



Robert Aukerman Director, Alcohol and Drug Abuse Division Harold Meadows Associate Director Bruce Mendelson Director of Data Analysis and Evaluation Linda Harrison Researcher Randall Deyle Researcher Denise Stubert Administrative Program Specialist

OFFICE OF DATA ANALYSIS AND EVALUATION

DRUG USE TRENDS IN DENVER AND COLORADO

Bruce Mendelson, M.P.A Linda Harrison, M.S. Alcohol and Drug Abuse Division Colorado Department of Human Services

Denver, Colorado

Cocaine indicators present a mixed picture with hospital discharges, emergency room mentions (ER), and Drug Use Forecasting (DUF) figures rising; and treatment admissions, new users in treatment, and cocaine related deaths falling. Cocaine remains readily available throughout Colorado. Heroin and opiate-related indicators are all on the rise: DUF figures, hospital discharges, hepatitis-B cases, ER mentions, treatment admissions, and new users are all up. Heroin quality and price, however, are down. Marijuana indicators are mostly up: treatment admissions, hospital inpatient episodes, and ER mentions have increased, yet new users and DUF figures have dropped. Very high quality marijuana is available at very high prices. All stimulant indicators are up, except deaths, and anecdotal information has indicated a large upturn in use and availability, as well as in smoking as a route of administration. Hallucinogen indicators are down or stable. Among the more than 5,300 cumulative AIDS cases in Colorado, 7.8 percent were injecting drug users (IDUs) and 10.6 percent were homosexual/bisexual IDUs; the proportion with only injecting drug use as an exposure category has steadily increased since 1991.

INTRODUCTION

1. Area Description

The city and county of Denver, the capital of Colorado, is located somewhat northeast of the State's center. Covering only 111.32 square miles, Denver is bordered on the southeast by Arapahoe County, on the northeast by Adams County, and on the west by Jefferson County.

The potential for drug abuse in Denver and Colorado is exacerbated by the following factors:

- A major international airport nearly at the continental U.S. midpoint
- Remote rural areas ideal for the undetected manufacture, cultivation, and transport of illicit drugs of abuse
- Younger citizenry drawn to the recreational lifestyle available in Colorado
- A large tourism industry, which draws millions of people to the area each year
- Several major universities and small colleges

2. Data Sources and Time Periods

Data for the present report were collected and analyzed during April 1996. Although these indicators reflect trends throughout Colorado, they are dominated by the Denver metropolitan area.

- Availability, price, purity, and distribution data are available from law and drug enforcement agencies and drug treatment program personnel.
- Drug/Alcohol Coordinated Data System (DACODS) reports are completed on clients at admission and at discharge from all alcohol and drug treatment agencies receiving public monies in Colorado and from several nonfunded agencies that are under special reporting requirements. Data elements include demographics and severity indicators (for example, arrests, prior treatment episodes, drug use patterns, and employment). Annual figures are given for 1988-95. DACODS data are collected and analyzed by the Alcohol and Drug Abuse Division, Colorado Department of Human Services.
- Drug Use Forecasting (DUF) data reports on arrestee urinalysis results are based on quarterly studies conducted under the auspices of the National Institute of Justice. Annualized percentages are provided for 1990–95. DUF data in Colorado are collected and analyzed by the

Division of Criminal Justice, Office of Research and Statistics.

- Death statistics are available from the Colorado Department of Public Health and Environment, Health Statistics Section for 1988–95. These data represent drug-related deaths, which may involve the drug as an underlying or additional cause.
- Drug Abuse Warning Network (DAWN) provides weighted estimates of drug-abuse-related emergency room (ER) mentions in the Denver metropolitan area for 1988-94.
- Hospital discharge data are available from the Colorado Hospital Association through the Department of Public Health and Environment, Health Statistics Section. Data included are diagnoses (ICD-9-CM codes) for inpatient clients at discharge for all acute care hospitals and some rehabilitation and psychiatric hospitals for 1989-94. These data do not include ER care.
- Hepatitis-B data for 1988-95 are available from the Disease Control and Epidemiology Division of the Colorado Department of Public Health and Environment.
- Acquired immunodeficiency syndrome (AIDS) data through March 31, 1996, are available from the Sexually Transmitted Disease Control Section, Colorado Department of Public Health and Environment.

