

# How Many People Does the US Imprison for Drug Use, and Who Are They?

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## **Abstract**

Data from the *Survey of Inmates in Federal and State Correctional Facilities, 1997* are used to estimate the number of drug-law violators in U.S. prisons solely because of their drug use and not because of involvement in drug distribution or other offenses. The estimates (5,380 to 41,047) are much lower than would be implied by naively assuming that conviction for drug possession implies no involvement in drug distribution. Implied imprisonment risk per year of use is also low, perhaps an hour per year of use for marijuana, in part because expected time served is half that for those clearly involved in drug distribution.

## Introduction

Incarceration for drug-law violations in the United States has grown ten-fold since 1980 (Blumstein and Beck, 1999; Greenberg and West, 2001; Caulkins and Chandler, in submission), contributing substantially to the overall growth in U.S. incarceration rates (Langan, 1991; Beck, 1997; Greenberg and West, 2001), which now greatly exceed those of other western countries (Austin and Irwin, 2001). This increase has been controversial on a number of dimensions (Human Rights Watch, 1997; King and Mauer, 2002), with considerable attention devoted to the issue of whether those who are incarcerated are mostly “kingpins” or nonviolent, low-level offenders (Sevigny and Caulkins, 2004). Here we examine the question of how many people are imprisoned in the U.S. for drug-law violations simply because they used drugs, not because they played some role in drug distribution or other offenses.

Resolving this question is crucial to understanding how U.S. drug policies differ from those in other countries (MacCoun and Reuter, 2001). There is little question that the United States is more punitive than most other countries with respect to drug-law violators (Kuhn, 2001), but there is considerable imprecision in understanding whether this primarily reflects supply control efforts or sanctioning of drug users (ONDCP, 2005).

One might think that this question has been answered by Bureau of Justice Statistics’ (BJS) publications based on inmate surveys that report the distribution of inmates by conviction offense. Table 1 excerpts the relevant proportions from the BJS report *Correctional Populations in the United States, 1997* (BJS, 2000b, Table 4.3). Multiplying by the total number of inmates suggests that 38% of those imprisoned for drug-law violations in 1997 were convicted of simple drug possession.

## Table 1 About Here

However, serving time for a drug possession conviction does not imply innocence of involvement in drug distribution or other offenses. Some possession convictions were for possession with intent to distribute, not simple possession. Even some inmates convicted of “simple possession” self-report participating in drug distribution. Still others were caught in possession of quantities larger than are typically associated with personal use. Such individuals can be excluded using more detailed questions from the same inmate surveys that underpin the BJS publications. As we show, doing so suggests that at most 15% of drug inmates are in prison for drug-law violations that did not relate to drug distribution, less than half the 38% figure obtained by naively presuming that conviction for possession is synonymous with incarceration for use only, not distribution.

Furthermore, many of the 15% had other characteristics suggesting that they might possibly, though not necessarily, have been involved in selling, including possession convictions that stemmed from a plea bargain to reduced charges, being arrested with types of drugs that they had not themselves used, and/or having a prior history of drug trafficking. Also, only about one-third of the 15% were new court commitments. Most were already on parole or probation, and nearly half (48%) of them had technical violations or concurrent convictions for things other than drug use or possession. Hence, after describing the origins of the 85%/15% split, we try to shed light on who comprises the 15% not clearly involved in drug distribution. We then explore some policy implications of the 15% figure.

To clarify, our goal is to determine how many drug users are in prison for drug possession convictions that are unrelated to drug distribution, e.g., that stem from personal consumption. Clearly many drug sellers also use drugs, but since drug distribution is a more serious offense than mere possession or use, we view such people as in prison because of their involvement in drug distribution. Likewise, many drug users are incarcerated for other crimes, such as burglary or murder; we also wish to exclude them. So the number we seek is not the number of people who are in prison because of drug use. That number is clearly much larger. Rather, the number we seek can be better thought of as reflecting the number of people in U.S. prisons who would not be there (at least for their present charge) if criminal penalties for drug *use* were not enforced. Thus it is a measure of the difference between enforcement directed at the “demand side” of the market in the United States as compared to countries such as the Netherlands which eschew using prison to punish drug use (MacCoun and Reuter, 2001). Conversely, comparing this quantity to total drug-related incarceration is relevant to assessments of the extent to which U.S. drug enforcement is directed primarily at the “supply side” of the market. The quantity we estimate also gauges potential costs or savings associated with varying the imprisonment of users. It suggests an upper bound on how much could be saved from reduced imprisonment by decriminalizing simple drug possession. Conversely, it is germane to estimates of how much would have to be spent to increase the enforcement risk faced by users by a certain proportion. Finally, it is an essential component of estimates of the sanction risk faced by drug users because of their use.

