Drug Use and Drug Programs in the Washington Metropolitan Area

Peter Reuter, John Haaga, Patrick Murphy, Amy Praskac
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PREFACE

This is the final report of a study of drug use and programs in the Washington metropolitan area. The study was commissioned by the Washington Fund for the Prevention of Substance Abuse, which is jointly sponsored by the Community Foundation of Greater Washington, the Federal City Council, the Greater Washington Board of Trade, and the Greater Washington Research Center.

The purpose of this study was to assess the extent of the drug problem in this area and to examine how the community has responded through enforcement, treatment, and prevention programs. Incorporating information from the many local jurisdictions that make up the Washington metropolitan area, the report presents a broad view of how the entire community is addressing the problem of drugs. It analyzes how these programs have functioned in the past and recommends changes based on current and expected future patterns of drug use. These recommendations should be of interest to policymakers representing both public and private organizations concerned with the growing drug problems in Washington and other metropolitan areas.
SUMMARY

Throughout the nation, concern about drug abuse problems has been growing. In the Washington metropolitan area that concern has recently been heightened by the development of highly visible street drug markets and a rapid escalation in the level of violence associated with them, as well as by data showing that an extraordinarily high percentage of those arrested in the District of Columbia test positive with respect to hard drugs.

By several indicators, Washington’s drug problems are severe compared with those of other metropolitan areas. Moreover, these indicators are rising rapidly despite an intense and sustained enforcement crackdown. Demand for treatment services has increased sharply, and it appears that the public treatment system is currently operating at full capacity with growing waiting lists. The system will be overwhelmed if it is not expanded. Prevention presents the best prospect for long-term reduction in drug use, but it remains underemphasized, receiving only a small share of the local drug policy budget.

INDICATORS

Indicators of the extent and nature of Washington’s drug problems can be found in figures on deaths and emergency room admissions related to drugs for the whole metropolitan area, treatment program data for the District and Maryland, urinalysis data on arrestees in the District, and surveys of drug use in high school populations in the various jurisdictions. Each indicator captures a different element of the drug problem; jointly they provide a broad, though by no means complete, description.

All of the available sources show a sustained high prevalence of PCP use throughout the area. Emergency room and medical examiner data indicate that Washington and Los Angeles stand out from the rest of the country with regard to PCP. High school senior surveys show that it is widely used in the Maryland suburbs as well as the District of Columbia. The urinalysis data suggest that this dangerous drug is much more prevalent among young (under 21) residents. Of those in drug treatment in Washington, over 25 percent describe PCP as their primary drug of abuse; in the rest of the nation this figure is less than 4 percent.
Indicators of medical crises resulting from heroin and cocaine use are also high. Data from 26 of the nation's largest metropolitan areas consistently show Washington to be among the leading five in terms of these indicators for both drugs. The Washington problem is also getting more severe; the number of drug-related deaths, for example, increased almost 140 percent between 1978 and 1986. Between the third quarter of 1986 and the same quarter of 1987 the numbers of emergency room admissions involving cocaine or PCP both doubled. Drug-related emergencies are not confined to the medical facilities of the central city. The suburban emergency rooms report high rates for heroin, cocaine, and PCP.

The urinalysis data, providing figures on drug use by persons arrested in the District of Columbia, show a very high level of drug use and rapidly increasing prevalence of cocaine. By November 1987, three out of every four arrestees tested positive for one illicit substance (even excluding marijuana), and half tested positive for cocaine. The cocaine prevalence rate rose from 15 percent in March 1984 to almost 60 percent in December 1987. This rise in cocaine use was not accompanied by a decline in any other drugs; indeed, the PCP prevalence rate rose over the same period from 31 to 40 percent.

ENFORCEMENT

The most visible response to a perceived drug use problem has traditionally been enforcement of drug prohibition laws. In Washington, the number of drug arrests rose from 11,478 to 19,502 between 1981 and 1986.

In recent years, metropolitan area drug enforcement has been increasingly dominated by the District of Columbia; in 1986 over two-thirds of all metropolitan area drug arrests were made in the District. The number of District arrests for the more serious offense, drug distribution, rose from 408 in 1981 to 5,274 in 1986. The increased priority the District has placed on drug enforcement in the last five years has produced not only large numbers of arrests, but also dramatic growth in the numbers of prosecutions and convictions, as well as longer prison sentences for those convicted on drug charges. By 1986 over half of all felony prosecutions and convictions in the District involved drug charges; over one-third of all prison commitments were for drug convictions.

Suburban enforcement has shown a less clear trend; in some jurisdictions, the number of arrests for distribution was sharply lower in 1986 than in 1981. Consistent data on prosecutions and sentencing were unavailable for most of these jurisdictions.
The District's intensification has apparently not affected the consumption of illicit drugs in the short run. The major short-run effect may have been to increase safety in neighborhoods that had become infested with street drug markets. But the changes in the criminal justice system have "spilled over" to drug treatment programs.

**TREATMENT**

Drug abuse treatment in both the Washington area and nationally has until recently been predominantly treatment for addiction to heroin. Local, publicly supported programs are currently facing a sharp increase in the number of non-opiate clients, many of them referrals from the criminal justice system, some changes in the system. The District of Columbia, for example, has sharply cut back on methadone maintenance, a fairly expensive treatment modality; although the number of heroin users in treatment increased between 1985 and 1986, the number in methadone maintenance dropped from 2,540 to 1,066. This has permitted the District's treatment agency to provide services to a greater number and variety of clients.

In addition to the criminal justice referrals, Employee Assistance Programs (EAP) may send another wave of drug users to the treatment facilities. EAPs, common in large businesses and already in place in the major federal agencies, refer employees with substance abuse problems into treatment programs; many of these referrals may end up in the public treatment system because insurance coverage is shallow. Should work-site drug testing becoming more prevalent, EAP referrals to the public system may be a major source of clients.

The large number of PCP users presents a particularly difficult challenge to treatment professionals in the area. Because PCP use is uncommon in most parts of the nation, little research has been conducted on either the effects of repeated use or effective treatment modalities. Few facilities offer the specialized treatment that seems to be needed for this drug. Described as combative and anxious, PCP users may have violent episodes long after detoxification. Practitioners report that getting through to PCP users requires much repetition, and that they often react badly to the confrontation that is a major component of most drug treatment therapies.
PREVENTION

Though acknowledged as the “best hope for the future,” drug prevention programs continue to receive little public funding (both locally and at the federal level). The result is that few models of prevention programs have been proven effective. Washington area public schools have taken advantage of what little is known about substance abuse prevention, largely based on the successful methods employed in anti-smoking campaigns. Gone are the “scare tactics” and “general skills” approaches that characterized prevention programs in the 1970s. The area public schools mostly concentrate on some of the more promising methods such as providing specific skills to resist peer pressure—not “just say no,” but teaching adolescents how to say no.

Community-based programs in the Washington area appear to be somewhat fragmented and less up-to-date in their prevention techniques. They would benefit by coordinating with the school programs and reinforcing those efforts.

RECOMMENDATIONS

The report’s recommendations, aimed at both public and private policymakers in the community, do not form a comprehensive drug policy; rather they are some beginning steps, arising out of our analysis, attempting to address the specific problems of the Washington area.

Develop PCP Treatment Programs

PCP is a distinctive drug whose use has dangerous short-term consequences and uncertain, but possibly very serious, long-term effects. Very little is known regarding what constitutes effective PCP treatment. Given that PCP use has been high in the Washington area for quite some time and that there is no reason to expect a decline in use, the region should seek funding for a long-term research and development program.
Expand and Restructure Prevention Programs

Prevention expenditures should be increased substantially, whether from private or public sources. A first step could be the creation of a local prevention network to facilitate information-sharing across jurisdictions. Demonstration projects incorporating careful monitoring should also be encouraged. It may be important to develop programs that deal with prevention for those populations exposed to the intense pressures associated with opportunities for large incomes from drug selling.

Expand the Methadone Treatment Programs

Heroin users pose a double threat to the community in that they commit crimes to support their addiction and, through the practice of needle sharing, are at high risk of contracting and spreading AIDS. Research has shown that heroin users commit fewer crimes and share fewer needles while in treatment. Methadone maintenance is the treatment modality that retains clients for the longest period of time. It is in the interest of the community to ensure that as many heroin users as possible are in treatment programs. All those who wish to enter methadone maintenance should be able to do so.

Improve Coordination Among Programs and Jurisdictions

Given the unique composition of state and local jurisdictions in this metropolitan area, improved coordination and information sharing is essential. Coordination efforts should address relations among programs within jurisdictions as well as among jurisdictions. In the District, for example, policy changes in the enforcement program have had substantial consequences for treatment.

The drug problems of the Washington community will not disappear in the near future. We must set in place programs and institutions that will accept that reality. Research and data collection are important components of the effort, even at the local level.
ACKNOWLEDGMENTS

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The authors interviewed and consulted with numerous individuals on both methodological and substantive issues. Many local officials, educators, treatment professionals, employee assistance counselors, and community leaders gave us information and ideas for this report. We are unable to list each individually, partly because some did not wish to be named, but we would like especially to thank the following, whose help we sought on repeated occasions. Ann Blanken and Dr. Barry Brown, both of the National Institute on Drug Abuse, provided general comments on the indicators of drug use and enlightened us about the procedures surrounding the Drug Abuse Warning Network (DAWN). William Lusinko of the Maryland Department of Health and Mental Hygiene provided special database runs on the figures on treatment admissions for Montgomery and Prince George’s Counties. Two members of the District of Columbia’s Metropolitan Police Department, Assistant Chief Isaac Fulwood and Sgt. C. H. Moss, explained the methods and motivations of Operation Clean Sweep in detail.

In the Washington metropolitan area, many local treatment professionals improved our understanding of the drug problem in this community. Dr. Theodore Brown provided a description of drug detoxification in general and treatment of PCP abusers specifically. Peter Luongo, Director of the Montgomery County Alcohol, Drug Abuse, and Adolescents Services Division, and Carol Giannini of the Department of Children and Youth Services supplied data and valuable comments. Michael Fuller, Prince George’s County Health Department Director of Addictions, George McFarland of the District’s Alcohol and Drug Abuse Services Administration and Joseph Wright of WACADA helped us on several matters: Charles Avery of the District Department of Public Health, Dr. Cielle Block of the City of Alexandria Residential Services, Robert McKinley of PEPCO, and Dr. Boyd of the Arlington Health Department answered many questions on different parts of the treatment system.
Dennis Nelson of the Fairfax County Schools' Office of Substance Abuse spent a considerable amount of time responding to our questions about school-based prevention programs. Penny Largay (Prince George's County), Ed Masood (Montgomery County), Alverna Miller (Arlington), and Bill Johnson (District of Columbia) were equally helpful in providing information about drug education in their respective public school systems. Arlington Police Officer Bob McFarland supplied written materials and a description of the D.A.R.E. program. Most of the urinalysis data was provided by Jay Carver of D.C. Pretrial Services Agency and Mary Toborg, Toborg Associates. Both of them also read and commented on the Indicators section. None of these individuals are responsible for the interpretations and views expressed here, nor do their agencies necessarily agree with the findings.

James Q. Wilson of the UCLA Graduate School of Management and David Kanouse of RAND reviewed earlier drafts. Phyllis Ellickson of RAND also provided comments on Sec. V based on her work on substance abuse prevention.

Molly Coleman survived endless revision requests and managed the final word processing of the report.
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I. DEFINING THE PROBLEMS

For almost two decades now, illicit drugs have been a matter of primary concern to American society. Drug issues have become an apparently permanent part of our public policy concerns, affecting everything from international diplomacy to elementary education. Officials from the President to members of local Boards of Education make many decisions that are influenced by the drug issue.

The reasons for this concern are readily found. Although some indicators point to decline in use of particular drugs or by particular groups, there is no question that illicit drug use continues to be a major problem for many communities. For example, in a sample of metropolitan areas, the number of reports of deaths involving cocaine use rose dramatically in the decade 1976 (153 deaths) to 1985 (615 deaths).¹ Recent data on drug use among a sample of arrestees showed that in five cities across the country, half of those arrested had used an illicit drug other than marijuana at some time shortly before being arrested. A rapid surge in homicide rates in many big cities has been blamed on drug trafficking.

The nation has not simply wrung its hands over these issues. There has been a vast expansion in many programs aimed at dealing with the drug problem, especially enforcement. Newspapers and other media provide a heavy, if rapidly fluctuating, diet of stories about drugs. High level public officials frequently speak out on the topic. President Reagan has made drug control a major theme of his administration.

The expansion of enforcement has, in some terms, been very productive. Federal officials point to ever increasing numbers of drug traffickers imprisoned as a result of interdiction or high level enforcement efforts. Seizures of cocaine have grown rapidly as the interdiction agencies’ budgets have expanded. Declines in percentages of high school seniors reporting regular use of drugs, particularly marijuana, are cited as evidence that prevention efforts are now having an effect.

Yet despite all this, it is generally perceived that the problem has not diminished, and may still be worsening. The increased seizures of cocaine indicate that more is coming into the country. Drug-involved emergency room admissions and medical examiner reports of deaths are still rising. Despite demographic changes that should lower the

¹These data are from the Drug Abuse Warning Network (DAWN), which currently includes 27 of the nation’s largest metropolitan areas. This particular comparison is based on medical examiner offices that reported consistently for the ten year period.
national crime rates, those rates are beginning to rise again, perhaps because of the increased use of expensive drugs by the criminally active population.