DRUG ABUSE TRENDS

1. Cocaine and Crack

The Drug Enforcement Administration (DEA) reports that cocaine hydrochloride (HCl) remains readily available and popular throughout Colorado. This report is corroborated by various police departments and treatment agencies in the state.

Prices have declined slightly over the past several years, and quantity prices in Denver have declined over the past year. Gram prices remain at \$100, while ounce prices are down to \$800 and kilogram prices are \$12,000-\$15,000, a significant decline from the \$18,000-\$23,000 reported a year ago. Quantity prices in suburban and rural areas are still higher, at \$18,000-\$25,000 per kilogram.

Crack cocaine remains problematic in the metropolitan area and continues to be associated with gang violence, drive-by shootings and car-jackings by users and distributors alike. The Denver police department reports that while less crack is being sold, users are buying cocaine hydrochloride and rocking it up themselves.

Cocaine treatment admissions had increased from 29.3 percent of all admissions in 1990 to 42.1 percent in 1992 (exhibits 1,4). Admissions rose slightly to 42.6 percent in 1993, the highest percentage reported to date. However, this peak has been followed by a slight decline to 40.6 percent in 1994, and a dramatic decrease to only 32.6 percent in 1995, the lowest percentage since 1990. The proportion of new cocaine users in treatment, defined as those admitted to treatment within 3 years of initial cocaine use, continues to decline steadily (exhibits 2,4). In 1995, only 13.4 percent of cocaine admissions reported being new users—down slightly from the 13.5 percent observed in 1994 and substantially down from the 1988 peak of 26.3 percent.

Exhibit 3 displays demographic data and abuse patterns by primary drug for treatment admissions during 1995. A typical 1995 cocaine admission is a male (59.2 percent), typically aged 26–34 (average 32.7), and began using cocaine at an average age of 22.6 years. Alcohol is the most common secondary drug reported.

Exhibit 5 illustrates DUF data, which identify drugs found in Denver arrestees' urinalyses samples for quarterly reporting periods between February 1990 and November 1995. The data presented are annualized, with male and female arrestees combined so that any trends are more readily observable. The proportion of arrestees testing positive for cocaine increased from 28 percent in 1990 to 43 percent in 1993, then increased slightly to 44 percent and to 46 percent during 1994 and 1995, respectively.

Cocaine-related deaths per 1 million population increased from 7.6 in 1990 to 21.5 in 1993, but declined to 20.5 by 1995 (exhibit 5). Cocaine ER mentions declined sharply from 59.9 per 100,000 population in 1989 to 39.2 during 1990, but increased substantially over the next 4 years to reach 88.3 in 1994. Colorado cocaine-related hospital discharges also increased. After decreasing 40 percent from 39.8 per 100,000 population in 1989 to 23.9 in 1990, cocaine-related inpatient episodes climbed to 31.3 in 1991, to 38.1 in 1992, to 39.7 in 1993, and to 53.3 per 100,000 in 1994. The 1994 figure represents a 40percent increase over 1992 and a 34-percent increase over 1993 (exhibit 5). These increases should be interpreted with caution, however, as they may be due in part to reporting procedure changes by the hospitals.

2. Heroin and Other Opiates

The Denver Police Department reports that heroin use is rampant, with a large upsurge seen in the past year. Mexican Black tar remains the overwhelmingly predominate type. Prices in Denver have dropped to \$80-\$120 per gram and \$1500 per ounce. The median purity is between 30% and 40%. Distribution is multinational, with Hondurans, Guatemalans, Nicaraguans and Mexicans involved in heroin wars in downtown Denver. A very hard, black type of heroin, which is not black tar, is being distributed by Hondurans.

Changes in the demographics of the using population and the routes of administration were reported from numerous law enforcement and treatment sources, with smoking, snorting and eating being seen more often. Even black tar is now being snorted by crushing it up finely. This method has not been previously reported. Injection, however, remains the most popular method of use. Whereas admissions to treatment were previously exclusively 'baby boomers', reports in Denver, Colorado Springs and Boulder now indicate that users are more frequently younger people in their 20's and are more often white, middle class suburbanites. References were repeatedly made connecting the new heroin users to the Seattle grunge music scene. The 'grungers' are reportedly using heroin for nostalgic reasons, and as a rebellion against crack cocaine and the gangster rap scene. Connections are frequently made around espresso and juice bars.