An important limitation of these estimates is that they pertain only to adult inmates in prison. Incarceration in local jails and juvenile corrections facilities is not

considered. A second inherent limitation is that the data are based on self-report. However, this analysis still improves our currently imperfect understanding of important aspects of punishment for drug-law violators in the United States.

## **Data and Methods**

*The Survey of Inmates in State and Federal Correctional Facilities, 1997* (BJS, 2000a) is a nationally representative survey of federal and state inmates conducted regularly by the Bureau of Justice Statistics (BJS). It collects self-report data on a wide array of offender characteristics, including current offense and sentencing information, criminal history, socioeconomic status, incident characteristics, alcohol and drug use and treatment history, health status, and conditions of confinement. The 1997 survey is the most current available in a series that has been fielded every 5-6 years since 1974 (1991 for federal inmates). Between June and October 1997, 4,041 federal and 14,285 state inmates were interviewed using computer-assisted personal interviewing methods. Inmates were selected according to a two-stage stratified sampling plan from a universe of 1,409 state and 127 federal prisons. Region/state by gender and administrative level by gender strata were formed at the state and federal levels, respectively. Within each stratum, sampling was performed, first, by selecting prisons (i.e., the primary sampling unit) and, second, by selecting inmates in the sampled prisons (BJS, 2000c). Total nonresponse rates were 7.8% and 9.8% at the state and federal levels, respectively.

We focus on the 4,787 sentenced offenders with a controlling drug offense plus 205 additional inmates whose conduct was primarily drug-related but who reported being convicted under nondrug statutes, typically drug-related money laundering, conspiracy,

rackateering, or weapons possession. For example, one inmate was convicted of money laundering (which BJS codes as a public order offense), but incident information reveals the offender was laundering money for ten kilograms of cocaine. The recoding of these 205 inmates (169 federal and 36 state) is described in Seigny and Caulkins (2004). Note that this subsample does not include offenders with a controlling offense of murder, robbery, burglary and other serious offenses who were also convicted of a less serious secondary drug offense. Results were similar with and without the 205 recoded cases; findings are reported here only for the complete subsample of sentenced drug offenders (i.e., including the 205 additional cases). Including these recoded cases raises the estimated total number of offenders in prison in 1997 for drug-law violations from the 271,767 given in Table 1 to 274,324.

This paper conducts secondary analysis of *Inmate Survey* data. Our analyses are ‘design-based,’ meaning we adjust for the survey’s complex sampling design by accounting for strata, primary sampling units (PSU), and probability weights. Not accounting for these survey design elements would provide biased point estimates and improper standard errors and test statistics (StataCorp, 2003a, 2003b). In the presentation and discussion of our results, we focus on the weighted N population estimates of the various drug inmate subgroups identified in this study, but the reader should recognize that a degree of uncertainty exists around these point estimates.<sup>1</sup> All reported significance tests account for this uncertainty, however, by adjusting the parameters of the test statistics to incorporate stratum, PSU, and probability weight information. Specifically,

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<sup>1</sup> For example, the point estimate for those “clearly involved in drug distribution” is 233,277 with a 95% confidence interval of 218,620 - 247,933. Similarly, the point estimate for those “not clearly involved in drug distribution” is 41,047 with a 95% confidence interval of 36,073 – 46,022.

we use the design-based Pearson  $\chi^2$  and the adjusted Wald statistics to test for group differences for categorical and continuous variables, respectively (StataCorp, 2003b).

### **Estimating the Number of People In Prison Solely Because of Their Drug Use**

About five out of six (85%) drug-law violators imprisoned in the United States appear clearly to have been involved in drug distribution. Of the remaining 15%, half (51%) were in prison for current simple drug possession or “other” drug (e.g., paraphernalia) violations; the rest were incarcerated for infractions involving either (1) concurrent drug possession and nondrug convictions, (2) a nondrug technical violation or arrest while on parole/probation for drug possession or (3) a drug possession conviction while on parole/probation for a prior nondrug offense. Further, an unknown proportion of the 15% may have been involved in distribution even though the data do not provide a clear indication of such involvement (e.g., the simple possession conviction was the result of a negotiated plea bargain). For only 2% of imprisoned drug-law violators was there no reason whatsoever to suspect possible involvement in distribution. Hence, within the 15% who were not clearly involved in distribution, there is a considerable “gray area.” We first explain the 85%/15% split and then attempt to give some insight concerning the nature of this gray area so readers can draw their own judgments concerning where in this 2% to 15% range the true figure lies.

#### *Imprisoned Drug-Law Violators Who Were Clearly Involved in Distribution*

We first identified as drug distributors those inmates who met any of the following four criteria: (1) a current conviction for drug trafficking, possession with

intent to distribute, or conspiracy to distribute drugs (2) a functional drug distribution role in connection with the current drug offense (i.e., importing, growing/manufacturing, money laundering, wholesale dealing, or retail selling), (3) more than peripheral participation in the distribution activities of an organized drug group in the year before arrest (i.e., leader/organizer, middle man, underling, or seller), or (4) involvement with drug quantities in excess of 50 retail units.<sup>2</sup> A total of 231,029 imprisoned drug-law violators met one or more of these criteria for being identified as involved in drug distribution.<sup>3</sup> Note that involvement in distribution by no means implies high-level or controlling involvement. Drug couriers, bodyguards, and money launderers, for example, are included.

