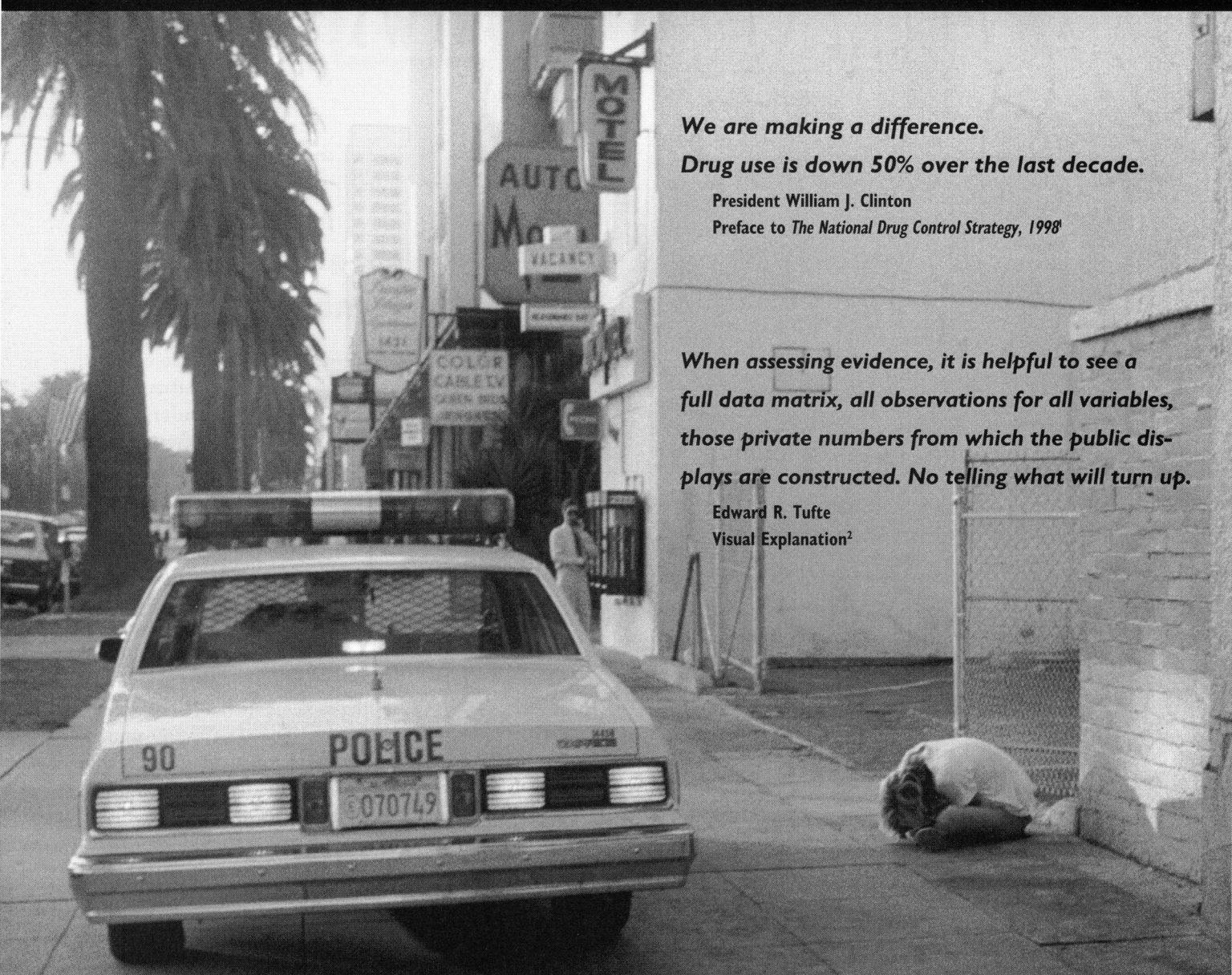



***We are making a difference. Drug use is down 50% over the last decade.***

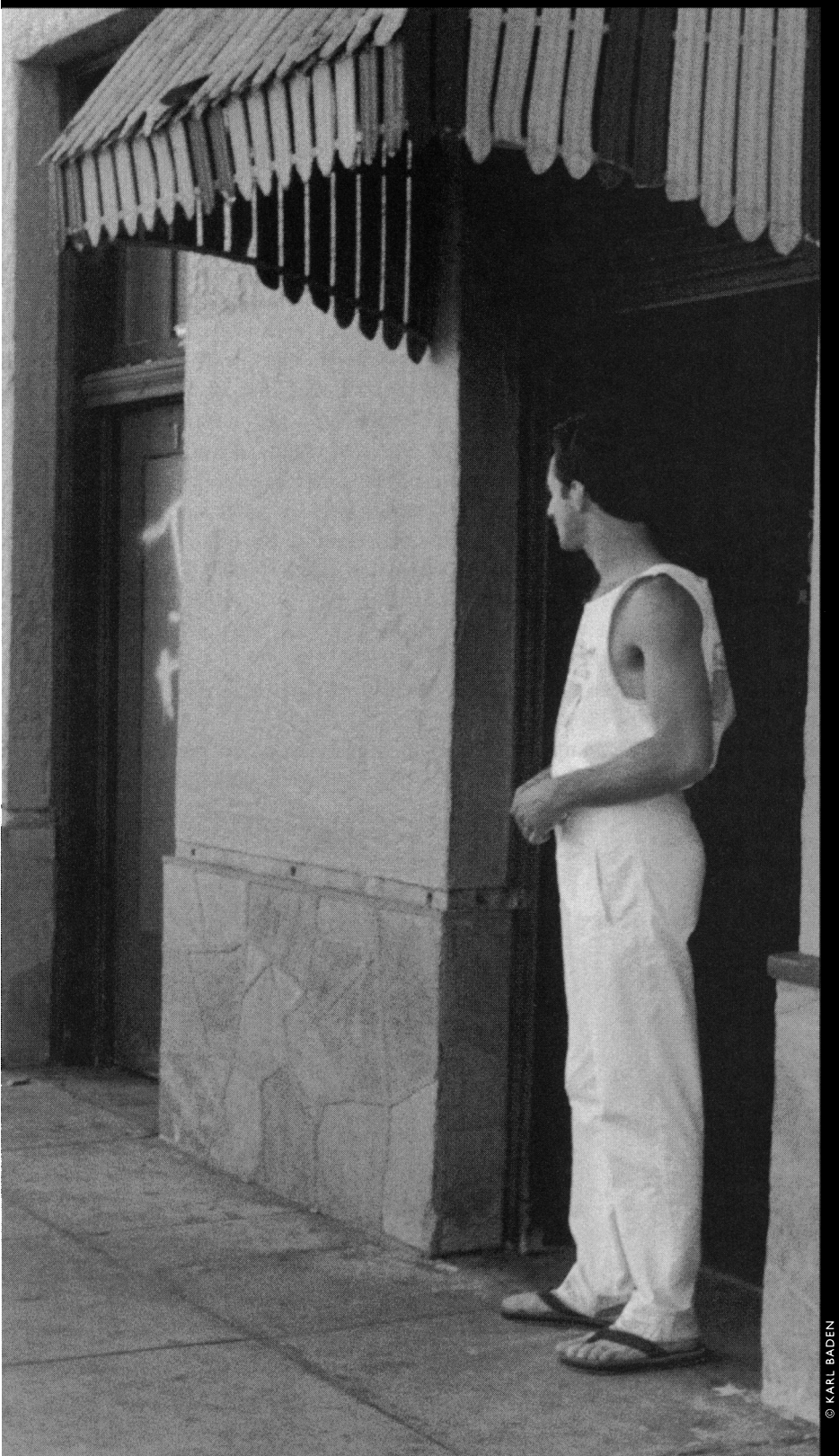
**President William J. Clinton**
**Preface to *The National Drug Control Strategy, 1998*[1]**

***When assessing evidence, it is helpful to see a full data matrix, all observations for all variables, those private numbers from which the public displays are constructed. No telling what will turn up.***

**Edward R. Tufte**
**Visual Explanation[2]**

# DRUG PROHIBITION

*Ernest Drucker, PhD*



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# and Public Health: 25 Years of Evidence


## SYNOPSIS

FOR THE PAST 25 YEARS, the US has pursued a drug policy based on prohibition and the vigorous application of criminal sanctions for the use and sale of illicit drugs. The relationship of a prohibition-based drug policy to prevalence patterns and health consequences of drug use has never been fully evaluated. To explore that relationship, the author examines national data on the application of criminal penalties for illegal drugs and associated trends in their patterns of use and adverse health outcomes for 1972–1997.

