

Prevalence of frequent cocaine use in urban poverty areas

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Many authors have noted that in national survey data cocaine use is more or less equally prevalent in all socioeconomic strata (Adams and Gfroerer 1991, Anthony 1992, Flewelling et al. 1992, O'Malley et al. 1991, Parker 1995, Robins and Przybeck 1985, Ritter and Anthony 1991, Trinkoff et al. 1990, Windle and Miller-Tutzauer 1991). A broader review of the heterogeneous data bearing on the question of use prevalence indicates that *frequent* cocaine use (weekly or more often) is far more prevalent in urban poverty areas than elsewhere.

Our review is motivated by consistent ethnographic reports of frequent cocaine use among the urban poor (Booth et al. 1993, Chirgwin et al. 1991, Edlin et al. 1994, Fullilove et al.

1990, Hamid 1992, Hunt 1991, Inciardi 1986 and 1991, Krohn and Thornberry 1993, Lewis et al. 1992, Marx et al. 1991, Ratner 1992, Rodriguez et al. 1993, Tidwell 1992, Weppner 1977). For example, studies in Ratner (1992) portray urban poor addicts who spend several days and nights repeatedly exchanging sex for a hit or rock of crack (or for the price of a rock) and then sleep for a few days to begin again.' Edlin et al. (1994) evaluated an urban street sample of 1,137 crack smokers in which the median user used 10 times per day and 28 days out of the last 30. Thirty-nine percent of the women smokers had had more than 50 sex partners, and in New York and Miami, respectively, 29.6% and 23.0% were HIV positive.

A focus on prevalence in poverty areas, as opposed to prevalence among poor individuals, is appropriate because concentrations of poverty create special dynamics. The collocation of a large group of occupationally limited adults deprives children of necessary role models and deprives adults of networks supporting access to advancement. Persons residing in such collocations face a high risk of slipping into poverty, crime and dependency, even if they are currently lawfully employed and are sustaining themselves above the poverty line (Kasarda 1992, Wilson 1987).

A focus on areas, as opposed to individuals, is particularly appropriate in relation to drug use, because drug use is often transmitted from person to person within social networks (Moore 1977). The social networks of drug users are more often neighborhood-based than institution-based (Krohn and Thornberry 1993).

The Census Bureau defines poverty areas as census tracts where more than 20% of the population was poor in 1990. There is, however, a necessary imprecision in our reference to "urban poverty areas" in this paper. First, urban poverty areas include varying concentrations of poor individuals, averaging 39.5% (Bureau of the Census 1993a). Second, the data on

drug abuse come from a number of very different sources, and there is no single analytic frame of reference within which all the sources are commensurable.

The National Household Surveys define “frequent” users of cocaine as weekly or more frequent users (e.g., Substance Abuse and Mental Health Services Administration 1995b). The term “frequent” conflates regular weekend recreational users with thoroughly addicted users consuming more than a gram per day. This imprecision is also necessary; the data do not effectively distinguish the varieties of “frequent” users. It is appropriate, however, to focus on users at the frequent end of the spectrum. These are the users sustaining the greatest personal damage and causing the greatest community damage. They also account for the bulk of the cocaine consumed.²

I. Assessment of the data

There are four types of data bearing on the relative prevalence of cocaine use in urban poverty areas and other areas: small-area event-driven data, small-area survey data, national event-driven data and national survey data. By “event-driven” data we mean data generated at the time of a life event (arrest, pregnancy, admission to an emergency room, death).

- A. Small-area event-driven data
- Small-area health-care studies show widely varying local prevalence of cocaine use. In these studies, inner-city poverty areas show a prevalence far greater than that of other areas. Small-area results may not fairly represent national groups. On the other hand, the small-area health care studies are the richest source of direct drug testing results in defined populations. Taken together, they have considerable force. Surprisingly, drug policy analysts rarely address them.

Concern about the effects of pre-birth exposure to cocaine and other drugs has motivated a number of studies of preg-

nant women and newborns. Table 1 shows the results from 20 of these studies for 33 subpopulations.³ The studies listed include all of the relevant studies located by the author applying an unbiased search strategy to the Medline and Health online databases.