To this group we add 2,248 offenders who were convicted of drug distribution and then were subsequently convicted of simple drug possession while on parole or probation for their original distribution offense. Although their most recent offense is simple drug possession and it is possible that they had ceased dealing and were caught the second time with drugs intended solely for personal consumption, we think it is more reasonable to include them among those who are incarcerated for involvement in drug distribution. Thus, we refer to  $231,029 + 2,248 = 233,277$  (85%) of the 274,324 imprisoned drug-law violators as being clearly involved in drug distribution. We next examine the remaining 15% (41,047 inmates) in more detail. Note that most of these individuals either did not answer the role question or identified their drug role as “using

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<sup>2</sup> Roughly, one retail unit is 0.5 grams of cocaine, crack, or methamphetamine; 0.3 grams of heroin; or one ounce of marijuana. Thus, the cutoff amount equates to 25 grams cocaine, crack, or methamphetamine, 15 grams heroin, and more than three pounds marijuana. For details, see Sevigny and Caulkins (2004).

or possessing” so it is not immediately clear whether they were possessing only for their own use or might have been possessing (“holding”) drugs for a seller.

*Criminal Justice Status of Imprisoned Drug-Law Violators Who Were Not Clearly Involved in Distribution*

That there is no direct evidence of drug distribution involvement among the remaining 41,047 drug-inmates does not mean they were imprisoned solely for their drug use. Indeed, almost half of these drug-law violators have concurrent nondrug convictions or technical violations while on parole or probation, so there is a considerable “gray area” among those ostensibly imprisoned for simple drug possession. In particular, committing another offense or violating the terms of release while under active criminal justice supervision for a previous offense is particularly likely to lead to imprisonment in the U.S. These factors are important because recidivism is common in the U.S. for all kinds of offenders, and this is no less true of drug offenders. Some might therefore view a subset of these offenders as serving time not only because of their drug use, but also at least in part because of other violations. To help inform such judgments, we divide these offenders into several subgroups based on the manner and substance of their concurrent convictions, revocations, and arrests. At one end of the spectrum are those 19,799 “gray area” offenders whose offense characteristics involve a mix of drug and nondrug violations. At the other extreme are those 20,479 inmates whose current violation(s)

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<sup>3</sup> This is a somewhat conservative estimate since about one-third of the 677 sample cases not identified as being involved in drug distribution had missing data on at least one of the four criterion measures, mostly for unreported/unknown drug weights.

pertain only to drug use or possession.<sup>4</sup> Table 2 and the following text characterize additional distinctions among these groups of offenders.

The group of 19,799 “gray area” offenders among those not clearly involved in drug distribution includes 4,316 inmates who had a concurrent nondrug conviction (e.g., weapons possession, burglary, or theft) along with their drug possession offense. Although drug possession is recorded as the “controlling” offense for these inmates, it would be naïve to assume their imprisonment may not partially be a function, even primarily so, of their concurrent nondrug conviction(s). A second subgroup of 7,950 offenders were on parole or probation<sup>5</sup> for a drug possession conviction when they obtained an arrest or technical violation not related to drugs. One could argue either side of whether this new prison time should be attributed to the original drug possession conviction or the subsequent nondrug infraction. The final subgroup of 7,533 gray area offenders were on parole or probation for an offense not related to drugs when they received a new conviction for drug possession. On the one hand, their controlling offense is drug possession. On the other hand, the sentencing for this new drug possession conviction might have been more severe than it otherwise would have been because of the prior nondrug offense. In short, all 19,799 represent a gray area of one sort or another.

The second group of 20,479 offenders who were not clearly involved in drug distribution had current violations pertaining only to drug use or possession. The largest subgroup (12,701) were new court commitments for drug possession only; that is, they

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<sup>4</sup> A small number of parolee/probationers (N = 769) could not be classified further due to missing or conflicting data.

<sup>5</sup> Only a few active criminal status offenders were escapees (N = 108), so we refer to this group collectively as parolee/probationers. Generally, the distinction is that parolees spent time in prison but were released early under community supervision; probationers were sentenced to community supervision in lieu of prison time.

were not under active criminal justice supervision at the time of their current drug possession conviction. The remaining 7,779 inmates were on parole or probation for drug use/possession when they committed their current infraction. For 4,013 the latest offense resulted in a new possession conviction. For the other 3,766 the latest infraction was merely a drug-related arrest or technical violation of the terms of parole or probation, with no new conviction.