The policy response has been increasingly dominated by efforts to control the supply of drugs rather than reduce demand. The federal government estimates that it spent $2.9 billion on supply reduction efforts in FY 1987, compared with $0.9 billion on treatment and prevention programs. As discussed in Sec. III, enforcement also dominates state and local drug policy budgets.

THE WASHINGTON PROBLEM

Since early 1987 an extraordinary amount of attention has been paid to the violence that has erupted around drug sales in the Washington area. There are indications that dealers from New York and Miami are coming to Washington to sell the highly potent form of cocaine called crack, because they can charge more here than in their home cities. The result has been an increase in the number of homicides both in the District of Columbia and Prince George's County. Most of these homicides are unsolved, apparently either because of witness intimidation or because the killers are unidentified strangers from out of town.

This increase in violence is only the most dramatic symptom of an apparently worsening drug problem. Newspapers also report that ever younger children are becoming involved in the distribution, as well as consumption, of hard drugs. The growing debate has naturally focused on law enforcement, and D.C. Mayor Marion Barry has called for further strengthening of the city's already substantial drug enforcement program. The violence around the drug business has led the District police department to seek heavier armaments for its officers. The Prince George's County Executive has proposed a massive expansion in the police forces devoted to drug enforcement. Other suburban counties have announced that their agencies arrested many more dealers and seized much larger quantities of drugs in 1987 than in 1986, and aim at still more enforcement in 1988.

There has been some interest in other elements of drug policy. For example, more community groups (churches, parents, and businesses) have considered or begun drug prevention programs of their own, in addition to the existing school-based efforts. A May 1988 conference of political leaders of the Metropolitan Washington area jurisdictions, organized by the Washington Council of Governments, gave considerable attention to prevention and treatment needs. But the response
around Washington, as in the nation generally, has been dominated by enforcement.

Concerned with the growth of the drug problem throughout the metropolitan area, and perceiving the response to be somewhat fragmented, four local organizations\(^2\) commissioned this study. Its objective is to provide a comprehensive description and assessment of drug problems in the Washington metropolitan area and of the responses, both public and private. This assessment aims to provide the basis for community discussion about what can be done to reduce various aspects of the community's drug problem.

Why a community assessment? As it turns out, communities within the United States vary a great deal in the nature of their drug problems. The policies and programs that they adopt also vary considerably. For example, the heroin problem is acute in a few large cities, mostly in the Northeast and the upper midwest. Although the data are inconclusive, by early 1987 it appeared that crack was widely prevalent in only some metropolitan areas. Miami seemed to have a unique problem of violence associated with conflict among high level cocaine distributors; Los Angeles had extraordinarily intense conflict within its large gang population, centering on drug retailing.

There have also been great differences in community responses. Comparisons of drug arrest rates (per thousand residents) among seven cities similar in size to the District show variation from a high of 14.8 in the District of Columbia to 5.0 in Boston in 1985; the outcomes of these arrests are also highly variable, with some areas, including Washington, having much higher rates of incarceration than others.

This study encompassed the metropolitan area rather than just the District of Columbia. Many aspects of the drug problem are common to both the District and the suburbs. Policies in one part of the metropolitan area affect other parts. A great deal can be gained if the various jurisdictions are treated together.

There has been little study of community variation. The National Institute on Drug Abuse does sponsor data series and conferences on the matter, but we know of no work that sets out to explain, for example, why some cities have a larger heroin problem than others or whether more stringent enforcement has affected drug use.\(^3\)

\(^2\)The four organizations were the Community Foundation of Greater Washington, the Federal City Council, the Greater Washington Board of Trade, and the Greater Washington Research Center.

\(^3\)Such analysis is complicated by the simultaneity of the relationship between drug use and drug enforcement; high use is likely to engender high enforcement. Techniques for dealing with this simultaneity require more detailed data on the levels of drug use than are currently available.
In light of this, it seems useful for a community to assess the nature of its drug problems and what it is doing about them. This is the first such metropolitan area study. It assesses both changes over time in the indicators of drug problems in Washington and the differences between Washington and other metropolitan areas. It takes the same approach with respect to the assessment of drug programs.

It was not possible to study all aspects of Washington's drug problems. The study relies almost exclusively on analysis of existing data collected by official agencies. Some agencies were able to furnish most of the data we sought; others were not. We were able to obtain very little data from the Virginia suburbs. Nor was it possible to obtain data on many important policy outcomes—e.g., changes in the price of cocaine or the prevalence of drugs in the general population. The analysis also is not as current as we would like, because there is a lag in the publication of various data.

Precisely because we are dealing with a single community, we have examined what resources and policies are available within that community. The federal government is arguably the major influence on drug policy. We have presented no analysis of what it has accomplished or what it might do differently. We simply remind the reader occasionally of where local and federal policies interact and in what ways federal policies may enhance or diminish local efforts.

PROBLEMS AND PROGRAMS

There is no single "drug problem." Instead there are different drugs, drug using populations, and problems arising from their use. We are concerned not only with the effect of illicit drug use on users, but also with the violence and crime that surround drug trafficking. Some drugs motivate users to predatory crime; others lead to brain damage.4 In some areas of the nation, particularly inner cities, drug trafficking seems to have become an important career option for young adolescents. Heroin, the source of the first contemporary drug problem, and one given little press attention nowadays, has become a major public health problem since 1982 because its users are at very high risk of contracting and spreading AIDS. Other examples, such as the

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4The relationship to crime is sometimes a function of the conditions surrounding drug use. Heroin, a narcotic, is associated with crime not because of its effect on users but because those who use it cannot maintain a regular job with earnings adequate to provide them with it. However, PCP is criminogenic because it induces some users to change their behavior while under its influence, becoming very much less inhibited and more violent. See Goldstein (1985) concerning the different ways in which drug use can be associated with criminal incidents.
emergence of crack, remind us that the problems associated with a particular drug can change over time.

Eliminating drug use is the ultimate goal. All the violence, crime, and corruption associated with the drug trades would disappear if we reached that goal. But not every measure that reduces drug use will reduce the problems related to drugs. We may be able to reduce violence and crime related to drug distribution without reducing drug use. If drug enforcement is cut, the result may be a decline in price and less crime on the part of users (particularly of heroin) who have few other sources of income to buy drugs. This is not to recommend reduced drug enforcement but only to suggest the importance of understanding the tradeoffs.

Society has a variety of programs for reducing drug use and associated problems. The standard categorization is enforcement (“supply side” programs) and treatment and prevention (“demand side” programs). Both types have a role; the question is the balance among them. Although the available data do not permit strong statements about what constitutes the appropriate distribution of resources among these different programs, we believe it is important to understand that they are highly interrelated; for example, expanded enforcement efforts are going to be more effective if they are reinforced through treatment and prevention programs.

**OUTLINE**

The next section presents an analysis of drug problem indicators in Washington; these show that Washington's problem may be more severe than that of most other large metropolitan areas and has been worsening recently. The analysis also suggests that Washington has a very distinctive problem with the drug PCP (phencyclidine).

Sections III—V describe the current drug programs: enforcement, treatment, and prevention. The final section discusses the options facing the community and recommends program changes; the recommendations are not intended to be a complete statement of appropriate drug policy but arise out of the analysis of the indicators and existing programs. Appendix A describes the characteristics of the drugs that are most influential in Washington. Appendix B provides additional data about school-based prevention programs.
II. INDICATORS OF DRUG USE

INTRODUCTION

There are no comprehensive data on the extent of drug use in Washington. Instead we have had to rely on two limited types of data. The first is data from institutional populations: those admitted to hospital emergency rooms or to medical examiners' offices in the metropolitan area, those arrested for crimes in the District of Columbia, and those in treatment facilities in the District and Maryland suburbs.

The second source of data is surveys of self-reported drug use. The only surveys specific to the Washington area are a series conducted among high school students in Maryland and occasional surveys of students in the District of Columbia and Arlington.

There have been no household surveys of the general population other than students in the Washington area, but we use recent national level survey data for different age and racial groups to generate very rough estimates of the number of current marijuana and cocaine users in the metropolitan area.

Each of these data sources provides only a partial view of drug use patterns in this area. However, there is enough consistency to permit statements about distinctive characteristics of drug use in Washington and about trends in the metropolitan area.

DAWN DATA

Since 1972, the federal government has, collected data on illicit drugs from emergency rooms (ER) and medical examiners (ME) in the DAWN system. A sample of ERs in 27 of the largest metropolitan areas provide data on the number of admissions involving mentions of a wide variety of illicit drugs. Medical examiners in those same areas provide data on the number of deaths in which these drugs appear to have played a role.¹ In the DAWN system, the unit of measurement is a specific drug “mention,” recorded when a substance is reported by the patient or an accompanying individual, or detected by the attending medical professional (for ER) or detected by the Medical Examiner. Many cases involve more than one drug mention.

¹A second data set, called the “National Panel,” covers areas that are not Standard Metropolitan Statistical Areas (SMSAs). This set is not used in the following analysis because the communities from which it is drawn are less comparable to Washington.
Use of many illicit drugs, particularly the three we examine (heroin, cocaine and PCP), may lead to acute symptoms of physical distress such as violent nausea, disorientation, and coma. In acute episodes, some users present themselves at hospital emergency rooms; more commonly, they are brought in by friends, ambulance crews, or the police. The number of such visits is affected by the quality of drugs sold, the experience of the users, and, most important, the number of users. Some users die during these acute episodes or as a result of injuries, homicide, or suicide while intoxicated. Most such deaths will lead to report by a coroner (Medical Examiner); the number of such deaths is affected by the same three factors as determine the ER visits. In addition, data may be affected by what epidemiologists call “ascertainment bias.” In times of intense concern about drug problems, emergency room physicians may be more alert to signs of intoxication and more likely to record such a diagnosis.

We were unable to obtain much information on the distribution of the sample emergency rooms among the various Washington jurisdictions. Twenty-seven facilities are members of DAWN in Washington but not all provide data every period; 20 participated in the 1986 DAWN data collection, but only 15 of those reported each year from 1976 to 1985. We do know that nine of the 20 facilities reporting in 1986 are in the District of Columbia, from which we conclude that at least six of the 15 facilities that consistently reported from 1976 to 1985 were located in the surrounding suburbs. Of nearly 500,000 visits made to these consistently reporting DAWN emergency rooms in the metropolitan area in 1985, 290,000 occurred at suburban hospitals. The data presented below are therefore not dominated by the District.  

Figures 1 and 2 present some of the relevant data for Washington in recent years. The most striking feature of the ME data is the rapid increase in the number of coroners’ reports of deaths involving drugs. In 1977 there were 105 such deaths; by 1986 the number was 276. Most of those deaths involved heroin or another morphine product.

The ER data show much more clearly the rising importance of PCP. By 1985 there were more ER admissions involving PCP than heroin, which had dominated the figures until 1983. Cocaine use also rose sharply in the early 1980s.

The trend for Washington has some distinctive features. In most of the DAWN metropolitan areas, the trend for heroin shows a sharp decline between 1976 and 1979, followed by a rapid increase to 1985;\footnote{Seven medical examiners in the metropolitan area have participated in the DAWN system from 1976 to 1986. Of these, one is the District of Columbia medical examiner, with the remaining six in the surrounding area. We do not know the identities of the nonparticipating offices.}
Fig. 1—DAWN medical examiner data Washington D.C. metro Area, 1976–1986


Fig. 2—DAWN emergency room mentions Washington D.C. metro Area, 1976–1985

Source: NIDA, 1987b.
but the increase is not enough to make up for the earlier decline. For the entire sample of reporting metropolitan facilities, the 1985 rate was about 90 percent of the 1976 rate both for ER and ME numbers. Washington stands out in that the 1985 numbers for both heroin series are much higher than those for 1976.\footnote{DAWN ER data for 1986 are available. However, they include reports from facilities that may not have been consistently reporting from 1976 to 1985; hence we do not include them in the trend analysis. The 1986 data are used for making single year comparisons among cities.}

The ER data cannot be used in the raw form to make comparisons among cities, even on a per capita basis, because we do not know what share of all metropolitan area ER visits are included in the DAWN sample. However, we can acquire some insight into differences by considering the share of all sample emergency room admissions that were drug related.\footnote{The comparisons among metropolitan areas are only rough. Assume that 75 percent of Washington's sample ERs are located in the center city, while in Philadelphia only 50 percent are located in the center city. One might expect, if use of the more dangerous drugs is concentrated in the inner city, that a higher share of Washington DAWN ER admissions would involve drugs, even if the two cities had similar usage patterns. DAWN will not disclose the identity of reporting hospitals. We suspect that this difference in coverage does not invalidate broad comparisons.}

The comparison figures are presented in Table 1. We chose five

<table>
<thead>
<tr>
<th></th>
<th>ER Mentions</th>
<th>ME Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Heroin</td>
<td>Cocaine</td>
</tr>
<tr>
<td>Metro Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baltimore</td>
<td>0.89</td>
<td>0.76</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>0.36</td>
<td>1.23</td>
</tr>
<tr>
<td>Atlanta</td>
<td>0.06</td>
<td>0.62</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>1.90</td>
<td>2.68</td>
</tr>
<tr>
<td>New York</td>
<td>1.69</td>
<td>2.53</td>
</tr>
<tr>
<td>Washington</td>
<td>1.87</td>
<td>2.35</td>
</tr>
<tr>
<td>All DAWN Metro Areas</td>
<td>1.02</td>
<td>1.60</td>
</tr>
</tbody>
</table>

\footnote{The New York City medical examiner did not participate in DAWN.}

\textbf{Table 1}

EMERGENCY ROOM MENTIONS AND MEDICAL EXAMINER DATA FOR HEROIN, COCAINE, AND PCP PER 1,000 EPISODES FOR SELECTED METROPOLITAN AREAS, 1986

cities for comparative purposes: Baltimore, Philadelphia, Atlanta, Los Angeles, and New York. The first three are comparable sized metropolitan areas in the same region of the nation, while Los Angeles is the one other city in which PCP has frequently been mentioned as a major problem. New York is included as a city whose drug problems have attracted great attention. The table also shows averages for the entire sample of 27 metropolitan areas. Table 1 also presents data on the share of coroner's reports involving illicit drugs as a contributing cause of death.\(^5\)

For PCP Washington clearly stands out. The Washington rate for ERs is nearly eight times that for the whole sample; only Los Angeles is more than half the Washington rate. The Washington PCP rate for ME reports is nine times that of the national sample, and Los Angeles has a rate only one-third as high.