TABLE 1 **Rate of intrauterine cocaine exposure of newborns**

Subpopulation of Mother	Rate	Test	N	Study
Inner city, Toronto*	13%	hair	200	Forman, 1994
Suburban, Toronto	3%	hair	400	Forman, 1994
Inner-city poor, Baltimore (80% Medicaid)*	31%	mec	141	Nair, 1994
Inner-city poor, Detroit (48% Medicaid)*	31%	mec	3,010	Ostrea, 1992
Low income zipcodes (<40th US percentile), Rochester*	16%	mec	270	Ryan, 1994
Public pay, Hartford*	8%	mec	171	Rosengren, 1993
Urban poor, Minneapolis-St. Paul*	4%	mec	604	Yawn, 1994
Mid income zipcodes (80-93d US percentile), Rochester	4%	mec	279	Ryan, 1994
Mid income zipcodes (40-80th US percentile), Rochester	2%	mec	252	Ryan, 1994
Private pay, Hartford	1%	mec	430	Rosengren, 1993
High income zipcodes (>93d US percentile), Rochester	1%	mec	310	Ryan, 1994
Middle class, Columbus, Ohio (mec. or urine, inconsistent)	1%	mec	228	Weeman, 1995
Suburban Minneapolis-St. Paul	0%	mec	729	Yawn, 1994
Inner-city clinic, New York City*	14%	imu	362	Matera, 1990
Inner-city American-born blacks, New York City*	13%	imu	406	McCalla, 1995
Inner-city poor, Detroit*	11%	imu	290	Land, 1990
Public clinic patients, Hartford*	7%	imu	234	Fenton, 1993
Inner-city poor, Bronx*	7%	imu	204	Schulman, 1993
Rural poor, Florida (pmu combined with interviews)	5%	pmu	456	Behnke, 1994
Public clinic, urban county, Florida (St. Petersburg)	5%	pmu	380	Chasnoff, 1990
Inner-city non-blacks, New York City*	4%	imu	172	McCalla, 1995
Public clients (<150% of poverty), urban counties, Alabama	2%	pmu	3,607	Pegues, 1994
Public clinic, urban low density, Utah	2%	pmu	373	Buchi, 1994
Private patients, urban county, Florida (St. Petersburg)	2%	pmu	335	Chasnoff, 1990
Private care, New York City	1%	imu	145	Matera, 1990
Public clients (<150% of poverty), Alabama (statewide)	1%	pmu	5,010	George, 1991
Inner-city, foreign-born blacks, New York City*	1%	imu	503	McCalla, 1995
Predominantly middle class, urban low density, Utah	1%	imu	792	Buchi, 1993
Community hospital, South Carolina (nbu after screening)	1%	nbu	14074	Weathers, 1993
Private patients, Hartford	1%	imu	769	Fenton, 1993
Public clients (<150% of poverty), rural counties, Alabama	1%	pmu	2,525	Pegues, 1994
Private physician, urban low density, Utah	0%	pmu	562	Buchi, 1994
Private pay, Denver	0%	pmu	1,425	Burke, 1993

* = Urban poverty subpopulation

With the exception of Weathers et al. (1993),⁴ these studies each tested a large consecutive or random sample from the flow of patients through one or more health care settings (doctors' offices, clinics, hospitals). Twelve of the studies tested maternal urine samples, either at a prenatal visit

("pmu") or around the time of labor and delivery ("lmu"). Six of the studies tested newborn meconium ("mec"). One tested hair from the newborns. Urine tests reveal use or exposure within the previous few days. Meconium and hair tests reveal prenatal exposure after the early gestational period.

The table lists the subpopulations in descending order⁵ of positive cocaine test rates within category of test, with all urine tests being grouped together. Within each test category the highest rates occur among urban poverty subpopulations. With one possible exception, the lower rates occur among non-urban and/or non-poor subpopulations. The contrasts are striking on inspection and are highly significant statistically.⁶

All of these studies generally focus on the cost-effectiveness of testing as a method of identifying at-risk babies. The conclusions vary widely, based on the population being tested. Several of the later studies consider this variation and conclude explicitly that primarily inner-city poor infants are at risk and/or in need of testing (Day et al. 1993, Fox 1994, Ryan et al. 1994, Yawn et al. 1994).