Table 2 summarizes these distinctions. Again, 85% of all imprisoned drug-law violators were clearly involved in drug distribution in one form or another. Among the other 15%, nearly half (n=19,799) are “gray area” offenders who committed nondrug violations that may have contributed to their imprisonment. Of the 20,479 whose current violations pertained only to drug use or possession, about two-thirds (12,701 of 20,479) were new court commitments, and most of them had prior convictions of one form or another. Thus, there were only 2,829 offenders in prison in the United States in 1997 for first-time drug possession only (about 1% of all drug offenders). Some fraction of the rest of those offenders who were not clearly involved in distribution might be viewed as incarcerated as a consequence of nondrug offenses and/or sentencing enhancements for repeat offenders (e.g., so-called “Three Strikes and You’re Out” laws).

Table 2 About Here

#### *Additional Indicators of Possible Involvement in Drug Distribution*

Presumably many of the 41,047 people imprisoned for simple drug possession who met none of the criteria for clearly being involved in distribution are simply drug

users serving time for their drug use and/or nondrug offenses. Others, however, may have been involved in drug distribution in some manner. Indeed, about 6% of them report never having used an illicit drug of any kind. There is no way to determine precisely who is who, but three conditions are worth examining to help inform readers' judgments on this matter.

The first is whether the conviction for simple possession stemmed from a negotiated plea agreement. Prosecutors often accept a guilty plea to a lesser charge rather than pursuing conviction for the original charge in a time-consuming trial, so offenders arrested for drug distribution can easily end up being convicted for simple possession. Unfortunately, the inmate survey asks only "did you reach an agreement with a prosecutor to plead guilty to a lesser charge or to fewer counts?" Hence, it is not possible to distinguish individuals who pled down to simple possession from a higher charge (such as drug distribution) from those who were arrested on multiple possession charges and just pled to fewer counts of simple possession. Nevertheless, the measure highlights the proportion of these inmates whose conviction offense is a condensed representation of their actual offense behavior.

Second, some of those convicted of simple possession were in possession of drugs that they report not having used in the last month or, more conspicuously, ever in their life. It is possible that these respondents were arrested after buying drugs for the first time but before they had a chance to use them. Alternately, they may have been distributing drugs or holding them for others who were selling.

Third, there are three survey measures pertaining to prior involvement in drug distribution. The first concerns prior trafficking/sales convictions. The second concerns

offenses for which inmates were arrested (but not necessarily convicted) (1) the first time they were ever arrested or (2) while on their most recent stint of parole or probation. The third refers to individuals who reported that while growing up they hung out with peers who sold, imported, or manufactured drugs. None of these imply recent selling activity, but any can be construed as “evidence of prior involvement in drug distribution.”

We can draw no firm conclusions from these conditions. Even a person who has trafficked in the past and who was convicted of possession via a plea bargain for possessing drugs the individual has never used might not have been currently involved in drug distribution. However, there is no more “scientific” basis for assuming that none of the 15% were involved in distribution than it is to favor some other point estimate. So to allow readers to draw their own inferences, Table 3 summarizes the proportions for several primary groups of offenders from Table 2 for whom these conditions pertain. As shown, the various user groups are not significantly different from drug distributors in negotiated plea status. However, we find significant differences across most of the other indicators, demonstrating that on the whole those who are not clearly involved in drug distribution are in fact different from those who are. Nevertheless, the evidence suggests that a relatively small but nontrivial share of those not clearly involved in distribution demonstrate possible involvement in drug distribution in less direct ways. Rows 6 and 7 estimate the number of inmates for whom *none* of various sets of conditions apply. Specifically, row 6 represents offenders for whom there was no additional suggestion of *current* drug distribution involvement. Similarly, row 7 represents offenders for whom we found no additional suggestion of either *prior or current* involvement.

At one extreme, someone might argue that only offenders whose current violations all pertain only to use or possession *and* for whom there is no suggestion of current or prior involvement in distribution should be presumed to be in prison solely for their drug use (5,380 people in Column I, Row 7). At the other extreme someone could argue that all drug-law violators whose incarceration is not clearly linked to current drug distribution could be imprisoned drug users (41,047 in Column IV total). The reality is probably somewhere in between. Hence, depending on how strict a definition one preferred, one might argue that anywhere from 5,380 to 41,047 people were in prison in the United States in 1997 solely for their drug use, representing 1.9% to 15.0% of all drug-law prisoners and 0.5% to 3.6% of all prison inmates.