Over this 25-year period, the rate at which criminal penalties are imposed for drug offenses has climbed steadily, reaching 1.5 million arrests for drug offenses in 1996, with a tenfold increase in imprisonment for drug charges since 1979. Today, drug enforcement activities constitute 67% of the $16 billion Federal drug budget and more than $20 billion per year in state and local enforcement expenditures, compared with $7.6 billion for treatment, prevention, and research.

Despite an overall decline in the prevalence of drug use since 1979, we have seen dramatic increases in drug-related emergency department visits and drug-related deaths coinciding with this period of increased enforcement.

Further, while black, Hispanic, and white Americans use illegal drugs at comparable rates, there are dramatic differences in the application of criminal penalties for drug offenses. African Americans are more than 20 times as likely as whites to be incarcerated for drug offenses, and drug-related emergency department visits, overdose deaths, and new HIV infections related to injecting drugs are many times higher for blacks than whites.

These outcomes may be understood as public health consequences of policies that criminalize and marginalize drug users and increase drug-related risks to life and health.

WE ARE BY NOW accustomed to sharply opposing viewpoints and conflicting claims about our national drug policy and its results. A succession of Presidents and Congresses have led the field with calls for a "drug-free" America and "zero tolerance" and have enacted drug prohibitions with ever-harsher criminal penalties and more militant (and more expensive) enforcement tactics. In contrast, libertarian reformers like Nobel Prize winner Milton Friedman or conservatives like William F. Buckley, Jr., call for outright legalization of all drugs. And others (this author among them) call for a public health or "harm reduction" approach,[3] reasoning that dangerous drugs will always be with us and that we had better learn how to live with them in a way that minimizes their adverse health and social consequences.

While this debate rages, we see continued (even rising) drug availability and ever-shifting patterns of drug use: crack and cocaine use are down, but marijuana and heroin use are becoming more popular among young people.[4] And, over the last decade, new and more lethal consequences of illicit drug use have emerged—including infectious disease epidemics (AIDS, TB, hepatitis B, and hepatitis C) linked to unsafe injecting and to the marginal life of the criminalized addict.[5] Meanwhile, of course, huge numbers of people continue to be arrested and imprisoned for drug offenses, the most specific expression of a policy based on prohibition and a punitive approach to drug users.

Yet despite constant appeals for more and better drug treatment, we still see severe shortages in treatment programs[1] as well as limited success in dealing with the severest forms of addiction, that is, to heroin and cocaine. There is new and important Federal support for Methadone[6] (the drug treatment of greatest proven efficacy for heroin addiction[7]), but public opinion remains sharply divided on the use of narcotic maintenance—with New York's Mayor Guiliani recently calling it "enslavement" and taking steps to end treatment for thousands of patients currently under care in the city.[8] Further, while AIDS has refocused our attention on drugs as a public health problem, raising the stakes for epidemiologic research and demanding effective interventions to reduce the spread of HIV infection, even massive international documentation of the effectiveness of needle exchange programs has failed to shift a hostile Federal policy that bans funding for such programs because they give the "wrong message," that is, something other than "zero tolerance."[9]

What then are our goals in drug policy? And what should they be?

If "winning the war on drugs" was once the battle anthem of national drug policy, that metaphor is now

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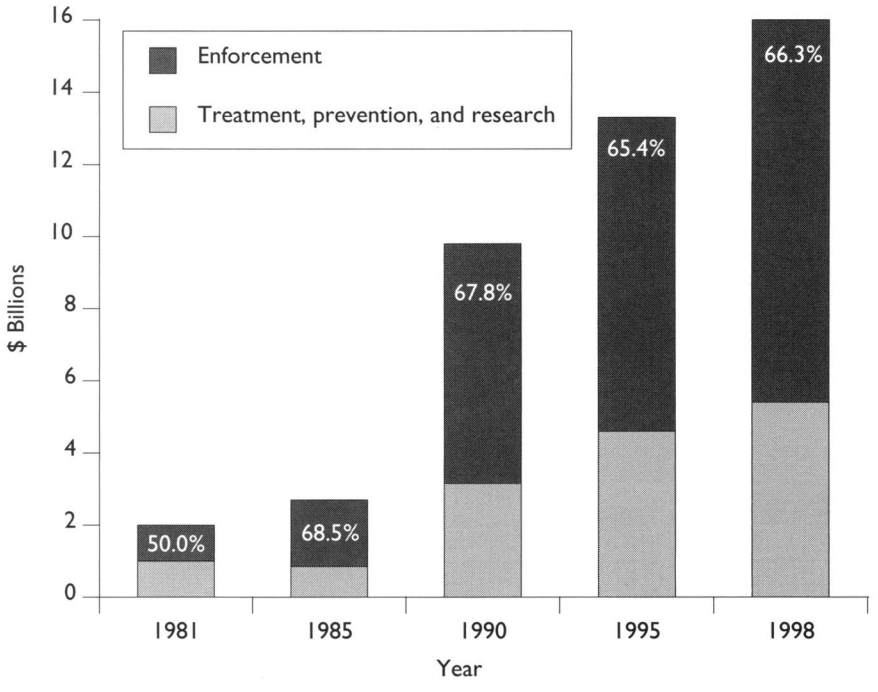
rejected by many, including Gen. Barry R. McCaffery, Director of the White House Office of National Drug Control Policy (ONDCP), as fostering "unrealistic expectations for a speedy victory and a specific end to the campaign."[10] The General now believes the fight against cancer to be a better analogy—"stressing prevention and treatment."[10]

Notwithstanding this more health-oriented view and the growth in Federal support for treatment programs, prohibition remains the major strategic goal of our national drug policy, under which treatment continues to be "backed up by a high level of social and legal disapproval"[10] and the strict enforcement of drug laws. This is most evident in the allocation of expenditures in the National Drug Control Budget for fiscal year 1998. Of a $16 billion total, more than $10.7 billion (67%) was devoted to drug law enforcement, interdiction, and supply reduction in the US and abroad.[1] In addition to representing the lion's share of current Federal funding, enforcement expenditures have shown almost two decades of steady growth—increasing tenfold since 1981.[1] (See Figure 1.) In the same period, Federal support for treatment and prevention has grown by only half that amount.[11]

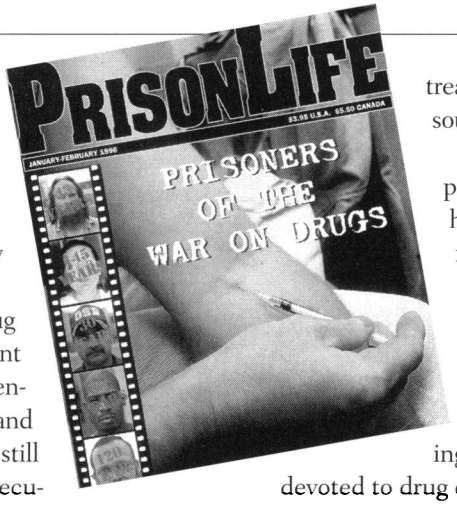
**Figure 1. Federal drug control budgets for selected years, 1981–1998: total budget and percent for enforcement**




**Growth in budgeted expenditures, 1981 to 1998**

| | |
|---|---|
| Total drug control budget | 800% |
| Enforcement | 1060% |
| Treatment, prevention, and research | 540% |

SOURCES OF DATA: References 14 and 15.




Even the recent innovation of drug courts, which steer arrested nonviolent users to treatment, represents an extension of Federal enforcement policy and funding priorities. This approach is still based on the continued vigorous prosecution of drug users, while using the criminal justice system to enforce compulsory treatment.

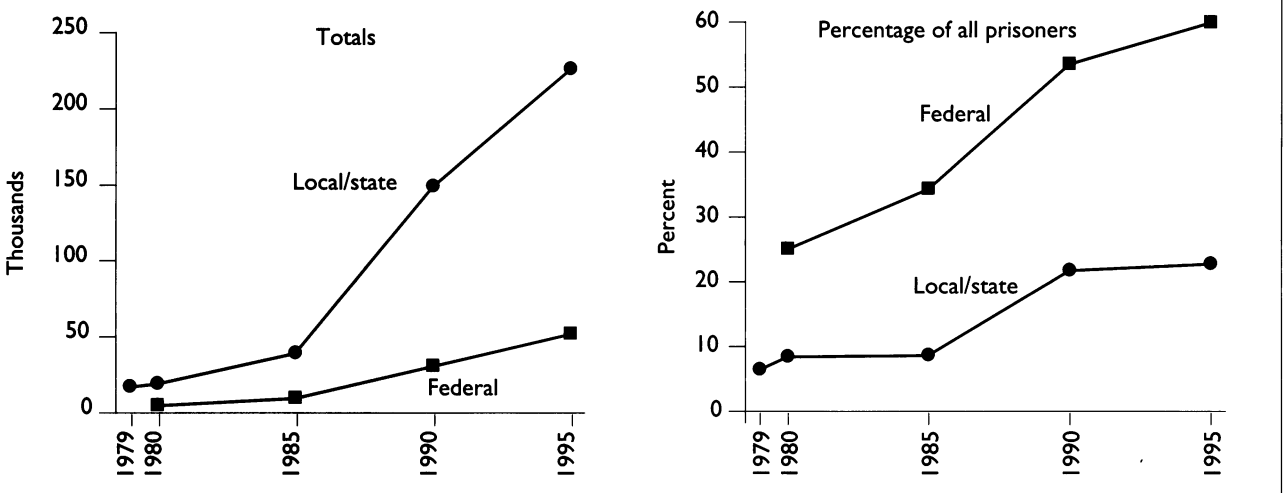
Further, Federal budgets reflect only a small part of all public expenditure for drug control. In this country, most law enforcement occurs at the municipal and state levels, where annual enforcement expenses are estimated at more than $20 billion,[12] compared with approximately $7.6 billion for treatment from all government and private sources.[13]

