060.0
Median	4,000.0	183,475.0	1,681,948.8	500,422,680.0
Methamphetamine[2]	Less Than 0.5G	10 - 39G	100G - 299G	At Least 3,000G
Number	9	141	178	116
Mean	0.3	21.2	183.6	367,233.6
Median	0.4	19.0	187.5	7,792.0

))))))))))))

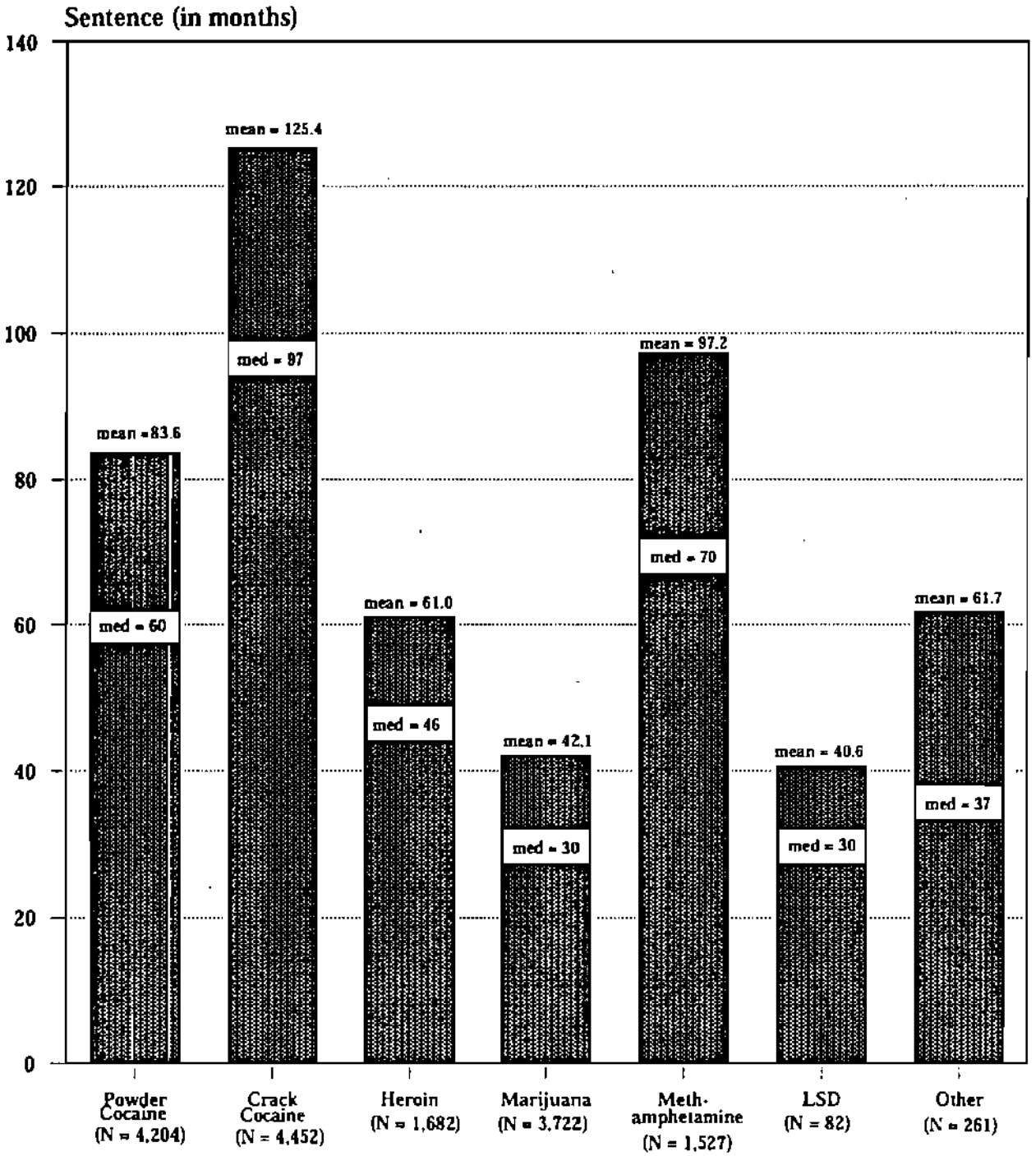
[1]Of the 42,436 cases, 16,196 were sentenced under Drug Trafficking (§2D1.1). Of these, 15,045 had complete guideline application information. Of these 15,045 cases, 14,639 involved powder cocaine, crack cocaine, heroin, marijuana, or methamphetamine. Of these 14,639 cases, 6,622 had a base offense level of 12, 26, 32, or 38. An additional 1,802 cases were excluded from this table due to one or more of the following reasons: involvement of more than 1 drug type (765), missing or range drug amount (1,036), or logical criteria (25). Descriptions of variables used in this table are provided in Appendix A.

[2]Methamphetamine includes Methamphetamine Mixture, Methamphetamine Actual, and ICE. All cases are converted into Methamphetamine Actual. Descriptions of variables used in this table are provided in Appendix A.

SOURCE: U.S. Sentencing Commission, 1996 Datafile, MONFY96.

Figure I

AVERAGE LENGTH OF IMPRISONMENT BY DRUG TYPE[1]
(October 1, 1995, through September 30, 1996)



[1] Of the 42,436 cases, 17,267 were sentenced under USSG Chapter Two, Part D (drugs). Of these, 17,170 sentenced under Part D guidelines other than §§2D1.1, 2D1.2, 2D1.5, 2D1.8, or 2D2.1 are depicted in this figure. Additionally, 1,109 cases with zero months prison ordered were excluded. Of the remaining 16,061 cases, three were excluded due to missing drug type and 128 due to missing sentencing information.

SOURCE: U.S. Sentencing Commission, 1996 Datafile, MONFY96.

2.2% of inmates who reported the results of the test for the virus that causes AIDS said they were HIV-positive

51.2% of all inmates had ever been tested for the human immunodeficiency virus (HIV) and reported the results

Inmates	Percent of inmates tested for HIV and reporting the results: Total	HIV-positive
All	51.2%	2.2%
Male	50.3	2.1
Female	66.8	3.3
White	52.6%	1.1%
Black	52.1	2.6
Other	50.5	.9
Hispanic	46.0	3.7
Male		
White	51.7%	1.0%
Black	51.2	2.5
Hispanic	45.2	3.5
Female		
White	68.2%	1.9%
Black	67.3	3.5
Hispanic	62.7	6.8

Fig. 34

Among all inmates—
51.2% reported HIV-test results
32.2 had never been tested
9.0 did not know if they had been tested
7.5 had been tested but did not know the results
.1 refused to report whether they had been tested or refused to report the test results.

Of those inmates who were ever tested for the presence of HIV and who reported the results —

- Women (3.3%) were more likely than men (2.1%) to test HIV-positive.

- 3.7% of Hispanic inmates and 2.6% of black inmates tested HIV-positive, compared to 1.1% of white inmates.

- Hispanic men (3.5%) were more likely than white men (1.0%) to test HIV-positive. HIV-positive tests accounted for 2.5% of the black men who had ever tested and who reported the outcome.

- Hispanic women (6.8%) had higher HIV-positive rates than white women (1.9%). Black women had a positive rate of 3.5%.

Of all prison inmates, 55.9% said they had been tested after the most recent admission.

Drug users and needle users had higher positive rates than other inmates

- For inmates reporting test results, 2.5% of drug users, compared to 0.8% of other inmates, reported that they tested HIV-positive.

- The percentage of HIV-positive was higher among inmates who —
used drugs in the month before their offense (2.8%),
used needles to inject drugs intravenously (4.9%),
and shared needles with other drug users (7.1%).

A quarter of inmates had used a needle to inject drugs

	Percent of inmates who: All	Ever used drugs	Used drugs in the month before the offense
Ever injected a drug for nonmedical purposes	25%	31%	40%
Type of drug			
Heroin/other opiate	17	22	28
Cocaine	16	21	28
Crank (methamphetamine)	6	8	11
Other	4	5	7
Ever shared a needle	12%	15%	20%

Fig. 35

- 40% of inmates who used drugs in the month before their offense had in the past used a needle to inject drugs.

- 1 in 6 inmates used a needle to inject heroin or other opiates, and 1 in 6, to inject cocaine.

- More than 10% of all inmates and 20% of users in the month before their offense had shared a needle.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Survey of State Prison Inmates, 1991*, May 1993.

random groups of inmates in addition to inmates suspected of drug use. About 70% of community-based facilities tested either all inmates or random groups and inmates suspected of using drugs.

Almost all work release facilities tested for drugs

About 92% of facilities that provided special work release or prerelease programs tested inmates for drugs (table 10). Ninety-three percent of facilities that separately handled offenders reincarcerated for violating some condition of their supervised release also checked inmates for drugs. Over 90% of facilities that performed "other" functions, such as presentence, psychiatric, or geriatric services also tested their residents. Nearly 60% of facilities for youthful offenders tested inmates.

For all inmates tested, State prisons reported higher positive rates than Federal prisons

Nationwide, 3.1% of the tests for cocaine in the 12 months before June 30, 1990, were positive, as were 1.2% of the tests for heroin, 1.5% for methamphetamines, and 5.6% for marijuana. State facilities reported higher positive rates for drug tests than Federal facilities (table 11). In State institutions, 3.6% of tests for cocaine were positive, compared to 0.4% in Federal prisons. State facilities found 2.0% of the tests showing recent methamphetamine use and 6.3% showing marijuana use; Federal prisons found 0.1% and 1.1%, respectively.

Table 10. Facilities testing inmates or residents for drug use, by function of correctional facility, June 1990

Facility function	Number of facilities	Percent
General adult population confinement	1,048	85.2%
Boot camp	23	82.5
Reception/diagnosis and classification	147	87.6
Medical treatment/hospitalization confinement	86	88.4
Alcohol/drug treatment confinement	117	88.0
Youthful offenders	27	59.3
Work release/prerelease	411	92.2
Persons returned to custody from a supervised release	91	93.4
Other	140	82.9

Note: Facilities may be classified with more than one function.

Table 11. Number of facilities testing for specific drugs, number of tests given, and percent positive, from July 1, 1989, to June 30, 1990

Type of drug	Tests: Number given	Tests: Percent positive	Facilities: Number testing	Facilities: Percent positive
All facilities				
Amphetamines	256,946	.9%	513	32.6%
Barbiturates	225,855	.8	472	34.1
Cocaine	379,970	3.1	712	60.0
Heroin	283,281	1.2	454	38.3
LSD	137,362	.6	275	8.8
Marijuana/hashish	396,993	5.6%	764	79.7%
Methadone	150,725	.5	304	6.6
Methamphetamines	176,300	1.5	327	21.4
Unspecified drug	124,815	.7	235	24.3
Other	83,608	1.4	162	60.5
Federal facilities				
Amphetamines	51,874	.2%	55	30.9%
Barbiturates	51,274	.1	54	33.3
Cocaine	55,393	.4	59	59.3
Heroin	45,496	.4	51	31.4
LSD	40,297	.0*	46	4.4
Marijuana/hashish	53,809	1.1%	57	77.2%
Methadone	43,338	.0*	48	5.3
Methamphetamines	49,191	.1	54	24.1
Unspecified drug	39,225	.1	42	14.3
Other	12,840	.4	13	92.3
State facilities				
Amphetamines	205,072	1.1%	458	32.8%
Barbiturates	174,581	1.0	418	34.2
Cocaine	324,577	3.6	653	60.0
Heroin	237,785	1.3	403	39.2
LSD	97,065	.8	230	10.9
Marijuana/hashish	343,184	6.3%	707	79.9%
Methadone	107,387	.8	256	9.0
Methamphetamines	127,109	2.0	273	20.9
Unspecified drug	85,590	1.0	193	26.4
Other	70,768	1.6	149	57.7

Note: Data are for 61 Federal facilities and 776 State facilities with data on all variables.
*Less than 0.05%.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Drug Enforcement and Treatment in Prisons, 1990*, July 1992.

Same percentage of State and Federal facilities reported positive drug tests

When facilities rather than individual drug tests are considered, Federal and State facilities were about equally likely to have found drug use in their institutions. Around 6 in 10 of both Federal and State facilities which tested for cocaine had at least one positive test. In over 2 in 10 facilities testing for methamphetamines, the use of the drug was discovered. Marijuana was detected in about 8 in 10 facilities testing.

Community-based facilities found higher rates of drug use than confinement facilities

Tests had positive outcomes for 8.9% of the cocaine tests and 8.1% of the marijuana tests administered by community-based facilities, compared to 1.4% of the cocaine tests and 5.6% of marijuana tests in confinement facilities (table 12). Methamphetamines, however, were found more often in confinement facilities (2.3% tested positive) than in community-based facilities (1.1% positive).

Among State confinement facilities, positive test results were highest in those testing on suspicion only

How inmates were selected for testing affected the rate of positive results. Those State confinement facilities testing only when drug use was suspected recorded higher rates of positive results than other facilities that tested randomly or comprehensively. When facilities tested only on suspicion of drug use, 6% of cocaine tests and 14% of marijuana tests were positive, compared to 1.5% or less for cocaine and 5% or less for marijuana when facilities tested everyone or at random.

The results for State community-based facilities were opposite those of confinement facilities. Testing on suspicion only produced a lower percentage of positive results than testing everyone or a random selection. In community-based facilities which tested on suspicion only, 4.8% were positive for cocaine and 6.4% for marijuana; in community-based facilities using other selection methods, around 9% of tests for cocaine and 8% for marijuana were positive.

The percentages of positive tests were higher in large facilities

Large prisons, whether Federal or State, had higher rates of positive drug tests. In Federal facilities with 1,000 or more inmates, 1.4% of the marijuana tests, 0.6% of the cocaine, and 0.6% of the heroin tests were positive (table 13). In Federal facilities holding fewer than 500 inmates, the percentages were 0.5% for marijuana, 0.2% for cocaine, and none for heroin. Among State prisons, the largest facilities with 2,500 or more inmates had the highest percentages of positive tests for amphetamines, cocaine, and heroin.

Table 12. Number of drug tests given in State facilities and percent positive from July 1, 1989, to June 30, 1990, by type of drug and criteria for testing

Type of drug and facility	Number of tests given	Percent positive when facility tests inmates/residents based on: Total	Combination of suspicion and other random or systematic	Random or systematic only	Suspicion only
State confinement					
Amphetamines	136,121	1.1%	.6%	.4%	5.0%
Barbiturates	126,162	1.0	.6	.3	4.0
Cocaine	230,800	1.4	1.0	1.5	6.0
Heroin	172,284	1.0	.7	.5	3.7
LSD	71,064	1.0	.4	1.7	4.1
Marijuana/hashish	270,963	5.6%	5.1%	4.7%	14.3%
Methadone	76,807	1.1	.7	0	3.3
Methamphetamines	92,101	2.3	1.1	.0*	7.8
Unspecified drug	65,818	1.1	.5	.2	4.9
Other	52,559	1.8	1.2	0	13.8
State community-based					
Amphetamines	68,951	1.0%	.8%	1.4%	.2%
Barbiturates	48,419	.8	.8	1.3	.2
Cocaine	93,777	8.9	9.4	8.9	4.8
Heroin	65,501	2.2	2.4	2.0	0
LSD	26,001	.2	.3	.0*	0
Marijuana/hashish	72,221	8.1%	7.7%	8.6%	6.4%
Methadone	30,580	.2	.2	.0*	0
Methamphetamines	35,008	1.1	1.0	1.2	.2
Unspecified drug	19,772	.7	1.1	.0*	1.5
Other	18,209	.9	.9	.9	0

Note: Data are for 569 State confinement facilities and 207 State community-based facilities with data on all variables.
*Less than 0.05%.