Table 3 About Here

### **Characteristics of People in Prison Solely for Their Drug Use**

We next investigate characteristics of people imprisoned for their drug use. Considerations of space and sample size preclude examining every cell in Table 3, so we focus on four groups: (1) all 41,047 prisoners who were not clearly involved in drug distribution (Column IV total), (2) the  $20,479 + 7,950 = 28,429$  of those 41,047 who did not have a legally active nondrug conviction when they were convicted for drug possession (Columns I and II totals), (3) the 15,401 of the 41,047 whose conviction did not stem from a negotiated plea and who reported using in their lifetime all of the drugs they possessed (Column IV, Row 6), and (4) the subset of this last group that did not have a legally active nondrug conviction ( $7,340 + 3,010 = 10,350$  in Columns I and II,

Row 6). These four groups will be referred to as User Groups 1-4, respectively. They represent increasingly restrictive subsets of those offenders who may be considered in prison solely for their drug use. It turns out that all four groups have generally similar characteristics, so we can draw broad conclusions about the characteristics of people in prison solely for their drug use even though there is some uncertainty concerning their total numbers.

### Drug(s) Involved

Table 4 breaks down the clearly identified Drug Distributors and User Groups 1-4 by the substance involved in the instant offense. The “cocaine, heroin, or meth” column includes people who possessed cocaine/crack, heroin, and/or (meth)amphetamine in combination with any other substance, including, for example, people who possessed just cocaine and marijuana.

### Table 4 About Here

The proportions by drug are very similar across the four alternative definitions of people who appear to be imprisoned for their drug use. In particular, depending on the group definition, 87-88% of those in prison for drug use/possession were involved with cocaine, heroin, and/or (meth)amphetamine. Just 5-7% possessed only marijuana. In general, compared to drug distributors, rates of user involvement are significantly greater for (meth)amphetamine but lower for cocaine, heroin, and marijuana.

### Sentencing Characteristics and Severity

Decisions to incarcerate and length of imprisonment are influenced by factors such as a history of prior incarceration and applicable sentencing statutes. Table 5 compares sentencing characteristics and severity across the five offender categories. Again, the results are very consistent across all four definitions used to identify people as possibly incarcerated only for their own drug use. Between 15% and 20% were first-time offenders, roughly 60% had previously been sentenced to prison as an adult, about half received a mandatory or presumptive sentence, and about one-in-four received some type of drug sentence enhancement. The average time expected to be served was about three years.

Table 5 About Here

These results differ in the expected ways from those for offenders known to be involved in drug distribution. Presumed drug users had significantly more extensive prior criminal histories than did clearly identified distributors. Drug distribution is the more serious offense, so it is “easier” to get imprisoned for distribution even if one does not have an extensive prior record. Likewise, known distributors were significantly more likely to receive both mandatory/presumptive sentences and drug sentencing enhancements, presumably in part because these sentencing options are often tied to indicators of drug distribution (e.g., large quantities) and pernicious forms of drug dealing (e.g., selling in a school zone or to pregnant women). Finally, those clearly

identified as being involved in drug distribution expected to serve five-and-a-half years, vs. three for those who may not have been involved in distribution.

#### Average Imprisonment Risk for Drug Users by Drug

Another way to look at how punitive the United States is toward drug users is to divide the number of people in prison for using a drug by the total number of users of that drug in the country. Those ratios give a rough estimate of the average time served in prison per year of drug use. Likewise, dividing offenders in prison by the total dollar value of the retail market for a drug (ONDCP, 2001) estimates the expected time served in prison per \$1,000 worth of that drug consumed. Table 6 gives these calculations for User Group 1, which includes all 41,047 drug-inmates who were not clearly involved in drug distribution. Hence, the prison risk estimates are upper bounds.

#### Table 6 About Here

Numbers of cocaine and heroin users, as well as retail sales figures for all drugs, are for 1997 and are from ONDCP (2001). Numbers of past-year (meth)amphetamine, marijuana, and other drug users are from the 1997 National Household Survey on Drug Abuse (NHSDA). The estimates are particularly rough for (meth)amphetamine because at that time the NHSDA did not ask about methamphetamine or amphetamines directly. The 1.7 million past-year user figure in the table comes from a question pertaining to nonmedical use of all stimulants. The risk ratios are somewhat inflated because of double counting. For example, some inmates who possessed both cocaine and heroin get counted in both of those columns. That upward bias is very minor for cocaine/crack, heroin/other

opiates, and (meth)amphetamine because 97+% of those individuals could be placed in a single column. Marijuana, on the other hand, appeared much more often in combination, so sanction severity estimates for marijuana may be overstated by 45-90%.

The U.S. has a deserved reputation for having a highly punitive drug policy, incarcerating far more people for drug-law violations than other countries both in absolute terms and per capita. Nevertheless, the imprisonment risk for users does not appear all that high when viewed in this way. For the “expensive drugs” (cocaine, heroin, and methamphetamine), it is about one-and-a-half days in prison per year of use. For marijuana it is about one hour in prison per year of use if all incarceration for polydrug use involving marijuana is attributed entirely to marijuana, and only 30 minutes if it is attributed to the other drug. Relative to the dollar value of drugs consumed, there is less variation, with the expected time in prison for drug use ranging from 1.9 hours per \$1,000 of marijuana used up to 6.6 hours per \$1,000 worth of cocaine consumed, although the marijuana figure could be as low as 1 hour per \$1,000 used if incarceration stemming from polydrug use is attributed to the drug other than marijuana. These figures reflect averages, and averages can mask considerable variation. Presumably the expected time to be served is greater for a year of frequent use than a year of occasional use, but the inmate survey does not allow us to make that distinction.