Thus, as we follow the money for the past 25 years, it is clear that enforcement has been the centerpiece of our drug policy, far outstripping other approaches to the problem. The consequences of disproportionate spending for enforcement are most visible in our society in the high rates of arrest and incarceration for drug offenses[14] (Figure 2), the increasing proportion of criminal justice activities devoted to drug offenses, and the rise in both over the past 25 years.

## TRENDS IN DRUG ARRESTS AND INCARCERATION

While overall crime rates today are at their lowest in the past 25 years, arrests for drug law violations have reached a

**Figure 2. Prisoners incarcerated for drug law violations in local/state and Federal facilities, totals and as percentage of all prisoners, United States, selected years, 1979–1995**




SOURCE OF DATA: Reference 14.

record high—more than 1.5 million in 1996, the latest year for which complete data are available.[14] State and Federal prisons and local jails today hold more than 400,000 drug law violators—60% of all Federal prisoners and more than 25% of state and local inmates.[14] (See Figure 2.)

Although rates of drug use were already declining rapidly by 1980, between 1980 and 1990 there was a 1055% increase in new commitments to state prisons for drug offenses (from 8800 to 101,600).[15] New commitments continued to rise into the 1990s (Table 1).

In 1980 there were 51,950 drug law violators behind bars in state and Federal prisons (8% of all inmates). By 1995 this number had increased more than 700% to 388,000 (25% of all inmates in a prison population now four times as large). This growth represents the clearest expression of a policy based on prohibition and the vigorous application of criminal sanctions for the use and sale of illicit drugs.

The surge in incarcerated populations in the 1980s was due to harsher enforcement policies and longer mandatory sentences for possession of smaller quantities of drugs, including disproportionate penalties for possession of crack cocaine. This resulted in progressively longer prison terms for drug offenses and a widening gap in sentence length between drug offenders and those convicted of violent crimes[16]—which has helped increase the proportion of the prison population behind bars for drug offenses (Figure 2). And while some individuals are in prison for major trafficking offenses or violent crimes, more than 90% of drug offenders are arrested for possession or for low-level drug deals to support their personal use.[16]

It is clear from these data that we have practiced what we preach, literally with a vengeance. There are more drug offenders behind bars today than the total incarcerated population of 1970.[17] Indeed, drug enforcement has accounted for such a large increase in our prison pop-

**Table 1. New criminal commitments to state prisons, United States, selected years, 1980–1992**

| Category | Year | | | | | | | Percent increase, 1980–1992 |
|---|---|---|---|---|---|---|---|---|
| | 1980 | 1982 | 1984 | 1986 | 1988 | 1990 | 1992 | |
| Total | 131,125 | 164,648 | 166,927 | 203,315 | 245,310 | 323,069 | 334,301 | 155 |
| Violent crimes | | | | | | | | |
| Number | 61,800 | 64,200 | 60,800 | 68,100 | 73,300 | 86,600 | 95,600 | 55 |
| Drug offenses | | | | | | | | |
| Number | 8800 | 12,700 | 18,700 | 33,100 | 61,573 | 102,400 | 101,600 | 1055 |
| Percent of total | 6.7 | 7.7 | 11.2 | 16.3 | 25.1 | 31.7 | 30.4 | — |

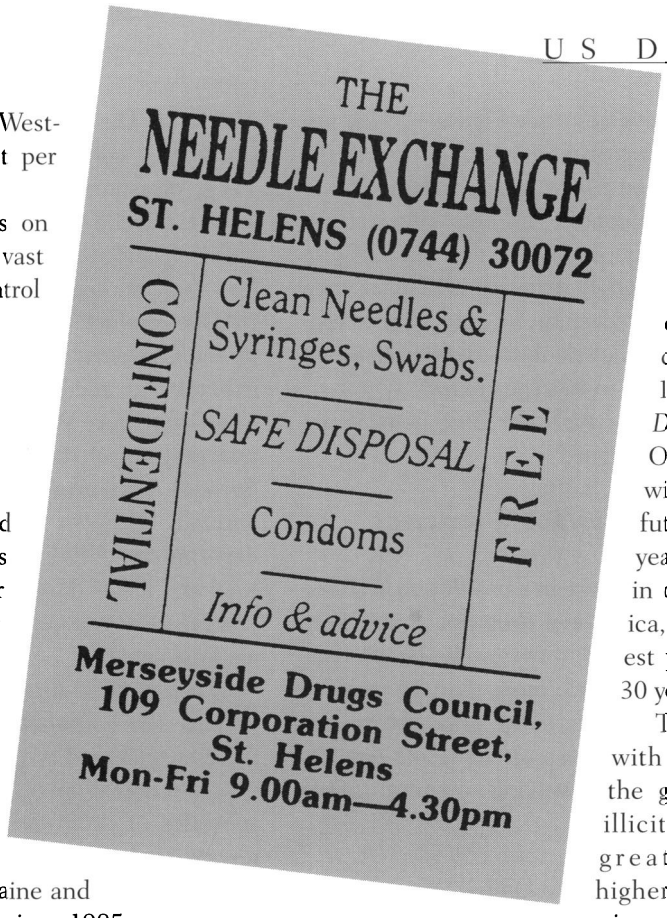
SOURCE OF DATA: Reference 15.

ulation that the US is now the Western democracy with the highest per capita rate of imprisonment.[18]

What have been the effects on the patterns of drug use of this vast natural experiment in drug control policy?

## TRENDS IN THE PREVALENCE OF DRUG USE

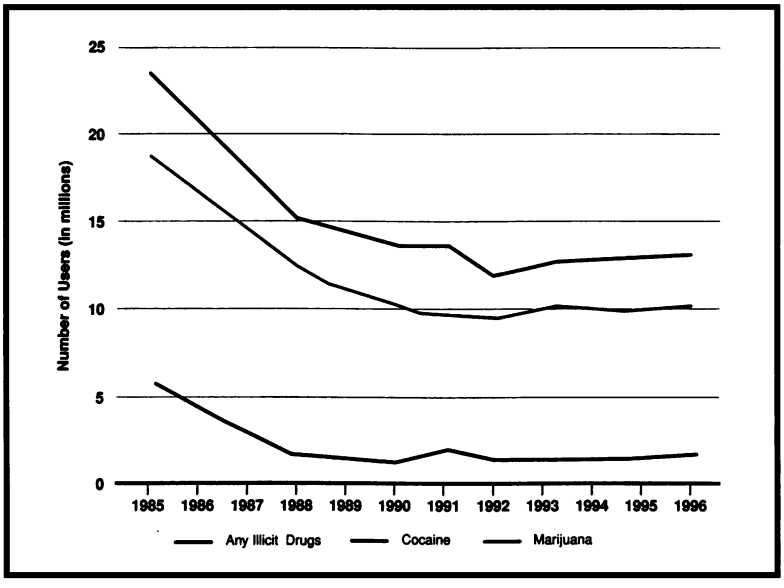
Proponents of a drug policy based on prohibition and its rigorous enforcement claim that their approach is working. See, for example, Figure 3, reprinted here from the ONDCP's 1998 *National Drug Control Strategy*,[1] which is used to support this contention. It shows that self-reported past month use of any illicit (that is, illegal) drug, and specifically of cocaine and marijuana, have declined sharply since 1985.