Table 13. Positive drug tests from July 1, 1989, to June 30, 1990, by security level and size of confinement facilities

Security level and size of facility	Percent of positive tests: Amphetamine	Cocaine	Heroin	Marijuana	Methamphetamine
Federal					
Security level					
Maximum	.2%	.7%	1.4%	2.5%	.3%
Medium	.3	.4	.3	1.0	.2
Minimum	.0*	.3	.0*	.3	.0*
Average daily population					
1-499 inmates	.0*	.2	.0*	.5	.1
500-999	.1	.4	.3	1.0	.1
1,000-2,499	.4	.6	.6	1.4	.2
State					
Security level					
Maximum	1.6	1.0	.5	5.0	.5
Medium	1.2	1.7	1.4	5.8	4.2
Minimum	.5	1.4	.8	4.6	.5
Average daily population					
1-499 inmates	.6	1.4	1.0	6.1	2.4
500-999	.5	.9	.6	4.4	.1
1,000-2,499	.9	1.5	.6	6.9	4.7
2,500 or more	3.6	2.7	3.3	4.6	3.1

Note: Data are from 734 State confinement facilities and 62 Federal facilities with data on the number tested and number positive for a drug.
*Less than 0.05%.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Drug Enforcement and Treatment in Prisons, 1990*, July 1992.

The facilities holding 1,000 to 2,499 inmates had the highest rates for marijuana and methamphetamines. Among Federal prisons, the maximum security facilities had higher rates for positive drug tests than minimum security facilities. In maximum security prisons, 2.5% of the tests for marijuana, .7% of the tests for cocaine, and 1.4% of the tests for heroin were positive. In minimum security, 0.3% for marijuana, 0.3% for cocaine, and none for heroin were positive.

State medium security facilities generally had higher positive rates than maximum or minimum security prisons. For each drug in medium security facilities, the percentage positive was as follows: 6.6% for marijuana, 4.2% for methamphetamines, 1.7% for cocaine, and 1.4% for heroin. In maximum and minimum facilities, the equivalent findings were 5.0% or less for marijuana, 0.6% or less for methamphetamines, 1.4% or less for cocaine, and 0.8% or less for heroin.

Positive results from drug tests varied among facilities performing different functions

Facilities which confined inmates returned to custody for parole violations had relatively high percentages of positive drug tests (table 14). More than 9% of tests for marijuana were positive, as were 6.2% of tests for methamphetamines, 3.5% for cocaine, and 2.9% for heroin. Facilities holding inmates who participated in work release programs or who were preparing for discharge also had relatively high positive test rates: 7% for cocaine, 6.9% for marijuana, and 1.8% for heroin. Drug/alcohol treatment in facilities was associated with relatively high positive results on tests for cocaine and marijuana use — 3% for cocaine and 7.6% for marijuana.

Facilities handling youthful offenders generally had relatively low positive test results: 2.1% for marijuana and 1.5% for cocaine.

Positive drug tests were linked to interdiction activities

The State confinement facilities that questioned and frisked inmates but did not exchange clothes or search body cavities had higher rates of positive drug tests than facilities doing all these measures (table 15). The tests in the facilities using less stringent measures were 5.2% positive for cocaine, 13.5% for marijuana, and 16.2% for methamphetamines. Tests in facilities performing all types of specific drug interdiction activities were 1.2% positive for cocaine, 4.6% for marijuana, and 0.6% for methamphetamines. Facilities which performed all types of interdiction activities had higher positive drug test rates than facilities which did body cavity searches and/or clothing exchanges. The facilities doing all types of interdiction may have

Table 14. Positive drug tests from July 1, 1989, to June 30, 1990, by function of facility

Facility function	Percent of positive tests				
	Amphetamines	Cocaine	Heroin	Marijuana	Methamphetamines
General adult population confinement	.7%	1.4%	.9%	5.1%	1.5%
Bootcamp	.7	1.7	1.9	5.2	1.1
Reception/diagnosis and classification	1.4	1.1	1.6	4.2	.5
Medical treatment/hospitalization confinement	.4	2.0	.9	5.8	5.1
Alcohol/drug treatment confinement	1.8	3.0	1.6	7.5	1.2
Youthful offenders	.1	1.5	.5	2.1	0
Work release/prerelease	1.0	7.0	1.8	6.9	1.0
Returned to custody	2.7	3.5	2.9	9.1	6.2
Other	.6	4.3	.6	4.8	.3

Note: Data include 807 facilities with data on number of drug tests and number positive for each drug.

Table 15. Positive drug tests from July 1, 1989, to June 30, 1990, by drug interdiction activities of State confinement facilities

Interdiction activity and group targeted	Number of inmates tested	Percent of positive tests				
		Amphetamines	Cocaine	Heroin	Marijuana	Methamphetamines
Inmates						
All types	101,824	1.4%	1.2%	.6%	4.6%	.6%
Body cavity search and clothing exchange	17,444	.5	1.2	.1	2.6	0
Body cavity search	41,487	.3	.6	.8	5.1	.1
Clothing exchange	88,430	.9	1.5	1.4	6.3	.7
Verbal questioning and pattdown	23,321	3.6	5.2	4.0	13.5	16.2
Pattdown	17,111	.0*	.5	.2	3.9	.1
Verbal questioning	2,377	.1	1.1	.4	4.8	.2
Other	3,114	.2	1.1	1.0	2.7	0
No reported interdiction activity	254	8.3	40.2	0	28.4	0
Visitors						
All types	55,414	1.6%	.8%	.7%	3.8%	.5%
Body cavity and belongings searches	23,835	6.0	2.6	2.9	4.4	12.0
Body cavity search	4,067	.0*	.2	.1	2.1	0
Belongings search	193,121	.7	1.6	1.0	6.7	2.8
Verbal questioning and pattdown	2,893	0	1.6	.2	6.0	0
Pattdown	4,699	.2	.4	.2	9.0	0
Verbal questioning	8,757	.1	.9	.1	2.2	.1
Other	1,541	0	0	0	8.6	0
No reported interdiction activity	1,345	.4	7.4	0	8.3	0
Staff						
All types	26,032	3.3%	1.0%	.8%	5.4%	.9%
Verbal questioning and pattdown	50,065	1.0	1.2	.5	5.5	.6
Questioning	42,529	.4	.3	1.1	5.3	5.6
Pattdown	62,209	.5	1.2	.6	6.6	.0*
Other	50,704	.6	2.1	1.3	5.3	4.9
No reported interdiction activity	44,363	9.1	2.6	2.2	6.5	6.6

Note: Interdiction activities are mutually exclusive categories. "All types" for inmates and visitors includes body cavity search, clothing exchange or belongings search, pattdown, and verbal questioning and may include other interdictions. For staff, "all types" includes verbal questioning, pattdown and other interdiction. "Body cavity search and clothing exchange" and "body cavity and belongings searches" include both and may include pattdown, verbal questioning, and/or other. "Body cavity search," "clothing exchange," and "belongings search" may include pattdown, verbal questioning, and/or other. "Verbal questioning and pattdown," "pattdown," and "verbal questioning" may include other. "Other" does not include any of the specified interdiction activities. *Less than 0.05%.

Source: U.S. Department of Justice, Bureau of Justice Statistics, *Drug Enforcement and Treatment in Prisons, 1990*, July 1992.

TABLE 18

NUMBER OF DRUG CLIENT TREATMENT ADMISSIONS IN STATE-SUPPORTED FACILITIES BY PRIMARY DRUG OF ABUSE AND BY STATE FOR FISCAL YEAR 1995

STATE	HEROIN	NON-RX METHADONE	OTHER OPIATES/ SYNTHETICS	BARBITURATES	BENZODIAZEPINE	OTHER TRANQUILIZERS	OTHER SEDATIVE/ HYPNOTICS	METHAMPHETAMINES	OTHER AMPHETAMINES
ALABAMA	92	15	376	0	104	5	15	101	42
ALASKA	89	4	14	5	3	1	6	40	18
ARIZONA	2,553	90	151	7	36	8	9	1,814	669
ARKANSAS	119	20	321	15	0	53	58	N/A	1,168
CALIFORNIA	67,856	68	1,352	190	150	52	114	28,204	1,044
COLORADO	1,744	34	342	19	68	9	15	1,199	339
CONNECTICUT	12,361	92	805	50	0	35	51	0	30
DELAWARE	1,410	1	24	8	4	14	1	5	4
DISTRICT OF COL	3,375	0	5	0	0	0	0	0	0
FLORIDA	1,272	23	604	53	80	37	57	195	47
GEORGIA	1,314	0	0	0	0	0	284	428	0
HAWAII	300	4	39	0	4	0	4	874	15
IDAHO	88	3	14	5	8	8	4	915	49
ILLINOIS	12,368	8	251	52	95	0	31	184	221
INDIANA	599	15	342	30	88	65	55	314	47
IOWA	211	7	115	19	37	20	21	2,253	173
KANSAS	113	5	74	8	13	7	11	658	86
KENTUCKY	91	25	331	4	155	5	31	43	31
LOUISIANA	160	5	181	31	57	27	44	36	100
MAINE	231	1	70	16	0	21	34	28	8
MARYLAND	7,221	37	177	23	23	5	32	25	15
MASSACHUSETTS	24,492	53	449	51	345	35	23	47	35
MICHIGAN	6,496	93	1,015	64	97	72	58	174	155
MINNESOTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MISSISSIPPI	65	3	141	1	36	26	47	137	32
MISSOURI	1,030	49	130	6	84	43	30	915	249
MONTANA	49	3	92	15	16	20	8	492	58
NEBRASKA	115	10	51	7	8	16	22	318	37
NEVADA	565	1	34	1	1	3	3	1,429	28
NEW HAMPSHIRE	168	1	8	5	5	1	2	8	2
NEW JERSEY	19,359	54	281	54	164	41	41	56	65
NEW MEXICO	469	26	46	4	6	11	8	214	91
NEW YORK	19,715	154	403	118	109	141	90	26	151
NORTH CAROLINA	1,391	11	485	15	142	23	69	56	85
NORTH DAKOTA	4	0	9	0	6	0	2	20	7
OHIO	1,949	42	848	119	175	41	193	145	231
OKLAHOMA	88	3	92	22	30	10	11	508	261
OREGON	4,587	20	216	48	0	17	36	N/A	7,620
PALAU	0	0	0	0	0	0	0	1	0
PENNSYLVANIA	3,525	59	667	81	131	145	89	211	113
PUERTO RICO	5,585	0	4	14	0	31	4	0	0
RHODE ISLAND	2,622	10	153	16	27	34	4	2	12
SOUTH CAROLINA	348	7	149	16	26	11	84	35	31
SOUTH DAKOTA	7	0	28	4	5	5	9	127	46
TENNESSEE	41	3	257	17	30	53	50	7	70
TEXAS	4,559	53	328	105	0	103	156	N/A	1,795
UTAH	867	34	217	22	0	12	24	N/A	1,525
VERMONT	125	1	50	3	20	2	8	5	12
VIRGINIA	2,250	7	324	36	123	38	32	59	42
VIRGIN ISLANDS	23	0	0	0	0	0	0	0	0
WASHINGTON	4,932	21	297	32	21	54	21	2,443	478
WEST VIRGINIA	91	5	179	9	64	26	31	49	32
WISCONSIN	298	15	536	57	0	42	19	N/A	113
WYOMING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTALS	221,502	1,195	12,675	1,463	2,596	1,428	2,071	44,593	17,324
PERCENT OF TOTAL	25.5%	0.1%	1.5%	0.2%	0.3%	0.2%	0.2%	5.1%	2.0%

N/A = Information not available.

Source: State Alcohol and Drug Abuse Profile (SADAP), FY 1995; data are included for " ONLY THOSE PROGRAMS that receive at least some funds administered by the State Alcohol/Drug Agency during the State's Fiscal Year (FY) 1995."

TABLE 18

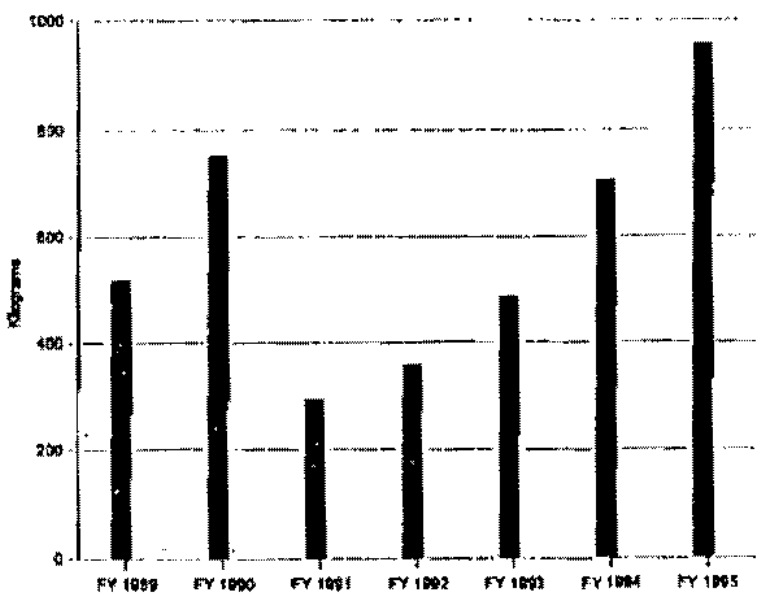
NUMBER OF DRUG CLIENT TREATMENT ADMISSIONS IN STATE-SUPPORTED FACILITIES (CON'T)
BY PRIMARY DRUG OF ABUSE AND BY STATE FOR FISCAL YEAR 1995

STATE	COCAINE	MARIJUANA/ HASHISH	PCP	OTHER HALLUCINOGENS	INHALANTS	OVER THE COUNTER	OTHER	NOT REPORTED	TOTAL
ALABAMA	4,479	1,854	0	23	34	0	31	634	7,803
ALASKA	872	784	5	8	31	2	34	0	1,906
ARIZONA	7,581	1,176	14	18	28	0	28	0	9,182
ARKANSAS	2,100	2,041	12	22	44	4	81	0	6,258
CALIFORNIA	19,512	11,468	1,160	176	78	34	256	160	132,184
COLORADO	4,220	4,001	10	66	134	11	25	0	12,036
CONNECTICUT	8,273	1,871	84	44	14	6	26	623	24,345
DELAWARE	1,482	334	57	4	2	1	7	257	3,615
DISTRICT OF COL	8,948	269	27	0	0	0	0	51	12,676
FLORIDA	17,837	10,598	19	124	71	12	204	8,672	39,895
GEORGIA	16,965	2,416	3	41	64	0	4,462	5,583	31,760
HAWAII	623	694	0	16	3	0	0	0	2,485
IDAHO	280	1,129	2	24	20	8	33	5	2,596
ILLINOIS	32,853	9,811	400	115	111	30	100	7,063	63,693
INDIANA	7,012	2,686	5	46	58	13	293	1	11,667
IOWA	1,886	1,728	5	48	99	13	125	0	8,760
KANSAS	3,287	2,758	23	34	42	13	49	0	6,991
KENTUCKY	1,396	1,324	3	21	54	1	808	2,340	6,885
LOUISIANA	7,119	2,129	24	44	19	5	65	5,416	15,442
MAINE	235	830	0	84	7	5	12	0	1,568
MARYLAND	6,269	4,025	335	102	76	4	3	1,307	19,679
MASSACHUSETTS	17,594	4,506	65	136	20	19	256	0	48,189
MICHIGAN	17,384	10,009	13	123	71	29	113	0	35,965
MINNESOTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MISSISSIPPI	3,872	1,130	2	34	16	0	102	374	6,018
MISSOURI	7,380	4,039	140	65	84	1	106	440	14,791
MONTANA	261	814	1	19	16	3	3	0	1,872
NEBRASKA	1,073	1,086	9	28	21	13	65	620	3,499
NEVADA	903	574	19	4	7	1	127	0	3,700
NEW HAMPSHIRE	393	540	0	22	6	0	10	0	1,171
NEW JERSEY	8,721	3,742	106	56	20	15	98	0	32,873
NEW MEXICO	691	637	7	11	16	3	505	16	2,761
NEW YORK	25,647	11,566	421	285	78	59	4,401	707	64,071
NORTH CAROLINA	14,469	4,035	6	49	62	7	270	0	21,155
NORTH DAKOTA	41	274	0	0	5	0	19	44	434
OHIO	14,248	10,273	32	152	161	27	185	0	28,821
OKLAHOMA	1,009	650	1	15	35	2	33	483	3,253
OREGON	2,932	4,869	7	82	36	15	49	0	30,524
PALAU	0	1	0	0	0	0	2	0	4
PENNSYLVANIA	17,106	7,602	294	231	118	37	367	0	32,776
PUERTO RICO	1,364	873	0	0	11	1	760	4,524	13,111
RHODE ISLAND	1,121	1,043	2	12	5	2	5	3	5,051
SOUTH CAROLINA	5,299	2,181	0	23	74	14	84	0	8,404
SOUTH DAKOTA	124	879	0	26	63	3	26	486	1,860
TENNESSEE	2,615	1,193	N/A	14	75	9	59	521	5,016
TEXAS	18,596	7,878	60	117	400	14	81	0	34,745
UTAH	1,844	1,800	11	57	45	86	386	340	7,274
VERMONT	298	836	1	23	5	2	8	7	1,407
VIRGINIA	10,716	4,038	170	47	47	26	49	0	18,044
VIRGIN ISLANDS	20	7	0	0	0	0	3	0	51
WASHINGTON	4,723	4,897	6	150	55	22	388	0	18,561
WEST VIRGINIA	736	942	7	25	55	12	49	0	2,312
WISCONSIN	3,554	6,705	8	45	158	49	123	0	11,541
WYOMING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTALS	331,359	165,801	3,567	3,893	2,743	642	15,391	40,677	868,920
PERCENT OF TOTAL	38.1%	19.1%	0.4%	0.3%	0.3%	0.1%	1.8%	4.7%	100.0%

N/A = Information not available.