#### Source of Imprisonment’s Effect on Drug Demand

Imprisonment can affect drug demand through all three of the traditional mechanisms: deterrence, incapacitation, and rehabilitation (through drug treatment in prison). The discussion above suggests that the risk of imprisonment stemming from drug

use per se may be modest, limiting deterrence. Furthermore, most drug users in prison were *not* sentenced for their drug use, so the majority of any incapacitation and rehabilitation effects of imprisonment on drug demand do not stem from enforcing laws against drug use. Table 7 makes this point, focusing on inmates who were daily or almost daily users since heavy users account for the vast majority of all drug consumption (Everingham and Rydell, 1994).

#### Table 7 About Here

Drug users are significantly more likely than distributors and nondrug offenders to report heavy drug use overall and for specific substances—the major exception being marijuana, with heavy use rates significantly less for users than the other groups. However, in absolute terms, there are about five times as many heavy users in prison for drug distribution as there are for drug use, and 15 times as many in prison for nondrug convictions as for drug use. So ironically, unless deterrence is much more “powerful” per person incarcerated than the combined effects of incapacitation and rehabilitation, the majority of imprisonment’s effect on drug demand does not come from enforcing laws against drug use. Rather, it stems from incarcerating drug users for other offenses, including drug distribution.

This has an interesting implication for econometric analyses that try to assess the effects of drug prices on drug use, while controlling for possible effects of law enforcement on drug demand. In particular, putting the number of people in prison for drug possession on the right hand side of such regressions might bias the results. In such

cases, analysts might be better off (1) controlling for the total number of people in prison, or the number in prison who were regular drug users, not the number of drug-related prison inmates and/or (2) focusing on sanctions less extreme than imprisonment, such as arrests and jail sentences.

## **Conclusions**

The vast majority (85%) of the 274,324 people in prison in the U.S. in 1997 for drug-law violations were clearly involved in drug distribution in one way or another. Many of the remaining 15% (41,047) had at least some suggestion of possible current or past involvement in distribution. The precise proportion of drug offenders in prison solely because they used drugs is thus hard to pin down, but appears to be somewhere in the range of 2%-15%, representing 5,380 to 41,047 individuals. Furthermore, only about one-third of the 41,047 individuals were in prison as new court commitments; most were already on parole or probation before the infraction that led to their current incarceration. Almost half had a current nondrug infraction that may have contributed to their incarceration.

Even taking the upper bound figure of 15%, the number of people in prison for their drug use is far lower than would be implied by naively assuming that everyone convicted of drug possession was not involved in distribution. Incarceration for drug use/possession thus appears to be a very modest contributor (0.5%-3.6%) to the total sentenced U.S. prison population (1,137,210 in 1997). One reason is that the expected time served by these individuals is about half that for those who were clearly involved in drug distribution. It is also worth noting that 50-80% of arrestees test positive for some

illicit drug and ~75% of drug arrests are for possession (Maguire and Pastore, 1997), so presumably if the criminal justice system wanted to incarcerate many more drug users, that would be possible.

Among those in prison for drug use, almost 90% were involved with cocaine, heroin, and/or (meth)amphetamines. Just 5-7% possessed only marijuana. Hence, the number of marijuana users in prison for their use is perhaps 800-2,300 individuals or on the order of 0.1-0.2% of all prison inmates. This figure is roughly consistent with ONDCP (2005) and is well below Thomas' (1999) estimate of 9,700 based on the same survey because Thomas assumes that all inmates convicted of possession were not involved in trafficking. An implication of the new figure is that marijuana decriminalization would have almost no impact on prison populations, although it might well have a bigger effect on other components of the criminal justice system.

Another implication is that the imprisonment risk due to drug use is low, perhaps on the order of one-and-a-half days per year of use for cocaine, heroin, and (meth)amphetamines, and no more than about an hour per year of use for marijuana. That is not to say that there are not many drug users in prison. However, for heavy users of these four major drugs, the vast majority are in prison because of nondrug offenses (68%-75%) or drug distribution offenses (22%-26%). This implies that comparing characteristics of imprisoned drug offenders with those of drug users is not helpful for determining whether drug-related imprisonment falls disproportionately on one group or another. Since most imprisoned drug offenders are involved in distribution, the relevant referent group is drug distributors, not drug users.

It should be stressed that all of these conclusions are based on self-reported survey data, and they pertain to prisons, not juvenile correctional facilities or jails. Given the small numbers of people in prison for drug use, if even one-third of drug-law violators in local jails were there because of their drug use, local jails not prisons would be the greater source of incarceration risk for U.S. drug users.