While Federal drug control officials admit that the problem is still serious, costing at least 14,000 lives and $110 billion a year,[1] they assert that our approach has increased societal disapproval of drug use and lessened the extent and severity of the drug problem. Citing reductions in "casual use" of all illegal drugs by 50% (and of cocaine by 75%) since 1979,[1] in its 1998 *National Drug Control Strategy*, the ONDCP claims that we will do even better in the future and sets a new 10-year goal of a 50% reduction in overall drug use in America, to a level below the lowest point attained in the last 30 years.[1]

These claims are greeted with some skepticism given the growing world market in illicit drugs. We are seeing greater availability of higher purity drugs at lower prices; from 1981 to 1996 the average price per pure gram of cocaine fell by 66% and the average purity of street heroin rose from 6.7% to 41.5%.[1] Increased crop acreage and expanded international traffic have driven a steady rise in the number of consumer and producer nations to at least 140 countries and a $500 billion world market, as has been well documented by the ONDCP, the US Drug Enforcement Agency, Interpol, and the United Nations Drug Control Program.[1]

**Figure 3. Self-reported past-month use of all illicit drugs, cocaine, and marijuana based on data from the National Household Survey on Drug Abuse, 1985–1991, and data from the Substance Abuse and Mental Health Services Administration, 1992–1995**




SOURCE: Reprinted from Reference 1.

In a world awash in drugs, with widespread economic hardship and social dislocation to motivate their continued production and distribution, can we succeed in protecting our nation from drugs and their dangers by the application of our current policies?

Apparently not.

Despite reductions in adult use, the latest data from national surveys[19] show a sharp climb since 1991 in the prevalence of illicit drug use among American high school students—despite decades of intense enforcement

and powerful anti-drug messages. (See Figure 4.) This primarily reflects increased use of marijuana, but use of the harder drugs also appears on the increase.[19] These climbing rates of teen use are a sentinel for the failure of our current policies to reduce the number of new users of prohibited drugs. And, interestingly, they are echoed in teen use of *legal* drugs—tobacco (despite the anti-tobacco crusades of the last few years) and alcohol—neither of which may be legally sold to people in this age group.[19]

Are there other ways in which our drug policies are failing us? What do the data show?

## EVALUATING ALL AVAILABLE EVIDENCE

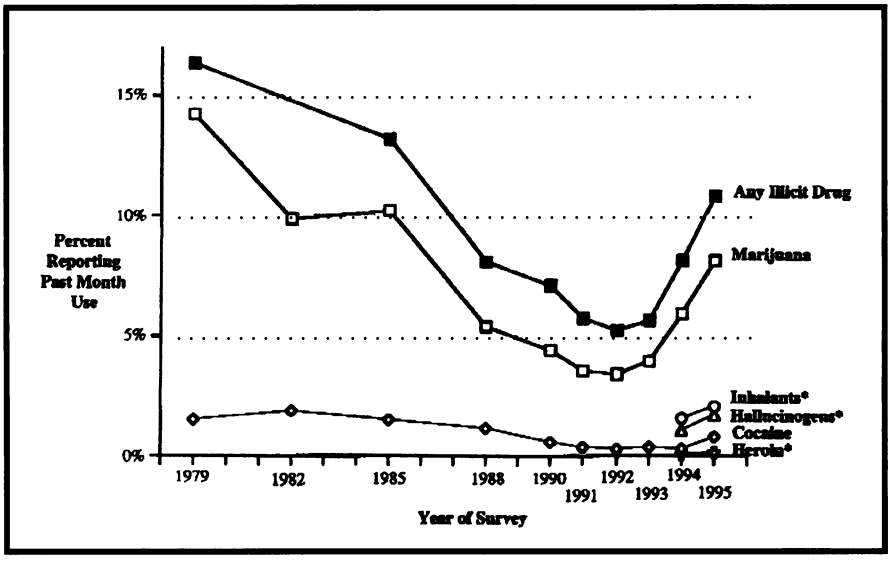
Fortunately, in this country, we are in a position to evaluate the long-term relationship between drug policy and drug use by examining in detail some of the public health consequences of that policy. We have more than 25 years of information on changes in patterns of drug use in the US population and may hold these up alongside data on the use of criminal penalties, identifying long-term trends and health and social outcomes.

**Sources of data on drug use**. The United States has the best funded, largest scale, longest functioning, and methodologically most consistent drug use surveillance and data monitoring system in the world. There are three major sources of national survey data on drug use in the United States: (*a*) The National Household Survey on Drug Abuse (NHSDA), conducted by the Federal government since 1973, measures the prevalence of drug and alcohol use among the US household population ages 12 years and older; expanded in 1991 to include college students, homeless shelters, and the military. (*b*) Monitoring the Future (MTF), conducted for the National Institute on Drug Abuse by the University of Michigan; surveys high school seniors (since 1972), and 8th through 12th graders (since 1982). (*c*) The Drug Abuse Warning Network (DAWN), a data collection program of the Substance Abuse and Mental Health Services Administration (SAMHSA), in place since 1972; annually samples more than 400 hospital emergency departments (ERs), reporting on ER visits in which both legal and illegal drugs are implicated, and also tallies medical examiner reports of deaths in which drugs and alcohol are implicated.

Each of these surveys and the data they report have limitations: the household survey (NHSDA) underrepresents the homeless, and the survey of high school seniors (MTF) misses school dropouts, both groups with higher than average rates of drug use (for example, school dropouts are reported to have two to four times the rate of cocaine use of non-dropouts[1]). And DAWN does not capture all hospital ERs. Another limitation, of course, is that given public law and private sentiment, one would expect a certain amount of under-reporting of personal drug use to researchers. This is probably most true for heroin, for which some Federal studies warn of substantial underreporting.[1] For these reasons, "harder" data on measures of drug-related morbidity and mortality, which are less dependent on self-report and more public than use *per se*, should be closely watched, recognizing that these reflect the adverse consequences of drug use and not simply its prevalence.

But, despite these shortcomings, data from large, ongoing, national surveys are very useful because they are consistent in their limitations and biases and allow us to create a reliable comparative picture of patterns and time trends in the prevalence of drug use over the past 25 years. They also permit us to see the demographic profile of drug users and to identify changes in this population over time.

**Figure 4. Percentage of US household residents ages 12 to 17 years self-reporting past-month use of illicit drugs, by type of drug, selected years, 1979–1995**




SOURCE: Adapted by the Center for Substance Abuse Research, University of Maryland, College Park, from Reference 19. Available from: <cesar.cesar.umd.edu>.

NOTE: Heroin data are reported for 1994 and 1995 only.

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## TRENDS IN POPULATION PREVALENCE, 1972–1997

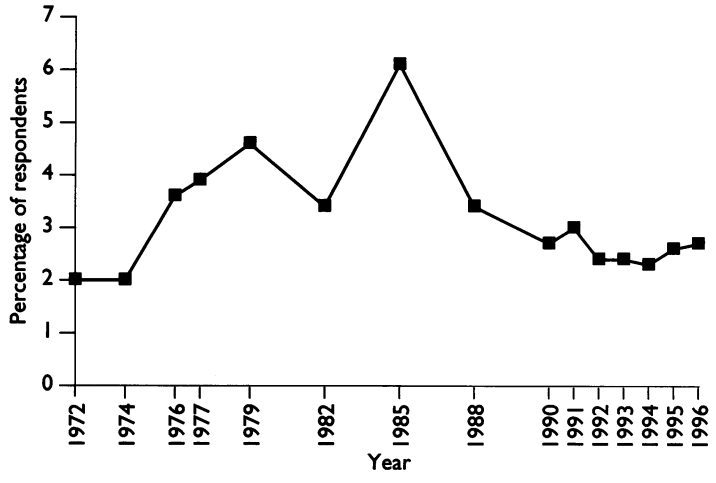
Data on the prevalence of drug use are available by year for the major social and demographic categories (age, sex, "race") and for each of the illicit drugs (as well as for tobacco and alcohol use). The NHSDA collects data on use in the respondent's lifetime ("ever used"), in the past year, and in the past month ("current use").

NHSDA household survey data show that in 1997, 36% of the adult population ages 12 years and older reported some illicit drug use in their lifetimes, but that number dropped to 11% for use in the past year and 6% for the past month[20]—ratios that have not changed significantly in the national data in a generation despite changes in prevalence.[21] These data show that most illicit drug users are not "hard core" addicts and that most experimental or casual use does not eventuate in continued or regular use.

From a public health perspective, past-month use is the most appropriate measure for looking at long-term changes in the prevalence of drug use because it captures all "current" or regular users (including dependent users) but only a small percentage of the much larger group who may have used drugs a single time or who are experimental or casual users. Figure 4 shows the NHSDA prevalence data for US population ages 12–17 years for past-month use of illicit drugs.

As most health risk is associated with regular exposure to the "major" drugs—cocaine, heroin, stimulants, depressants, and hallucinogens,[22] it is useful to focus attention on the long-term trends in past month use of these drugs independently from trends for marijuana, which has consistently shown a higher prevalence since data collection began in the 1970s than all other illicit drugs combined.

**Figure 5. Percentage of US household residents ages 12 years and older self-reporting past-month use of illicit drugs other than marijuana, selected years, 1972–1996**




SOURCES OF DATA: References 20 and 21.