Source: State Alcohol and Drug Abuse Profile (SADAP), FY 1995; data are included for "ONLY THOSE PROGRAMS that received at least some funds administered by the State Alcohol/Drug Agency during the State's Fiscal Year (FY) 1995."

DEA Methamphetamine Seizures

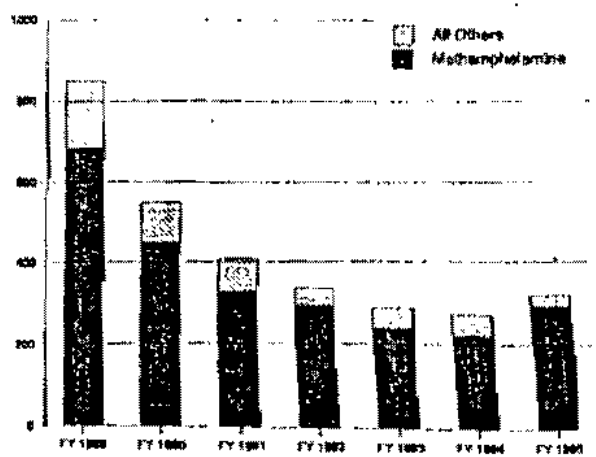


During FY 1995, DEA seized the largest total amount of methamphetamie it had ever seized in a single year.

DEA methamphetamine seizures increased 36 percent to a total of 958 kilograms, the largest total amount seized by DEA in a single year. This increase was due in large part to 306 kilograms of 97 percent pure methamphetamine seized in Las Cruces, New Mexico, the third largest DEA methamphetamine seizure.

DEA Clandestine Laboratory Seizures

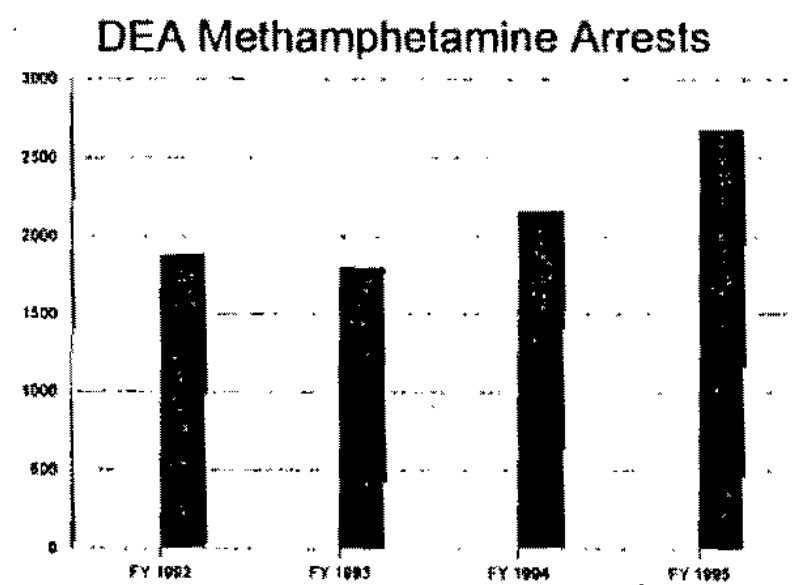
DEA seized nearly 50 more clandestine laboratories in FY 1995 than in the previous year, a 17 percent increase. This increase was due to a significant increase in the number of seized methamphetamine laboratories. Methamphetamine laboratory seizures increased by 32 percent in FY 1995 to a total of 291 seizures, following a decline that began in FY 1990. That five year decline is attributable to several factors including the Chemical Diversion and Trafficking Act, a shift in DEA enforcement priorities, and less DEA participation in hazardous waste clean-up of clandestine laboratories seized by state and local agencies. It should be noted that DEA clandestine laboratory totals represent only a portion of those seized nationwide by law enforcement authorities. State and local police also seize a significant number of laboratories without DEA involvement.



Nine-tenths of clandestine laboratories seized by DEA in FY 1995 were set up for methamphetamine production.

DEA Methamphetamine Investigations

During FY 1995, DEA devoted nine percent more investigative work hours to methamphetamine investigations that resulted in nearly 2,700 arrests, an increase of 23 percent over the previous year. Nearly one-quarter of the individuals arrested in FY 1995 DEA domestic methamphetamine investigations were Mexican nationals.



DRUG ENFORCEMENT ADMINISTRATION
DOMESTIC RECORD METHAMPHETAMINE REMOVALS
FY 1995

NUMBER	DATE	LOCATION	KGS.	DOSAGE UNITS**	PURITY %
1	FEB 03, 1995	LAS CRUCES, NEW MEXICO	308.2	59,658,480	97.3
2	APR 11, 1995 *	FONTANA, CALIFORNIA	78.1	--	--
3	MAR 11, 1995 *	DOWNEY, CALIFORNIA	45.1	--	--
4	FEB 11, 1995 *	MEXICO	43.9	--	--
5	NOV 30, 1994	CHULA VISTA, CALIFORNIA	43.6	8,563,240	98.0

FY 1986 - FY 1995

NUMBER	DATE	LOCATION	KGS.	DOSAGE UNITS**	PURITY %
1	OCT 27, 1989	HAYWARD, CALIFORNIA	444.5	88,900,000	100.0
2	JAN 12, 1988	PORTALES, NEW MEXICO	315.5	52,226,118	82.8
3	FEB 03, 1995	LAS CRUCES, NEW MEXICO	308.2	59,658,480	97.3
4	FEB 12, 1991 *	SAN BERNADINO, CALIFORNIA	207.0	--	--
5	APR 24, 1993	LAS CRUCES, NEW MEXICO	101.8	19,342,000	95.0
6	JAN 10, 1989	VISTA, CALIFORNIA	95.2	17,707,528	92.9
7	APR 11, 1995 *	FONTANA, CALIFORNIA	78.1	--	--
8	OCT 14, 1989 *	BLACKWOOD, PENNSYLVANIA	75.8	--	--
9	NOV 02, 1988	SACRAMENTO, CALIFORNIA	75.1	12,615,314	84.4
10	MAY 24, 1991	RANCHO CORDOVA, CALIFORNIA	70.3	3,510,473	24.9

SOURCES: STRIDE (NET WEIGHT)
***INFORMATION ONLY DEA-7 (GROSS WEIGHT)**
NOTE: ALL SEIZURES WERE MADE IN DEA DOMESTIC CASES.
****DOSAGE UNITS NOT AVAILABLE FOR INFORMATION ONLY DEA-7**

Source: U.S. Department of Justice, Drug Enforcement Administration, *DEA Annual Statistical Report, FY 1995*, January 1996.

DANGEROUS DRUGS

METHAMPHETAMINE: Annual Price Data National Range (dollars)					
Quantity	Division	1993	1994	1995	1996
Pound	National Range	4,000 - 20,000	3,500 - 25,000	3,000 - 20,000	4,000 - 30,000
Ounce	National Range	600 - 2,600	400 - 2,600	400 - 2,700	500 - 2,700
	San Francisco	400 - 1,200	400 - 1,000	400 - 900	500 - 900
	San Diego	500 - 850	500 - 850	500 - 1,000	500 - 1,000
	Phoenix	575 - 1,400	575 - 1,400	575 - 1,500	700 - 1,500
Gram	National Range	40 - 150	40 - 150	40 - 200	37 - 200
	San Francisco	45 - 120	50 - 120	60 - 100	45 - 100
	San Diego	50 - 80	50 - 80	50 - 80	50 - 75
	Phoenix	80 - 100	80 - 100	70 - 110	45 - 100

METHAMPHETAMINE: Quarterly Price Data National Range (dollars)					
Quantity	Division	1st Quarter 1996	2nd Quarter 1996	3rd Quarter 1996	4th Quarter 1996
Pound	National Range	4,000 - 20,000	4,000 - 30,000	4,000 - 22,000	4,000 - 22,000
Ounce	National Range	500 - 2,700	500 - 2,200	500 - 2,700	500 - 2,400
	San Francisco	500 - 900	500 - 900	500 - 900	500 - 900
	San Diego	500 - 1,000	500 - 1,000	800	800
	Phoenix	1,000 - 1,500	700 - 900	700 - 900	700 - 1,000
Gram	National Range	40 - 200	37 - 200	37 - 200	37 - 200
	San Francisco	60 - 100	60 - 100	45 - 100	45 - 100
	San Diego	50 - 75	50 - 75	50 - 75	50 - 75
	Phoenix	70 - 100	70 - 100	70	45 - 100

Source: U.S. Department of justice, Drug Enforcement Administration, Intelligence Division, *Illegal Drug Price/Purity Report, United States: January 1995-December 1996*, June 1997.

METHAMPHETAMINE[1]

Developments in the United States

Methamphetamine trafficking and abuse in the United States have been on the rise over the past few years. As a result, this drug is having a devastating impact on many communities across the nation. Although more common in western areas of the country, methamphetamine increasingly is being seen in areas not previously familiar with the harmful effects of this powerful stimulant. Methamphetamine trafficking is increasing in the Southwest, Midwest, and Southeast.

The Methamphetamine Problem

Historically, the suppliers of methamphetamine throughout the United States have been outlaw motorcycle gangs and numerous other independent trafficking groups. Although these groups continued to produce and distribute methamphetamine in 1996, organized crime polydrug trafficking groups operating from Mexico dominated wholesale methamphetamine trafficking in the United States. Over the past few years, these groups have revolutionized the production of this drug by operating large-scale laboratories--both in Mexico and the United States--capable of producing unprecedented quantities of methamphetamine. The groups have saturated the western U.S. market with this product, increasingly moving the product to markets in the eastern United States.

Relatively small quantities of methamphetamine are produced by licit drug manufacturers in the United States. There is little diversion of these legitimate products because they are subject to strict controls. Clandestine production accounts for nearly all of the methamphetamine trafficked and abused in the United States.

Domestic methamphetamine production, trafficking, and abuse were concentrated primarily in the western and southwestern regions of the United States. The cities encountering the most significant problems with abuse included Los Angeles, Phoenix, San Diego, San Francisco, and, to a lesser degree, Dallas, Denver, and Seattle. Much of the clandestine laboratory activity was centered in California where the methamphetamine problem was most acute. Methamphetamine also was available consistently in wholesale quantities in some cities in the Midwest and the South.

Within certain areas of Arizona, Colorado, Nevada, Utah, and portions of the Pacific Northwest, methamphetamine traditionally has been the drug of choice among a portion of the illicit drug user population. The involvement of Mexico-based criminal organizations in methamphetamine trafficking clearly has expanded the market in those areas and beyond. Areas of the Pacific Northwest, Midwest, Southeast, and some portions of the South, particularly Georgia and the surrounding States, experienced a dramatic increase in the availability of methamphetamine supplied by organized crime groups operating from Mexico. For example, organized crime drug groups operating from Mexico transported large quantities of the drug to the Midwest, which led to the

Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The Supply of Illicit Drugs to the United States, August* 1997.

expansion of the existing methamphetamine market. Within the Midwest, Kansas and Missouri experienced an increase in the number of methamphetamine laboratories operating in those States, which would indicate that methamphetamine production expanded eastward. However, these laboratories were small-scale operations, particularly when compared to the large-scale laboratories operating in California. The rise in laboratory seizures in these States does not reflect a concerted effort by major traffickers to shift production from sites in California. Rather, it reflects an increasing effort by local entrepreneurs, who operated on the periphery of the methamphetamine market, to exploit the expanding demand for the drug. Laboratories in California, controlled by organized crime drug trafficking groups operating from Mexico, remained the predominant sources of supply for the West, Midwest, and much of the rest of the United States.

Methamphetamine Use

Traditionally, methamphetamine users have suffered the same addiction cycle and withdrawal reactions as those suffered by crack cocaine users. Both drugs, after prolonged use, lead to binging, which is consuming the drug continuously for up to 3 days without sleep. The user then is driven into a severe depression, followed by worsening paranoia, belligerence, and aggression, which is a period known as tweaking. Finally, the user collapses from exhaustion, only to awaken days later to begin the cycle again.

The new ephedrine-based methamphetamine, however, has a usage pattern unlike that of traditional methamphetamine or crack cocaine. Several times more potent than its other forms, todays methamphetamine produces a reaction far more severe than even crack cocaine, with sleepless binges that last up to 15 days and end with sudden crashes.

Chronic, high-dose methamphetamine abusers, often called "speed freaks," are generally undernourished and have a gaunt appearance, poor hygiene, and rotten teeth. These individuals inject methamphetamine every 2 to 3 hours and often as much as 1,000 milligrams each time. Due to the high level of methamphetamine in their systems, "speed freaks" are extremely paranoid.

According to the latest information available from the DAWN, the estimated number of nationwide emergency room drug abuse episodes involving methamphetamine decreased from 1994 to 1995. However, despite this decrease, the number of nationwide emergency room episodes remained well above the level of 1992. Moreover, there were preliminary indications that methamphetamine abuse is again increasing. The areas hardest hit by methamphetamine abuse in 1996 included Dallas, Denver, Los Angeles, Phoenix, San Diego, San Francisco, and Seattle.

Pharmacology

Methamphetamine can be a lethal, dangerous, and unpredictable drug. Methamphetamine, like cocaine, is a potent central nervous system stimulant. It can be smoked, snorted, injected, or taken orally; the most frequent method of

Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The Supply of Illicit Drugs to the United States, August 1997.*

methamphetamine use is injection. The drug increases the heart rate, blood pressure, body temperature, and rate of breathing; dilates the pupils; produces euphoria, increased alertness, a sense of increased energy, and tremors. High doses or chronic use have been associated with increased nervousness, irritability, and paranoia. Withdrawal from high doses produces severe depression.

Effects: In large doses, methamphetamines frequent effects are irritability, aggressive behavior, anxiety, excitement, auditory hallucinations, and paranoia (delusions and psychosis). Abusers tend to engage in violent behavior. Mood changes are common, and the abuser can change from friendly to hostile rapidly. The paranoia produced by methamphetamine use results in suspiciousness, hyperactive behavior, and dramatic mood swings.