Despite these caveats, the results here are interesting inasmuch as they paint a different picture of U.S. drug enforcement than is sometimes presumed. There is no question that the U.S. aggressively uses imprisonment as part of its drug control strategy, but the great bulk of that imprisonment falls on people who were involved in drug distribution in some manner, whether significant or modest. Prison risk for drug users who avoid all aspects of drug distribution appears relatively modest in absolute terms.

The large gray area in our estimates highlights the value of adding more precise questions to the inmate surveys to distinguish drug-law violators who had no involvement in distribution from those who did but were nevertheless convicted of simple possession. Specifically, the drug role question should distinguish those who possessed only for their own use from those who held drugs for a seller. Another intriguing avenue for further work would be to assemble and compare parallel estimates from multiple countries of prison risk per year of use or per \$1,000 of drugs consumed.

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**Table 1. Proportion of Incarcerated Drug-Law Violators Convicted of Simple Possession, 1997**

	State Inmates	Federal Inmates	All Prison Inmates
Prison Population	1,046,705	88,018	1,134,723
Proportion of Prison Population Incarcerated for Drug Offenses:			
Simple Possession	20.7%	62.6%	24.0%
Trafficking/Sales	8.8%	11.5%	9.0%
Other/Unspecified	11.3%	45.5%	14.0%
	0.6%	5.6%	1.0%
No. Imprisoned for Drug Offenses	216,668	55,099	271,767
No. Imprisoned for Simple Possession	92,110	10,122	102,232
Proportion of All Drug Offenders Incarcerated for Simple Possession	43%	18%	38%

Source: *Correctional Populations in the United States, 1997*

**Table 2. Breakdown of Imprisoned Drug-Law Violators Among Those Clearly and Not Clearly Involved in Drug Distribution, 1997**

Group Description	Sample n	Weighted N	Weighted Percent
<b>Clearly Involved in Drug Distribution</b>	<b>4,315</b>	<b>233,277</b>	<b>85.0%</b>
<i>Met Four Initial Criteria for Involvement in Drug Distribution</i>	4,282	231,029	84.2%
<i>On Parole/Probation for Trafficking/Sales When Convicted of Current Drug Use/Possession Violation</i>	33	2,248	0.8%
<b>Not Clearly Involved in Drug Distribution</b>	<b>677</b>	<b>41,047</b>	<b>15.0%</b>
<i>“Gray Area” Offenders: Drug Use/Possession Mixed with Nondrug Violations</i>	325	19,799	7.2%
Concurrent Drug Use/Possession and Nondrug Convictions	66	4,316	1.6%
On Parole/Probation for Drug Use/Possession When Recommitted for Any Nondrug Technical Violation or Arrest	144	7,950	2.9%
On Parole/Probation for Any Nondrug Offense When Convicted of Current Drug Use/Possession Violation	115	7,533	2.7%
<i>Drug Use/Possession Violations Only</i>	338	20,479	7.5%
On Parole/Probation for Drug Use/Possession When Convicted of Current Use/Possession Violation	71	4,013	1.5%
On Parole/Probation for Drug Use/Possession When Recommitted for a Drug-Related Technical Violation or Arrest	66	3,766	1.4%
New Court Commitment	201	12,701	4.6%
<i>On Parole/Probation but Uncategorizable Due to Missing or Conflicting Data</i>	14	769	0.3%
<b>All Incarcerated Drug-Law Violators</b>	<b>4,992</b>	<b>274,324</b>	<b>100%</b>

**Table 3. Drug Offender Subgroups and Additional Indicators of Possible Drug Distribution Involvement<sup>a</sup>**

Additional Drug Distribution Indicators	(I) Drug Possession Violations Only	(II) Nondrug Violation While On P/P for Drug Possession	(III) Drug Possession Violation While On P/P for Nondrug Offense	(IV) Not Clearly Involved in Drug Distribution	(V) Clearly Involved in Drug Distribution
Weighted N	20,479	7,950	7,533	41,047	233,277
1) % Plea Bargain to Lesser Charge or Fewer Counts	54%	56%	56%	55%	55%
2) % Offense Involved Drug That Offender Never Used in Life	22%***	14%***	6%***	16%***	40%
3) % Prior Drug Trafficking Conviction	5%***	6%***	11%**	7%***	24%
4) % First-Ever or Recent Arrest Was for Drug Trafficking/Sales	2%***	8%	2%*	4%***	9%
5) % Hung Out with Youthful Drug-Selling Peers	22%***	29%	30%	26%***	37%
6) Number with No Indication of Current Distribution (i.e., <i>None</i> of 1-2 Apply)	7,340	3,010	3,167	15,401	57,064
7) Number with No Indication of Current or Prior Distribution (i.e., <i>None</i> of 1-5 Apply)	5,380	1,984	1,885	10,407	26,924

\* p<0.05      \*\* p<0.01      \*\*\*p<0.001

<sup>a</sup> Estimates and tests are based on survey-adjusted data. Significance tests compare each user subgroup I-IV individually with the subgroup of drug distributors (Col. V) using the design-based Pearson  $\Pi^2$  statistic.