While heroin is popular in Boulder, most users come to Denver to buy as prices in Boulder are currently double those in Denver. This in contrast to the situation a year ago, when prices in Boulder were lower than those in Denver. A number of treatment clients have migrated to Boulder to escape the Denver heroin scene.

Price and purity data for all of 1995 are available from the DEA's Domestic Monitor Program. The average purity of street-level buys during the first quarter was 21.2 percent, the second quarter average was 19.8 percent, the third averaged 13.9 percent and the fourth continued the decline with an average of 7.3 percent. Mexico was the source of all identified samples.

Admissions for heroin and other opiate abusers constituted 13.2 percent of the treatment population in 1988. This proportion declined slightly to 12.3 percent in 1989, rebounded sharply to 21.6 percent in 1990, and then declined to only 13.9 percent in 1995 (exhibit 1). For heroin only, the proportion of treatment admissions declined steadily from 18.7 percent in 1990 to 10.3 percent in 1994, but increased to 11.5 percent in 1995 (exhibits 1,6). New heroin users as a proportion of total heroin admissions declined from a high of 9.5 percent in 1988 to 6.8 percent in 1992, then increased to 8.9 percent in 1994, and sharply increased to 13.3 percent in 1995 (exhibits 2,6). New users of other opiates as a proportion of total other opiate admissions dropped from a high of 23 percent in 1989 to 12.2 percent in 1993, increased to 22.8 percent in 1994, but declined to only 16.4 percent in 1995 (exhibit 2).

The two private methadone clinics in Colorado, both located in Denver, began reporting on the DACODS in January 1989. The data from these clinics are excluded from the information presented in exhibits 1, 2, and 6 so as not to interfere with the trends presented; however, they are included in the analysis of the demographics and drug use patterns of heroin admissions to provide a more accurate picture of heroin users in Colorado (exhibit 3). A typical 1995 heroin admission is male, white, and over 35 years old. The average heroin admission began using at an average age of 21.7 years, and just over 30 percent report secondary cocaine use.

Exhibit 7 shows DUF data on opiatepositive urine tests for male and female arrestees combined. Among arrestees tested in 1991, only 1 percent were positive, down from 3 percent during the previous year. This percentage increased to 2 percent during 1992, to 4 percent during 1993, remained at 4 percent during 1994, but increased to 6 percent in 1995.

Classifying opiate-related deaths by type of narcotic (such as heroin) is not possible with the current data; therefore, aggregate opiate death mentions are displayed in exhibit 7. Such mentions decreased from 10.4 per 1 million in both 1988 and 1989 to 7.9 in 1990, rebounding sharply to 13.2 in 1991 and steadily increasing to 26.3 per 1 million in 1995, the highest rate reported to date.

Heroin ER mentions per 100,000 population decreased from 13.1 in 1989 to 7.4 in 1991, increased to 8.3 in 1992, and then jumped dramatically to 18.4 in 1993, and to 33.7 in 1994, the highest rate of mentions observed to date. Similarly, narcotic-related hospital inpatient episodes declined from 17.1 per 100,000 population in 1989 to 16 in 1991, then increased to 18 in 1992, to 19.5 in 1993, and steeply increased to 28.8 in 1994. As in the case of cocaine, this increase may be partly due to hospital reporting procedure changes (exhibit 7).

The rate of acute hepatitis-B cases dropped from 6.1 per 100,000 population in 1988 to only 2.4 in 1993 (exhibit 7); however, increases were observed in both 1994 and 1995 at 2.8 and 4 per 100,000, respectively.