Duration: Compared with cocaine, which is metabolized rapidly in the body, methamphetamine is metabolized slowly; up to 2 days are required to eliminate a single dose. Rapidly absorbed when taken orally, the effects of the drug peak within 2 to 3 hours and are measurably effective in the body for up to 8 hours.

Addiction: One of the main arguments in determining whether or not a substance is capable of producing physical addiction (dependence) is the ability to produce a withdrawal syndrome similar to that of narcotics and central nervous system depressants. Once it was discovered that each drug produces its own unique pattern of effects, more drugs then were identified as having addiction potential. Repeated use of high-dose methamphetamine produces such a pattern. Several hours after the last use, the individual experiences a drastic drop in mood and energy levels. Sleep begins and may last for a long period and, upon awakening, severe depression exists that may last for days. While users are in this depressed state, suicide is a major concern. These symptoms occur after use and may be reversed by taking another dose of methamphetamine, thereby fitting the definition for a withdrawal syndrome.

"Ice" is a large crystal form of high-purity

d-methamphetamine hydrochloride. Ice derives its name from its appearance: large, clear crystals that resemble chunks of ice, shards of broken glass, or rock candy.

It was not until 1988 that ice became widespread in Hawaii. By 1990, ice spread to the U.S. mainland, although distribution remained limited to retail amounts in just a few regions of the country. In the early 1990s, Koreans served as the principal supply source for ice that was smuggled from Asia directly to Hawaii and the U.S. mainland. In 1996,

intelligence data indicated that traffickers from Mexico were supplying Asian organizations/gangs on the West Coast and in Hawaii with methamphetamine for conversion to ice.

Source: U.S. Department of Justice, Drug Enforcement Administration. 1996 NNICC Report: The Supply of Illicit Drugs to the United States, August 1997.

Analyses of all samples of ice seized to date in the United States have shown purity levels of 90 to almost 100 percent. In 1996, ice sold for $200 to $450 per gram, from $5,000 to $8,500 per ounce, and $35,000 to $50,000 per kilogram. Abusers in the United States ingested ice almost exclusively by smoking the drug in glass pipes.

Other terms for ice included quartz, glass, crystal meth, shabu, kaksonjae, hanyak, hiropon, batu, and crack meth.

Laboratory Seizures

The number of methamphetamine laboratory seizures in the United States reported to DEA increased dramatically during 1996. The significant increase reflects the widespread proliferation in the manufacture, trafficking, and use of the drug across the West, Midwest, and portions of the South. DEA special agents in concert with State and local law enforcement authorities seized a record-breaking 879 methamphetamine laboratories in 1996, the highest figure ever reported by DEA. This compares to 327 laboratories seized in 1995, 263 in 1994, and 218 in 1993. The 1996 figure represents a 169-percent increase over 1995 seizures, and marks the most significant annual increase in the number of seizures ever reported by DEA.

According to seizure data, the manufacture of methamphetamine was based primarily in the West, Midwest, and portions of the South. DEA field divisions in Dallas (77), Denver (88), Los Angeles (52), New Orleans (81), Phoenix (83), St. Louis (292), San Diego (53), and San Francisco (87) accounted for approximately 92 percent of the methamphetamine laboratory seizures nationwide. The significant increase in the number of methamphetamine laboratory seizures was most pronounced in the St. Louis Field Division where 235 laboratories were seized in the State of Missouri alone. Most of these laboratories, however, were capable of producing only small quantities ranging from half an ounce to 1 pound.

Although there were a large number of seizures reported by the St. Louis Division, California remains the predominant area for methamphetamine production in the United States. According to the Western States Information Network (WSIN), preliminary data indicate that 892 methamphetamine laboratories were seized in California during 1996. (WSINs figure may include seizures counted by DEA; however, DEA currently does not maintain a system to capture WSINs data. The development of a nationwide database to capture this data is underway at EPIC). In addition, Mexican-operated laboratories continued to be based in California where they produced large quantities of

methamphetamine. According to DEA figures, Mexican-operated laboratories accounted for approximately 26 percent of all laboratories seized in California and, for the most part, were capable of producing anywhere from 10 to 150 pounds per cook.

Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The Supply of Illicit Drugs to the United States, August* 1997.

Production Methods

Methamphetamine is produced most commonly by using either an ephedrine/pseudoephedrine reduction method or a P2P method. However, only 3 percent of the methamphetamine laboratories seized during the year used a P2P method of synthesis. The use of pseudoephedrine for synthesizing methamphetamine increased dramatically over the past several years due to the relative ease of purchasing pseudoephedrine tablets and the subsequent decline in the availability of ephedrine. Preliminary data indicate approximately 51 percent of the laboratories seized in 1996 were identified as, or suspected of, using pseudoephedrine compared to 45 percent for ephedrine. (Initial reporting of ephedrine as a precursor at the laboratory site often is confirmed later through laboratory analysis to be pseudoephedrine.)

Pseudoephedrine/ephedrine was obtained from various sources. Illicit laboratory operators obtained/diverted pseudoephedrine (in tablet form), and in a number of cases ephedrine, from over-the-counter (OTC) products often designed for legitimate use such as OTC cold preparations sold in retail stores and through mail-order distributors. These varied sources indicate the increasing diversion and use of OTC products to manufacture methamphetamine.

The Federal Government has prepared regulations to further reduce the diversion of pharmaceutical products containing chemicals, such as ephedrine and pseudoephedrine, which can be used to produce illegal drugs. DEA has consulted with corporations within the pharmaceutical industry to develop a solution to the diversion problem that does not restrict unduly the availability of these chemicals for legitimate use. The Comprehensive Methamphetamine Control Act of 1996 was formulated so that retail sales of legitimate ephedrine/pseudoephedrine products for normal medical use will not be affected.

Use of the "Nazi method," which uses ephedrine/pseudoephedrine, sodium/lithium, and anhydrous ammonia to produce methamphetamine, has been identified in approximately 12 percent of the laboratories seized in 1996. Use of this method has increased significantly from 5 laboratories in 1995 to 104 in 1996. While most Nazi-method laboratories were seized in Arkansas and Missouri, these operations were encountered in eight other States and as far west as California and Washington. This method has become popular because it is quick, inexpensive, requires little setup time or equipment, and produces a high yield of pure methamphetamine.

The significant rise in the number of methamphetamine laboratory seizures not only demonstrates that increasing numbers of individuals are becoming involved in the methamphetamine trade it also underscores the expanding influence of this drug in many States is one that is not fueled only by Mexico-based organizations but also by a large number of independent traffickers/groups that operate the majority of illicit laboratories in the United States. While these laboratories are small, for the most part, in comparison

Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The Supply of Illicit Drugs to the United States, August* 1997.

communities across the nation. The growing methamphetamine problem in the United to the Mexican-operated laboratories in California, they are nonetheless a source of supply to the illicit drug market. In addition, they are extremely hazardous and they endanger the safety and well-being of many citizens.

In addition to domestic manufacture, methamphetamine increasingly is being produced in Mexico and smuggled into the United States. This is confirmed by seizure data from EPIC and the DEA Mexico City Country Office. According to EPIC, the amount of methamphetamine seized in transit from Mexico to the United States increased dramatically beginning in 1993. In 1993, 1994, and 1995, 329, 683, and 697 kilograms, respectively, were seized along the Southwest border. During 1996, 795 kilograms were seized. By comparison, only 6.5 kilograms were seized in all of 1992. Likewise, the amount of methamphetamine seized in Mexico has increased in the past 3 years.

Laboratory Operations

Clandestine methamphetamine laboratories in the United States usually are operated on an irregular basis rather than on a consistent production schedule. Operators often produce a batch of finished product, disassemble the laboratory, and either store it or move it to another location while they acquire additional chemicals. Relocating the laboratory affords some protection against detection by drug law enforcement authorities. Storage facilities often are used to house or safeguard chemicals, glassware, and finished product. It is not uncommon for operators to have multiple laboratory sites.

Cooperative efforts by law enforcement agencies and chemical suppliers have made obtaining the necessary chemicals more difficult for methamphetamine laboratory operators. In order to circumvent these joint efforts, laboratory operators have sought alternative chemicals, routes of synthesis, and sources of supply to fulfill their needs. Laboratory operators have manufactured their own chemicals, employed "runners" to purchase necessary chemicals under the "threshold amount" (the amount at which record-keeping and reporting of chemical transactions are required), or experimented with alternative, nonregulated chemicals. They also have obtained chemicals from rogue chemical companies, from sources of supply located in States without strict chemical regulations, or from other countries.

Locations: Small-scale methamphetamine laboratories are being operated increasingly in single and multifamily residences in urban and suburban neighborhoods, where they pose a significant threat to public health and safety. Although traditionally the laboratories were located in sparsely populated or isolated rural areas in order to avoid detection, as

laboratory seizures reported to DEA indicate, 52 percent of the clandestine laboratories seized in 1995 were located in urban and suburban sites. Rural locations were reported in 38 percent of the seizures and industrial or commercial sites in 5 percent. (Locality information was not available for the remaining 5 percent of the laboratory seizures.)

Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The Supply of Illicit Drugs to the United States, August* 1997.

Operators: Methamphetamine laboratory operators often are well-armed, and their laboratories occasionally are booby-trapped and equipped with scanning devices employed as security precautions. Weaponry, ranging from single firearms to arsenals of high-powered weapons and explosives, are found commonly at laboratory sites. Laboratory operators, or "cooks," frequently display little concern for public safety or the environment. Cooks vary from high school dropouts with no real chemistry education to professionals with graduate degrees in chemistry. Typically, however, these cooks have little formal training. Instead, they follow a handwritten recipe or have learned to produce methamphetamine from underground publications, apprenticeships, or fellow inmates during periods of incarceration.

Chemists: Some laboratory operators act as their own chemists, while others hire chemists to run the laboratories for them. Many manufacturers are independent producers who cook for various organized groups. This is particularly true of larger organizations that may hire or contract chemists to manufacture methamphetamine in return for cash, finished product, or a combination of both. Other cooks manufacture for themselves rather than for a particular organization.

Networks: Leasing storage facilities, procuring chemicals, securing the laboratory site, and setting up glassware and equipment may be the responsibility of one person or many different individuals. Several individuals may work together to combine their expertise, chemicals, etc., on an ad hoc basis. The number of individuals that comprise an operation, and the function each performs, differs from one organization to the next. Illicit manufacturers often develop and maintain associations with other laboratory operators. In certain areas, they function as a loosely interconnected community or network, sharing, selling, or exchanging chemicals, recipes, glassware, or the finished product.

Laboratories Operated by Traffickers from Mexico

Typically, laboratories operated by traffickers from Mexico were set up in remote areas in parts of northern California and throughout Southern California. Organizations may purchase property or pay for the short-term use of a site to acquire a secure location where they can manufacture. In the Fresno area, in 1996, for example, laboratories usually were constructed on property rented out by farm laborers who were paid up to $10,000 for use of the property. Cooking most frequently occurred during the weekend when the farms were not in operation. An organization may utilize one location many times. The same location may be used by numerous organizations. Some individuals make money simply by renting out laboratory sites to various organizations. Organizations assisted each other in obtaining chemicals, glassware, and the finished product. Chemists may manufacture for numerous organizations. Chemical brokers supply numerous manufacturing organizations with chemicals.

An individual, acting in a supervisory capacity, may be responsible for the overall management of the laboratory, such as ensuring that the necessary chemicals and equipment are present and are set up for the operation to proceed. Generally, chemicals

Source: U.S. Department of Justice, Drug Enforcement Administration. 1996 NNICC Report: The Supply of Illicit Drugs to the United States, August 1997.

were stored in stash houses and brought to the laboratory site as needed. The amount of chemicals present at the laboratory usually is restricted to that amount required to complete a particular cook. Once the process is complete, the laboratories were dismantled, and the equipment is put into storage.

Numerous 22-liter setups were used frequently in laboratories operated by traffickers from Mexico to produce up to 150 pounds during each manufacturing process. Furthermore, these organizations operated many laboratories simultaneously. Illegal aliens were encountered most frequently at the laboratory site. In some cases, they were hired as helpers or to maintain the reaction process, while the actual chemist visited the site periodically to ensure the operation was functioning properly. In other cases, they were responsible for all facets of the manufacturing process.

Clandestine methamphetamine laboratories in Mexico

appear to be run in a manner similar to their counterparts in the United States. For example, temporary laborers typically are hired to perform the production process, laboratories often are located in remote areas (e.g., ranches), and large-capacity laboratory equipment is used.

The increase in production in Mexico was a result of an increased demand in the United States and ongoing enforcement efforts in California. It is likely that increasingly strict chemical controls and enforcement efforts in the United States will result in an additional increase in production of methamphetamine in Mexico, depending upon access to chemicals in that country.

Health and safety hazards, site contamination, and the environmental impact

Not only are methamphetamine laboratories used to manufacture illegal, often deadly drugs, but the clandestine nature of the manufacturing process and the presence of ignitable, corrosive, reactive, and toxic chemicals at the sites, have resulted in explosions, fires, toxic fumes, and irreparable damage to human health and to the environment. Every year, fires or explosions occur at a number of clandestine laboratory sites, which lead to their discovery.

The chemical reactions that occur during the manufacture of illegal drugs may produce toxie vapors that permeate into the plaster and wood of buildings or may be vented outside. The problems are further complicated when the chemicals are stored at off-site locations such as rental lockers. The lack of proper ventilation and temperature controls at these off-site locations adds to the potential for fire, explosion, and exposure to humans.

Methamphetamine laboratories may contaminate water sources and/or soil. In some cases, contamination may spread off-site. Careless or intentional dumping by the laboratory operator is one source of contamination. Spilling chemicals on the floor or dumping waste into bathtubs, sinks, toilets, or on the grounds surrounding the laboratories, and along roads and creeks are common practices. Surface and groundwater

.Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The Supply of Illicit Drugs to the United States, August* 1997.

drinking supplies could be contaminated, potentially affecting large numbers of people. Perhaps the greatest risk of long-term exposure is assumed by unsuspecting inhabitants of buildings formerly used by clandestine drug laboratory operators where residual contamination may exist inside and outside the structure.

Operators also dispose of hazardous chemical wastes by pouring the wastes into local sewage systems or septic tanks, or burying them. Law enforcement personnel engaged in clandestine drug laboratory seizure and analysis require specialized training in the investigation of such facilities, including training in appropriate health and safety procedures and in the use of personal protective equipment. Cleaning up a seized clandestine drug laboratory site is complex, dangerous, expensive, and time consuming. The amount of waste material from a clandestine laboratory may vary from a few pounds to several tons depending on the size of the laboratory and its manufacturing capabilities.

When a methamphetamine laboratory is seized, hazardous wastes and materials, such as chemicals, contaminated glassware and equipment, by-products, and the drug products themselves are found at the site and must be disposed of properly. These hazardous materials can weigh from a few pounds to several tons and include solvents, reagents, and precursors. Many of these materials are reactive, explosive, flammable, corrosive, and/or toxic. The danger is compounded by the fact that many Federal, State, and local law enforcement officers lack adequate training in clandestine laboratory safety procedures and regulations, hazards, and other related health and safety issues.

Although the quantities of hazardous materials found at a typical methamphetamine laboratory are relatively small when compared to waste generated from a major industry, the substances to which law enforcement personnel and others may be exposed present very real public health concerns. Methamphetamine laboratories present both acute and chronic health risks to individuals involved in the seizure and cleanup of the facility, to those who live and work nearby, and to the violator operating the facility.

Trafficking

As noted, the suppliers of methamphetamine in the United States traditionally were outlaw motorcycle gangs and other independent trafficking groups. While they continued to produce methamphetamine and controlled a share of the market, in 1996 methamphetamine smuggling into the United States from Mexico was controlled primarily by the same major organizations that dominated the production/trafficking of other illicit drugs from Mexico into the United States.