Pregnant women should be the group of young adults least likely to test positive for cocaine use. Unfortunately, in disadvantaged areas too many women receive inadequate prenatal care and counseling. Yet, it is common knowledge that substance abuse puts babies at risk.⁷ Moreover, the cocaine-positive women are disproportionately multi-gravid, i.e., not first-time mothers (Ostrea et al. 1992, Rosengren et al. 1993). Most of the tests reflect use late in pregnancy, long after the mother must be aware of her pregnancy. It seems fair to infer that many of the women who expose their babies are dependent frequent users who find it difficult to give up cocaine during their pregnancy.⁸

In many surveys, men are much more likely than women to report recent cocaine use (e.g., National Institute on Drug Abuse 1995, Substance Abuse and Mental Health Services

Administration, 1995a). This makes the pregnancy data especially troubling. McNagny and Parker (1992) provide some comparison testing data on inner-city males in the same general age range as childbearing women: 18–39 years old. Males who presented themselves at a walk-in clinic of a large public hospital in Atlanta (for various problems) on weekdays were asked if they would be willing to have their urine tested for sexually transmitted diseases. Thirty-nine percent of those providing urine samples (total N=415) tested positive for recent cocaine use. (Of the positive group, 72% denied recent use.) Testing positive for recent use does not necessarily indicate frequent use, but probably many, if not most, of the recent male users used weekly or more frequently.⁹

This corpus of studies appears to indicate that in many urban poverty areas 15% or more of the young adults use cocaine frequently, while in most non-urban, non-poverty areas frequent cocaine use is relatively rare, generally at or below the 1% level. The only distinctly contrary small-area event data known to this author are from a study of young children apparently exposed to passive cocaine smoke (Rosenberg et al. 1995); this study showed little difference in exposure rates between suburban and urban subpopulations in the Chicago area.

B. Small-area survey data from urban poverty areas

Several of the foregoing studies in health care settings make the point that direct physical testing reveals use at a much higher rate than self-reporting indicates. Only 28% of those males testing positive in McNagny and Parker (1992) admitted use in the previous three days. In Ostrea et al. (1992) only one-third of mothers with infants testing positive admitted use.

Despite the probability of underreporting, small-area statistical studies located by the author (arrayed in Table 2) do tend to show a relatively high prevalence of frequent use among the urban poor.

TABLE 2 **Small-area survey datasets on cocaine prevalence**

Study	Population/Use Variable	Prevalence
Spinner, 1992	Homeless, New Haven, past month use	41%
Sussman, 1995	Shelter homeless/mentally ill in NYC, dependent	35%
NIDA, 1993	Homeless, Washington D.C., past month use	27%
Everingham, 1994	Homeless, Los Angeles, dependent	21%
Reuter, 1990	Young adult black males, Washington, D.C., frequent use	20%

The NIDA (1993) data are especially striking, given that interviewers avoided street persons who appeared to be drug dealers or prostitutes—likely cocaine users. However, with the exception of Reuter et al. (1990), these studies focus on the homeless. Their results are at best suggestive as to general urban poverty populations with greater residential stability.

Reuter et al. (1990) focused on dealing. Our estimate of 20% frequent use prevalence based on the data in Reuter's study¹⁰ applies across the population of young adult black males resident in Washington, D.C., only about half of whom reside in poverty areas. The poverty area prevalence is probably higher than 20%. By contrast, the 1993 National Household Survey puts past month cocaine use by black males at 1.3% (Substance Abuse and Mental Health Services Administration, 1995a). The national results, to the extent they reach urban poverty areas at all (see discussion below), combine poverty and non-poverty areas. Survey results for black males drawn exclusively from non-urban, non-poverty areas could be expected to measure even lower prevalence of past-month use.¹¹

The small-area survey results lend some further support to the notion of a radical contrast in cocaine use prevalence between urban poverty areas and other areas.

C. National event-driven data

The Drug Use Forecasting (DUF) program and the Drug Abuse Warning Network (DAWN) provide national data based on events: respectively, on arrests (samples of arrestees given urine tests) and on emergency room visits and deaths (participating institutions report involvement of drugs in

patients' medical events). The limited inferences possible from these datasets tend to support our hypothesis.

The DUF program regularly collects urine samples and interviews from arrestees for serious crimes in 24 cities nationwide. These samples show recent cocaine use varying around the 45% level among arrestees (National Institute of Justice 1992, Reardon 1993). Rhodes (1993) concluded that roughly half of the recently using arrestees were frequent (weekly) users.