Washington figures are also very high for heroin. The ME reports show Washington substantially higher than any other city and four times the average for the sample as a whole.\(^6\) It is only fourth among all cities for the rate of ER mentions of heroin/morphine (behind San Francisco, Detroit and Los Angeles) but the figure is still almost double the sample average. For cocaine, there are somewhat similar differences; Washington is sixth in the ER mention rate (behind Miami, Detroit, San Francisco, Los Angeles, and New York) although only about 50 percent above the sample average. It has the third highest rate of medical examiner cocaine mentions.

The ER data also distinguish between central city rate and rates for emergency rooms located outside of the central city (Table 2). For Washington, the cocaine rates are actually higher outside of the central city than inside it. The suburban PCP rate is almost as high as the central city figure. Note that for all 27 SMSAs the opposite statement holds; central city rates are sharply higher. For heroin, the Washington central city rate is higher than that for the suburbs; but the Washington noncentral city rate is higher than the central city rate for all but six of the other cities.\(^7\)

---

\(^5\)In the DAWN system, a drug-related death is any death where drugs are a contributory factor, but not necessarily the sole cause of death. This is a broader definition than "drug overdose," where a toxic level of drugs is present in the deceased; however, a mention is more narrowly defined than merely noting the presence of a drug in the body.

\(^6\)The Medical Examiner DAWN data do not include New York City.

\(^7\)DAWN uses political boundaries to define central cities. Thus, the District of Columbia represents the central city in this metropolitan area. The District accounts for a smaller share (20 percent) of the SMSA population than does the central city in most metropolitan areas. Thus it may be more "urban" than other center cities, which may explain part of the difference.
Table 2
EMERGENCY ROOM MENTIONS FOR HEROIN, COCAINE, AND PCP PER 1,000 EPISODES FOR SELECTED METROPOLITAN AREAS, ACCORDING TO LOCATION OF FACILITY, 1986

<table>
<thead>
<tr>
<th>Metro Area</th>
<th>Heroin City</th>
<th>Heroin Suburb</th>
<th>Cocaine City</th>
<th>Cocaine Suburb</th>
<th>PCP City</th>
<th>PCP Suburb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltimore</td>
<td>1.02</td>
<td>0.20</td>
<td>0.79</td>
<td>0.63</td>
<td>0.11</td>
<td>0.31</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>0.48</td>
<td>0.24</td>
<td>1.83</td>
<td>0.60</td>
<td>0.06</td>
<td>0.11</td>
</tr>
<tr>
<td>Atlanta</td>
<td>0.08</td>
<td>0.03</td>
<td>0.67</td>
<td>0.52</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>4.58</td>
<td>0.73</td>
<td>6.15</td>
<td>1.17</td>
<td>4.15</td>
<td>0.65</td>
</tr>
<tr>
<td>New York</td>
<td>2.08</td>
<td>0.35</td>
<td>2.97</td>
<td>1.01</td>
<td>0.25</td>
<td>0.04</td>
</tr>
<tr>
<td>Washington</td>
<td>2.50</td>
<td>1.22</td>
<td>1.89</td>
<td>2.83</td>
<td>3.54</td>
<td>3.06</td>
</tr>
<tr>
<td>All DAWN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metro Areas</td>
<td>1.34</td>
<td>0.46</td>
<td>1.89</td>
<td>0.95</td>
<td>0.49</td>
<td>0.29</td>
</tr>
</tbody>
</table>


The 1986 ER data also provide some insight into the distribution of use across ethnic and age groups. Within the Washington area, blacks account for 82 percent of heroin admissions, 71 percent of those for cocaine, and 80 percent of those for PCP. Males consistently account for at least two-thirds of the drug-related ER admissions with men involved in 65 percent of the heroin admissions, 67 percent of cocaine, and 73 percent of the PCP admissions. PCP admissions are considerably younger (24.7 years) on average than those for the other two drugs, 28.1 for cocaine, and 31.1 for heroin.

An alternative method of standardizing the ME data for comparison across metropolitan areas is to use the number of mentions per 100,000 residents. This comparison, however, assumes that all of the medical examiners in the metropolitan area participate in DAWN, which is not true for all SMSAs. For example, in the Washington area, seven out of a possible 10 medical examiners participate. Table 3 presents drug-related deaths per 100,000 residents for this area and for the only six metropolitan areas in which all of the medical examiners reported to...

---

8Wealthier users are more likely than poorer users to go to a private physician rather than to an emergency room, in case of an adverse drug experience. The DAWN demographic information may not accurately represent the composition of the population having adverse experiences with these drugs.

9Average age of admissions figures are 1985 data. Data from 1986 were not available.
Table 3

DRUG-RELATED DEATHS PER 100,000 RESIDENTS, 1986

<table>
<thead>
<tr>
<th>Metro Area</th>
<th>Heroin</th>
<th>Cocaine</th>
<th>PCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffalo</td>
<td>1.5</td>
<td>2.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Denver</td>
<td>1.1</td>
<td>0.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>6.1</td>
<td>4.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Miami</td>
<td>0.7</td>
<td>6.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>2.6</td>
<td>1.5</td>
<td>0.0</td>
</tr>
<tr>
<td>San Francisco</td>
<td>10.8</td>
<td>2.6</td>
<td>0.4</td>
</tr>
<tr>
<td>Washington</td>
<td>9.2</td>
<td>3.1</td>
<td>2.2</td>
</tr>
</tbody>
</table>


the system. The estimates presented in Table 3 follow the same pattern as the previous indicators: The Washington area is the highest for PCP and relatively high for heroin and cocaine. If one considers that the Washington figures may be understated because three of the area’s medical examiners did not report, the incidence of chronic drug episodes relative to the size of this area’s population could be very high indeed.

Much attention has been paid to the recent reports of the introduction of “crack” into this metropolitan area. Crack, the inexpensive, smokable cocaine derivative, is highly addictive and much more potent than cocaine hydrochloride. Emergency room data for the first three quarters of 1987 gives reason for increased concern about the dangers of cocaine. Twice as many cocaine mentions were reported in the emergency rooms in this area in the third quarter of 1987 (the first “post-crack” time period) as in the third quarter of 1986. Cocaine mentions rose from 482 to 948 per quarter.10 During these three months, the number of heroin mentions increased by one-third (from 341 to 464), and the number of PCP mentions doubled (498 to 1063) compared with mentions in 1986. From these data, at least until September 1987, crack was not substituting for these drugs.

10Although we do not know the total number of ER visits for these two periods, we do not believe this dramatic increase to be simply the product of growing ER admissions in general. For the two periods, the number of mentions for over-the-counter sleep aids did not increase dramatically. We consider these types of substances to be closely related to the number of emergency room admissions.
URINALYSIS OF ARRESTEES

Since 1971, the District of Columbia has had some form of drug testing of individuals arrested there. In the early years the results of these tests were not kept in a form that permitted monitoring of drug use patterns. However, since March 1984, the District has undertaken a major effort to test arrestees for illicit drugs. The District’s Pretrial Services Agency (PSA) has the responsibility for collecting information for judicial officers who make decisions regarding pretrial release. Drug use is considered to be information relevant to these decisions, but self-reporting (simply asking the defendant whether they use drugs) has been shown, understandably, to lead to substantial underestimation of the rate of drug use. Therefore, along with information on the arrestee’s family, employment history, and prior criminal record, PSA asks a defendant to submit a urine sample for testing. The results of the test cannot be used as evidence, only in determining conditions of release, so few refuse to participate in the testing (Carver, 1986).

Those arrested in the District of Columbia are a very selective population: generally young, male, and black. The average age of those arrested in 1986 was 30 years; 84 percent were male, and 86 percent were black. Very few were over 50 years of age. They also tend to be much less educated than the rest of their cohort. Thus the urinalysis data pertain to a very particular subpopulation and should not be extrapolated to the total population. It is not even a random sample of a particular age/race/sex group.

One result of this widespread testing of individuals in the criminal justice system has been a large body of data (over 40,000 tests) tracking drug use among arrestees. Figure 3 plots the monthly percentages of those who tested positive for drugs from March 1984 to December 1987. Although the use of opiates remains constant until late 1987 at approximately 20 percent, cocaine use increased dramatically from 15 percent to almost 60 percent less than four years later. The most recent data indicate that seven out of every 10 arrestees have some drug in their systems, half test positive for cocaine, and four out of 10 have recently used PCP—a drug that can cause extremely violent and unpredictable behavior.\textsuperscript{11} It is disturbing to note that 45 percent of the 1987 arrestees tested positive for more than one drug.

\textsuperscript{11}The figures for different drugs are not entirely comparable since the tests employed all pick up drug use within a period of time that varies by drug. For heroin and cocaine the test will pick up drug use within at least the last 24 hours and perhaps 72 hours. For PCP the test will detect use within the last 10 to 15 days.
The meaning of these results can be seen in recent studies of the probability of an individual being rearrested before trial as a function of the detected drug. Those who test positive for one drug show a probability of 21 percent of being rearrested before trial, rather than 14 percent for those who test negative (Carver, 1986).

There is a strong relationship between test results and age, which also varies by drug (Table 4). Heroin use peaks among arrestees aged 31–35 and is quite low (below 5 percent) for arrestees aged 18–21; only 1 percent of juveniles tested positive for heroin. PCP use, by contrast, seems to peak at a much lower age: 57 percent of arrestees aged 18–21 test positive for PCP use compared with 21 percent aged 31–35, and 9 percent aged 41–45. Cocaine use is most prevalent in arrestees aged 26–45, but is less peaked than the other drugs.

Data are also available on the distribution of test results across arrest charges for the periods June 1984 to January 1985 and 1986. As presented in Table 5, the data show that those arrested for drug-related offenses are most likely to test positive for drugs. At the other end of the scale are individuals charged with assault or destruction of property—although this figure remains as high as one in three. The percentage of individuals testing positive for drugs also increased between the two time periods for each of the charges in the table.
Table 4

URINALYSIS OF DISTRICT ARRESTEES BY AGE AND DRUG, PERCENTAGE TESTING POSITIVE, 1986

<table>
<thead>
<tr>
<th>Age</th>
<th>Heroin</th>
<th>Cocaine</th>
<th>PCP</th>
<th>Any Drug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juvenilea</td>
<td>1</td>
<td>9</td>
<td>28</td>
<td>34</td>
</tr>
<tr>
<td>18-21</td>
<td>4</td>
<td>32</td>
<td>57</td>
<td>67</td>
</tr>
<tr>
<td>22-25</td>
<td>11</td>
<td>39</td>
<td>51</td>
<td>70</td>
</tr>
<tr>
<td>26-30</td>
<td>25</td>
<td>45</td>
<td>38</td>
<td>71</td>
</tr>
<tr>
<td>31-35</td>
<td>40</td>
<td>49</td>
<td>21</td>
<td>70</td>
</tr>
<tr>
<td>36-40</td>
<td>38</td>
<td>45</td>
<td>18</td>
<td>87</td>
</tr>
<tr>
<td>41-45</td>
<td>37</td>
<td>43</td>
<td>9</td>
<td>59</td>
</tr>
<tr>
<td>46-50</td>
<td>28</td>
<td>36</td>
<td>7</td>
<td>45</td>
</tr>
<tr>
<td>51+</td>
<td>17</td>
<td>20</td>
<td>6</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>40</td>
<td>39</td>
<td>68</td>
</tr>
</tbody>
</table>


*aJuvenile tests are not included in column total.