These groups operating from Mexico were composed of combinations of Mexican nationals residing in Mexico and the United States, Mexican-Americans who operated on either side of the border, and illegal aliens residing in the United States. Often, these organizations were directed by well-established families that have been involved in smuggling contraband for decades. They produced and/or transported large quantities of cocaine, heroin, and marijuana into the United States on a daily basis. They regularly

Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The Supply of Illicit Drugs to the United States, August* 1997.

demonstrated their flexibility and adaptability, modifying smuggling routes and methods as needed to handle virtually any drug. The younger generation within some of these families expanded into methamphetamine trafficking.

There were numerous border points of entry for Mexican-produced methamphetamine into the United States. Most methamphetamine was seized at the San Ysidro, California, port of entry. The most common method of transporting methamphetamine across the border was by passenger vehicles. The passenger vehicles most frequently used to smuggle methamphetamine were cars, but also include pickup trucks and 4-wheel-drive vehicles.

Domestically, methamphetamine was distributed by a wide array of organizations that vary greatly in size, structure, and degree of sophistication--from small, local independent groups that operate on a limited scale to large organizations that controlled all aspects of the traffic. Intelligence indicates that many of the newly established distribution networks around the country were supplied by sources in California. In addition, as previously described, there are organizations involved solely in chemical acquisition.

Organized crime drug groups operating from Mexico dominated distribution in many areas of the West and Southwest in 1996. For example, these groups operating from Mexico have been identified as operating in States such as Arizona, Colorado, Georgia, Florida, Idaho, Iowa, Nebraska, Kansas, Texas, and Washington, beyond their strongholds in California and Mexico.

Unquestionably, the large-scale move by these organized crime drug groups operating from Mexico into methamphetamine production is a conscious decision of the leaders of these powerful organizations. Should demand for methamphetamine in the United States continue to increase, these trafficking organizations are in a position to control the smuggling and distribution of the drug into and within the United States.

Several enforcement events highlight the expanding role of organized crime drug groups from Mexico in trafficking methamphetamine. Mexican criminal drug groups, based typically in California, extended their methamphetamine distribution operations farther eastward. One indicator of the extent to which California-based Mexican criminal groups supply methamphetamine to distributors in other States is seizure data collected through Operation PIPELINE, the U.S. highway interdiction program managed by EPIC. Operation PIPELINE seizure statistics show that of 447 kilograms of methamphetamine seized from vehicles nationwide in 1996, 335 originated in California. The following enforcement actions highlight the increasing presence of Mexican organizations in the trafficking of methamphetamine eastward:

Based on DEA information, the Carroll County, Georgia, Sheriffs Department seized 63 pounds of methamphetamine on October 16, 1996, from a Mexican national traveling by vehicle from Riverside, California.

Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The Supply of Illicit Drugs to the United States, August* 1997

A DEA investigation in Idaho, in coordination with other Federal, State, and local authorities, terminated in early December 1996, with the arrest of five Mexican nationals. Authorities confiscated 19 pounds of methamphetamine as well as other drugs in this investigation.

On December 11, 1996, 10 pounds of methamphetamine were seized in Las Vegas by State authorities from a Mexican male traveling by vehicle from California to Omaha, Nebraska.

On December 31, 1996, DEA Atlanta arrested two members of an organization capable f distributing approximately 40 pounds of methamphetamine per month. Subsequently, the source of supply was arrested with 16 pounds of methamphetamine. Further investigation determined the source of supply was linked to a California-based Mexican polydrug trafficking organization. It has been estimated that this source was responsible for wholesaling up to 100 pounds of methamphetamine per month to various retail groups in the Atlanta area. Most of the methamphetamine was transported from California by automobile.

During 1996, methamphetamine prices nationwide ranged from $4,000 to $20,000 per pound, $500 to $2,700 per ounce, and $40 to $200 per gram.

Major Methamphetamine Trafficking Organizations

The extensive involvement of polydrug trafficking organizations from Mexico in methamphetamine production and distribution has redefined the methamphetamine problem in the United States. These polydrug organizations control well-established cocaine, heroin, and marijuana distribution networks throughout the western United States, enabling them to supply methamphetamine to a large retail-level market. Presently, these organizations are poised to supply methamphetamine to the rest of the country in response to any increases in demand. The major methamphetamine trafficking organizations operating from Mexico include:

The Arellano-Felix organization, the most violent of the gangs from Mexico, supplies methamphetamine to distributors in U.S. cities such as San Ysidro and San Diego, routinely employing gang members from Mexico to act as U.S. distributors. They operate on both sides of the U.S.-Mexican border and smuggle between 50 and 100 pounds of methamphetamine into the United States monthly.

The Amado Carrillo-Fuentes organization currently is the most powerful drug group in Mexico and operates from Hermosillo in the west across the border into Arizona and from Juarez into Texas. A seizure in Las Cruces, New Mexico, in 1995 of 315 kilograms of methamphetamine was tied to the Carrillo-Fuentes organization. Parts of this shipment were destined for Washington, Oklahoma, Illinois, and Georgia. Methamphetamine from

Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The Supply of Illicit Drugs to the United States, August* 1997

this shipment was analyzed at 98-percent pure and had an estimated street value of over $50 million. This organization also is tied to a 3-metric-ton shipment of ephedrine destined for Nicaragua is connected to the Amezcua organization. The Carrillo-Fuentes organization provides large quantities of methamphetamine to the Phoenix, Arizona, area through the Jorge Ortiz-Caro organization, which operates in Sonora, Mexico, as well as Phoenix. The Ortiz-Caro organization has been identified as a methamphetamine source of supply for organizations based in the Chicago and Milwaukee areas. Ortiz-Caro reportedly is a supplier of methamphetamine to associates and members of the Aryan Brotherhood prison gang in Phoenix.

The Amezcua-Contreras organization has been identified as the largest known importer of ephedrine into Mexico and across the U.S. border. Since September 1992, in excess of 5 tons of ephedrine, ordered by Jesus and Luis Amezcua, have been seized. These brothers have been documented since 1988 as trafficking in cocaine and methamphetamine in both the San Diego and the Los Angeles areas. This organization operates primarily out of Guadalajara, but, through agreements with other Mexican gangs, has extended its trafficking operations all along the border. It controls methamphetamine laboratories in Guadalajara and Tijuana and employs associates across the border in ephedrine and methamphetamine trafficking, especially in Southern California. Luis was indicted in the Central District of California in December 1994 for methamphetamine-related violations. Jesus was indicted in the Southern District of California in February 1993 for cocaine-related violations in a joint DEA-FBI investigation. Although indictments and arrest warrants have been issued for both individuals, investigations continue to indicate that they and their organization remain deeply involved in methamphetamine trafficking from Mexico to the United States.

The Caro-Quintero organization, a major transporter of cocaine and marijuana, has expanded to methamphetamine trafficking and may be aligning with the Arellano-Felix organization. This organization operates from Hermosillo, Agua Prieta, Guadalajara, and Culiacan, as well as the Mexican States of San Luis Potosi, Sinaloa, and Sonora. The organizations smuggling routes extend into California, Arizona, Texas, and Nevada and it is responsible for trafficking 100-pound quantities through Arizona ports of entry.

The major Mexican trafficking groups outlined above operate within a fluid, flexible, and elastic system. Alliances shift or shake-ups in the hierarchy occur with the divergence of interests and eruptions of internecine violence. But while the precise roles of specific groups and individual group members often blur, there is an overarching structure within which drug trafficking operates: the Federation.

The Federation evolved from the Guadalajara cartel, which was formed in the 1980s by Rafael Caro-Quintero and Miguel Felix-Gallardo in order to ship heroin and marijuana to the United States. Among the first of the Mexican drug trafficking groups to work with the Colombian cocaine mafias, the Guadalajara cartel prospered from the cocaine trade, eventually broadening into todays Federation. Currently, its leadership consists of Chapo Guzman and Hector Palma-Salazar (both jailed in Mexico) and Amado Carrillo-Fuentes,

Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The Supply of Illicit Drugs to the United States, August* 1997

now the dominant force. The Arellano-Felix brothers--laying claim to Felix-Gallardos former leadership position and by virtue of their control over smuggling in Sonora--also are battling for influence.

As a loose consortium of smuggling groups, managers of the Federation generally have the following functions.

Cartel heads make the major decisions, broker security with corrupt officials, and negotiate at the international level. They retain overall authority over land, sea, and air movement of all drugs, form connections with the influential political families, establish major front operations, and generally facilitate cocaine, heroin, marijuana, and now methamphetamine movement to major U.S. markets.

Division chiefs, the working arm of the Federation, are responsible for all stages of smuggling into the United States. It is this level on down that law enforcement confronts directly through investigations, seizures, and arrests.

Gatekeepers, who control major ports of entry, facilitate trafficking on both sides of the border. Although they may owe allegiance to a certain division chief or cartel head, they will move drugs for other gangs at a price.

Family syndicates, small time brokers at the bottom of this informal structure, operate along the border and in the United States and are employed to off-load, transport, store, and distribute drugs.

Violence

Drug-related violence usually occurs in one of three ways: by users under the influence of the drug, by users who commit violent acts to obtain money or more of the drug, and by distributors who use violence in the course of conducting their business.
Every community with a methamphetamine abuse problem has experienced violence in some form; most commonly this appears as domestic disputes. The extreme agitation and paranoia associated with use of the stimulant often lead to situations where violence is more likely to occur. Chronic use of methamphetamine can cause delusions and auditory hallucinations that precipitate violent behavior or response.

However, due to the expansion of the methamphetamine trade by organized crime drug groups operating from Mexico, violence associated with distribution of the drug--used as a means of intimidation, retaliation, and discipline--also has been on the rise in many areas of the country.

Methamphetamine traffickers disputes, acts of retribution, and attempts to eliminate competition have led to violence and murder that echo the gruesome crack gang turf wars of the mid-1980s. Violence of this magnitude has become an alarming characteristic of

Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The supply of Illicit Drugs to the United States, August* 1997

the methamphetamine trade. Increasingly, the major methamphetamine traffickers operating from Mexico recruit local U.S. street gangs to distribute methamphetamine in many areas of the country.

Regional trafficking trends in 1996

Northeast

In general, most methamphetamine was transported into the Northeast from outside suppliers. Distribution remained in the hands of traditional outlaw motorcycle gangs, such as the Hells Angels, and the user population remained stable. Nevertheless, there were slight indications of an emerging group of younger, independent entrepreneurs distributing methamphetamine. A handful of investigations, for instance, demonstrated local distributors connections to California- and Mexico-based methamphetamine suppliers.

The regions current methamphetamine problem pales in comparison to that experienced in other regions of the country. Only in the Philadelphia area did methamphetamine surface as a serious concern. Four groups have been identified as active in its manufacture--primarily using the P2P method--and distribution: traditional organized crime groups operating in southern New Jersey as well as Philadelphia; African-American criminal gangs; outlaw motorcycle gangs, namely the Pagans, Breed, and Warlocks; and independent operators. Some production spilled over into New Jersey, where one laboratory was seized in 1996. But, overall, the New Jersey-New York area remained relatively untouched by methamphetamine trafficking. Methamphetamine trafficking in the Boston area was controlled by outlaw motorcycle gangs, but availability remained limited.

Despite limited methamphetamine trafficking and production in the Northeast, the large number of chemical companies in the region made it difficult for law enforcement to deny methamphetamine manufacturers access to precursor chemicals.

Southeast

Methamphetamine availability increased significantly throughout the Southeast over the previous 2 years. Law enforcement agencies in Alabama, Arkansas, Florida, Georgia, Mississippi, South Carolina, and Tennessee reported increases in methamphetamine seizures and case initiations. In Atlanta, for example, methamphetamine was transformed from "poor mans cocaine" to the drug of choice in upscale nightclubs. It was more profitable for sellers than cocaine.

Methamphetamine supplied from the West Coast surpassed local production as the leading source for regional distribution. Florida law enforcement officials indicated that their methamphetamine problem was fueled by Mexican trafficking groups that engaged

Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The Supply of Illicit Drugs to the United States, August* 1997

California-based suppliers and exploited existing marijuana distribution channels. In Atlanta and other regional cities, Mexican drug trafficking organizations used established cocaine distribution networks to move methamphetamine. Traffickers most commonly transported methamphetamine by vehicle along interstate highways. In addition, operators used couriers traveling on commercial airlines to smuggle the drug from the West Coast, particularly into Florida where couriers using rail services also were encountered.

In contrast to the general regional trend toward reliance on outside suppliers, clandestine methamphetamine production continued in Arkansas, southern Alabama, and sections of Tennessee. Manufacturers in these areas tended to be rural, low-income whites. In Alabama, white supremacists were active in methamphetamine production, while in Tennessee some third-generation bootleggers took to methamphetamine production like their grandfathers took to moonshining and their fathers took to the marijuana trade. Regional groups involved in methamphetamine production were increasingly violent, well-armed, and knowledgeable about explosives.

Midwest

Areas of the upper Midwest were hard hit by the spiraling growth of methamphetamine trafficking and use. In Iowa, methamphetamine was cited as a contributing factor in an estimated 80 percent of domestic violence cases, and as a major reason behind violent crime. The user population consisted primarily of young white adults from lower-middle income families. Many started by snorting methamphetamine and progressed to injecting. Methamphetamine cases now account for 80 percent of the police departments drug investigations. Most of the methamphetamine available in the upper Midwest was trafficked by Mexican-controlled criminal organizations--connected to sources of supply in California and Mexico--that were based in smaller Midwestern cities with existing Mexican-American populations. Smuggling routes into the region incorporate a variety of transportation means, but the profit is a constant--a pound of methamphetamine purchased in California for $5,000 sells for as much as $16,000 in Iowa.

Methamphetamine was also a leading drug of abuse in Missouri. Local clandestine manufacture furnished most of the supply, and it was supplemented by California-based sources. Law enforcement agencies regularly seized clandestine methamphetamine laboratories throughout Missouri, where, almost without exception, they encountered caches of weapons. Since 1993, in a trend unique t Southwestern Missouri, clandestine laboratories have been manufacturing methamphetamine by the sodium ammonia or "Nazi" method, previously described.

West

Arizonas methamphetamine problem exploded. Law enforcement officials blamed the upsurge in trafficking and related violence on Mexico-based trafficking groups and their

Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The Supply of Illicit Drugs to the United States, August* 1997

associates. The California-Arizona border became the focus for law enforcement authorities, as interstate highways were used increasingly to move methamphetamine from suppliers in California to Arizona.

In the Pacific Northwest, Mexico-based drug trafficking organizations spearheaded methamphetamine distribution along established black tar heroin and cocaine networks. Since 1993, methamphetamine traffickers have stretched their routes from California to Oregon in 1994 and on to Washington and Idaho in 1995. Outlaw motorcycle gangs, the regions traditional suppliers, purchased their methamphetamine from the Mexican trafficking organizations. Accompanying the influx into the Northwest were drive-by shootings, assaults, and other acts of violence spawned by the methamphetamine trade. Similarly, parts of Colorado were inundated in methamphetamine and violence. The escalation in local methamphetamine trafficking generated its own criminal subculture. Violence--not only homicides, but also kidnappings, mutilations, and torture--was a core element of methamphetamine trafficking.

Source: U.S. Department of Justice, Drug Enforcement Administration. *1996 NNICC Report: The Supply of Illicit Drugs to the United States, August* 1997

METHAMPHETAMINE PRECURSOR CHEMICAL CONTROL IN THE 1990's

January, 1996

Executive Summary

By the late 1980s, traffickers and clandestine laboratory operators discovered the ease with which ephedrine, a primary methamphetamine precursor, could be converted to methamphetamine. When the Chemical Diversion and Trafficking Act imposed controls upon the import, export and distribution of bulk ephedrine powder, drug traffickers switched to the diversion of ephedrine from international commerce and the use of ephedrine tablets, which were exempt under the law. When the Domestic Chemical Diversion Control Act effectively closed the ephedrine loophole in the law, clandestine lab operators switched to the use of pseudoephedrine as their methamphetamine precursor. Pseudoephedrine is a direct substitute for ephedrine for this purpose.