Figure 5 shows NHSDA prevalence data for the US adult (≥12 years) population for past-month use of all illicit drugs except marijuana for 1972–1996.

Unlike the data beginning in the mid-1980s that are presented to support the claim that our policies are working to reduce the prevalence of drug use (see, for example, Figure 3), these more complete and specific data on time trends make clear that the prevalence of drug use in the US has followed no simple course over the past 25 years. Use of the "major" illicit drugs rose in the early 1970s from a 1960s level estimated at less than 2% of the adult population ages 12 and older,[21] peaked at about 6% in 1985, and declined until 1992, when it started to rise again among teens (although the 1990s average was still only 2.3% of the adult population) (Figure 4).

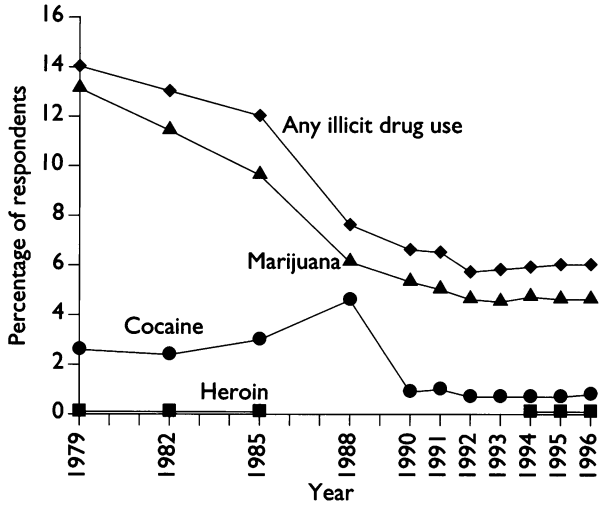
**Trends in the use of specific drugs.** While overall population trends in the use of any illegal drug are informative, individuals use specific drugs. Figure 6 shows 1979–1996 trends for each of the most commonly used illegal drugs. It is immediately apparent from this Figure that prevalence levels for the various drugs are markedly different and that each drug exhibits a different trajectory of use over the years.

Marijuana dominates the picture, accounting for over 93% of all reported use of illicit drugs—more than all other illicit drugs combined. Past-month marijuana use reached a peak of 13.2% of the adult (≥12 years) population in 1979 and declined until 1993, when it began to climb again—although to only a fraction of its former level, reaching 4.7% by 1996.

Cocaine use rose most sharply exactly as marijuana use was declining, peaking at 4.6% of the adult (≥12 years) population in 1988 but declining to the 0.7% to 1% range for 1990–1998. The NHSDA reported heroin use to be relatively stable, at less than 0.1%, throughout the years from 1972 through 1979. (Heroin use is particularly covert and subject to rapid local changes in availability and use, changes not well captured in the household survey method, and the NHSDA does not claim great accuracy or reliability for its heroin data.)

While there are no more reliable surveys than the NHSDA from which to document national levels of the use of heroin, the ONDCP has estimated (relying on local field studies and modeling techniques) that there are 810,000 chronic users of heroin in the US,[1] 0.3% of people ages 12 years and older. According to the ONDCP, this group now includes more younger (new) users, among whom there is clear evidence of a shift away

**Figure 6. Percentages of US household residents ages 12 years and older self-reporting past-month use of any illicit drugs; marijuana; cocaine; and heroin; selected years, 1972–1996**




SOURCES OF DATA: References 20 and 21.
NOTE: No data are available for heroin use for 1988 through 1993.

from injecting to sniffing, an important change for AIDS risk but one that does not necessarily make the drug safer.[1]

Do these trends in the prevalence of drug use bear any relationship to the steady rise in enforcement that we have seen over the same time period? The details about who uses drugs (and who does not) provide important clues to this relationship.

## WHO USES ILLICIT DRUGS?

While the overall prevalence of drug use and the drugs of choice may have changed over time, the characteristics of the populations using these drugs has been more stable. Figure 7 shows the demographics of the population using illegal drugs for selected years from 1979 through 1997.

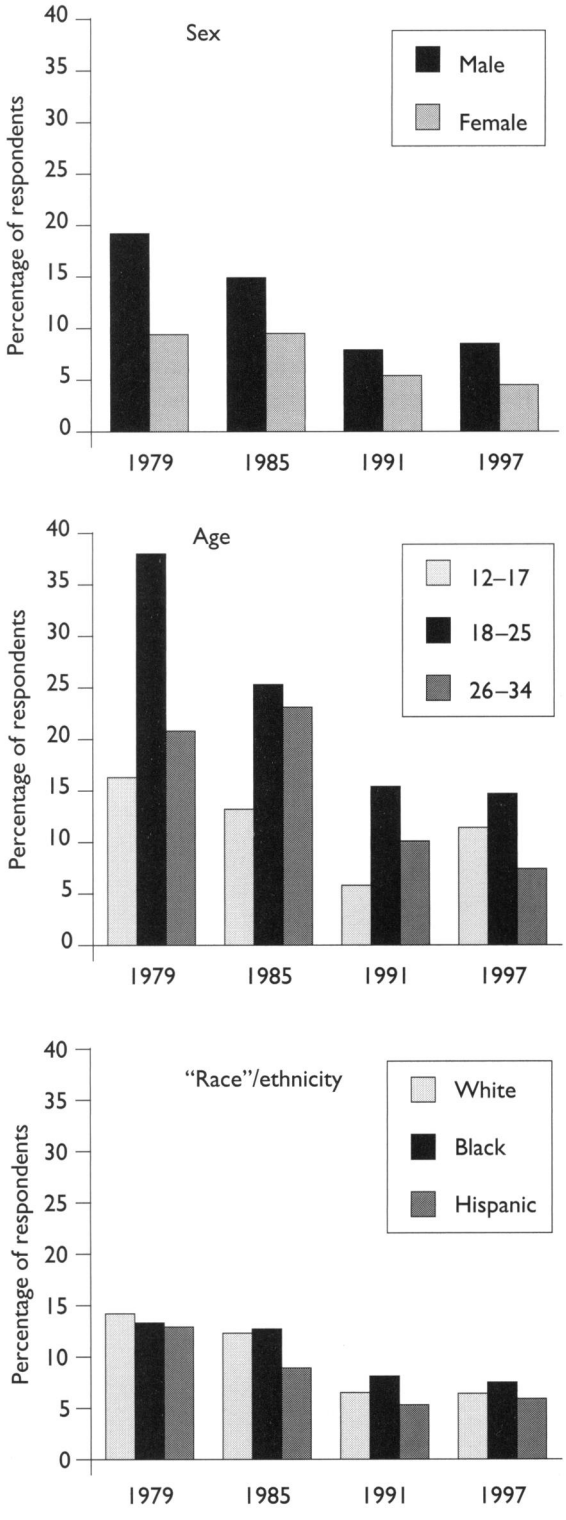
*Gender.* From Figure 7, we can see that over this 19-year period, male use regularly outstripped female use by about 2:1 and both showed proportionate rises and declines as overall prevalence changed over time.

*Age.* Initiation of the use of all drugs, both legal and prohibited, is principally an event of adolescence, especially ages 12 through 17. But the 18–25 age group, the group most at risk for criminal activity, arrest, and imprisonment,[16] consistently has the highest prevalence of use. We see lower rates of use as individuals "age out" of the lifestyles and social networks in which they used drugs; however, the increase in youthful drug use in the 1990s created new cohorts, some of whom will continue use as adults. So, for the present, we see a shift in the age mix of the drug-using population in the direction of youth. For example, in 1979, only 21% of current drug users in the 12–34 age category were younger than 18 years of age, but by 1997 that proportion was 33%, albeit of a total population of users half the size.

*"Racial" category.* A common stereotype, fostered by the media, is that some "racial" or ethnic groups use drugs more than others. This is not borne out by the data. There are only small differences across "racial" categories in the prevalence of illegal drug use. And the declines in drug use seen from 1979 through 1997 are reflected in all groups. Some small age- and drug-specific differences by "racial" category appear over this 19-year period—for example, marijuana and amphetamine use has been heavier among whites, and cocaine use somewhat higher among blacks. But these differences are neither large nor consistent, and the recent trend of rising use in the 12–17 age group reflects virtually identical increases in the prevalence rates for all "racial" categories.[20]

While the prevalence of drug use is an important measure of changing trends over time, from a public health

**Figure 7. Percentages of US household residents ages 12 years and older self-reporting past-month use of illicit drugs, by sex, age category, and "race"/ethnicity, selected years, 1979–1997**




SOURCES OF DATA: References 20 and 21.

perspective we are most concerned with health effects, seen in morbidity and mortality related to drug use. How do trends in these adverse outcomes correspond to the substantial changes we have seen in both enforcement and prevalence over this 25-year period? To answer, we turn to the data from the Drug Abuse Warning Network (DAWN).