3. Marijuana

Marijuana remains endemic in all areas of the state. Many large grows have been seen recently, and Colorado remains one of the leading states for indoor cultivation. A large amount of the available marijuana is also smuggled from Mexico. Prices vary from \$600 for a pound of cheap marijuana to the exorbitant price of \$4500-\$5000 for 'kind bud' and 'KGB', short for 'Killer Green Bud'. An ounce of good quality marijuana reportedly sells for more than gold, at \$425 per ounce and \$200 per quarter-ounce. The proportion of marijuana treatment admissions increased to 40.6 percent in 1989, but dropped steadily to 29.9 percent in 1992, increasing slightly to 32.0 percent in 1993, to 33.9 percent in 1994, and again to 36.8 percent in 1995 (exhibits 1 and 8). The proportion of new users in treatment declined from 22.1 percent in 1989 to 14.7 percent in 1991 but increased rapidly to 32 percent over the next 3 years, falling slightly to 30.9 percent in 1995 (exhibits 2 and 8).

A typical 1994 marijuana admission is male (75 percent) and white (57.2 percent) (exhibit 3). Most are younger than 25 and first used marijuana at an average age of 14.0. Over half (55.9 percent) report secondary alcohol use.

For the most part, DUF data show an increasing percentage of combined male and female arrestees testing positive for marijuana. In 1990 and 1991, 23 percent of tested arrestees were positive. This percentage increased to 34 percent by 1994, but dropped to 29 percent in 1995 (exhibit 9).

Interestingly, marijuana ER mentions per 100,000 population, which had decreased from 15.6 in 1992 to 13.5 in 1993, more than doubled to 27.6 in 1994. Marijuana hospital episodes declined from 29.3 per 100,000 in 1989 to 15.7 in 1991, but increased to 19.3 in 1992, to 27.3 in 1993, and to 37.2 in 1994 (exhibit 9).

4. Stimulants

A year ago, reports indicated that Methamphetamine had inundated the Denver area. This same circumstance is also reported this year. It's popularity is regional, as it is very prevalent in Denver, Colorado Springs and on the Western slope, but is not as common in the Boulder or Vail areas. It is manufactured and trafficked mainly by Mexican nationals. Many creative methods are used in manufacture, with the current "method of the month" involving the burying of pots containing the requisite chemicals in the desert and letting the sun cook the product, and the use of large plastic cups to make small amounts.

Multiple sources reported that much of the ephedrine-based Mexican methamphetamine is of very poor quality and is sloppily manufactured. The DEA reported that purity levels have greatly reduced from those seen in the past. According to both the DEA and various police agencies, purity is currently often less than 35%. Prices remain static, at \$150-\$200 per eighth-ounce and \$1000-\$1600 per ounce.

A lot of 'mexican crack', which is methamphetamine with the appearance of crack is being seen in Denver. A new type known as 'glass', which is a pretty reddish color and is probably manufactured by the P2P method, is available from Nevada. It is either smoked or injected. A form of mexican methamphetamine which has a peanut brittle appearance and is ground into a powder form prior to use is also available. While most methamphetamine is used by injection, it is also snorted, smoked and ingested.

Methamphetamine has traditionally been used mainly by white males aged 25–50, but a large increase in use by minorities and juveniles, and particularly young females in their early 20's and 30's has been observed. The DEA also reported a rise in usage by young urban professionals in the Denver metro area.

As expected based upon anecdotal information, amphetamine treatment admissions increased to 9 percent in 1994 and to 12.9 percent in 1995, after fluctuating between 5.6 and 7.3 percent for the prior 6 years (exhibits 1 and 10). New amphetamine users in treatment have also increased steadily from a low of 10.1 percent in 1991 to more than 25 percent in 1995 (exhibits 2 and 10).

Amphetamine admissions are usually male, though a large proportion (44.5 percent) are female (exhibit 3). The vast majority of amphetamine admissions are white (87.2 percent), and the largest proportion (38.4 percent) are aged 26–34. While injection is the most commonly reported route of administration, the proportion of clients reporting use by smoking has increased to 16 percent. Marijuana is the most commonly reported secondary drug.

DUF figures indicate that the proportion of arrestees testing positive for amphetamine was 1 percent or less during 1990–93. In 1994, an increase to 3 percent was observed followed by an increase to 4 percent in 1995 (exhibit 11).