By the early 1990s, Mexican traffickers had become the major source in the U.S. of illicit methamphetamine. The magnitude of their involvement in the international diversion of ephedrine was discovered in 1994, when 3.4 metric tons of the chemical were seized at the Dallas/Ft. Worth airport. As a result of this initial seizure, it was determined that between June 1993 and December 1994, brokers from Switzerland alone supplied Mexican traffickers with at least 70 metric tons of ephedrine. An additional 100 tons are believed to have been diverted in a similar manner from a variety of international sources. This total of 170 tons could yield 136 tons of methamphetamine, which, at today's prices, would potentially generate a profit in excess of $3.2 billion, and would be enough to supply 12.4 million abusers with three 10-milligram doses a day for 365 days a year.

Recent diplomatic efforts undertaken by DEA's Office of Diversion Control with the foreign governments whose industry provides the major sources of raw material for methamphetamine production have virtually eliminated the massive diversion of ephedrine from foreign sources which the Mexicans had instituted. However, traffickers and lab operators continue to find ways to adjust to DEA's diplomatic and legislative initiatives. Now we have begun to see massive diversion of pseudoephedrine to substitute for ephedrine, and tablets containing ephedrine in combination with other substances such as guaifenesin, this time primarily from domestic distributors. Enforcement action recently undertaken against a single company reveals that it distributed approximately 68 metric tons of chemicals sufficient to produce 50 tons of methamphetamine in a single year. It is believed that virtually all of this material was diverted.

This paper provides an overview of DEA's accomplishments in combating clandestine methamphetamine production through chemical control regulatory and enforcement measures, and concludes with a brief discussion of plans for dealing with the traffickers' and clandestine lab operators' latest "adjustment" to these measures.

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METHAMPHETAMINE

PRECURSOR CHEMICAL CONTROL IN THE 1990's

Office of Diversion Control

Introduction

There are two different aspects to DEA's effort to control the chemicals necessary to produce methamphetamine. One is working with foreign counterparts to cut off the supply of methamphetamine precursor chemicals to traffickers; the other is shutting down domestic "rogue" chemical companies which knowingly sell large quantities of the precursors to traffickers. This paper describes the steps that the Office of Diversion Control (OD) has taken in both respects, and the success which has thus far been achieved. This paper concludes with a brief discussion of needs for the future if ultimate success in attacking this particular drug problem is to be realized.

Methamphetamine History

Methamphetamine is a purely synthetic central-nervous-system stimulant of the amphetamine family. Amphetamines were first synthesized in the late nineteenth century by a German scientist; the synthesis of methamphetamine is attributed to a Japanese chemist in 1919. Historically, methamphetamine has had therapeutic uses. It also has been widely abused for its powerful stimulant effects. Amphetamine derivatives, such as methamphetamine, were developed in both oral and intravenous form. They were promoted as nonaddictive. In 1937, amphetamine became available by prescription in tablet form. It was used in the treatment of hyperactive children, Parkinson's disease, depression, and narcolepsy. When narcolepsy patients reported loss of appetite, it was discovered that amphetamines also worked as an anoretic.

Japan was the first country to experience a methamphetamine epidemic. During World War II, large amounts of methamphetamine were produced for use by war-industry factory workers to aid output. Following the war, methamphetamine tablets, of which large quantities remained in store, were vigorously promoted by pharmaceutical companies and large quantities were sold to the Japanese public without prescription. Epidemic intravenous use of the drug soon followed.

Although a prescription was required in the U.S., during the 1950s large quantities of amphetamines were sold by drug companies to bogus companies in care of post office boxes. "Bennies" or pep pills, as they were known, were used for nonmedical purposes by college students, athletes, truckers, and housewives, as well as thousands of veterans returning from the war with amphetamine habits. Use of methamphetamine expanded across the U.S. in this decade as production of the drug increased significantly. Amphetamines were being marketed to treat obesity, narcolepsy, hyperkinesis, and depression, but were being taken primarily to increase energy, decrease the need for sleep, and elevate mood. In the 1960s, doctors in San Francisco began prescribing amphetamine injections for treatment of heroin addiction. Widespread abuse followed as San Francisco pharmacies began selling injectable amphetamines without prescriptions, or with crudely forged prescriptions, or through bogus telephone orders from users posing as doctors. "Script-writers" appeared: physicians who, for the cost of an office visit, would write prescriptions for the drugs. In 1962, federal, state and local law enforcement agencies

visit, would write prescriptions for the drugs. In 1962, federal, state and local law enforcement agencies cracked down; eventually, amphetamine and methamphetamine were controlled under the Drug Abuse Control Act of 1965. Subsequent control in Schedule II of the Controlled Substances Act (CSA) in 1970 placed restrictions, among other things, on the amounts of these drugs produced. Drug companies took their liquid, injectable products off the market, although they remained available to hospitals. In response to this market vacuum, illegal crystal-methamphetamine labs began to appear in the Bay Area (1).

Intravenous methamphetamine abuse in the U.S. became prominent in the late 1960s particularly in the Haight-Ashbury district of San Francisco, where speed, as all amphetamines came to be known, began replacing drugs such as LSD and mescaline in popularity. Public education, massive reduction of federally approved production quotas, and treatment of abusers brought this epidemic under control, although motorcycle gangs, in particular, remained involved in the clandestine production of methamphetamine. During the rise in cocaine and crack abuse in the early 1980s, bikers and "dopers" in rural areas, where cocaine was less plentiful and too expensive, continued to favor "crystal meth" or "crank," which was typically snorted or injected. They produced the drug in crude laboratories via a simple process. Among the general U.S. population, the methamphetamine problem increased steadily. Unlike the earlier epidemic, abusers today are not limited to urban areas, and more women are involved.

Extent of the Problem

The illicit domestic demand for stimulants such as methamphetamine has remained constant for many years. A sharp drop in production and abuse occurred following the implementation of the CDTA in 1989. But within the 1990s, reports of methamphetamine/speed abuse episodes have exceeded those seen in the peak of 1989, according to national Drug Abuse Warning Network data for 1994. In particular regions of the country the problem has been or continues to be more severe. Methamphetamine abuse remains a particularly severe problem in California and other southwestern states, such as Texas and Arizona. In fact, authorities in San Diego and the southern San Francisco Bay area report that methamphetamine is the number one drug of abuse in those locations. In San Diego in 1994, there were nearly 3,000 admissions to publicly-funded treatment programs for methamphetamine abuse, up from fewer than 600 in 1988.

Methamphetamine is abused for its stimulant effects; at therapeutic or slightly higher doses, the drug promotes feelings of euphoria, increased alertness and the perception of improved self-esteem and self-confidence, and feelings of power and importance. And its effects last longer than those produced by cocaine or crack. However, the drug often decreases performance and negatively affects the ability to perform tasks requiring thought and creativity. Ultimately, performance deteriorates due to sleep deprivation. Abusers of methamphetamine typically increase the dosage, as a tolerance to some of its effects, notably the euphoria, develops. Taken at higher levels, the drug may cause nervousness, irritability, and restlessness. With high doses taken chronically, psychotic reactions with paranoid delusions often mistaken for schizophrenia may occur. Methamphetamine is smoked, snorted and injected. Tolerance develops to the euphorigenic effects of methamphetamine, leading to higher and more frequent doses. The abuser may take methamphetamine in "binges" lasting several days with intervals of sleep, also lasting for days, between the binges. Repeated use of methamphetamine rapidly produces strong psychological dependence and a withdrawal syndrome consistent with physical dependence.

During the period 1989-1994, methamphetamine consistently accounted for 80 percent and more of clandestine lab seizures by DEA. Whereas the number of all clandestine lab seizures, including methamphetamine, declined from 1989 to 1993 in reaction to domestic chemical control legislation, since 1993 methamphetamine lab seizures have begun to increase, reflecting the heavy and increasing involvement of Mexican drug traffickers in the production of methamphetamine. Their role is described in greater detail below.

The Switch to Ephedrine/Pseudoephedrine

The earliest clandestine labs used the chemical phenyl-2-propanone, also known as phenylacetone or P2P, to produce methamphetamine. Prior to its control in 1980 in Schedule II as an immediate precursor to amphetamine and methamphetamine (for which it is used by legitimate industry), P2P was freely available. In response to a consistent high number of clandestine amphetamine and methamphetamine lab seizures throughout the 1970s, P2P was placed in Schedule II of the CSA. This scheduling of P2P resulted in a brief decline in the number of clandestine lab seizures. Traffickers adjusted to the scheduling of P2P by switching to production of this chemical from other uncontrolled chemicals. In 1989, DEA embarked upon a broad chemical control program based onlegislative authority. In the meantime, clandestine amphetamine/methamphetamine lab seizures once again increased.

In 1987 the first DEA seizure of a clandestine lab which employed the hydriodic acid/ephedrine reduction method of methamphetamine production occurred. Since then, seizures of labs employing the ephedrine reduction method have far outnumbered those using the P2P method each year; in 1994, it was more than six times as many. This relatively simple, high yield method of producing the drug results in a more potent isomer of methamphetamine. In fact, the stimulant properties of ephedrine have been known for centuries, having first been described by the Chinese over 5,000 years ago (2). Ephedrine is obtained from the ephedra plant, known to the Chinese as *mahuang*. Ephedrine also is produced via purely synthetic methods. Like ephedrine, for which it can be used as a direct substitute in the clandestine manufacture of methamphetamine, pseudoephedrine can be obtained from the ephedra plant or produced synthetically. Ephedrine is used legitimately as a bronchodilator for asthma, while pseudoephedrine is used as a nasal decongestant. Ephedrine is not produced in the U.S.; however, pseudoephedrine is produced in this country from imported ephedrine, as well as being imported itself. Major producing countries of ephedrine and pseudoephedrine are China, India, Germany and the Czech Republic.

Approximately 48,000 25 mg. ephedrine tablets are required to extract one kilo of pure ephedrine. One kilogram of ephedrine or pseudoephedrine, theoretically, will yield 0.92 kilos of methamphetamine. Actual yield in clandestine labs is typically in the range of 50 to 75 percent.

Methcathinone

In 1989, a new clandestinely manufactured drug made from ephedrine, methcathinone or "cat," came to the attention of health and enforcement officials in the upper Michigan peninsula area. This highly addictive methamphetamine analog was, and continues to be, typically manufactured in small batches by individual clandestine lab "cooks." The vast majority of ephedrine used in methcathinone production is obtained from over-the-counter purchases of 25 mg. bottles of 1,000 or less tablets or capsules. Although clandestine cat labs eventually were seized in other areas of the country such as Wisconsin, Illinois, Missouri, and as far away as Washington, cat remains a relatively isolated problem and no involvement by large trafficking or polydrug organizations has yet been found. Methcathinone was placed into Schedule I of the CSA in October 1993.

A New Domestic Tool: The Chemical Diversion and Trafficking Act

A new tool to attack the clandestine methamphetamine production problem became available to DEA in 1988 with the amending of the CSA to include the Chemical Diversion and Trafficking Act (CDTA). The CDTA imposed reporting, record keeping and import/export notification requirements for regulated transactions in controlled chemicals. Under this law, bulk ephedrine became regulated; however, the law exempted over-the-counter ephedrine products such as tablets and capsules which are legally marketed or distributed under the Food, Drug and Cosmetic Act. At the time the CDTA was drafted in the mid-1980s,

distributed under the Food, Drug and Cosmetic Act. At the time the CDTA was drafted in the mid-1980s, the widespread use of ephedrine to manufacture methamphetamine had not yet emerged. Under strong pressure from industry involved in the over-the-counter market of this product, the exemption was provided for ephedrine products lawfully marketed under the Food, Drug and Cosmetic Act.

By the late 1980s, however, traffickers and clandestine lab operators had discovered the ease with which ephedrine could be converted to methamphetamine. Bulk ephedrine powder eventually was encountered with greater frequency than P2P in clandestine lab seizures. Both

l-ephedrine and d-pseudoephedrine, which have very similar chemical structures, can be used to produce d-methamphetamine, a more potent version than the dl-methamphetamine produced via the P2P synthesis method. Within a month following enactment of the CDTA and the controls it placed upon ephedrine powder, the first encounter with ephedrine tablets at a clandestine methamphetamine lab seizure occurred. Traffickers had quickly realized that noncontrolled ephedrine tablets could easily be purchased in large quantities for conversion to methamphetamine. At the same time, DEA became aware of a number of mail order distributors aggressively marketing ephedrine tablets in 100 and 1,000-count bottles through ads in national magazines such as *Cosmopolitan*, High Times and Hustler. These mail order outfits and other retail distributors ostensibly sold the ephedrine tablets as bronchodilators, energy boosters, or diet aids. Criminal prosecution under the CDTA is possible even when exempt tablets are involved if the government can prove that the company sold the product knowing or having reasonable cause to believe that the tablets would be used to illegally manufacture a controlled substance. These distributors routinely disclaimed any knowledge of unlawful conduct, however. It became all too evident that the ephedrine tablet exemption contained in the CDTA provided traffickers a loophole that would have to be closed.

Recognizing that additional authority under the law was required to deal with rogue chemical companies, in addition to closing the ephedrine loophole, OD drafted the Domestic Chemical Diversion Control Act (DCDCA) in 1990. In November 1993 Congress passed the law; it became effective April 16, 1994. Regulations implementing the DCDCA became effective in August 1995. This law requires that all distributors, importers and exporters who distribute List I chemicals register with the DEA, as is required of controlled substances handlers under the CSA. This will allow DEA to deny registration to, or in future, revoke the registration of companies whose actions pose an imminent threat to the public health and safety, without proof of criminal intent. The DCDCA also removes the record keeping and reporting exemption for single entity ephedrine products and requires registration for distributors of these products. The law does not remove the exemption provided for over-the-counter pseudoephedrine products, although it provides a mechanism for dealing with this problem should it become necessary.

Traffickers have again reacted quickly to DEA's actions. There is some evidence of the use of over-the-counter combination products containing ephedrine. Also, clandestine lab operators have searched for other unregulated sources of methamphetamine precursors. This has led to the diversion of pseudoephedrine tablets for the illicit production of methamphetamine. Because of their chemical similarity, the illicit use of either ephedrine or pseudoephedrine yields the same quantity of controlled substance. By 1994, 28 clandestine methamphetamine labs using pseudoephedrine for precursor material were seized by DEA (3). It now appears that many tons of pseudoephedrine tablets are being supplied to the illicit drug traffic by a handful of mail-order distributors.

Case Examples

DEA became aware of the activities of Clifton Pharmaceuticals, an ephedrine/-pseudoephedrine tablet manufacturer located in western Pennsylvania, in early 1995. Clifton also transacted business under the

names Nittany Pharmaceutical, Interglow Associates, and Valley Run Pharmaceutical. Import/export declarations being filed by several bulk importers of ephedrine and pseudoephedrine powder showed that massive quantities of ephedrine and pseudoephedrine were being imported into the U.S., and investigation revealed that Clifton Pharmaceuticals was the primary customer of all of these bulk importers. Further investigation quickly revealed that Clifton's primary customers were three mail order firms located in Florida and Kentucky, who were selling tremendous volumes of the two chemicals principally to buyers on the West Coast. The products shipped by these mail order firms were regularly being seized in clandestine laboratories in California and several other western states. In May 1995, a federal search and seizure warrant was executed at Clifton Pharmaceuticals following an undercover purchase of 20 million 60 mg. pseudoephedrine tablets, for which Clifton was paid $180,000. Seized at the plant were ephedrine, pseudoephedrine and phenylpropanolamine powder and tableted drug products which filled five 50-foot tractor trailers. The ephedrine and pseudoephedrine alone totalled 25 metric tons.