## ADVERSE OUTCOMES

DAWN was established in the mid-1970s by the Federal government to monitor two important outcomes of drug use—drug-related hospital ER admissions and deaths in which drugs are implicated. Surprisingly, these data show a distinctly different time trend from the data on the prevalence of drug use in the same time period (Figures 5 and 6).

Both drug-related ER visits and deaths climbed steadily after 1979, the peak year for all drug use, rose most sharply in the mid-1980s just as the prevalence of use was declining most rapidly, and continued to rise through the 1990s, despite low and stable drug prevalence among adults. Drug-related ER visits rose by 60% from 1978 to 1994 (from 323,100 annually to 518,500) while overall ER visits increased by only 26%.[22]

These increases are most strongly associated with the use of cocaine and heroin (Figure 8), which together account for fewer than 4% of all illegal drug use but are mentioned in more than 40% of all drug-related ER visits and more than 90% of deaths due to overdoses. And while there are a growing number of overdose deaths seen among the new, younger users of heroin,[1] the age-adjusted death rates show increases in every age group for the period 1985–1995,[22] with the highest rates in the 35–44 age group (an older cohort of established users).[23] Overall, drug-related deaths more than quadrupled from 1976 to 1995—from 2136 to 9097 annually.[22,24–38] (See Figure 9.)

It would appear that drug use is becoming more dangerous. Even as the numbers of drug users have gone down, the per-user *rates* of ER visits and fatalities have been much higher since the mid-1980s. If we measure the success of our drug policy in terms of adverse public

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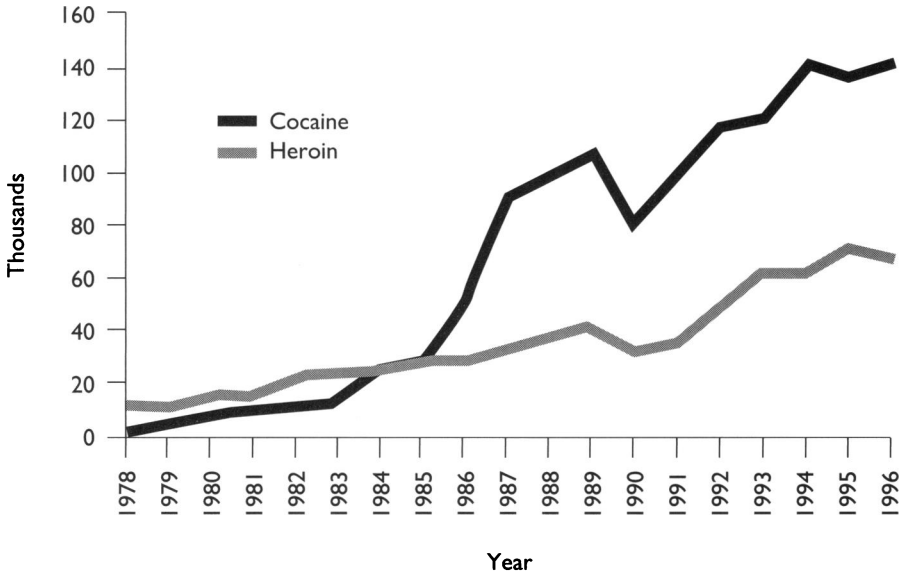
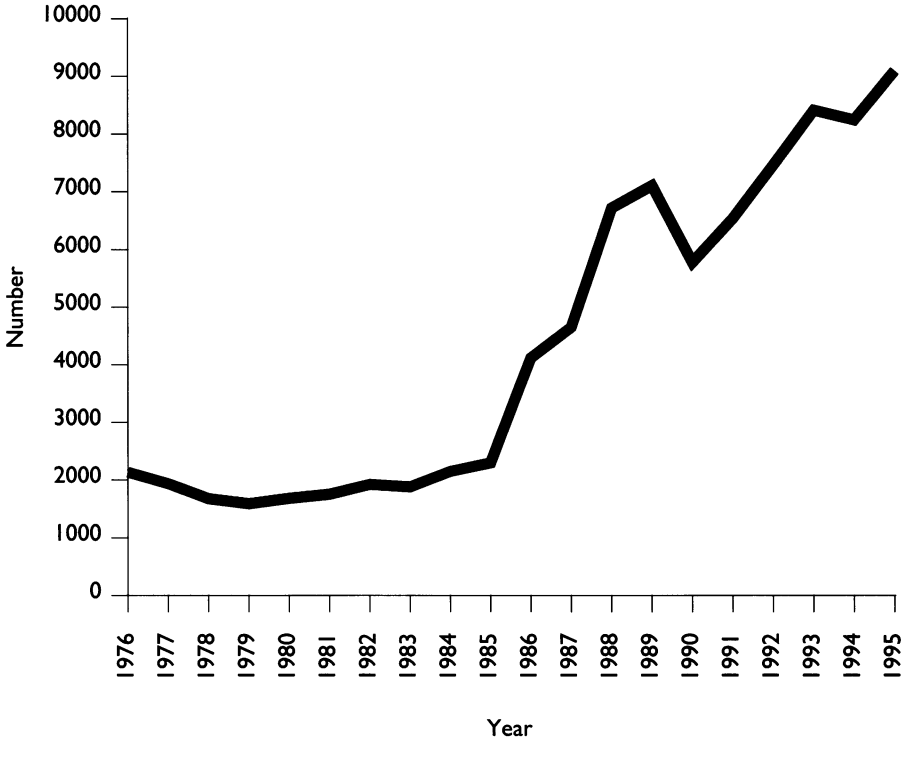
**Figure 8. Cocaine- and heroin-related emergency department visits, United States, selected years, 1978–1996**




SOURCE: Reference 22.

**Figure 9. Drug-related deaths in the United States, 1976–1995**




SOURCES OF DATA: References 22, 24–38.

health outcomes instead of prevalence of drug use, it is clear that we are doing worse, not better.

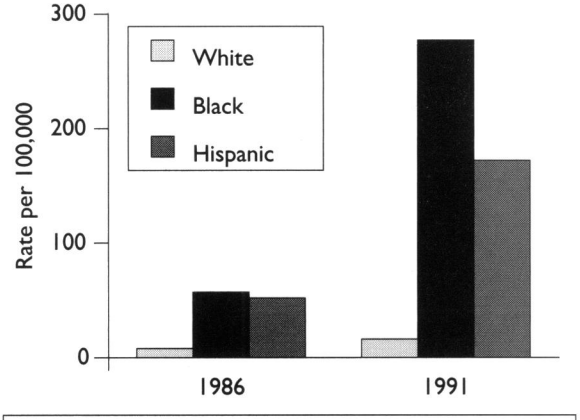
But if the time trends in drug-related morbidity and mortality do not correspond to trends in the overall prevalence of adult drug use, as we would expect them to, what accounts for the sharp climb in both as prevalence declined? And to what extent is this increase a reflection or result of our drug policy? To answer these questions it is necessary to disaggregate the data.

## DRUG POLICY IN BLACK AND WHITE

Disaggregating the data on adverse outcomes and drug enforcement by "race" suggests that the greater the intensity of criminal penalties, the greater the public health danger of drugs.

The enforcement of drug laws is not applied equally to all groups: despite comparable rates of drug use, African Americans are disproportionately represented among imprisoned drug offenders. Figure 10 shows white, black, and Hispanic drug law violators as a proportion of all state prison inmates for 1986 and 1991. Today, state prison incarceration rates for African Americans for drug law violations are almost 20 times those of whites and more than double those of Hispanics.[14] From 1990 to 1994, incarceration for drug offenses accounted for 60% of the increase in the black population in state prisons and 91% of the increase in Federal prisons.[14] This trend corresponds to the higher proportion of African Americans incarcerated for all reasons: 6296 per 100,000 adults in 1995, compared with 919 per 100,000 for whites—a ratio of 7.5 to 1.[14] By 1995, 35% of all African American males ages 25–34 were under the control of the criminal justice system—behind bars, on probation, or on parole.[39]

**Figure 10. Drug law violators in state prisons per 100,000 US residents, by "race"/ethnicity, 1986 and 1991**




| | 1986 | | 1991 | | Percent increase 1986 to 1991 |
|---|---|---|---|---|---|
| | Number | Rate per 100,000 | Number | Rate per 100,000 | |
| White | 15,030 | 8 | 30,950 | 16 | 110 |
| Black | 15,870 | 57 | 82,730 | 277 | 420 |
| Hispanic | 9,930 | 52 | 40,150 | 172 | 300 |

SOURCE OF DATA: Reference 17.