Table 5

PERCENTAGE OF POSITIVE TESTS FOR DRUGS BY CHARGE, JUNE 1984 TO JANUARY 1985 AND CALENDAR YEAR 1986

<table>
<thead>
<tr>
<th>Offense Charged</th>
<th>Percentage Tested Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>June 1984/January 1985</td>
</tr>
<tr>
<td>Drug possession or sale</td>
<td>71.8</td>
</tr>
<tr>
<td>Robbery</td>
<td>52.6</td>
</tr>
<tr>
<td>Auto theft</td>
<td>47.8</td>
</tr>
<tr>
<td>Larceny</td>
<td>47.0</td>
</tr>
<tr>
<td>Burglary</td>
<td>41.6</td>
</tr>
<tr>
<td>Assault</td>
<td>33.3</td>
</tr>
<tr>
<td>Other offenses</td>
<td>43.1</td>
</tr>
<tr>
<td>Total for period</td>
<td>54.0</td>
</tr>
</tbody>
</table>

Source: Toborg Associates, personal communication.
The increase in the drug prevalence rates presented in Fig. 3, therefore, are not simply a function of an increase in the number of drug arrests. Part of this increase of drug use across all charges could be a result of changes in police tactics. The sweeping arrests made at open-air drug markets net individuals who are wanted for a variety of crimes. With law enforcement emphasizing drug enforcement, the drug-using thief has a higher chance of being arrested than the thief who abstains from drug use.

Urinalysis results by type of drug and charge are also available for 1986 (Table 6). These data show that there is little relationship between charge and PCP and cocaine use. Heroin use, however, appears to be more prevalent among those charged with property crimes, particularly larceny (which includes shoplifting). Heroin use is less common among those arrested for violent crimes such as homicide, rape, and assault.

Data from the National Institute of Justice's Drug Use Forecasting System (DUF) provide urinalysis information from seven cities including the District. Table 7 summarizes some of the 1987 DUF findings. DUF data are based on urinalysis results from a sample of male arrestees charged with felonies in January, February, and March 1988. Participation in the DUF system is voluntary, and by the end of 1987

Table 6

<table>
<thead>
<tr>
<th>Charge</th>
<th>Heroin</th>
<th>Cocaine</th>
<th>PCP</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homicide</td>
<td>8</td>
<td>24</td>
<td>24</td>
<td>41</td>
</tr>
<tr>
<td>Rape</td>
<td>5</td>
<td>20</td>
<td>36</td>
<td>47</td>
</tr>
<tr>
<td>Robbery</td>
<td>16</td>
<td>31</td>
<td>44</td>
<td>62</td>
</tr>
<tr>
<td>Assault</td>
<td>6</td>
<td>19</td>
<td>27</td>
<td>41</td>
</tr>
<tr>
<td>Burglary</td>
<td>15</td>
<td>27</td>
<td>27</td>
<td>52</td>
</tr>
<tr>
<td>Larceny</td>
<td>29</td>
<td>37</td>
<td>30</td>
<td>64</td>
</tr>
<tr>
<td>Motor vehicle theft</td>
<td>11</td>
<td>28</td>
<td>29</td>
<td>56</td>
</tr>
<tr>
<td>Arson</td>
<td>15</td>
<td>23</td>
<td>38</td>
<td>62</td>
</tr>
<tr>
<td>Drugs</td>
<td>26</td>
<td>53</td>
<td>49</td>
<td>82</td>
</tr>
<tr>
<td>Other</td>
<td>16</td>
<td>32</td>
<td>34</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>41</td>
<td>39</td>
<td>68</td>
</tr>
</tbody>
</table>

ten cities had agreed to participate. By the end of 1988, the project plans to have 25 cities testing a sample of arrestees every three months.

The DUF data support other indicators of a high prevalence of PCP in this area. Other sources have pointed to New Orleans as a city with a growing PCP problem (Garey, Daul, and Samuels, 1987) and the DUF data appear to confirm this. Polydrug use also appears to be much more common among District arrestees; DUF data show that male D.C. felony arrestees are almost twice as likely to have two drugs in their system as those in New York. Again, the DUF data represent a sample of arrests made by the District's Metropolitan Police Department, covering an area that may be more "urban" than some of the other cities participating in the DUF program.

TREATMENT INDICATORS

As discussed in Sec. IV, there are no comprehensive figures for the numbers of Washington area residents in treatment for drug abuse; and since the great majority of current drug users are not in treatment, we could not in any case use such data as an accurate guide to the size

Table 7

<table>
<thead>
<tr>
<th>City</th>
<th>Heroin</th>
<th>Cocaine</th>
<th>PCP</th>
<th>Two or More Drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
<td>16</td>
<td>59</td>
<td>33</td>
<td>35</td>
</tr>
<tr>
<td>New York</td>
<td>22</td>
<td>73</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>12</td>
<td>58</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Detroit</td>
<td>14</td>
<td>53</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Chicago</td>
<td>12</td>
<td>55</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>San Diego</td>
<td>22</td>
<td>41</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>New Orleans</td>
<td>4</td>
<td>32</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Portland</td>
<td>12</td>
<td>38</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Phoenix</td>
<td>8</td>
<td>29</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>


"Drugs other than marijuana."
of the drug-using population. Nonetheless, treatment population data can provide some useful insights.

Admissions statistics from the public programs operated by the Alcohol and Drug Abuse Services Administration (ADASA) in the District of Columbia and from public and private certified programs in Montgomery and Prince George's Counties\(^{12}\) all show dramatic increases. Since 1978, admissions to ADASA drug abuse programs have increased 164 percent, from 2,239 per year to 5,922 in 1986. In the Maryland suburbs, admissions to certified programs grew 85 percent during the same years, from 1,563 per year to 2,887. (See Table 20 below.) Public treatment programs operate at or near their full capacity all the time, and there are waiting lists for the next available slot. ADASA’s February 1987 census of treatment facilities reports that 97 percent of its drug abuse slots were occupied. ADASA administrators explained that the remaining 3 percent simply reflected the short period of time between a client’s leaving the program and the contacting of the next person on the waiting list. There are no comprehensive data on private treatment admissions and self-help groups such as Narcotics Anonymous, but such programs and groups have proliferated in recent years.

Treatment statistics confirm the impression derived from other indicators that PCP abuse is a much greater problem in this area (both the District and the suburbs) than it is in the nation as a whole. In ADASA programs in 1986, 27 percent of those admitted listed PCP as their primary drug of abuse. The comparable number for Montgomery and Prince George's residents admitted to programs in Maryland is 32 percent. These are both much higher than the national figure of 3 percent reporting PCP as a primary drug of abuse to all state-supported programs in the United States (see Table 23 below). This 3 percent figure represents 9,040 admissions; of those, 2,871 (32 percent) were admitted to treatment in either the District, Maryland, or Virginia.

**DRUG USE AMONG HIGH SCHOOL STUDENTS**

Drug use among high school students has been one of the consistently monitored indicators of prevalence in the United States. The University of Michigan's Institute for Social Research has conducted an annual survey of high school seniors since 1975, each time using consistent questions and sampling methods. The result is a series of cross-sectional samples of U.S. youths at similar points in their lives.

\(^{12}\)Comparable data from Northern Virginia were not available for this project.
This series provides one indicator of changing trends and attitudes regarding drug use for an age group that has a traditionally high incidence of substance use and abuse. More important for our purposes, the National High School Senior Survey provides a point of reference for comparison with samples drawn from the Washington metropolitan area.

Figure 4 presents trends in the lifetime, annual, and thirty-day prevalence of cocaine use among high school seniors in the United States. Different rationales exist for examining either 30-day or lifetime prevalence rates; but as the figure indicates, the lifetime prevalence rate provides a consistent tracking of both the annual and 30-day rates. A similar relationship in the national data exists for marijuana and PCP. The patterns that emerge, therefore, are the same for any time reference regarding a particular drug. Marijuana usage peaked in 1979 and has been declining since that time. Cocaine use has shown a more stable pattern, with a slight increase in recent years. PCP also appears to have reached its highest level of usage in 1979 (the first year seniors were asked specifically about that substance) and has been declining nationally since (Johnston et al., 1986).

Source: Johnston et al., 1986; NIDA, 1988

**Fig. 4—National High School Survey of Drug Use:**
Cocaine use 1975–1986
The parallelism of the three rates is important for our analysis. We would like to make comparisons of current use (30 day rates in the national data) between the national and local populations. However we have only directly comparable data for lifetime rates, since each survey asked about current drug use in a slightly different manner. Figure 4 suggests that differences in lifetime rates reflect differences in current rates as well.

**Surveys of Washington Area High School Students**

Questionnaires and sampling methods in Washington area surveys are not exactly the same as those used in the national survey, but some useful comparisons can be made.

Between 1973 and 1984 the Maryland Drug Abuse Administration conducted six surveys of drug use among high school students. All of the state's subdivisions were invited to participate, with 100 percent participation among students in selected grades in the smaller districts and a representative sample by local contacts in the larger subdivisions. Only public schools were included until 1984, when a separate pilot study of private schools was begun. Montgomery County chose to participate in the 1980, 1982, 1984, and 1986 surveys. Prince George's County participated in the 1982, 1984, and 1986 surveys. In 1986, 1,145 Montgomery County high school seniors completed the questionnaire and approximately 163 in Prince George's.13

The Maryland questionnaire did not follow the same format as the National High School Senior Survey regarding drug use. Instead of the "lifetime, year, 30-day" questions, the Maryland survey used a seven-point scale to measure use and frequency of use. For each substance, the respondent was asked to pick the answer that described his or her current use:

1. I have never used it.
2. I have used it or tried it, but I am not currently using it.
3. I currently use it less than once a month.
4. I currently use it about once a month.

---

13In 1984, the Prince George's sample size was 750 seniors. Funding for the 1986 survey was made available late in the academic year. As a result, at the time the survey was administered, some 12th graders "were unavailable" in both Montgomery and Prince George's counties (Maryland Department of Health and Mental Hygiene, 1987). Many of these unavailable seniors were those who had skipped school or class that day since they would be graduating within the week. If one assumes that students who would be likely not to attend classes in these circumstances are also more likely to have experimented with drugs, then the 1986 Maryland estimates are understated.
(5) I currently use it about once a week.
(6) I currently use it several times a week.
(7) I currently use it one or more times a day.

As a result of this type of format, only lifetime prevalence is directly comparable to the national survey.

Two surveys have been conducted in the District of Columbia public schools. The first was designed and administered by the Washington Urban League, Inc. in the spring of 1985. The Urban League attempted to compile a racially and geographically representative sample of District schools by a nonrandom selection process. Within each chosen school, a certain number of classes were chosen at random to participate. The questions on the Urban League survey regarding drug use followed the same format as those on the Maryland survey. Approximately 1,300 junior and senior high school students participated.

The 1986 Koba Associates, Inc. survey was administered in 21 D.C. junior and senior high schools with over 2,800 students participating. Of the 21 schools included in the study, six were selected because they previously had been targeted for intervention programs funded by ADASA. Classes were randomly selected within each school (Koba Associates, Inc. 1987). The Koba survey used a six-point scale in questions regarding drug use. For each substance, the individual was asked how often he had used it:

(1) Almost every day
(2) At least once each week
(3) At least once each month
(4) 1–2 times a year
(5) Tried but don’t use now
(6) Never tried once

Again, lifetime prevalence is the only statistic directly comparable to the national survey.

One survey was conducted in Northern Virginia, covering 493 Arlington junior and senior high school students in 1981. The survey was administered to classes “selected for their representativeness to the school as a whole according to race, sex, and grade” (Arlington Community Services Board, 1983). As in the other local surveys, direct comparisons can be made only regarding lifetime prevalence. A survey of drug use among Fairfax County students is scheduled for the fall of 1988.
Comparisons with National Student Surveys

Figures 5, 6, and 7 plot the available data for the Washington metropolitan area surveys relative to the national figures for lifetime prevalence of marijuana, cocaine, and PCP. In 1982 and 1984 in Prince George’s County, the incidence of marijuana use was higher than the national figure; for all other years and jurisdictions, the area’s high school seniors report a lower level of experience with marijuana.

In the surveys conducted before 1985, all estimates of lifetime prevalence of cocaine use were higher than the National Survey. In the District in 1985 and 1986 and in the Maryland counties in 1986, the prevalence of cocaine use was below the national average. These data do not cover the period since crack has been reported to be available in Washington.