Amphetamine-related deaths rarely occur in Colorado. Between 1988 and 1993, only four such deaths were reported. However, in just the two year time period of 1994-1995, seven amphetamine deaths were reported. Methamphetamine ER mentions per 100,000 population dropped consistently from 8.1 in 1989 to 2.1 in 1992, but increased slightly to 3.7 in 1993, and to 9.7 in 1994, nearly a threefold increase over the prior year and the highest rate observed in the most recent seven year time period. Overall amphetamine mentions followed the same pattern, falling from 13.3 in 1989 to 4.9 by 1992, but increasing nearly five-fold to 22.3 in 1994. Similarly, amphetamine-related hospital inpatient episodes had declined from 5.9 per 100,000 population in 1989 to only 2.6 in 1991. However, such episodes had also increased nearly five-fold to 12 per 100,000 by 1994 (exhibit 11).

5. Hallucinogens

The Denver Police Department reports an influx of lysergic acid diethylamide (LSD), psilocybin mushrooms and methoxymethylene dioxyamphetamine (XTC). Users are often 'grungers' and are using for nostalgic reasons. On the other hand, while psilocybin mushrooms are more common in Boulder, less LSD has been reported in that area. In the Vail area, XTC is quite common among the 18-25 age group and LSD from Chicago is available in both the blotter and liquid form in that area. Psilocybin mushrooms are very popular at this time of year, and are often used in conjunction with the parties celebrating the end of the ski season.

Prices are higher than those reported at this time last year, with mushrooms currently at \$90-\$110 per ounce and \$800 per pound, as compared to \$100-\$200 per ounce and \$500-\$800 per pound. LSD has increased from \$2-\$5 to \$4-\$10 for single dose units.

Primary hallucinogen users have represented 2.5 percent or less of the treatment population every year since 1986 (exhibit 1). Hallucinogen admissions accounted for only .6 percent of the total treatment population in both 1994 and 1995. Phencyclidine hydrochloride (PCP) treatment admissions have made up no more than 0.2 percent of total admissions in the past 8 years.

Only one hallucinogen-related death was reported between 1980 and 1986; however, two to three were reported every year between 1987 and 1990. While only two such deaths were observed from 1991 to 1992, six were reported in 1993, and six were reported in the two year time period of 1994-1995. The rate of LSD ER mentions per 100,000 population increased from 7 in 1990 to 9 in 1991; however, the rate dropped to 6.6 in 1992, to 4.5 in 1993, and climbed back to 6.6 in 1994. PCP ER mentions have been too infrequent to tabulate.

Hospital episodes for hallucinogens decreased from 4.3 per 100,000 population in 1989 to 3.1 in 1990. This rate remained relatively stable in 1991, 1992, 1993, and 1994 with reported rates of 3.3, 3.2, 2.8, and 2.9, respectively.

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

Of the 5,368 AIDS cases reported in Colorado through March 31, 1996, 7.8 percent were classified as IDUs, and another 10.6 percent were homosexual or bisexual males as well as IDUs (exhibit 12).

.

4

PERCENTAGE	OF	DRUG	TREATM	ENT	ADMI	SSIONS
		BY	PRIMARY	DRU	IG OF	ABUSE
					19	88-95

Primary Substance	1988	1989	1990	1991	1992	1993	1994	1995
Heroin	10.0	9.9	18.7	14.9	13.9	11.7	10.3	11.5
Other Opiates	3.2	2.4	2.9	3.2	3.2	2.7	2.6	2.4
Non-Rx Methadone	0.2	0.2	0.1	0.1	0.2	0.2	0.2	.3
Amphetamine	6.6	7.3	7.1	7.2	5.6	5.9	9.0	12.9
Cocaine	39.5	33.5	29.3	36.1	42.1	42.6	40.5	32.6
Marijuana	33.3	40.6	36.2	31.9	29.9	32.0	33.9	36.8
Barbiturates	0.4	0.3	0.4	0.3	0.1	0.2	0.2	0.1
Sedatives	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.2
Tranquilizers	1.4	1.2	1.1	0.9	0.8	1.0	0.7	0.7
Hallucinogens	2.1	1.9	1.6	1.8	1.4	1.0	0.6	0.6
Inhalants	1.3	1.3	1.6	2.2	2.1	2.3	1.3	1.4
РСР	0.2	0.2	0.0	0.1	0.0	0.1	0.1	0.1
Over-the-counter	0.3	0.3	0.1	0.1	0.3	0.1	0.2	0.1
Other	1.1	0.8	0.9	0.7	0.3	0.1	0.4	0.2
Total N	3,970	4,749	6,258	6,550	8,133	10,085	11,409	11,959