Drug enforcement (arrests, incarcerations, probation, parole) may itself be considered another adverse outcome of drug use—a measure of social morbidity with enormous negative consequences for those caught up in the criminal justice system. The damages that a prison record does to a young person's self-esteem and social and economic prospects are well known. In addition, a recent study reveals that in 1998, 3.9 million convicted felons (which includes all drug offenders), were disenfranchised as citizens and lost the right to vote.[40] Reflecting the disproportionately high rates of prosecution for drug offenses, disenfranchisement of African Americans occurs at three to four times the rate of whites. In states with the most restrictive voting laws, as many as 40% of African American men are likely to be permanently disenfranchised, according to the study's authors.[40]

I would suggest, however, that drug enforcement can also be viewed as an independent variable—a causal factor responsible for worsening many of the social and public health problems that we normally attribute to drug use *per se*.

**Effects of differential enforcement.** Prohibition criminalizes all drug users, buyers and sellers equally. For those who are drug-dependent or addicted and cannot gain access to effective treatment, these laws dictate a life of crime and of degradation, deceit, and (for the poor) prostitution and drug trafficking to obtain the money needed to shop in a violent and expensive marketplace.

Further, the drug user is continually exposed to risks to health and life—to infectious diseases through the reuse of injecting equipment (also criminalized and still prosecuted under drug paraphenalia laws) and to the unpredictable effects of illicit substances of unknown purity or potency. The powerful stigma of addiction relentlessly pushes the addict to the margins of society, away from family and social supports, medical attention, and employment—all factors that mitigate the dangers of drug use and promote recovery.[41]

Although these pervasive influences of prohibition affect all users of prohibited drugs, the data show that the most negative health consequences of drug use are not evenly distributed—they fall most heavily on those who experience the highest rates of drug enforcement, African Americans.

When the data are adjusted for the correct population denominators, they reveal a huge discrepancy in rates of adverse outcomes. While we see an overall rise in drug-

**Table 2. Heroin- and cocaine-related emergency department visits, United States, 1988, 1992, and 1996, by "race"/ethnicity**

| Drug | 1988 Number | 1988 Rate per 100,000 people in "racial"/ ethnic category | 1992 Number | 1992 Rate per 100,000 people in "racial"/ ethnic category | 1996 Number | 1996 Rate per 100,000 people in "racial"/ ethnic category |
|---|---|---|---|---|---|---|
| Heroin | | | | | | |
| Blacks | 13,000 | 54.6 | 18,500 | 77.1 | 27,500 | 114.6 |
| Whites | 17,500 | 10.1 | 18,500 | 11.5 | 25,000 | 15.2 |
| Hispanics | 5000 | 22.7 | 8000 | 36.4 | 10,000 | 45.5 |
| Cocaine | | | | | | |
| Blacks | 49,000 | 204.2 | 69,000 | 287.5 | 75,000 | 312.5 |
| Whites | 35,000 | 21.7 | 32,000 | 19.9 | 43,000 | 26.7 |
| Hispanics | 10,000 | 45.5 | 12,500 | 56.8 | 16,500 | 75.0 |

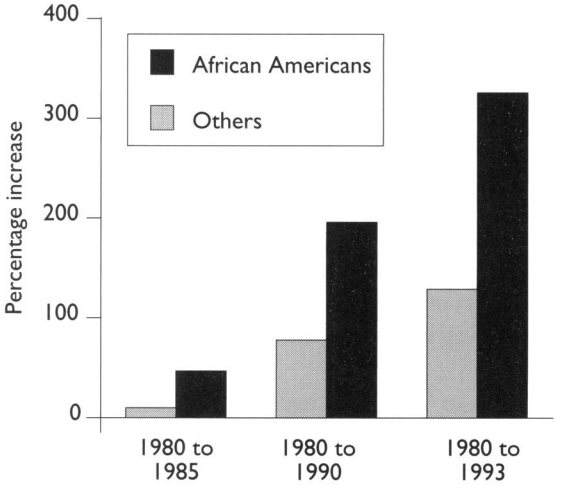
NOTE: Totals are rounded to the nearest 500.
SOURCE OF DATA: Reference 36.

related ER admissions for the total population throughout a long period of declining drug use (especially declines in the use of cocaine), these rates are very different across "racial" subgroups. African Americans fare dramatically worse than whites; in 1996, African Americans had 7.5 times the white rate of heroin-related emergency department visits and 11.5 times the white rate of cocaine-related visits (Table 2).

In 1996, African Americans, who represent only 12% of the US adult population[42] and a similar percentage of drug users, accounted for 57% of ER drug admissions while whites (75% of the population[26] and a proportionate number of drug users) accounted for 31%.[12]

A similar pattern is seen in the racially disaggregated data on overdose deaths in this period. African Americans have 3.5 times the rate of drug fatalities of whites,[36] and while the overall trend is an increase for all groups, from 1980 to 1993 there was a 326% increase in drug abuse deaths for blacks but a 129% increase for whites and others (Figure 11).

**Figure 11. Percentage increases in drug abuse-related deaths for African Americans and others, United States, 1980–1993**




SOURCE OF DATA: Reference 55.

## CONCLUSION: DRUG PROHIBITION VS PUBLIC HEALTH

Large disparities in drug-related morbidity and mortality appear to be a powerful consequence of prohibition drug policies and their unequal application in our society. (See Table 3.) But they also point to a set of larger problems, evident in the historic relationship of US drug policies to public health. In the United States we have a long history of strong public sentiment about the use of all intoxicating substances—we alone in the Western world altered our national Constitution to ban alcohol for 14 years. Today's drug policies may be understood as the expression of an (almost) innocent wish to make dangerous drugs disappear by legislating their prohibition.

A plausible case can be made that as drug use rose in the 1960s and 1970s, extending more widely and more openly into middle-class America, increasingly severe criminal penalties for the use of prohibited drugs and more rigorous enforcement was a predictable response. While the avowed motive of this policy, restraining the damages that can be caused by drugs, was (and is) a legitimate social goal, the cure has only worsened the disease.

**Table 3. Drug-related arrests, deaths, and emergency department visits, United States, 1996**

| "Racial" category | Rate per 100,000 people in "racial" category: Arrests | Deaths | Emergency department visits |
|---|---|---|---|
| Whites | 4272 | 25.6 | 15.0 |
| Blacks | 16,495 | 89.9 | 112.3 |
| Black/white ratio | 3.9 | 3.5 | 7.5 |

SOURCES OF DATA: References 12, 36, and 37.

Drug laws and their massive, cruel imposition on millions of young men and women—not simply the use of drugs—have stigmatized and estranged our most disadvantaged minorities, creating a "new American Gulag"[18] with its own archipelago of prisons, jails, courts, probation, parole, and, most recently, compulsory treatment as an alternative to incarceration, blurring the boundary between treatment and punishment. As we build prisons instead of schools, the images of young black men being arrested and imprisoned for drug offenses continue to fill the news media. While all the data suggest little systematic difference in the prevalence of drug use by "race" or ethnicity, these images foster the belief that nonwhite Americans use drugs more than other Americans—an assumption that goes largely unexamined by a public systematically frightened about our children's almost inevitable exposure to drugs.[43] At the same time, our prejudicial enforcement of drug laws and the wholesale criminalization of a large cohort of young inner-city residents serves to sustain and reinforce this stereotype while fostering social, economic, and political disenfranchisement[44] and increasing the health and life risk associated with use of drugs.

Drugs can certainly cause harm, but our selective application of punitive drug prohibition laws are at least as dangerous. These laws have spawned a lethal biosocial ecology in which the poorest nations and communities are ravaged by uncontrolled criminal drug markets,[45] emerging infectious diseases,[46] and the widespread corruption of civil society.[47]

Drugs are cheaper, more powerful, and more available today then at any time in the past 25 years. This new and complex political reality cries out for effective policies based on sound science, public health priorities and human rights.[48-50] Yet, after nearly a century of a bankrupt approach to drug control, we see no end in sight. In June 1998, delegates from all over the world heard Pino Arlacchi, Executive Director of the UN Office for Drug Control and Crime Prevention, address the General Assembly's Special Session on International Drug Control with calls "to start the real war against drugs and convince nations and people that there could be a drug-free world."[51]

Effective and publicly acceptable alternatives to a prohibition-based policy are now available to us in the form of harm reduction approaches (including needle exchange programs, low threshold treatment, and improved access to housing and health care for drug users). Harm reduction is already national policy in a score of countries throughout the world.[52] But in the US the very use of the term harm reduction is still banned from the Federal policy lexicon and denied funding because it is seen as "condoning drug use." Its proponents are vilified as supporters of drug legalization,[53,54] and critics within the government are cowed into silence (or anxiously whispered support at AIDS conferences). And there can be severe penalties for open dissent—as we saw in the case of Surgeon General Joycelyn Elders.