The DUF program is oriented toward documenting the drugs-crime connection (Reardon 1993) and not to mapping prevalence of drug use. The DUF data do not tell us where the arrested frequent users live. The general literature leaves no doubt, however, that criminality is much more prevalent in urban poverty areas than elsewhere (Bursik 1988, Bursik and Grasmik 1993a and 1993b, Canada 1995, Greenberg and Schneider 1994, Hagan 1992 and 1993, Lafree et al. 1992, Nelsen et al. 1994, Rountree et al. 1994, Sampson 1993, Sampson and Lauritsen 1993, Sullivan 1989, Taylor and Covington 1993, Tonry 1995, Vila 1994, Warner and Pierce 1993, Winsberg 1994). To the extent that arrest rates are dramatically higher in urban poverty areas, the DUF data linking arrests to drug use support the proposition that frequent cocaine use is also dramatically higher.¹²

The DAWN data from emergency rooms and medical examiners are difficult to interpret for many reasons (Ebener et al. 1993). The most significant difficulty, for our purposes, is that the data are tabulated by race, not by income level or by poverty area residence. A different problem is that poor people, having limited access to health care, use emergency rooms for different purposes than middle-class people do. A final problem is that the mention of cocaine use in a DAWN record conveys little about the frequency of the patient's cocaine use.

However, two observations on emergency room patients add some further plausibility to our hypothesis that frequent cocaine use is distinctly more prevalent in urban poverty areas. First, central city blacks, 7% of the total U.S. population (Bureau of the Census 1993a), account for a disproportionate share, roughly 50%, of all of the cocaine episodes.¹³ Half of central city blacks reside in poverty areas (Bureau of the Census 1993a). Second, central city blacks' drug use leading to emergency room visits tends to be illegal, chronic and debilitating, while whites' use tends to involve prescription drugs and episodes of suicidal depression.¹⁴ The medical examiner data on drug-related deaths (National Institute on Drug Abuse 1994) loosely parallel the emergency room results.

D. The limited relevance of the national survey data

As noted at the outset, many authors working from national survey data have found only weak correlation between socioeconomic status and use of illicit drugs. The major repetitive annual surveys are the National Household Survey of Drug Abuse (National Institute on Drug Abuse 1991; Substance Abuse and Mental Health Services Administration 1993a, 1993b, 1994, 1995a, 1995b) and the Monitoring the Future survey (National Institute on Drug Abuse 1992a and 1995), commonly known as the "High School Senior" survey.¹⁵

Recent survey-based studies (Flewelling et al. 1993, Gfroerer and Brodsky 1993) have begun to show significant inverse relationships between socioeconomic status and drug use, yet many policy makers remain under the lingering impression that socioeconomic status and drug use are not closely related. It is therefore important to point out why the national surveys have always been poor tools for measuring the class dynamics of frequent cocaine use.

Frequent cocaine use is a rare phenomenon in the populations reached by the national surveys. The 1992 National Household Survey detected a frequent-use rate of only 0.3%. To

measure statistically significant relationships between use and income, researchers are forced to test monthly, annual or even lifetime use as opposed to frequent use.¹⁶ People of higher socioeconomic status, especially youths, do experiment with illegal drugs (Baurind 1985, Flewelling et al. 1993, Hawkins et al. 1985, Substance Abuse and Mental Health Services Administration 1993b, Zinberg 1984). It is not surprising that socioeconomic variables are weak predictors of occasional use. However, these results tell us little about the class dynamics of frequent use.

General survey methods simply cannot reach many frequent users. Frequent cocaine users have lifestyles which make them hard to find and interview. On this point, see generally the ethnographic literature cited in the introduction. “[Crack abusers] are probably America’s subpopulation least likely to be found in an ordinary household” (Lewis 1992). As a result, the National Household Survey misses as many as 65% of the frequent users.¹⁷ Although the managers of the National Household Survey have recognized this problem and have begun to develop adjusted estimates (Substance Abuse and Mental Health Services Administration 1995b), these adjustments are highly uncertain and help little in the analysis of class dynamics.

Urban poverty areas pose the greatest challenges to survey techniques, and the omission of frequent users in surveys may be greatest in these areas. The national census fails even to count residents of these areas correctly (Holmes 1994). As an example of the difficulty of counting persons living in areas of concentrated poverty—much less determining their substance use habits—consider the embattled Robert Taylor Homes housing project in Chicago, studied by Wilson (1987). This project had 20,000 official residents, but an estimated 6,000 additional adults resided there unregistered with the Housing Authority. These included many males whose presence, if known to authorities, would jeopardize household welfare benefits.