The use of PCP among metropolitan high school students produces the most disturbing figures. In each case where Washington area seniors were asked about PCP use, the number of affirmative responses was considerably above the national figure. In four surveys, Prince George’s in 1982 and 1984 and the District in 1985 and 1986, the

```
% Percentage reporting use


National
Prince George's
Arlington
Montgomery
D.C.

Source: Arlington Community Services Board, 1983; Maryland Department of Health and Mental Hygiene, various years; Koba Associates, Inc., 1987; Urban League, Inc., personal communication; Johnston et al., 1987

Fig. 5—Lifetime prevalence for marijuana for high school seniors: National and metro area school districts
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Fig. 6—Lifetime prevalence for cocaine for high school seniors: National and metro area school districts

The lifetime prevalence of PCP use was three times that reported in the national survey.\textsuperscript{14}

Even allowing for the difficulty of comparing differently worded questions across surveys, and for possible differences in the degree of underreporting of drug use, Washington-area high-school students, both in the District and in the suburbs, are somewhat more likely than their counterparts in the nation as a whole to be using harder and more dangerous drugs. The apparent reduction of overall drug use by students in recent years, both in this area and nationwide, is due mostly to smaller numbers reporting use of marijuana. This trend, if it is real and sustained in the future, may be one of the first signs of a healthier culture among the new cohorts of youngsters exiting their

\textsuperscript{14}The reader should be cautioned about interpreting the high school data as estimators of drug use among 17–18 year olds. High school dropouts are more likely than those in school to be substance abusers (Johnston et al., 1986). Since the high school dropout rate may differ between jurisdictions, these estimates may be biased. For jurisdictions with higher dropout rates, the high school senior rate will be more of an underestimate of prevalence in the relevant age cohort. However, if the dropout rate is fairly constant, we can make some generalizations about time trends.
teenage years. The trend toward later initiation and lower rates of marijuana use will also shrink the “pool” of young marijuana users and drug experimenters from which hard drug users emerge, usually in late adolescence. But the size of this pool is still distressingly high.

ESTIMATES OF REGULAR COCAINE AND MARIJUANA USE IN THE GENERAL POPULATION

Unlike the national surveys of high-school students, the national surveys of drug use in the general household population have no counterparts specific to the Washington area. In this section we present an estimate of the number of users of marijuana and cocaine in the Washington area, using data from the National Household Survey, a survey sponsored by NIDA every two or three years. These are, at best, rough estimates, but we believe that they help develop a better understanding of the scale of the Washington drug problem.

The advantages of surveys over other sources of information is that they reveal something about the latent problem, the number of users who have not yet come to the attention of the criminal justice system or treatment programs. Household surveys have an obvious advantage

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*Fig. 7—Lifetime prevalence for PCP for high school seniors: National and metro area school districts*
over school-based surveys in that they reach older age groups and those members of the school-aged population who are not in school.

The major disadvantage of surveys—more generally of self-report data, which can include data from treatment intake and other records as well—is that people may not report their behavior accurately, with or without an intent to deceive. Several studies have compared self-reported recent drug or alcohol use (from respondents who did not know that they would then be asked to undergo a confirming test) with data from subsequent blood, urine, or breath tests. The two sources agree well, with estimates based on self-reports being higher than estimates from biological tests as often as lower (See Marquis et al., 1981 for a review).15 Most of the drug studies involved heroin users, but there is no particular reason to suppose they are more honest than cocaine or marijuana users.

Results from the most recent NIDA survey, carried out in 1985, show the percentages of respondents who report ever using cocaine and marijuana and the percentages who report using them in the last 30 days before the interview. These data are disaggregated by age group for white non-Hispanics, blacks, and Hispanics. Whites and blacks under age 25 report marijuana use at about the same rates, though usage among blacks is higher in the older age groups (Table 8). Blacks report cocaine use at about the same rates as white non-Hispanics. Hispanics report less use of either drug than non-Hispanics. Both drugs are most commonly used by people aged 18 to 25 years.

To produce rough estimates of the size of the drug using population in this area, we obtained data from a 1980 Census tape on the number of people in each age and category in the District and the Maryland and Virginia suburbs. If we assume that area residents in particular age and race categories use drugs at the same rates that NIDA found in the nationwide sample, then we can multiply the local population figures by the percentages given in Table 8 to get the estimates shown in Tables 9 and 10 for the numbers of local marijuana and cocaine users.

The NIDA national estimates, and our local estimates based on them, pertain to any use in a recent 30-day period; we cannot directly estimate the number of people who have a “drug abuse problem,” even if we had a precise operational definition of what we mean by a problem. Both drugs are illegal, so any user has a legal problem by definition if nothing else. Many people who happen to have used the drugs

15This does not contradict Carver’s finding that arrestees grossly underestimate their recent drug use, because both the samples and the interview situation differ greatly between the studies reviewed by Marquis et al. and the arrestees studied by Carver.

16For less commonly used drugs, the percentages are not broken down by age and racial or ethnic group.
Table 8
PERCENTAGE OF RESPONDENTS REPORTING MARIJUANA AND COCAINE USE IN THE PRECEDING 30 DAYS BY RACE AND AGE, U.S. HOUSEHOLD POPULATION, 1985

<table>
<thead>
<tr>
<th>Race</th>
<th>Age Group</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12-17</td>
<td>18-25</td>
<td>26-34</td>
<td>35+</td>
<td></td>
</tr>
<tr>
<td>Marijuana</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>13.2</td>
<td>22.2</td>
<td>16.9</td>
<td>1.8</td>
<td>9.1</td>
</tr>
<tr>
<td>Black</td>
<td>8.2</td>
<td>24.1</td>
<td>22.3</td>
<td>5.8</td>
<td>13.2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>9.9</td>
<td>14.8</td>
<td>10.1</td>
<td>1.9</td>
<td>7.4</td>
</tr>
<tr>
<td>Total</td>
<td>12.2</td>
<td>21.7</td>
<td>16.8</td>
<td>2.2</td>
<td>9.4</td>
</tr>
<tr>
<td>Cocaine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>1.8</td>
<td>8.0</td>
<td>6.6</td>
<td>0.4</td>
<td>3.0</td>
</tr>
<tr>
<td>Black</td>
<td>1.1</td>
<td>6.5</td>
<td>5.6</td>
<td>1.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2.7</td>
<td>6.4</td>
<td>2.7</td>
<td>0.2</td>
<td>2.4</td>
</tr>
<tr>
<td>Total</td>
<td>1.7</td>
<td>7.6</td>
<td>6.1</td>
<td>0.5</td>
<td>2.6</td>
</tr>
</tbody>
</table>


in the last month may be very infrequent users, or even first-time users who will never try the drugs again. Some people whose drug use is substantially affecting their lives may happen not to have used the drugs in the last month: Off-and-on abstinence has been documented for opiate abusers and may be more common for marijuana users. It is easier to objectively define a behavior (use in the last 30 days) than a mental health condition (substance abuse). For our purpose the best that can be said is that the former is an operational measure of the latter.

17First time users are likely to be a modest share of the total numbers reporting use within the last 30 days, if use is accurately reported, unless the number of users is expanding very rapidly.

18The National Institute of Mental Health is sponsoring a large multi-center Ecological Catchment Area Study to estimate the prevalence of mental diseases and conditions in the general population in six parts of the country, using standard diagnostic criteria (the DSM-III). Unfortunately Washington is not in one of the six (the nearest is Baltimore). Substance abuse is the most common mental disorder. About 5 percent of the household population was considered to have a diagnosable drug abuse problem—roughly the same proportion revealed by the NIDA household surveys to be recent cocaine users.
Table 9
ESTIMATES OF THE NUMBER OF CURRENT MARIJUANA USERS IN THE WASHINGTON METROPOLITAN AREA (Thousands)

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Age 12-17</th>
<th>18-25</th>
<th>26-34</th>
<th>35+</th>
<th>Total Users Age 12+</th>
<th>Total Population Age 12+ (1980 Census)</th>
</tr>
</thead>
<tbody>
<tr>
<td>District</td>
<td>5</td>
<td>26</td>
<td>22</td>
<td>12</td>
<td>65</td>
<td>551</td>
</tr>
<tr>
<td>Marylanda</td>
<td>16</td>
<td>43</td>
<td>38</td>
<td>12</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>Virginib</td>
<td>14</td>
<td>33</td>
<td>35</td>
<td>9</td>
<td>91</td>
<td>898</td>
</tr>
<tr>
<td>Washington Metropolitan area</td>
<td>35</td>
<td>102</td>
<td>95</td>
<td>33</td>
<td>265</td>
<td>2483</td>
</tr>
</tbody>
</table>

SOURCE: NIDA, 1985c (self-reported prevalence of use in last 30 days, by age and race).

*a*Montgomery and Prince George's counties.

*b*Arlington, Fairfax, Loudon, and Prince William counties; Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park cities.

Assuming that the self-reported data in the NIDA surveys are sufficiently accurate and that Washington area residents of every race and age group use drugs with the same frequency as their counterparts in the nation as a whole, then the numbers of current marijuana users over the age of 12 would be close to what is shown in Table 9. We expect that about a quarter million, or a tenth of the area's adult population, are current marijuana users. Table 10 shows similar estimates, again based on the national survey data for each race and age group, for cocaine use. About 80,000 adults, just over 3 percent of the area's adult population, would be current cocaine users. In each case, the majority of the area's drug using population, like the majority of the area's adult population, lives in the suburban jurisdictions. Most of the cocaine users are probably also marijuana users, so the two estimates should not be added.

Far smaller percentages of the NIDA respondents reported use of drugs other than marijuana or cocaine in the past 30 days—less than 1 percent, for example, for both heroin and PCP. We do not attempt to estimate the size of the local population using heroin or PCP by this same method. A household survey of the type that produced the NIDA estimates would not reach many heroin addicts. For PCP, we have

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NIDA's surveys do not include respondents under age 12 for logistical reasons, although there are reports of drug use among younger children.
already presented strong evidence from other sources that usage in the Washington area is a great deal higher than elsewhere outside California. We assume that an estimate of the number of PCP users would be in the tens of thousands; we do not know what proportion of PCP users is already captured by the calculations of marijuana and cocaine users.

These estimates of local drug usage are one attempt to provide some scale for the relative sizes of the populations of regular users, clients of treatment programs, and arrestees. The estimated number of current drug users, although imprecise, is far larger than the numbers of people who either get treatment or are arrested (and thus show up in administrative statistics) each year. Treatment statistics are discussed in detail below. Our statistics are incomplete, but the total number of area residents in treatment of any sort, for any drugs, at present is not likely to be greater than 10,000.

The vast majority of current drug users are not in treatment, nor is there any conceivable expansion of public and private funding that would increase the number of treatment slots ten- or twenty-fold to equal the numbers of current drug users. Vigorous law enforcement might incapacitate some heavy users and deter a large number of casual users, but local criminal justice systems are very hard pressed to handle the drug offenders they are getting now, let alone the number they would get if a serious attempt were made to arrest all users of illegal drugs in the area. This is not to argue against expansion of either law enforcement or treatment systems, but no one should expect them to be able to eliminate, or perhaps even to manage, such a pervasive social problem by themselves.

CONCLUSIONS

Each of the data sources described above is only a partial indicator of the patterns of drug use and of the scale of the drug problem in the Washington area. However, there are some striking consistencies among the figures that support important conclusions.

From the DAWN data we can draw two conclusions. First, the Washington area problem, for heroin, PCP, and cocaine, is worse than that of most comparable metropolitan areas; for PCP Washington

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20 This does not mean that a quarter million adults in this area "need" or would benefit from drug treatment. Not all would have the requisite motivation for such programs to do any good, some would need mental health services different from standard drug abuse treatment programs, and others may be able to quit with the support of Alcoholics Anonymous, Narcotics Anonymous, or family, friends, and co-workers.
stands alone. Second, the problem is not concentrated in the District of Columbia. Other parts of the metropolitan area also are dealing with considerable drug problems, certainly when compared with other cities.

From the school surveys we get a more complicated pattern. Marijuana prevalence is lower in the area surveys than in the national surveys, but the rates for the much more serious drug PCP are sharply higher. The trends revealed in two jurisdictions are also complicated; for Montgomery County the trends are generally downward, for Prince George's County they have fluctuated up and down. From the little trend data available from the local high school surveys, fewer individuals are entering the “pool” of drug users and experimenters. This does not mean that the total number of drug users in the metropolitan area has declined because we are unable to estimate the number of individuals who are leaving this pool. Should this decreased entry be a long and sustained trend, we could eventually expect to see a decline in the number of users.
The treatment figures show a growing demand for these services; again, the area's distinctive PCP problem is prominent since almost one-quarter of the admissions indicate PCP is their primary substance of abuse.

Finally the urinalysis data provide perhaps the most alarming indicator of increasing use, albeit in a narrower population (arrestees only). Most persons arrested show signs of recent use of serious drugs. This is also the indicator that permits the closest monitoring of a high risk population, namely young, low-income males. The sharp increase over the last four three years in the percentage showing positive for cocaine, accompanied by little decline in the percentage positive for heroin and PCP, suggests that the drug problem of the Washington area is certainly not decreasing. If early criminal activity is a major predictor of continued commitment to criminal pursuits, then this increase, particularly focused among the young, bodes ill for future crime rates in the area.