In the early 1990s, Nationwide Purveyors, Inc., of Pittsburgh, Pennsylvania, operated as a mail order supplier of ephedrine tablets selling millions of ephedrine 25 mg. tablets annually. An estimated 80 percent of this company's sales were ephedrine tablets, and it was identified as the source of ephedrine tablet supply in numerous DEA clandestine lab seizures throughout the U.S. In June 1992, the corporate officers and other employees of this company were arrested pursuant to a federal indictment returned by a grand jury in San Diego, California. The indictment alleged a conspiracy between the Nationwide defendants and co-conspirators from Southern California to divert approximately 9,000 pounds of ephedrine. In August 1993, the defendants were sentenced following guilty pleas to federal charges of conspiracy to manufacture methamphetamine, illegal distribution of a listed chemical, and money laundering. Sentences ranged from five years probation and 300 hours of community service for one company employee, to 20 years of imprisonment, 10 years supervised probation, and a $100,000 fine imposed on Nationwide's president.

Between October 1993 and May 1994, ephedrine tablets furnished by one Arkansas-based mail order distributor were encountered at several hundred clandestine labs in Arkansas and California. Based on this fact, the owner of the company was federally indicted on charges of money laundering and distribution of a listed chemical knowing that it would be used to manufacture methamphetamine. The owner was documented in undercover tape recordings as having knowledge that the ephedrine tablets he was selling were being used to make illegal drugs. Two million ephedrine tablets were seized at the owner's residence, and another eight to nine million were seized at his warehouse. He was sentenced in March 1995 to 41 months in prison, a $10,000 fine, and two years supervised release after prison.

The Mexican Traffickers

Following implementation of the CDTA, the nature of the methamphetamine traffic and its predominant suppliers changed. Mexican polydrug organizations with connections to Colombian traffickers replaced the outlaw motorcycle gangs as the primary methamphetamine producers, traffickers, and distributors in California and the western U.S. In 1990, shortly after passage of the CDTA, smuggling of precursor chemicals along the U.S./Mexican border increased significantly, reflecting the Mexican traffickers' preference for manufacturing the drug in the U.S. In this way, they avoided the more significant penalties associated with smuggling the final product, methamphetamine, across the border. These traffickers established large scale clandestine laboratories, staffed by previously unemployed or low-wage Mexican immigrants, which are capable of producing an average of 20 to 100 pounds of methamphetamine per process. The labs are typically established in remote locations throughout California, primarily in the southern part of the state (4). In fact, in 1994, California accounted for over 40 percent of all clandestine methamphetamine labs seized nationwide. DEA intelligence indicates that traffickers also are producing

methamphetamine in mobile clandestine labs. Although these mobile labs generally have a smaller production capacity than stationary ones, they are a more difficult target for law enforcement.

Not only do Mexican traffickers operate labs in the U.S., but they produce the methamphetamine clandestinely in Mexico and smuggle the drug into the U.S. In their dominance of the U.S. market, these traffickers regard the Mexican/U.S. border as nonexistent, moving methamphetamine and its precursor chemicals in either direction across the border to facilitate their production and distribution needs. Methamphetamine distribution has been expanded by using established heroin, cocaine and marijuana distribution networks (4). The enormous profit involved in the trade of methamphetamine explains the lure of this drug to these traffickers. An investment of $500 in chemicals yields about one pound of methamphetamine, which sells for as much as $12,000 in California, to as much as $18,500 elsewhere in the U.S.

Although Mexican criminal organizations dominate the production and distribution of methamphetamine, other players in this illegal market include Asian gangs in northern California, Washington State, and other Asian groups in British Columbia which have penetrated the U.S. market. Outlaw motorcycle gangs never withdrew from this drug scene entirely, and there are indications that they are increasing the level of their activities.

The International Effort

In March 1994, the U.S. Customs Service at the Dallas/Ft. Worth airport seized 3.4 metric tons of ephedrine which was in transit to Mexico. This was the largest quantity of the chemical seized in the U.S. since passage of the CDTA. It was purely by chance that this ephedrine shipment happened to come within U.S. jurisdiction and thus to the attention of Customs and DEA. Brokered by a Swiss firm, the ephedrine, manufactured by an Indian company, was intended to be shipped from Zurich via Frankfurt to Mexico City. Because of flight scheduling, the ephedrine wound up on a flight which transited Dallas/Ft. Worth airport. It caught the attention of Customs because the proper export documentation was lacking, and the packaging had been visibly altered. It was subsequently determined that some of the information accompanying the shipment was false. It was notable that all of the cardboard drums containing this ephedrine had the manufacturer's labels removed, and the drum lids had been turned inside out and the broker's name concealed with black paint. Four months later, a 2.3 metric ton ephedrine seizure was once again made at the same location. In the fall of 1994, authorities intercepted 6.8 metric tons of the drug at Schipol airport in Amsterdam, which was destined ultimately for Mexico via Guatemala. These ephedrine seizures focused attention on the magnitude of ephedrine diversion by the Mexican organizations, and set in motion an effort to focus international attention on the ephedrine diversion problem and to take action to prevent such diversion.

From the initial discovery of large-scale ephedrine diversion through the Dallas/Ft. Worth airport, and through available shipping documents, DEA investigators documented numerous multi-ton and multi-kilo ephedrine and pseudoephedrine shipments destined for bogus or nonexistent Mexican firms. Many of these chemicals were being produced in the Czech Republic and brokered through Switzerland. It was determined that three Swiss firms were involved in this activity, and Swiss officials were able to confirm that at least 70 tons had been shipped over the past year. In addition, large volumes were originating in India and China and transiting the United Arab Emirates, the Netherlands, Germany, Guatemala, and other Latin American countries. Elaborate schemes to conceal the Mexican sources of funds for these ephedrine and pseudoephedrine purchases led back to all of these countries and even Thailand. It was very clear that the Mexican traffickers had established a virtually unlimited supply of precursor chemicals for their clandestine methamphetamine production.

With the knowledge of the massive scale of ephedrine diversion, and subsequently pseudoephedrine diversion, that was occurring, diplomatic efforts were swiftly undertaken with the exporting and transit countries involved. Close cooperation was developed initially with the Swiss, Czech and Indian governments, and with limited success with the Mexican and Guatemalan governments. It has been determined that as a result of these efforts, during the period March 1994 through May 1995, 19.7 metric tons of ephedrine have either been seized or shipment prevented, resulting in major disruption of the methamphetamine traffic. These 19.7 tons would have produced close to 16 tons of methamphetamine, and would have had a minimum street value of $160 million. But much remains to be done. Unfortunately, traffickers continue today to procure precursor chemicals, facilitated by the activity of unethical brokers.

The U.N. International Narcotics Control Board

An important aspect of the international effort concerning methamphetamine precursors has been the close working relationship that has been established with the U.N.'s International Narcotics Control Board (INCB), and the important contribution the INCB has made by focussing its attention on this problem. The INCB has taken a significant interest in the diversion of methamphetamine precursors. In the summer of 1994, it hosted an international working group on the issue, and the INCB notified competent authorities throughout the world to be aware of the problem. This organization also acts as a central collection point for data regarding ephedrine and pseudoephedrine shipments, which it disseminates worldwide on a timely basis via electronic mail. This support from the INCB has been a significant factor in the outstanding cooperation OD has received from the countries mentioned above.

Needs for the Future

It is evident that battling the diversion of precursors for the illicit production of methamphetamine (and methcathinone) is a difficult and complex task both on the domestic front and internationally. The concerted international effort to curtail and prevent ephedrine and pseudoephedrine diversion have impacted the traffickers' activity. A 25 kg. barrel of ephedrine, selling in the legitimate market for an average of about $1,800, which traffickers were able to procure for $45,000 in mid-1995, reportedly sells in January 1996 for $60,000-$80,000. But as described above, each time legal or regulatory measures have been implemented both federally and by states, traffickers and clandestine lab operators have reacted by seeking alternatives. Success in working with the international community to shut down the unlimited source of ephedrine supply to traffickers has resulted in the massive domestic diversion of pseudoephedrine. OD is aware of several mail order distributors located on the East Coast and in the Midwest that are currently dealing almost exclusively in exempt pseudoephedrine tablets and combination ephedrine tablets, who are shipping massive quantities of the tablets on a weekly basis to recipients on the West Coast. Recently, over-the-counter pseudoephedrine products, containing 30-120 mg. pseudoephedrine and which are currently exempt from the chemical provisions of the Controlled Substances Act, have begun turning up in clandestine laboratory seizures around the country.

On October 31, 1995, DEA published a notice of proposed rulemaking (NPRM) in the Federal Register which proposed the removal of the drug exemption for certain over-the-counter pseudoephedrine products. The NPRM would require registration and record keeping and reporting requirements for business entities at the manufacturer and distributor level. The retail level, such as pharmacies, truck stops and mini-marts, would be exempt from registration for the sale of small quantities for individual medical use. DEA is working closely with the pharmaceutical industry in order to arrive at a solution which does not have negative impact on the availability of pseudoephedrine for legitimate use.

A vital domestic aspect of this drug effort is the need for resources sufficient to fully implement the

DCDCA. This law, as described above, will allow DEA to investigate all distributors of ephedrine so that registration may be denied to rogue companies, effectively putting them out of business. DEA was not provided resources for the purpose of implementing this legislation. At present, the Office of Diversion Control does not, therefore, have the resources to conduct in a timely fashion all of the investigations which will be needed as a result of the registration process.

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Provisions of the Comprehensive Methamphetamine Control Act of 1996

Introduction

On October 3, 1996, President Clinton signed into law the Comprehensive Methamphetamine Control Act of 1996 (MCA). The MCA broadens controls on listed chemicals used in the production of methamphetamine, increases penalties for the trafficking and manufacture of methamphetamine and listed chemicals, and expands controls to include the distribution of lawfully marketed drug products which contain the listed chemicals ephedrine, pseudoephedrine and phenyl-propanolamine (PPA).

The following is a brief summary of major provisions of the Comprehensive Methamphetamine Control Act (MCA):

(1) The MCA makes the possession of list I chemicals a crime in instances where the chemicals were obtained under authority of a registration, if that registration has been suspended or revoked. In addition, this provision facilitates the forfeiture of such chemicals.

(2) The MCA extends Federal "long arm" jurisdiction for certain controlled substance offenses to include the manufacture and distribution of listed chemicals outside of the U.S. with intent to illegally import them into the U.S.

Therefore, violations committed outside the territorial jurisdiction of the U.S. shall be subject to prosecution in the U.S.

(3) The MCA establishes higher maximum penalties for the manufacture, import, export,

possession, or distribution of chemicals or equipment used in methamphetamine production. This provision increases the maximum penalties to 10 years for a first offense and 20 years for a subsequent offense. The MCA also directs the sentencing commission to review and amend guidelines for sentencing methamphetamine offenses and to enhance penalties for offenses involving list I chemicals.

(4) The MCA imposes a civil fine up to $250,000 for any firm which distributes a laboratory supply (defined as a listed chemical or any chemical or equipment which the Attorney General publishes on a special surveillance list) to a person who uses it in a clandestine laboratory, where the distribution is with "reckless disregard" for the intended illicit use.

(5) The MCA enhances injunctive authority; it also establishes new injunctive authority relating to various violations of the Controlled Substances Act (CSA) including certain violations relating to listed chemicals and other chemicals, products and equipment used

in the illicit manufacture of controlled substances.

(6) The MCA includes provisions for the restitution of cleanup costs by a defendant convicted of offenses involving methamphetamine clandestine laboratories.

(7) The MCA also establishes several advisory panels and task forces to evaluate methamphetamine education and prevention programs, to monitor methamphetamine abuse within the U.S., and to develop programs to aid industry in better identifying suspicious orders.

(8) The MCA adds iodine as a list II chemical but regulates only domestic transactions of this substance. In addition, the MCA effects controls on domestic transactions of hydrogen chloride gas.

(9) The MCA modifies the exemption for legal drug products which contain either ephedrine, pseudoephedrine or phenylpropanolamine. Whereas the removal of the exemption for ephedrine combination products was effective upon signing of the MCA, most transactions involving legal drug products containing pseudoephedrine and phenylpropanolamine will remain exempt through October 3, 1997.

Therefore, at this time, ephedrine combination products are subject to the record keeping, reporting, registration and import/export notification provisions of the CSA, with a single transaction threshold of 24 grams (for retail sales and for sales by mail order). This new threshold applies only to ephedrine combination products and the threshold remains zero for ephedrine products which do not contain another active ingredient.

(10) Also effective immediately, all transactions of ephedrine, pseudoephedrine and phenylpropanolamine to non-regulated parties by postal, private or commercial carrier must be reported to DEA on a monthly basis (regardless of size).

The following section addresses questions pertaining to general provisions of the MCA. This section deals predominately with the regulatory provisions such as record keeping, reporting, registration and import/export notification requirements.

This publication is intended to serve only as general guidance. For information on the specific requirements of the MCA consult Public Law P.L. 104-237.

Legal Requirements Pertaining to Licit Drug Products Containing a Listed Chemical

Q. What legal drug products are controlled under the MCA?

A. The MCA modifies the exemption for legal drug products which contain either ephedrine, pseudoephedrine or phenylpropanolamine. Whereas the removal of the exemption for ephedrine combination products was effective upon signing of the MCA, most transactions involving legal drug products containing pseudoephedrine and phenylpropanolamine will remain exempt though October 3, 1997.

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Q. What are thresholds?

A. A "threshold" is the quantity of a particular chemical, above which record keeping requirements and other control provisions of the CSA apply. Thresholds differ according to the individual chemical.

Requirements for Retail Distributors

Q. How do I determine whether I am considered a retail distributor?

A. The MCA defines a retail distributor as a grocery store, general merchandise store, drug store, or other entity or person whose activities as a distributor of legal drug products containing listed chemicals are limited almost exclusively to sales for personal use, both in number and volume of sales, either directly to walk-in customers or in face-to-face transactions by direct sales. (Personal use is defined as sub-threshold sales of less than 24 grams to an individual for legitimate personal use.)

Q. I sell pseudoephedrine, phenylpropanolamine, and combination ephedrine products in my convenience store. Am I required to register or keep records of the sales?

A. Requirements with respect to combination ephedrine products went into effect on October 3, 1996; the requirements pertaining to pseudoephedrine and PPA do not go into effect until October 3, 1997. However, the DEA has proposed to exempt retail distributors from the registration requirement. If you will engage in any above-threshold transactions, then you must maintain a record of each of these

transactions; however, please read the following question and answer as this may make you subject to the registration requirement.

Q. I operate a convenience store at which I sell pseudoephedrine, phenylpropanolamine, and combination ephedrine products to walk-in customers. Can I occasionally distribute some of these products to another store if they run low without affecting my status as a retail distributor?

A. The MCA definition of 'retail distributor' does allow for a retailer to engage in very infrequent and small quantity transactions of this nature. However, retailers should be extremely cautious in this regard since they are required to limit their sales of these products "almost exclusively, both in number of sales and volume of sales" to "walk-in customers or in face-to-face transactions by direct sales." Therefore, depending upon a retailer's volume of sales, a large quantity sale to another store could mean the retailer no

longer satisfies the definition of 'retail distributor' and would be required to register. In addition, even if a retailer is able to complete this transaction without affecting its status as a retail distributor, a record of the transaction would have to be maintained if it were above threshold.

Q. Am I required to place pseudoephedrine, phenylpropanolamine and ephedrine products behind the counter?

A. While ephedrine single-entity products must be stored behind the counter, there is no such requirement for pseudoephedrine, PPA or combination ephedrine products.

Q. My firm is already registered with DEA to distribute single-entity ephedrine products. Will DEA's waiver of registration for retail distributors of pseudoephedrine, PPA and combination ephedrine products also apply to single entity ephedrine products?