- E. Summary Table 3 summarizes the available evidence bearing on the hypothesis that frequent cocaine use is more prevalent in urban poverty areas than outside them.

TABLE 3 Evidence of high prevalence in urban poverty areas

Small area health care data	Strongly supports -- ten fold or greater contrast in frequent use levels
Small area survey data	Supports (but mainly homeless data)
DUF arrestee data	Supports with reasonable assumptions
Emergency room data	Supports, but inferences tenuous (only racial data -- no poverty data)
National survey data	Older data contra; recent data supportive; but both largely irrelevant

On balance, the evidence strongly indicates that frequent cocaine use is far more prevalent in urban poverty areas than in non-urban or non-poverty areas—perhaps more than 10 times more prevalent.

II. Discussion

Many factors contribute to the radical contrast in rates of frequent cocaine use. Prohibition is less effective in urban poverty areas. Cocaine is widely available in open street markets; higher availability contributes to higher use rates. Poor youths may be less fearful of incarceration and criminal stigma, and so may be less influenced by the fact that cocaine use is illegal. Also, they may be less receptive to prevention messages disseminated by middle-class authorities.

Residents of urban poverty areas may be more vulnerable to addiction. Life stress correlates (as both cause and consequence) with increased abuse of both legal and illegal substances (Flewelling et al. 1992, Schlesinger et al. 1993). In urban poverty areas, poverty itself, out-of-wedlock births, unstable households, unemployment, marginal employment, frequent exposure to victimization through crime, and, for some, racism, all take a psychological toll. The bleakness of the future for many urban poor, especially as seen against the

consumerist messages of the media, contributes to a profound despair and nihilism (West, 1994). Nihilism manifests itself in self-destructive behavior. Frequent-use prevalence far greater than in the general population does not seem surprising.

Whatever the causes of the prevalence contrasts between urban poverty areas and other areas, the contrasts are real and dramatic. Yet many policy makers refuse to address them. President Clinton's 1996 National Drug Strategy postulates that "Clearly, drugs are not a problem just for inner-city residents, or the poor or members of some minority group—they affect all Americans from every social, ethnic, racial and economic background" (Office of National Drug Control Policy 1996). At the other end of the political spectrum, House Speaker Newt Gingrich has made an issue out of supposed leniency toward rich drug abusers (Join Together 1995).

If we ignore or deny the reality that addiction flourishes in a complex matrix of poverty-related problems, we are unlikely to design effective solutions. In particular, we are likely to overemphasize enforcement, which does little to deter poor youths who have nothing to lose. It is ironic that liberals, for fear of stigmatizing the urban poor, sustain a public denial that in turn sustains crushing sentencing policies primarily affecting the urban poor.

Notes

1. In four of the cities in Ratner (1992) (Chicago, New York, Philadelphia and Newark), the samples are derived from urban poverty areas and consist of indigenous residents of those areas. In Los Angeles and San Francisco, the samples are derived from the visible prostitution scene and seem to also include nonindigenous transients, who all have troubled family backgrounds but are not necessarily originally from urban poverty areas. In the Denver region, the phenomenon of sex-for-crack exchanges seems to be both less intense and less concentrated in urban poverty areas.
2. Everingham and Rydell (1994) estimate that frequent users (defined slightly differently) account for 70% of the cocaine consumed annually. In fact, they may consume a much greater share. Everingham and Rydell's estimates are based on the self-reporting of monthly use

by National Household Survey respondents. The highest category offered in the survey, four grams per month, appears to be well below the monthly consumption of many frequent users.