SOURCE: Colorado Drug/Alcohol Coordinated Data System

DENVER NUMBER AND PERCENTAGE OF DRUG USERS ENTERING TREATMENT WITHIN FIRST 3 YEARS OF USE OF SUBSTANCE INDICATED 1988–95

	New Users Entering Treatment Within First 3 Years of Use of Substance Indicated								ed	
Year Heroin		roin	Other Oplates		Cocaine		Marijuana		Amphetamine	
	N. est	%	N	%	N	%	N	%	N	%
1988	36	9.5	27	22.1	401	26.3	247	19.5	¥	*
1989	39	8.6	26	23.0	403	26.2	409	22.1	•	٠
1990	87	7.8	39	22.4	415	23.1	394	17.8	*	*
1991	74	7.7	43	20.3	431	18.5	305	14.7	23*	10.1
1992	75	6.8	42	15.9	501	14.8	421	17.8	49	11.0
1993	100	8.6	35	12.2	639	15.2	751	23.9	86	14.9
1994	103	8.9	71	22.8	609	13.5	1211	32.0	227	22.8
1995	178	13.3	53	16.4	513	13.4	1333	30.9	381	25.2

* Amphetamine data not available until 7/91-'91 figures based on 6 months. SOURCE: Colorado Drug/Alcohol Coordinated Data System

DENVER TREATMENT DEMOGRAPHICS FOR SELECTED DRUGS, IN PERCENT

1995

n								
Demographic Characteristic	Cocaine (%)	Heroin (%)	Marijuana (%)	Amphetamina (%)				
Gender								
Male Female	59.2 40.8	67.1 32.9	75.0 25.0	55.5 44.5				
Race/ethnicity								
White	41.6	55.8	57.2	87.2				
African-American	39.0	10.1	8.5	1.3				
Hispanic	17.4	30.1	31.3	9.4				
Native-American	1.1	2.3	2.0	1.2				
All other races	1.0	.7	1.0	.8				
Age at admission								
≤17	0.9	0.4	42.1	4.6				
18-25	15.1	10.0	28.7	29.7				
26-34	47.1	24.4	16.9	38.4				
35 +	36.9	65.2	12.2	27.3				
Route of								
auministration	676	20	03.0	16.0				
Johaling /Spiffing	07.0 17 Ω	2.5	50.9 A A	24.1				
Interting	12.4	2.0 29.2	0.3	39.2				
All other/multiple	2.2	5.7	5.0	10.6				
Total	3,874	1,926	4,389	1,530				

SOURCE: Colorado Drug/Alcohol Coordinated Data System



EXHIBIT 5



13



EXHIBIT 7



EXHIBIT 8



EXHIBIT 9



15

EXHIBIT 10



EXHIBIT 11



DENVER COLORADO CUMULATIVE AIDS CASES BY DEMOGRAPHICS, MORTALITY STATUS, AND EXPOSURE CATEGORY THROUGH MARCH 31, 1996

Demographic Characteristic	No.	
Number of confirmed cases	5,368	(100.0)
Gender		
Male	5,047	(94.0)
Female	321	(6.0)
Cumulative mortality		
Alive	2,128	(39.6)
Deceased	3,240	(60.4)
Race/ethnicity		
White	4,126	(76.9)
Black	501	(9.3)
Hispanic	694	(12.9)
Asian	18	(0.3)
Native American	29	(0.5)
Age at diagnosis (vears)		
<13	27	(0.5)
13-19	24	(0.4)
20-29	970	(18.1)
30–39	2,644	(49.3)
40-49	1,251	(23.3)
49 +	452	(8.4)
Exposure category		
Men/sex/men	3,845	(71.6)
Injecting drug user (IDU)	417	(7.8)
IDU and men/sex/men	567	(10.6)
Transfusion recipient	70	(1.3)
Hemophiliac	74	(1.4)
Heterosexual contact to	210	(3.9)
high-risk individual		
Undetermined risk/no identified	162	(3.0)
risk factor		
Parent at risk/has AIDS	21	(0.4)
Confirmed occupational exposure	2	(0.0)

SOURCE: Colorado Department of Public Health and Environment

.....