A. No, it does not. All handlers of single-entity ephedrine products must be registered under previous provisions of the law.

Q. My firm currently has a DEA registration to distribute/dispense controlled substances. Will we be required to obtain a separate DEA chemical registration to distribute pseudoephedrine, PPA, combination ephedrine, and single-entity ephedrine products?

A. No, the law requires that any person who manufactures and distributes a List I chemical must register, however the DEA has provided an exemption for CSA registrants in 21 CFR 1309.25; you will not be required to obtain a separate DEA chemical registration if you are already a controlled substance registrant.

Q. The new law states that there is a limit of 24 grams on retail sales of pseudoephedrine, phenylpropanolamine, and combination ephedrine products How much is that and can I sell more in a single transaction without getting in trouble?

A. The limit of 24 grams on retail sales does not pertain to blister packs of pseudoephedrine and phenylpropanolamine. The reference to a limit of 24 grams is actually a threshold and not an absolute cap on the quantities which may be sold. You may sell more than 24 grams in a single transaction, however, a record will be required to be maintained and the fact that you engage in such a transaction(s) may jeopardize your status as a 'retail distributor' (see response on previous page on this issue). If you no longer qualify as a 'retail distributor', you will be required to be registered.

For a listing of the number of dosage units of pseudoephedrine, PPA, and ephedrine equivalent to 24 grams, see Appendix A, at the end of this discussion.

Q. In addition to pseudoephedrine, phenylpropanolamine, and combination ephedrine products, I also sell single-entity ephedrine products in my convenience store. Does the retail distributor exemption from registration and record keeping also apply to single-entity ephedrine products? How about the 24 gram single transaction limit?

A. No, the waiver of registration will only apply to pseudoephedrine, PPA, and combination ephedrine products. All distributors of single entity ephedrine products must obtain a registration. In addition, the threshold for single-entity ephedrine products is

zero. Therefore, all transactions of single-entity ephedrine products are regulated transactions which require a record to be maintained.

Q. As a retail distributor, I ensure that my sales of pseudoephedrine, phenylpropanolamine, and combination ephedrine products remain consistent with the requirements for exemption from registration and record keeping (i.e. sales to walk-in customers only and not more than 24 grams in a single transaction). Are there any other requirements or concerns that I should be aware of?

A. The MCA provides for the publication of a surveillance list which contains chemicals, products, materials, or equipment used in the manufacture of controlled substances and listed chemicals. These items and all listed chemicals are referred to as "laboratory supply". (Note that the phrase "listed chemicals" includes legal drug products containing listed chemicals and chemical mixtures.)

The DEA is currently preparing this surveillance list. The MCA provides for a civil penalty of up to $250,000 for the distribution of a laboratory supply to a person who uses, or attempts to use the laboratory supply to manufacture a controlled substance or a listed chemical, if that distribution was made with "reckless disregard" for the illegal uses to which such a laboratory supply will be put. In addition, any person who distributes a listed chemical or any other chemical, product or equipment knowing, or having reasonable cause to believe, that it will be used in the illegal manufacture of a controlled substance is subject to criminal prosecution.

Also, firms which distribute a pseudoephedrine, PPA or ephedrine product via Postal, private or commercial carrier to non-regulated parties, must report all such transactions to DEA on a monthly basis.

Q. What is the difference between the ephedrine products that were already regulated by DEA prior to MCA and combination ephedrine products that the new law regulates?

A. Single-entity ephedrine products are those ephedrine products which do not contain another active medicinal ingredient in therapeutically significant quantities. Therefore ephedrine is the sole active medicinal ingredient in these products. All such products must be stored behind the counter, are subject to a zero threshold which requires records to be maintained of all transactions, and all distributors are required to obtain a registration.

Combination ephedrine products contain another active medicinal ingredient in therapeutically significant amounts. These products do not need to be stored behind the counter, are subject to a 24 gram single transaction threshold, and are afforded a waiver from registration for retail distributors.

Requirements for Wholesale Distributors:

Q. I am a wholesale distributor of combination ephedrine products (i.e. I distribute these products and do not qualify as a retail distributor). Do I have to get a registration

now for those activities?

A. Yes, requirements for distribution of combination ephedrine products are currently in effect. The DEA has issued a Federal Register Notice providing guidance on how to obtain a registration. Firms distributing combination ephedrine products may continue to conduct legitimate business if they had submitted an application for registration by July 12, 1997.

Q. How about pseudoephedrine and phenylpropanolamine products?

A. There currently is no registration requirement for legal drug products containing pseudoephedrine or phenylpropanolamine. The registration and record keeping requirements pertaining to those products will become effective on October 3, 1997.

Q. The new law states that for distributors who are not retail distributors or distributors required to report to DEA on a monthly basis, there is a transaction limit of one kilogram for combination ephedrine products. If I am one of these distributors, can I sell more than one kilogram in a transaction?

A. Yes, the one kilogram amount is a threshold, above which records must be maintained. It is not an absolute cap on quantities which may be distributed. Please note, however, that the cumulative threshold provisions apply to these transactions.

Therefore, records must be maintained if the cumulative amount for multiple transactions to a person within a calendar month exceeds the threshold of one kilogram.

Q. I am a distributor who is registered with DEA for controlled substance activities. Do I have to obtain a separate chemical registration to distribute pseudoephedrine, phenylpropanolamine, and combination ephedrine products? Do I have to keep records?

A. No, you do not have to obtain a separate registration. However, if you engage in an above threshold transaction, or in cumulative transactions to a person greater than the threshold quantity within a calendar month, you must maintain a record of the transaction.

Q. I am registered with DEA to distribute single-entity ephedrine products. I also distribute combination ephedrine products. Do I have to change my registration to reflect my combination ephedrine activities? What if I also handle pseudoephedrine and phenylpropanolamine products?

A. No, if you are already registered to distribute ephedrine products you do not need to modify your registration to handle combination ephedrine products. However, if you distribute pseudoephedrine and PPA products, in October of 1997, you must request that your registration be modified to add these products. This application may be accomplished through a letter to DEA. Please note that there will not be any additional fees required.

Q. I am a distributor of prescription pseudoephedrine, phenylpropanolamine, and combination ephedrine products only. Do I have to register and keep records of such distributions?

A. DEA has an existing exemption for prescription drug products; therefore, normal

prescription records or records required under part 205 of the Food, Drug and Cosmetic Act, are considered adequate to satisfy the record keeping requirements. *Q. I have heard that the new law does not go into effect for pseudoephedrine and phenyl-propanolamine products until October 3, 1997, and that I don't have to worry about any requirements under DEA's laws until then. Is this true?*

A. No, firms which distribute these products via Postal, private or commercial carrier to **non-regulated parties** must report all such transactions to DEA on a monthly basis. In addition, since these products contain a listed chemical, the firm may be held criminally responsible for transactions which they have a reasonable cause to believe would be used for the illicit manufacture of controlled substances. In addition to the criminal penalties, the new law contains provisions pertaining to distribution with "reckless disregard" of illicit use. Violations can carry a civil penalty up to $250,000.

Q. When the requirements of the new law go into effect for pseudoephedrine and phenylpropanolamine products in October of 1997, will I be exempt from registration and record keeping if I only distribute ordinary over-the-counter pseudoephedrine and phenylpropanolamine products (blister packs with less than 3 grams per package)?

A. No, only retail distributors are exempted from registration for the distribution of these products. However, existing CSA registrants are not required to obtain a separate registration.

Q. How many dosage units are there in the thresholds for pseudoephedrine, phenylpropanolamine, and combination ephedrine products?

A. See Appendix A, at the end of this discussion.

Q. What is the difference between the ephedrine products that were already regulated by DEA and the combination ephedrine products that the new law controls?

A. Single-entity ephedrine products are those ephedrine products which do not contain another active medicinal ingredient in therapeutically significant quantities. Therefore ephedrine is the sole active medicinal ingredient in these products. All such products are subject to a zero threshold which requires records to be maintained of all transactions. In addition, all these distributors must obtain a registration.

Combination ephedrine products contain another active medicinal ingredient in therapeutically significant amounts. These products are subject to a one kilogram threshold for non-retail distribution. Distributors not considered retail distributors who distribute via Postal, private or commercial carrier to non-regulated parties (and thus required to report to DEA on a monthly basis) are subject to a threshold of 24 grams for record keeping purposes.

Q. I understand that if a distribution of pseudoephedrine, phenylpropanolamine, and combination ephedrine products is less than the threshold for the product, then it is not a regulated transaction. If I always distribute less than the threshold in all my transactions, am I exempt from DEA's regulations?

A. No, there is currently a registration requirement for non-retail combination ephedrine product distributors regardless of whether their sales are above or below the threshold.

In addition, there will be the same registration requirement for non-retail pseudoephedrine and PPA product distributors beginning October of 1997. Certain firms which distribute an ephedrine, pseudoephedrine, or PPA product via Postal, private or commercial carrier to non-regulated parties are currently required to report all such transactions to DEA on a monthly basis. Also suspicious reporting requirements and reckless disregard provisions of the law pertain to all regulated transactions involving such products.

New Monthly Reporting Requirement

Q. I distribute by mail and/or delivery to non-regulated persons (i.e. consumer or end user). When must my firm begin to report sales of pseudoephedrine, phenylpropanolamine and combination ephedrine products? Do I have to report all of my sales? What information should be included and to whom do I send these reports?

A. Yes, the requirement to report all such distributions is currently in effect. Therefore, on a monthly basis, reports should be filed with:

The Chemical Operations Section

Office of Diversion Control

U.S. Drug Enforcement Administration Washington D.C. 20537.

The DEA has issued a Federal Register Notice to provide further guidance on how to report to DEA. This Notice provides guidance on what information should be included in these reports.

Q. Who is required to submit reports on a monthly basis of each transaction conducted during the previous month involving ephedrine, pseudoephedrine and phenylpropanolamine products?

A. Any distributor who engages in a transaction with a non-regulated party (i.e. consumer or end user) via Postal, private or commercial carrier, is required to submit a monthly report of all such transactions to DEA.

Q. What threshold applies to such transactions for reporting purposes?

A. All such transactions must reported regardless of size

Q. What threshold applies for record keeping purposes?

A. The record keeping threshold for the distributors required to report transactions to DEA on a monthly basis is 24 grams for combination ephedrine products. This is a non-cumulative threshold.

The record keeping threshold for non-retail distribution (by persons not required to report to DEA on a monthly basis) of combination ephedrine products is 1 kilogram. (Cumulative threshold provisions of the CSA apply to this 1 kilogram threshold.) Please

note, however, that the record keeping threshold for single entity ephedrine products is zero.

Record keeping requirements for pseudoephedrine products and PPA products do not become effective until October 3, 1997. At that time, the record keeping threshold will be 24 grams for these distributors.

Requirements Pertaining to All Listed Chemical Products including Legal Drug Products:

Q. How long are records required to be kept for List I and List II chemicals?

A. The MCA reduced the record retention requirement from four years to two years for List I chemicals. Therefore, all chemical records are subject to a two year retention period.

Q. When can my firm begin to keep only two years of sales records for listed chemicals?

A. Immediately. Effective October 3, 1996, regulated persons need not maintain records for more than two years.

Q. What types of identification am I required to obtain from my customers?

A. For sales to individuals, the type of documents and other evidence of proof must consist of at least the signature of the purchaser, a copy of a driver's license and one other form of identification. (For specific guidance, see 21 U.S.C. Section 1310.07)

Q. If I supply a threshold amount of a List I chemical to a customer who also sells the List I chemical over threshold amounts, do my records have to have my customer's DEA registration number?

A. Yes, your records should include your customer's registration number. If the customer has applied for a DEA registration and has not yet received that registration, you should obtain confirmation that the customer has applied for that registration. In such instances, a copy of the application for registration will suffice.

Q. What is the Special Surveillance List? When will the Special Surveillance List be published?

A. The MCA provides for the publication of a surveillance list which contains chemicals, products, materials, or equipment used in the manufacture of controlled substances and listed chemicals. These items are referred to as "laboratory supply". The DEA is currently preparing this surveillance list.

Q. If I sell Iodine or HCl gas, what records am I required to keep?

A. While certain export transactions of hydrochloric acid and HCl gas were already regulated under the CSA, the MCA added regulatory controls on domestic transactions of iodine and HCl gas. The DEA will soon publish a Federal Register Notice which establishes a threshold for these domestic transactions. For each regulated transaction

the record should include (1) the name, address and (if required) DEA registration number of each party involved in the transaction, (2) the date of the transaction, (3) the name quantity and form of packaging of the listed chemical, (4) the method of transfer, (5) the type of identification used by the purchaser and any unique number on that identification.

Appendix A
Threshold Quantities
(Number of Dosage Units
of Marketed Products)

Ephedrine

Threshold	# 25 mg Tablets HCl	# 25 mg Tablets Sulfate
1000 grams	48,826	51,870
24 grams	1,172	1,245

Pseudoephedrine

Threshold	# 120 mg Tabs HCl	# 120 mg Tabs Sulfate	# 60 mg Tabs HCl	# 60 mg Tabs Sulfate	# 30 mg Tabs HCl	# 30 mg Tabs Sulfate
1000 grams	10,172	10,806	20,344	21,613	40,688	43,225
24 grams	244	259	488	519	976	1,037

Phenylpropanolamine

Threshold	# 75 mg Tabs HCl	# 25 mg Tabs HCl	# 12.5 mg Tabs HCl	# 6.25 mg Tabs HCl
2500 grams	41,371	124,112	248,224	496,449
24 grams	397	1,191	2,383	4,766

FOR MORE INFORMATION

Full copies of publications used to produce this information packet may be obtained by contacting the agencies below:

Office of National Drug Control Policy
Drug Policy Information Clearinghouse
PO Box 6000
Rockville, MD 20849-6000
1-800-666-3332
http://www.whitehousedrugpolicy.gov

Executive Office of the President, Office of National Drug Control Policy, *Pulse Check, National Trends in Drug Abuse, Winter 1997*, 1997. Order # NCJ-167891. http://www.whitehousedrugpolicy.gov/drugfact/pulsechk/winter97/pcindex.html

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National Clearinghouse for Alcohol and Drug Information
PO Box 2345
Rockville, MD 20847-2345
1-800-729-6686 or
http://www.health.org

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, *National Household Survey on Drug Abuse: Main Findings 1995*, March 1997.

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National Institute on Drug Abuse
Division of Epidemiology and Prevention Research
5600 Fishers Lane, Room 9-A-53
Rockville, MD 20857
301-443-6543
www.nida.nih.gov

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Office of Intelligence Liaison and Policy
Intelligence Division
Washington, DC 20537
202-307-8265

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Intelligence Division
Washington, DC 20537
202-307-8726

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Drug Enforcement Administration
Office of Diversion Control
Washington, DC 20537
202-307-7165

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Drug Enforcement Administration
Office of Public Affairs
700 Army Navy Drive
Arlington, VA 22202
202-307-7977

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Government Printing Office
Mail Stop: SSOP
Washington, DC 20402-9328

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United States Sentencing Commission
Office of Legislative and Public Affairs,
One Columbus Circle, N.E.,
Washington, DC., 20002-8002.

1996 Sourcebook of Federal Sentencing Statistics. 1997.
http://www.ussc.gov/annrpt/1996/sourcbk.htm

University of Michigan
News and Information Services
412 Maynard
Ann Arbor, MI 48109-1399
(313) 763-5043
http://www.isr.umich.edu/src/mtf/

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National Association of State Alcohol and Drug Abuse Directors
444 North Capitol Street, NW, Suite 642
Washington, DC 20001
202-783-6868
http://www.nasasad.org

Gustafson, John S., et.al., *State Resources and Services Related to Alcohol and Other Drug Problems for Fiscal Year 1995*, March 1996.

ONDCP

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1-800-666-3332

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http://www.whitehousedrugpolicy.gov
fax: 301-519-5212

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Rockville, MD 20849-6000

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