3. As is apparent in the table, the studies classify their subpopulations by varying demographic indicators relevant to poverty, the most common being public or private funding of care. Nine of the subpopulations listed in the table consist of entire study populations. The other 24 subpopulations are derived from cross-tabulations within studies. In each such instance, the subpopulations taken together constitute the entire study population. The subpopulations are characterized with as much specificity as the published data allow.
4. Weathers et al. (1993) tested the urine only of those newborns ("nbu") who met screening criteria indicating drug use. Both screening and newborn urine testing are relatively unreliable (Bibb, et al. 1995, Ostrea, et al. 1992, Ryan et al. 1994, Schulman et al. 1993). Weathers et al. (1993) probably underestimated drug use in their population.
5. The prevalence rates are rounded to whole numbers for ease of inspection. They were sorted before rounding.
6. One simple test of statistical significance can be made by constructing a two-by-two table grouping study populations from the chart as urban poor (identified with asterisks in the table) or not and as above or below their test category median. A chi-squared test of the deviation of the actual values in this matrix from the expected values yields $p < .0001$.
7. Some believe, however, that the risks of intrauterine exposure to cocaine have been overstated in the media (e.g., Griffith et al. 1994).
8. Ostrea et al. (1992) suggest that some cocaine users may "fix" immediately before labor to make labor quicker. This would inflate results. On the other hand, Schulman et al. (1993) suggest that users may *abstain* immediately before delivery to avoid positive urine tests that might create problems for them with social service agencies. It seems unlikely that either of these conflicting dynamics would influence exposure rates too much.
9. In the absence of multiple tests per user and/or self-report data, there is no way to reliably estimate the share of frequent users in a group of recent users. Based on several such data sources for arrestees, Rhodes (1993) estimated that only 56% of arrestees testing positive were frequent users. However, he reached that conclusion noting that nonfrequent users may be overrepresented in the sample of arrestees because they commit crimes while they are intoxicated. One could similarly argue that nonfrequent users are more likely to present themselves for health care after a period of intoxication. Fifty percent seems conservative.

10. Reuter's analysis, intended to be conservative, indicates a population of 25,000 drug dealers resident in the District of Columbia in the mid-1980s (Reuter et al. 1990:92). This translates into a cocaine *dealing* prevalence among all young black males residing in the District of over 20%: almost all of the identified dealers were black males over 18 (Reuter et al. 1990: Table 3.5), and approximately two-thirds were primarily crack or cocaine dealers (Reuter et al. 1990: Table 4.12). The population of black males age 18–44 was approximately 80,000 in this period (Bureau of the Census 1985, 1993a, 1993b, 1993c).

Reuter's data about these dealers further suggest that the prevalence of frequent use among young black males in the District of Columbia may also be over 20%. A majority of Reuter's dealers admit using. Those who do generally admit using more than one day per week—median two days, with multiple uses on using days (Reuter et al., 1990: Table 4.16). Considering the underreporting in the health care studies, even more of Reuter's dealers may be users than admit it. Of course, in addition there are probably some users who do not deal. Note that while over half of the black males in the District resided in urban poverty areas in 1980 (Bureau of the Census 1985), we have no data allocating the dealer population to urban poverty areas.

11. This follows mathematically from high urban poverty area prevalences in the local surveys. If these areas were excluded from the national results, the measured national prevalence would go down.
12. Low-level geocoding is a missing dimension in our national crime reporting systems. There are no data allowing an absolute estimate of arrest rates in urban poverty census tracts. The inference in the text (from relatively high arrest rates in urban poverty areas to relatively high cocaine use rates) depends on two assumptions: first, that most frequent cocaine users are arrested at least once for some crime in any given year (Rhodes 1993); and second, that the share of arrestees testing positive in urban poverty areas is not significantly lower than elsewhere (reasonable given that the DUF samples are all urban and the measured use rates are very high).
13. Blacks account for 55% of all cocaine mentions, and 85% of blacks admitted to emergency rooms for drug episodes are admitted to central city facilities (National Institute on Drug Abuse 1992b).
14. Among whites visiting emergency rooms for drug-related problems in 1991, 71.3% had taken an overdose, 56.6% had intended suicide, and 26.7% of their drug mentions were of illegal drugs. Among non-Hispanic blacks, only 29.4% had taken an overdose, only 20.8% intended suicide, and 77.2% of their drug mentions were of illegal drugs (39.2% suffered dependence-related problems or were seeking detoxification) (National Institute on Drug Abuse, 1992b). The computations of legal-drug vs. illegal-drug mentions is based on the

author's analysis of National Institute on Drug Abuse 1992b: Table 2.08. Alcohol-in-combination, "other" and unknown drugs are omitted. Amphetamines are classified as illegal, while barbiturates are classified as legal.

15. Smaller survey studies include the Epidemiological Catchment Area Study (Ritter and Anthony 1991, Trinkoff et al. 1990) and the National Longitudinal Study of Youth (Kandel and Davies 1991, Windle and Miller-Tutzauer 1991).
16. See studies listed at start of paper.
17. Rhodes (1993), using the DUF data, estimates a population of 2.0 million frequent cocaine users. From its thin frequent-user sample, the Household Survey estimates only 642 thousand (Substance Abuse and Mental Health Services Administration 1993a).

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