III. ENFORCEMENT

At both the national and local levels of government, enforcement of drug prohibition laws has been the dominant and most visible response to the problem of drug abuse. Federal and local police agencies carry out different kinds of enforcement. Much of the federal enforcement effort is aimed at drugs before they enter the U.S. distribution system. For example, almost half of the federal expenditures go to the interdiction program, which seizes drugs and couriers as they bring the drugs from the source country to the United States. The Drug Enforcement Administration (DEA), FBI, and IRS have active domestic drug enforcement programs aimed at the higher levels of the domestic distribution system; the vast majority of those arrested by the federal agencies are associated with enterprises that distribute at least kilo quantities of cocaine, ounces of heroin, or hundreds of kilos of marijuana. Most state and local enforcement resources are devoted to organizations and individuals at lower levels of the market, closer to the point of final sale.

Drug enforcement has at least three distinct goals. First, it aims to make drugs more expensive by increasing the risks and costs of being a drug dealer; by raising drug prices, this should lead to reduced drug use by experienced users and to fewer experimental users becoming regular users. Second, it seeks to make more difficult the searches of dealers for customers and vice versa; effective enforcement will make both sides wary of revealing themselves as seeking to buy or sell drugs. Third, enforcement symbolizes community disapproval of illicit drug use and is at least partly a deterrent. Besides these drug consumption goals, drug law enforcement can accomplish other important goals. For example, it can make neighborhoods safer by eliminating street markets and reducing crime rates by either driving addicted users into treatment or reducing the number of occasional users who acquire expensive drug habits.

Federal enforcement results solely in higher drug prices since it occurs far from the retail market. Uniquely, local enforcement disrupts the market. If retail dealers must be concerned that a buyer may be a police informant or that a transaction is likely to be under surveillance by police agents, they will become more reluctant to sell to strangers and will make themselves more difficult to find. Local enforcement
will make it correspondingly more difficult for users, particularly new users, to find a source.\footnote{See Moore, 1977 for a full explication of this point. A more recent analysis of experience with street-level crackdowns is provided by Kleiman, 1987.}

This effect will be of different importance for different drugs. Most heroin is sold in street transactions. The erratic earnings and lifestyles of users, their constant interaction with the police (through income generating crime), and the urgency of their needs for the drug combine to ensure that the user is forced to buy drugs frequently and in some location fairly close to the street. Affluent cocaine users (who may constitute a significant share of the market for that drug) are likely to buy infrequently\footnote{An ounce purchase, not uncommon for regular users, might be enough for one month’s use, although this varies according to both frequency of use and mode of ingestion.} and to do so in settings that are not readily subject to surveillance (e.g., their own home or office). Moreover, it is difficult for law enforcement to make dealers in such markets very wary, since the customers are not generally at high risk from police. Clearly, it is not only drugs that differ in the extent to which they are subject to police monitoring, it is also user groups.

Public attention to drug enforcement has until recently been dominated by periodic, single seizures of drugs with extraordinary estimated street values. Newspapers and television news programs frequently report the seizure of a thousand pounds of cocaine at the Miami Airport or the roundup of an organization responsible for bringing in some hundreds of kilograms of heroin. More recently, there has been an interest in the revival of sustained low level enforcement of illicit drug laws in the metropolitan area. Two highly publicized efforts, “Operation Clean-Sweep” in the District and Montgomery County’s “jump-out squads,” exemplify the increased emphasis being placed on the enforcement of drug laws by many local law enforcement agencies in the area. Los Angeles, New York, and other cities have also greatly intensified street enforcement.

Operation Clean-Sweep is the name of an effort to intensify enforcement against street drug markets in the District; it has led to numerous arrests for non-drug offenses as well, because it concentrates on particular areas as well as particular transactions.\footnote{D.C. Police Chief Maurice Turner stated that 53 percent of the Clean Sweep arrests to date (April 20, 1988) were for drug violations.} The “jump-out squads” were created by the Montgomery County Police Department to enforce the drugs laws in an area that had become notorious for the openness of drug transactions. Sales were made from and to cars; the
name of the squads came from the fact that officers “jumped out” of their own cars to catch the participants after observing a transaction.¹

Drug Enforcement Expenditures

Throughout the 1980s the federal government rapidly expanded its expenditures on drug enforcement, while programs for treatment and prevention, at least until 1987, received declining funds. In FY 1981, federal dollars for enforcement totaled $860 million, while $371 million was spent on treatment and prevention. In fiscal year 1986, the enforcement budget grew to $1,878 million, while only $392 million was spent on treatment and prevention (National Drug Enforcement Policy Board, 1987).

A recent study of state and local drug enforcement expenditures confirmed the dominance of enforcement in drug policy expenditures (Godshaw, Koppel, and Pancoast, 1987). The report estimated that drug enforcement expenditures by police departments (state and local) amounted to $4.9 billion in 1986. The state and local figure (in contrast to the federal estimates) does not include expenditures on the back end of the criminal justice system, such as prosecutors, courts and corrections; no estimates are available for these elements of the state and local drug enforcement effort, but they undoubtedly constitute a substantial addition to the $4.9 billion.

The only available data on state and local government expenditures on drug treatment and prevention programs give the sum of these and alcohol programs (Butynski et al., 1987). In FY 1986, drug and alcohol treatment and prevention expenditures were estimated to total $1.6 billion, including federal block grant money. The figures on numbers of patients in treatment for the two programs suggest that the larger part of this money goes to alcohol rather than drug programs. The total public sector expenditure on drug treatment and prevention in FY 1986 may then have been less than $600 million, whereas the enforcement total was approximately ten times that.⁵

One indicator of the continued growth of local drug enforcement throughout the nation is the rising number of state and local arrests for drug law violations. The Uniform Crime Reports estimated total drug arrests of 560,000; in 1986 the total figure was 824,000, an increase of almost 50 percent in five years. During the same period,

⁵A Montgomery County government task force estimated that drug enforcement expenditures constituted 57 percent of all county government and school system drug-related expenditures. This may represent a balance more typical of affluent suburban areas.
the estimated number of arrests for distributing heroin or cocaine rose from over 23,500 in 1981 to 105,000 in 1986.

The remainder of this section describes the increased emphasis on drug enforcement in the Washington area and its success in achieving various goals; drug arrest statistics and the differences among the geographic areas; changes in the numbers of prosecutions and convictions for felony drug violations in the District; how the increased enforcement effort has affected the corrections component of the criminal justice system; the effects of the stepped-up drug enforcement in the District, particularly as it has affected drug use, crime, and order maintenance; and the sources and consequences of differences between the District and suburbs.

ARRESTS

Arrest statistics provide the starting point for any description of drug enforcement in the metropolitan area. Table 11 presents total drug arrests for the area broken down by political jurisdiction: the District, Northern Virginia, and the Maryland suburbs. The table shows that the District has come to dominate drug arrests in the area. Drug arrests as a share of all arrests made by each jurisdiction are also presented.

Table 11
DRUG ARRESTS IN THE WASHINGTON METROPOLITAN AREA, 1981 TO 1986

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<thead>
<tr>
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<tr>
<td>District of Columbia</td>
<td>6408</td>
<td>6871</td>
<td>8061</td>
<td>8456</td>
<td>9279</td>
<td>13280</td>
</tr>
<tr>
<td>(% of all arrests)</td>
<td>(16)</td>
<td>(17)</td>
<td>(19)</td>
<td>(20)</td>
<td>(20)</td>
<td>(23)</td>
</tr>
<tr>
<td>(% of area drug arrests)</td>
<td>(56)</td>
<td>(56)</td>
<td>(61)</td>
<td>(61)</td>
<td>(61)</td>
<td>(68)</td>
</tr>
<tr>
<td>Northern Virginia</td>
<td>2971</td>
<td>2991</td>
<td>2820</td>
<td>2924</td>
<td>2927</td>
<td>2524</td>
</tr>
<tr>
<td>(% of all arrests)</td>
<td>( 6)</td>
<td>( 5)</td>
<td>( 6)</td>
<td>( 6)</td>
<td>( 6)</td>
<td>( 5)</td>
</tr>
<tr>
<td>(% of area drug arrests)</td>
<td>(26)</td>
<td>(24)</td>
<td>(21)</td>
<td>(21)</td>
<td>(19)</td>
<td>(13)</td>
</tr>
<tr>
<td>Maryland suburbs</td>
<td>2099</td>
<td>2470</td>
<td>2259</td>
<td>2574</td>
<td>3085</td>
<td>3698</td>
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<tr>
<td>(% of all arrests)</td>
<td>( 5)</td>
<td>( 5)</td>
<td>( 5)</td>
<td>( 6)</td>
<td>( 7)</td>
<td>( 8)</td>
</tr>
<tr>
<td>(% of area drug arrests)</td>
<td>(18)</td>
<td>(20)</td>
<td>(17)</td>
<td>(18)</td>
<td>(20)</td>
<td>(19)</td>
</tr>
<tr>
<td>Total</td>
<td>11478</td>
<td>12332</td>
<td>13140</td>
<td>13554</td>
<td>15291</td>
<td>18502</td>
</tr>
<tr>
<td>(% of all arrests)</td>
<td>( 8)</td>
<td>( 9)</td>
<td>( 9)</td>
<td>(10)</td>
<td>(11)</td>
<td>(13)</td>
</tr>
</tbody>
</table>

SOURCE: District of Columbia Office of Criminal Justice Plans and Analysis, 1986a and 1986b; Virginia State Police various years; Maryland State Police, various years.
In 1981, D.C. accounted for 56 percent of area drug arrests; by 1986 that figure had risen to 68 percent. Even before the start of Operation Clean-Sweep, which began August 31, 1986, the D.C. Metropolitan Police Department was on a pace to arrest 11,300 individuals for the year, a figure that would still account for almost two-thirds of the area's drug arrests. On a per capita basis, the difference between the District and the suburbs is dramatic. With 1986 arrests and population estimates as a basis, the District arrested 21.1 individuals per 1,000 residents compared with 2.8 for the Maryland suburbs and 2.1 for Northern Virginia.

These differences in arrest totals in part reflect differences in the resource commitment by the different departments. For example, the Montgomery County Police Department had 22 officers (of a total force of 790 full-time officers) assigned specifically to drug enforcement, and an estimated FY87 budget of $1.9 million; Fairfax County Police had 12 full-time officers (out of 829 officers) and an approximate narcotics enforcement budget of $1.0 million for FY87. The District of Columbia, in contrast, employs 313 officers (out of 3,877) solely devoted to drug enforcement, and a corresponding FY87 budget of $12.9 million. The D.C. figures do not include officers who work overtime in Operation Clean-Sweep activities; these added an estimated $5.6 million during the program's first ten months. The District's drug arrests constituted 28 percent of all its arrests in 1986.

The District is not only arresting large numbers of individuals for drug offenses, but many of those arrests are for the more serious charge of sale and/or manufacture of drugs rather than simple

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6Not all drug arrests are the result of specialized drug enforcement efforts. Indeed, the bulk of marijuana possession arrests (which account for 36 percent of all drug arrests nationally) are probably made by patrol officers, incidental to other enforcement activity. Godshalk, Koppell, and Pancoast (1987) found that over half of state and local drug enforcement expenditures were for nonspecialized police units rather than specialized drug enforcement ($2,645 million for nonspecialized units and $1,711 million for vice squads and narcotics officers).

7Personal communication. In Congressional testimony in April 1985, representatives from the various police departments reported the following numbers of narcotics officers: D.C., 281 officers; Fairfax County, 12 officers; Montgomery County, 9 officers; and Prince George's County, 10 officers.

8The estimated costs for drug enforcement by any of the jurisdictions apparently do not include expenses other than salary and benefit costs.

9Clean-Sweep originally was built around the activities of 100 officers who volunteered to work up to 16 hours overtime per two week period; these officers carried out supplementary enforcement around the open street markets. Since that beginning, the department has organized all drug enforcement efforts under the "Clean-Sweep" umbrella (these include the Morals Division's Narcotics Branch, the Narcotics Task Force, and the District Vice Squads). Specific operations as well as targeted campaigns can now be coordinated through the Assistant Chief's office.
possession. The latter arrests may include some dealers caught with small quantities of drugs but without evidence of intent to sell. Many of those caught on possession are likely to be users rather than sellers, and they are generally charged with misdemeanor offenses rather than felonies. Table 12 presents figures for sale and manufacture arrests.\textsuperscript{10}

Although drug arrests in the Maryland suburbs have increased 76 percent over the period 1981 to 1986, compared with an increase of 107 percent for the District, the change in the composition of the arrests in the two jurisdictions is quite different. Whereas the District was making barely twice as many sale and manufacture arrests as Montgomery County in 1981, by 1986 it was making 26 times as many of those arrests. For Northern Virginia in the same period, there has been a slight decline in the total number of arrests and a substantial decline in the number of sale and manufacture arrests.

Since 1983, about 40 percent of the District drug arrests have been for sale and manufacture of drugs; in the two years before that these arrests accounted for a much smaller share of total drug arrests.

Table 12

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>District</td>
<td>408</td>
<td>1924</td>
<td>3039</td>
<td>3727</td>
<td>3435</td>
<td>5274</td>
</tr>
<tr>
<td>(% of all drug</td>
<td>(6)</td>
<td>(28)</td>
<td>(38)</td>
<td>(44)</td>
<td>(37)</td>
<td>(40)</td>
</tr>
<tr>
<td>arrests)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northern Virginia</td>
<td>715</td>
<td>688</td>
<td>626</td>
<td>566</td>
<td>591</td>
<td>534</td>
</tr>
<tr>
<td>(% of all)</td>
<td>(24)</td>
<td>(23)</td>
<td>(22)</td>