These are not-so-early warning signs of a great American failure—not only in drug policy but in our native capacity for creative, compassionate, and above all open discourse about issues vital to our well-being. It is time that we move beyond this drug fundamentalism and abandon our unhappy history of prohibition for more humane and pragmatic policies that protect public health and support our democratic values.

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## References

1. Clinton WJ. The President's message. In: Office of National Drug Control Policy (US). The National Drug Control Strategy, 1998: a ten year plan. Washington: ONDCP; 1998.
2. Tufte ER. Visual explanation: images and quantities, evidence and narrative. Cheshire (CT): Graphic Press; 1997.
3. Drucker E. Harm reduction: a public health strategy. Curr Issues Public Health 1995;1:64-70.
4. Substance Abuse and Mental Health Services Administration (US). National Household Survey on Drug Abuse. Series H-5: main findings. Washington: SAMSHA; 1996.
5. Grund JPC, Stern LS, Kaplan CD, Adriaans NFP, Drucker E. Drug use context and HIV consequences: the effects of drug policy on everyday drug use in Rotterdam and the Bronx. Br J Addictions 1992;87:41-52.
6. NIH Consensus Development Conference on Methadone, November

17-19, 1997. Effective Medical Treatment of Opiate Addiction 1997; 15(6):1-38 [cited 1998 Nov 16]. Available from: URL: **opd.od.nih.gov/consensus/cons/108/108_statement.htm**

7. Institute of Medicine. Effectiveness of drug treatment. Vol. 1. Washington: National Academy Press; 1995.
8. Swarms J. Mayor steps up his criticism of Methadone: accuses drug programs of enslaving ex-addicts. New York Times 1998 Aug 16. Sect. A:33.
9. Lurie P, Drucker E. An opportunity lost: HIV infections associated with lack of a national needle-exchange programme in the USA. Lancet 1997;349:604-8.
10. McCaffery BR. A strategy for confronting the nation's drug problem. San Diego Union Tribune 1998 Aug 2.
11. Office of National Drug Control Policy (US). National Drug Control Strategy budget summary 1997: FY 1998. Washington: ONCDP; 1998.
12. Department of Justice, Office of Justice Programs (US). Bureau of Justice Statistics sourcebook of criminal justice statistics: 1996. Washington: DOJ; 1997.
13. Mark T, McKusick D, King E, Harwood H, Genuardi J. Health care spending: national expenditures for mental health, alcohol and other drug abuse treatment, 1996: prepublication release. Washington: Substance Abuse and Mental Health Services Administration (US); 1998 Sep.
14. Department of Justice, Bureau of Justice Statistics (US). Trends in US correctional populations, 1995. Rockville (MD): Bureau of Justice Statistics; 1996.
15. Department of Justice, Bureau of Justice Statistics (US). Sourcebook 1992: correctional populations in the US. Rockville (MD): Bureau of Justice Statistics; 1993.
16. Department of Justice, Bureau of Justice Statistics (US). Drugs, crime, and the justice system : a national report. Rockville (MD): Bureau of Justice Statistics; 1992.
17. Lindesmith Center. Drug prohibition and the US prison system. New York: The Center; 1998.
18. Christie N. Crime control as industry. London (UK): Routledge; 1993.
19. National Institute on Drug Abuse (US). National survey results from Monitoring the Future study, 1975–1995. Rockville (MD): National Institutes of Health; 1996. Pub. No. 96-4139.
20. Substance Abuse and Mental Health Services Administration (US). National Household Survey on Drug Abuse population estimates, 1997. Series H-7. Rockville (MD): Department of Health and Human Services; 1998.
21. Substance Abuse and Mental Health Services Administration (US). Preliminary results from the National Household Survey of Drug Abuse, 1997. Series H-6. Rockville (MD): National Clearinghouse for Alcohol and Drug Information; 1998.
22. National Institute on Drug Abuse (US). Topical data from the Drug Abuse Warning Network (DAWN), 1976–1985, and mid-year preliminary estimates, 1996: trends in drug abuse related hospital emergency room episodes and medical examiner cases. Series H. No. 3. Rockville (MD): National Institutes of Health; 1996.
23. Fingerhut LA, Cox CS. Poisoning mortality, 1985–1995. Public Health Rep 1998;113:218-33.
24. National Institute on Drug Abuse (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1981. Series I. No. 1. Rockville (MD): Department of Health and Human Services; 1982.
25. National Institute on Drug Abuse (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1982. Series I. No. 2. Rockville (MD): Department of Health and Human Services; 1983.
26. National Institute on Drug Abuse (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1983. Series I. No. 3. Rockville (MD): Department of Health and Human Services; 1984.
27. National Institute on Drug Abuse (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1984. Series I. No. 4. Rockville (MD): Department of Health and Human Services; 1985.
28. National Institute on Drug Abuse (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1985. Series I. No. 5. Rockville (MD): Department of Health and Human Services; 1986.
29. National Institute on Drug Abuse (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1986. Series I. No. 6. Rockville (MD): Department of Health and Human Services; 1987.
30. National Institute on Drug Abuse (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1987. Series I. No. 7. Rockville (MD): Department of Health and Human Services; 1988.
31. National Institute on Drug Abuse (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1988. Series I. No. 8. Rockville (MD): Department of Health and Human Services; 1989.
32. National Institute on Drug Abuse (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1989. Series I. No. 9. Rockville (MD): Department of Health and Human Services; 1990.
33. National Institute on Drug Abuse (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1990. Series I. No. 10. Rockville (MD): Department of Health and Human Services; 1991.
34. National Institute on Drug Abuse (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1991. Series I. No. 11. Rockville (MD): Department of Health and Human Services; 1992.
35. Substance Abuse and Mental Health Services Administration (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1992. Series I. No. 12-B. Rockville (MD): Department of Health and Human Services; 1994.
36. Substance Abuse and Mental Health Services Administration (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1993. Series I. No. 13-B. Rockville (MD): Department of Health and Human Services; 1995.
37. Substance Abuse and Mental Health Services Administration (US). Data from the Drug Abuse Warning Network (DAWN): annual medical examiner data, 1994. Series I. No. 14-B. Rockville (MD): Department of Health and Human Services; 1996.
38. Substance Abuse and Mental Health Services Administration (US). Drug Abuse Warning Network annual medical examiner data, 1995. Series D-1. Rockville (MD): Department of Health and Human Services; 1997.
39. Mauer M, Huling T. Young black Americans and the criminal justice system. Washington: The Sentencing Project; 1995.
40. Fellner J, Mauer M. Losing the vote: impact of disenfranchisement laws in the US. Washington: The Sentencing Project and Human Rights Watch; 1998
41. Waldorf D, Reinerman C, Murphy S. Cocaine changes. Philadelphia: Temple University Press; 1991.
42. Department of Commerce, Bureau of the Census (US). Population estimates from Statistical Abstract of the US: 1994. Washington: The Bureau; 1995.
43. Partnership for a Drug Free America [website] [cited 1998 Dec 5]. Available from: URL: **drugfreeamerica.org/parents/html**
44. Tonry M. Malign neglect: race, crime, and punishment in America. New York: Oxford University Press; 1995.
45. Garrett L. The coming plague: newly emerging infections in a world out of control. New York: Farrar, Straus and Giroux; 1994
46. Stares P. Global habit : the drug problem in a borderless world. Washington: The Brookings Institution; 1996.
47. Andreas P. Profits, poverty, and inequality: the logic of drug corruption. NACLA Report on the Americas 1993; 27(3):22-8.
48. Nadelmann E. Commonsense drug policy. Foreign Affairs 1998;77:111-26.
49. Drucker E, Lurie P, Alcabes P, Wodak A. Measuring harm reduction: the effects of needle and syringe exchange programs and Methadone maintenance on the ecology of HIV. AIDS 98 1998;12 Suppl A:S217-S230.
50. Mann J, Tarantola D, editors. AIDS in the world II. New York: Oxford University Press; 1996.
51. Wren C. UN Special session on drugs meets in New York. New York Times 1998 Jun 7. Sect. A:7.
52. Nadelmann E, McNeely J, Drucker E. International perspectives on harm reduction. In: Lowinson J, Ruiz P, Millman M, Langrod J. Substance abuse: a comprehensive textbook. 4th ed. New York: Wiley; 1997.
53. Shea C. Thou shalt not. Washingtonian 1998;10(15):71.
54. McCaffery BR. Decriminalizing drugs is wrong. Cinncinnati Enquirer 1998 Aug 6.
55. Substance Abuse and Mental Health Services Administration (US). Historical estimates from the Drug Abuse Warning Network: 1978–1994 estimates of drug-related emergency department episodes. Advance Report No. 16. Rockville (MD): Department of Health and Human Services; 1996. ■