**Table 4. Estimates of Number of Drug Offenders by Subgroup and Substance(s) Involved<sup>a</sup>**

Group <sup>b</sup>	Weighted N	Any Cocaine/Crack	Any Heroin	Any Meth.	Cocaine, Heroin, or Meth.	Marijuana Only
Drug Distributors	233,277	73%	15%	10%	89%	9%
User Group 1	41,047	64%***	11%**	16%***	88%	5%*
User Group 2	28,429	65%**	9%***	14%*	87%	6%
User Group 3	15,401	64%**	10%*	16%*	88%	6%
User Group 4	10,350	66%	6%**	13%	85%	7%

\* p<0.05      \*\* p<0.01      \*\*\*p<0.001

<sup>a</sup> Percentages are based on weighted data. Significance tests compare each User Group 1-4 individually with the subgroup of Drug Distributors using the design-based Pearson  $\Pi^2$  statistic.

<sup>b</sup> *Drug Distributors* include all offenders identified initially as involved in drug distribution. *User Group 1* includes all offenders not identified initially as involved in drug distribution (Column IV total from Table 3). *User Group 2* includes all offenders not identified initially as involved in drug distribution and who were without a legally active nondrug conviction (Columns I and II total from Table 3). *User Group 3* includes all offenders not identified initially as involved in drug distribution for whom there is no additional evidence of current involvement in drug distribution (Column IV, Row 6 from Table 3). *User Group 4* includes all offenders not identified initially as involved in drug distribution who were without a legally active nondrug conviction and for whom there is no additional evidence of current involvement in drug distribution (Columns I and II, Row 6 from Table 3).

**Table 5. Sentencing Characteristics by Drug Offender Subgroups<sup>a</sup>**

Group <sup>b</sup>	First-Time Drug Offender	Previously Sentenced to Prison as Adult	Received Mandatory or Presumptive Sentence	Received Drug Sentence Enhancement	Average Time Expected to Serve (Months)
Drug Distributors	29%	48%	61%	35%	66
User Group 1	15%***	63%***	53%**	23%***	36***
User Group 2	20%***	55%*	54%*	23%***	35***
User Group 3	14%***	67%***	48%***	24%***	34***
User Group 4	19%**	60%**	52%*	23%**	34***

\* p<0.05      \*\* p<0.01      \*\*\*p<0.001

<sup>a</sup> Percentages are based on weighted data. Significance tests compare each User Group 1-4 individually with the subgroup of Drug Distributors using the design-based Pearson  $\Pi^2$  statistic for categorical variables and the adjusted Wald test for continuous variables.

<sup>b</sup> Sample size and group characteristics are the same as in Table 4.

**Table 6. Average Time in Prison per Year of Drug Use and per \$1,000 Worth of Drugs Consumed**

User Group 1	Any Cocaine/ Crack	Any Heroin/ Opiates	Any (Meth)- amphetamine	Marijuana Only
Weighted N	26,152	4,376	6,702	2,291
Past-Year Users (Millions)	5.7 <sup>a</sup>	1.2 <sup>a</sup>	1.7 <sup>b</sup>	19.4 <sup>b</sup>
Retail Sales <sup>a</sup> (\$ Billions)	\$34.7	\$11.4	\$9.3	\$10.5
Expected Time Served in Prison:				
Per Year of Use (in Days)	1.7	1.4	1.5	0.04
Per \$1,000 Used (in Hours)	6.6	3.4	6.3	1.9

Sources: <sup>a</sup> Office of National Drug Control Policy (ONDCP) (2001). *What America's Users Spend on Illegal Drugs*. Washington, D.C.: The White House

<sup>b</sup> 1997 National Household Survey on Drug Abuse (NHSDA), accessed at [www.icpsr.umich.edu/SAMHDA](http://www.icpsr.umich.edu/SAMHDA)

**Table 7. Proportion of Inmates Who Used Daily or Near-Daily in Month Before Arrest, by Drug and Offender Group**

Offender Group	Cocaine/ Crack	Heroin/ Opiates	(Meth)am- phetamine	Marijuana	Any Substance <sup>a</sup>
Nondrug Offenders (N = 862,886)	14%	6%	5%	27%	40%
Known Distributors (N = 233,277)	19%	9%	6%	29%	48%
User Group 1 (N = 41,047)	24%	11%	11%	21%	54%

Group differences for all drugs are significant at the  $p < 0.001$  level.

<sup>a</sup> Includes nonmedical use of heroin, other opiates, methamphetamine, amphetamines, sedatives, crack, powder cocaine, PCP, LSD, marijuana, and inhalants.