<td>(19)</td>
<td>(20)</td>
<td>(21)</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>215</td>
<td>224</td>
<td>153</td>
<td>158</td>
<td>162</td>
<td>203</td>
</tr>
<tr>
<td>(% of all)</td>
<td>(28)</td>
<td>(26)</td>
<td>(19)</td>
<td>(20)</td>
<td>(18)</td>
<td>(18)</td>
</tr>
</tbody>
</table>

\textsuperscript{10}This is the division used by the Federal Bureau of Investigation's Uniform Crime Report (UCR), the standard source of data on arrests. The UCR forms, used across the nation by almost all police departments, provide a consistent measure of arrests that can be compared across time and jurisdictions. The forms have become somewhat dated. For example no distinction is made between opiates (including heroin) and cocaine, a distinction that has recently become of considerable importance. Few agencies are able to provide breakdowns on any basis other than that given in the UCR system.
Montgomery County, the only Maryland jurisdiction for which we were able to obtain the relevant data, shows the opposite pattern; the share of drug arrests accounted for by the more serious charges has declined since 1981. In Northern Virginia the percentage has fallen somewhat. In both suburban areas, sale and manufacture drug arrests have accounted for about 20 percent of all drug arrests.\footnote{In 1986, arrests for sale and manufacture of drugs in the District almost outnumbered the total number of drug arrests (including simple possession) for the surrounding jurisdictions.}

It has been suggested that the District, together with the inner area of Prince George's County, serves as the market location for the metropolitan area drug traffic and that the greater intensity of the District's drug enforcement effort is partly a response to that. That would imply the District drug arrests should include large numbers of non-District residents, representing persons who came to the city for drug transactions.

After the first six months of Operation Clean-Sweep, of 12,444 individuals arrested on all charges in the District, 9,958 were residents of the District, 1,769 residents of Maryland, 521 from Virginia, and the remaining 196 resided elsewhere.\footnote{\textit{Washington Post}, March 31, 1987.} We cannot say what proportion of these residents from different areas were arrested and charged with a drug offense. Given that over half the Clean-Sweep arrests were on drug charges, we assume that a substantial number of the drug arrests were not residents of the District.

Drug enforcement in the metropolitan area is now primarily carried out by the District; as a consequence we direct most of our analysis of post-arrest events to the District. In the final section we consider the implications and sources of the differences in District and suburban arrest activities.

THE COURTS

Unfortunately, there is no uniform data collection process for prosecutors and the state courts comparable to the UCR for police agencies. As a result, we have been unable to collect consistent data across jurisdictions to present a complete picture of the metropolitan area. Instead we have statistics from the District and anecdotal information from Montgomery County regarding prosecutions and convictions. From Northern Virginia we have no data at all.

Table 13 presents the number of felony prosecutions and convictions in the District from 1981 to 1986, separating out those for drug
offenses. If one looks at the both the absolute numbers of drug felony prosecutions and their share of all felony prosecutions, it is clear that drug arrests are driving the expansion of the criminal justice system in D.C. The fact that over half of all felony prosecutions and convictions in the District in 1986 were for possession and distribution of illicit drugs, compared with a little more than one eighth in 1981, is particularly striking.

District police have emphasized making “good” arrests—those likely to lead to prosecution and conviction, rather than being rejected by the prosecutor. This claim of careful preparation of arrests is reflected in the high ratio of felony drug indictments to sale and manufacture arrests,\(^\text{13}\) 3309 felony convictions compared with 5274 sale and manufacture arrests in the same year. Note also the high ratio of felony drug convictions to felony drug indictments.\(^\text{14}\)

In Montgomery County in the first six months of 1987, 222 cases, or 23 percent of the state prosecutor’s total, were for violation of illicit drug laws. This figure does not include those cases prosecuted in

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\(^{13}\)We cannot determine precisely the percentage of felony drug arrests that result in felony drug indictments. Some persons are arrested while out on bail for a prior arrest on felony drug charges, and the two charges may be combined into a single case. There also is a lag between arrests and trials; some 1984 arrests do not lead to indictments till 1986 etc.

\(^{14}\)Boland et al. (1983) found that in the District approximately 50 percent of those arrests referred to prosecutors by the police department as felony charges resulted in convictions. Not all felony arrests result in referrals to the prosecutor’s office.
Maryland's District Court; however, it does encompass the bulk of the more serious drug offenses in the county. Anecdotal information from the Montgomery County State Attorney's office suggests that the above figure is an increase in the number and share of drug cases being handled by the prosecutors, although we do not have specific data to confirm this.

The increase in the percentage of Montgomery County drug cases being prosecuted can be attributed to policy changes in the State Attorney's Office. In November 1986, a Special Montgomery County Grand Jury reported its findings after a six month investigation of illicit drugs in the county. The report called for more aggressive prosecution of drug offenders and longer jail sentences for those convicted. In response to the report, the State Attorney's office became less willing to accept simple probationary sentences. The prosecutor's office has also established a "drug team" that deals solely with drug cases.

Prosecutors then, are cooperating with police in their efforts to intensify enforcement against drug dealers. Drug enforcement, however, is likely to be effective only if those convicted of serious charges receive severe sentences.

SENTENCING AND CORRECTIONS

The increase in the number of drug arrests in the District has substantially increased the flow of cases to the D.C. Department of Corrections, which was able to provide data on the number of persons committed to prison or jail on drug offenses as well as the maximum and minimum sentences imposed on drug commitments for the period 1981 to 1986, and the actual time served for those discharged following a sentence. These averages are plotted in Fig. 8. The average maximum sentence for those convicted in the District has almost doubled to over 80 months. The average time served has increased 83 percent to over 21 months.  

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16We recognize that there are penalties other than sentences of incarceration. For example, considerable effort has been devoted in the federal system to asset seizure programs; DEA reports that $591 million in assets were seized by or forfeited to DEA, FBI, or Customs officials in 1986. The seizure of illicit drugs has a deterrent effect as well. Record of a criminal conviction can serve as a deterrent, at least for some classes of offenders. However in the context of enforcement against retail drug markets we believe that the dominant effect comes from incarceration.

17The average time served of those leaving the corrections system in 1986 should not be compared to the maximum or minimum sentences received in the same year, because
Figure 9 shows the number of new commitments to D.C. correctional facilities for the years 1981 to 1986. Although the growth in the absolute number of commitments for drug offenses is impressive, the increase in their relative share is even more striking. In 1981, 12 percent of all new commitments were for individuals convicted on drug charges. By 1986, the share of new drug commitments had risen to 37 percent; although not as great as the increase in the share of felony prosecutions, it is still very large.

Table 14 provides profiles of the D.C. Corrections' population at two different points: August 1986 and June 1987. This population represents persons incarcerated in the Department's detention facility and the nine sentencing institutions. The table exhibits a graphic change in the D.C. prison population; within a ten-month period, the number of inmates held for drug violations grew by 62 percent and accounted for 96 percent of the growth in the population of the corrections system.

The releases of 1986 come mostly from commitments made in 1985 and earlier years. However, even taking account of such lags, we see that the average time served is a great deal closer to the minimum average sentence than to the maximum.
In addition to those incarcerated in D.C. facilities, many are sentenced to serve time in federal institutions on District charges. In April 1987, 650 inmates in federal penitentiaries had been convicted of violating a District illicit drug statute.\footnote{These data were provided by the U.S. Bureau of Prisons.}

Thus in the fall of 1986, one out of every four prisoners in D.C. correctional facilities was incarcerated on a drug conviction. By the summer of 1987, more than one out of every three prisoners had been convicted on drug charges. Even more interesting, out of a total population growth of 1,008 inmates, the number of individuals convicted of selling drugs increased by 972. This rise in the inmate population gains in importance when one considers that the Corrections Department is currently under a court-imposed inmate ceiling.

In attempting to comply with that court order, D.C. Corrections were forced to give early release to 719 inmates between July and October of 1987. Because the Department sought to release those convicted of nonviolent crimes, of the total released early, 360 (or 50
Table 14

DISTRICT OF COLUMBIA'S CORRECTION POPULATION,
TOTAL AND DRUG OFFENSES, AUGUST
1986 AND JUNE 1987

<table>
<thead>
<tr>
<th></th>
<th>August 1986</th>
<th>June 1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>6204</td>
<td>7216</td>
</tr>
<tr>
<td>Drug sales (percent of total)</td>
<td>1153  (18.6)</td>
<td>2027  (28.1)</td>
</tr>
<tr>
<td>Drug possession (percent of total)</td>
<td>418    (6.7)</td>
<td>516    (7.2)</td>
</tr>
</tbody>
</table>


percent) were convicted on drug charges. These 360 individuals were released on the average 19 days earlier than they would have been had the releases not been mandated by the courts. Applying the 1986 average length of stay for drug offenders (21 months), the 19 days accounts for 3 percent of that time served. The early release system is not greatly affecting the average period of incarceration for drug dealers.

Some understanding of the severity of sentencing of drug offenders can be reached by comparison of the 1986 drug felony conviction figure (3,309) with the number of drug commitments (4,333). (The higher number of commitments is probably accounted for by some 1985 felony convictions entering the corrections system only in 1986 and some misdemeanor convictions resulting in sentences of incarceration.)

It has been suggested that suburban sentences are less severe.\(^1\) Unfortunately, we have very little data on the sentences received for violation of controlled substances laws in the suburban jurisdictions. The Maryland State Attorney’s Office in Montgomery County has data recording requirements that collect important information regarding prosecution, conviction, and sentencing. No report is distributed externally, and we were unable to obtain specific database runs for our purposes.

The only data we have on suburban sentencing comes from the Parents’ Association to Neutralize Drug and Alcohol Abuse (PANDAA), a community organization based in Fairfax County. The PANDAA group

has monitored drug trials at the Fairfax County Circuit Courts since late
1982. PANDAA volunteers attend the sentencing hearings of individuals
convicted of violating illicit drug statutes and record the information.
Because the volunteers do not attend all of the drug sentencing trials,
their sentence estimates must be considered approximate, but they do
attend most of the hearings (in some periods, over 90 percent).

Table 15 presents the results from the PANDAA "court watch"
efforts for five time periods. These data show three interesting pat-
tterns. First, the number of cocaine convictions appears to have risen
rapidly, apparently tripling over a four year period. Second, average
sentence severity does not appear to be increasing and is lower than for
the District. Third, PCP has been a significant source of prosecutions
throughout the period.

Table 15
AVERAGE JAIL SENTENCE IN MONTHS FOR
INDIVIDUALS CONVICTED OF SELLING
DRUGS IN FAIRFAX COUNTY
CIRCUIT COURT

<table>
<thead>
<tr>
<th></th>
<th>11/82-</th>
<th>6/84-</th>
<th>1/85-</th>
<th>1/86-</th>
<th>7/86-</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>11/83</td>
<td>12/84</td>
<td>12/85</td>
<td>6/86</td>
<td>6/87</td>
</tr>
</tbody>
</table>

Heroin
Avg. sentence | 82 | 0 | na | na | na |
No. of cases   | 5  | 1 | 0  | 0  | 0   |

Cocaine
Avg. sentence | 20 | 7  | 19  | 12  | 13  |
No. of cases   | 35 | 34 | 74  | 66  | 111 |

PCP
Avg. sentence | 22 | 27  | 35  | 20  | 36  |
No. of cases   | 19 | 26  | 27  | 12  | 33  |

Marijuana
Avg. sentence | 13 | 2  | 4  | <1  | 13  |
No. of cases   | 26 | 22 | 36  | 11  | 21  |

SOURCE: Parents' Association to Neutralize Drug
and Alcohol Abuse, personal communication.
na = not available.
JUVENILES

Patterns of juvenile drug enforcement generally follow those regarding adults previously discussed but with some important distinctions. Table 16 presents available juvenile drug arrest data for the area jurisdictions. The District now dominates juvenile drug enforcement to an even greater extent than adult drug enforcement. In 1981, Northern Virginia and Montgomery County arrested twice as many juveniles for drug offenses as did the District. By 1986, that situation was reversed; the District was making three times the number of juvenile drug arrests. With respect to the more serious charge of sale and manufacture of drugs, the District made over seven times the number of arrests made in Montgomery County and Northern Virginia.

The District juvenile arrest figures indicate that the drug crackdown has not ignored those under the age of 18. Juvenile drug arrests have increased dramatically since 1981 in both absolute numbers and the relative share of all arrests. In 1981, drug charges accounted for 10 percent of all juvenile arrests; by 1986, almost one-third of all juvenile arrests were for drugs. During the first 11 months of Operation Clean-Sweep, almost 1,400 juveniles were arrested on drug charges with 38 percent aged 15 years or younger.20

Table 16

JUVENILE SALE AND POSSESSION DRUG ARRESTS IN THE WASHINGTON METROPOLITAN AREA, 1981–1986*

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>District of Columbia</td>
<td>343</td>
<td>316</td>
<td>439</td>
<td>635</td>
<td>630</td>
<td>1222</td>
</tr>
<tr>
<td>Sale and manufact.</td>
<td>58</td>
<td>82</td>
<td>104</td>
<td>185</td>
<td>220</td>
<td>279</td>
</tr>
<tr>
<td>Possession</td>
<td>285</td>
<td>234</td>
<td>335</td>
<td>450</td>
<td>410</td>
<td>943</td>
</tr>
<tr>
<td>North. Virginia</td>
<td>446</td>
<td>310</td>
<td>259</td>
<td>214</td>
<td>227</td>
<td>137</td>
</tr>
<tr>
<td>Sale and manufact.</td>
<td>58</td>
<td>32</td>
<td>44</td>
<td>27</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>Possession</td>
<td>388</td>
<td>278</td>
<td>215</td>
<td>187</td>
<td>207</td>
<td>112</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>283</td>
<td>200</td>
<td>156</td>
<td>137</td>
<td>167</td>
<td>156</td>
</tr>
<tr>
<td>Sale and manufact.</td>
<td>29</td>
<td>24</td>
<td>7</td>
<td>20</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Possession</td>
<td>254</td>
<td>176</td>
<td>149</td>
<td>117</td>
<td>149</td>
<td>143</td>
</tr>
</tbody>
</table>

SOURCE: District of Columbia Office of Criminal Justice Plans and Analysis 1985 and 1987b; Virginia State Police, various years, Montgomery County Police Department, personal communication.

*Information was not available for Prince George’s County.

More juveniles also are being prosecuted on drug charges. Table 17 presents data on the number of petitions (prosecutions) filed by the District’s Office of the Corporation Counsel, the office responsible for the prosecution of juvenile offenders. In 1987, almost one-half of the petitions were for drug offenses.

EFFECTS

The most striking conclusion from the data on the District’s drug enforcement effort is that the crack-down has been well executed and coordinated. The Metropolitan Police Department’s intensified enforcement has been backed up by the rest of the criminal justice system. The crackdown has produced “good” cases, not merely arrest numbers, as has historically been the pattern for vice crackdowns. Prosecutors are indicting arrestees, juries are convicting those indicted, and judges are giving them substantial sentences. Although average time served is a modest fraction of the maximum sentence, it is comparable to that for most local felony charges (forgery, 25 months; larceny, 27 months; assault, 35 months). One can ask little more of the criminal justice system.

For the suburban jurisdictions our information is much more slender; indeed it is almost nonexistent post-arrest. However, because these jurisdictions account for such a small share of the arrests that lack of information about dispositions is less important. Even if the prosecutors devote substantial efforts to drug cases, and judges give out severe sentences, the District will still account for most of the sanctions against drug dealers in the metropolitan area.

Table 17

| JUVENILE PETITIONS IN THE DISTRICT OF COLUMBIA, 1985–1987* |
|-------------|-----|-----|
|              | 1985 | 1986 | 1987 |
| Total number of petitions | 2803 | 2915 | 3561 |
| Number for drugs (percent) | 645  | 1263 | 1638 |
| (percent) | (23) | (43) | (46) |

*Juveniles prosecuted in a given year may have been arrested in the previous year.
The differences between the District and the suburbs arise not so much from differences in the productivity of enforcement resources as from the different level of commitment. The District, with a population of 628,400, spent more than 10 times as much on Police Department drug enforcement efforts as did Montgomery County, with a population of 646,000. As a share of law enforcement resources the difference is less substantial, because the suburban jurisdictions have much smaller police departments.

This is not a criticism of the suburban jurisdictions, for, as suggested earlier, drug enforcement serves multiple purposes, just as illicit drugs pose multiple threats. The “demand” (political or popular, not economic) for drug enforcement is greater in the District, because drug dealing is such a large problem. Even if drug use were comparably prevalent in the populations of the different jurisdictions, we might still expect variation in the intensity of enforcement.

**Drug Enforcement and Order Maintenance**

Street drug dealing threatens the safety of neighborhoods. Open drug markets are surrounded with violence from two sources. First, there have been notably violent struggles among dealer groups, often associated with efforts to control particular areas.21 Second, the markets have also generated high concentrations of active offenders, both buyers and sellers, which have produced very high levels of crimes against neighborhood residents.

Drug enforcement in the District has been very much an effort to restore order in some poorer neighborhoods. Thus its success cannot be measured solely in terms of its effect on drug use. Operation Clean-Sweep uses tactics that make that clear, directing its efforts primarily to the visible street markets rather than either the dealing organizations or users.22

How successful has this effort been? Measures of the public’s perception of safety are not readily obtained. But certainly there have been some areas in which recent declines have been reversed by a combination of geographically targeted drug enforcement and other city

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21Incidents of increased violence are reported to be the result of an influx of drug dealers from outside the Washington metropolitan area (New York, Miami, etc.). *Washington Post*, July 28 and November 11, 1987.

22Similarly, in Alexandria the development of an active street market for heroin led to community pressure for intensified enforcement (*Washington Post*, September 14, 1986).
programs aimed at making the area unattractive as a location for drug dealers.\textsuperscript{23}

More general measures of success in increasing public order are highly impressionistic. The Metropolitan Police Department in April 1987 listed only 39 locations as street drug markets, compared with approximately 70 a year earlier. Reports of drug-associated violence seem unabated, however. The total number of homicides in 1987 was 227, a 17 percent increase from 1986 (194); the MPD maintains that the majority of the homicides are drug-related.

We simply cannot say how successful the effort to improve the orderliness of the affected communities has been. Some street markets may have been shifted as dealers attempt to relocate in areas subject to less intense surveillance, but the sheer scale of the MPD effort has probably ensured that it becomes aware of emerging market areas quite rapidly. More disturbing is the possibility that the intensified enforcement has raised the violence of the drug trades, simply because the participants feel more threatened. Reports of gunfire exchanges between police and dealers add no comfort in this respect; dealers threatened with a high probability of a lengthy prison sentence following arrest have strong incentives for resistance.

**Drug Enforcement and Drug Use**

The effect of the crackdown on the extent of drug use is equally hard to measure, but the available data provide little basis for optimism that it has had an effect in the short run. We return here to the drug indicators that were presented in Sec. II, focusing particular attention on the urinalysis data.

Data previously presented in Table 5 provide figures on the change in the percentage of those arrested for particular charges (robbery, assault, etc.) showing positive for at least one of five serious drugs\textsuperscript{24} from approximately September 1984 to July 1986.\textsuperscript{25} These data show that the percentage testing positive rose substantially for each charge

\textsuperscript{23}The District’s “Operation Avalanche” is one example of how a dangerous open cocaine market was shut down. D.C. police combined with other city agencies to clean up Hanover Place; close to 1200 people were arrested, 300 tons of trash were removed, and 47 buildings were boarded up. (Washington Post, December 4, 1986.)

\textsuperscript{24}The five drugs are opiates (heroin), cocaine, PCP, methadone, and amphetamines.

\textsuperscript{25}The only available charge-specific data come in the form of tables published for the periods June 1984 to January 1985 and January to December 1986. We use the midpoints of these periods as the reference months for these data, although in each case there are probably more observations from the later months of the period than from the early months, simply because arrest rates were rising. The second period includes the early months of Operation Clean-Sweep.
category. Although we do not have drug-specific data for the first period, the aggregate data presented earlier in Sec. II suggest that most of the increase has come from a higher prevalence of cocaine; for the entire population of arrestees cocaine positive rates went from 15 percent in March 1984 to approximately 45 percent three years later.

The urinalysis data provide an imperfect measure of changes in general drug use. The criminally active population might be less affected by intense drug enforcement, in terms of drug use, precisely because they are better connected to the networks of people involved in selling. Those less competent at finding sources are more likely to be affected by the intensification of enforcement.

The other indicator of changes in drug use is the Drug Abuse Warning Network figures on emergency room admissions and medical examiner reports of deaths involving drugs. Both datasets point to increasing levels of abuse. The ER figures involving cocaine, for example, rose from 94 in 1981 to 1,506 in 1986, while ME figures for cocaine rose from 5 in 1981 to 92 in 1986.26 Both sets of data have potentially important weaknesses as indicators of the size of the drug using population. For example, the rise in reported heroin deaths (usually accounting for over 60 percent of the ME total) may reflect more the aging, and consequent physical weakening, of the heroin using population than any change in the size of the population. Similarly, mentions of PCP may be affected by increasing awareness of the ER personnel of the symptoms of PCP intoxication, which are similar to those of alcohol intoxication.

Notwithstanding these disclaimers, it is disturbing that none of the available indicators point to a decline in use of illicit drugs in the short run. We have considered two possible explanations for the fact that whatever effect the crackdown has had, it has yet to produce a decline in drug use.

1. If most street users are addicted, then enforcement-induced higher price and reduced availability (longer search time) would lead to entry into treatment programs and reduced use but not abstention. This hypothesis is consistent with the urinalysis data but not with the DAWN indicators, because the latter mostly pick up the effects of heavy use. Moreover, the treatment system did not expand sufficiently rapidly, as discussed in Sec. IV. New users may be deterred, but we would not expect to pick up that effect in either short-term indicator; at any one time new users form a small share of the regular user population.

\[^{26}\]DAWN collects figures on "mentions" in emergency rooms and medical examiners' offices. Therefore, a death involving a combination of heroin and cocaine would be considered one cocaine mention and one heroin mention.
2. The enforcement has coincided with the continuation of an increase in use of certain drugs, notably cocaine. Although the rates have increased during the period of crackdown, they would be even higher in the absence of such an effort. We have no data for testing this hypothesis.

In this connection it would be particularly desirable to report drug price changes over the period of intensified enforcement, because one of the primary means by which enforcement can affect drug use is through increasing the price of drugs (see Reuter and Kleiman, 1986). Unfortunately, local agencies collect little price data. The only available reports came from the Washington field division of the Drug Enforcement Administration. The field report for July-September 1986 quarter provided wide ranges for some drugs; crack was reported to sell for between $10 and $25 per vial in the District of Columbia and Maryland. At the time crack was asserted to be no more than sporadically available, so that there may have been few undercover buys available for determining the prevailing price. The price range for more widely available drugs was narrower—$30-40 per quarter gram of heroin of 6.5 percent purity. But without a series of consistently collected data, we are unable to determine how much enforcement has affected the price of targeted drugs. Comparisons with other cities for the same time period are possible for a few drugs, but without knowledge of the enforcement and other policy changes in those cities they provide no meaningful measure of the effect of local enforcement efforts on prices.

Drug Enforcement and Crime

Many studies have shown a strong connection between heroin use and crime (Wish and Johnson, 1986). Although it has not been proven, the use of cocaine and other expensive and addictive drugs might also induce crime. To the extent that enforcement reduces drug use, we would expect to see a decline in the rate of property crimes; to the extent that it raises drug prices, it may have the opposite effect, at least for the truly addicted users.

Table 18 presents the number of reported Index crimes in the

---

27 The report appears to be prepared by an officer of the MPD on behalf of DEA.
28 Collins et al. (1985) found that, in a sample of persons admitted to federally supported treatment facilities, there was a strong correlation between expensive drug habits and the number of criminal acts, even where the drug involved was not heroin. The nature of the sample precludes generalization to expensive drug use.
29 Index crimes are the more serious property and violent crimes. Consensual crimes, such as drug dealing, are not included in the Index.
Table 18
INDEX CRIMES REPORTED IN THE DISTRICT OF COLUMBIA, SELECTED YEARS, 1976-1986

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Murder/man-</td>
<td>188</td>
<td>189</td>
<td>200</td>
<td>223</td>
<td>194</td>
<td>175</td>
<td>194</td>
</tr>
<tr>
<td>slaughter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rape</td>
<td>508</td>
<td>477</td>
<td>439</td>
<td>414</td>
<td>421</td>
<td>366</td>
<td>328</td>
</tr>
<tr>
<td>Robbery</td>
<td>7,044</td>
<td>6,333</td>
<td>8,897</td>
<td>10,399</td>
<td>9,137</td>
<td>6,087</td>
<td>4,719</td>
</tr>
<tr>
<td>Assault</td>
<td>2,659</td>
<td>2,546</td>
<td>3,236</td>
<td>3,432</td>
<td>3,645</td>
<td>4,097</td>
<td>4,181</td>
</tr>
<tr>
<td>Burglary</td>
<td>11,869</td>
<td>12,497</td>
<td>16,260</td>
<td>16,832</td>
<td>14,744</td>
<td>10,954</td>
<td>10,814</td>
</tr>
<tr>
<td>Larceny</td>
<td>24,506</td>
<td>25,744</td>
<td>31,068</td>
<td>32,845</td>
<td>33,435</td>
<td>27,471</td>
<td>25,818</td>
</tr>
<tr>
<td>Motor vehicle</td>
<td>2,962</td>
<td>3,294</td>
<td>3,568</td>
<td>3,765</td>
<td>4,086</td>
<td>4,374</td>
<td>6,105</td>
</tr>
<tr>
<td>theft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arson</td>
<td>(a)</td>
<td>(a)</td>
<td>367</td>
<td>428</td>
<td>379</td>
<td>333</td>
<td>272</td>
</tr>
<tr>
<td>Total</td>
<td>49,726</td>
<td>50,950</td>
<td>64,035</td>
<td>68,338</td>
<td>66,071</td>
<td>53,857</td>
<td>52,431</td>
</tr>
</tbody>
</table>


Arson figures were not collected before 1979.

District of Columbia for the period 1976 to 1986. There has been a substantial decline in the total from its peak in 1981, particularly for robberies (55 percent), burglaries (36 percent), and larcenies (21 percent), the crimes most strongly associated with use of addictive drugs.30 The number of crimes reported since 1976, however, exhibits a less distinctive pattern. Over the ten year period, the number of reported crimes in some categories rise; others fall.

Explaining changes in crime rates over time is complicated. The single most important variable appears to be the size of the male cohort aged 15-30, since this cohort accounts for the vast majority of Index crimes. For example, UCR data show that in 1980, this age group accounted for over 70 percent of all Index crime arrests (Wilson and Herrnstein, 1985, p. 127). The change in the size of the District's population can also affect the number of reported crimes over time, but

30We have included figures on violent crimes because many are incidental to property crimes; a significant fraction of robberies result in assaults on the victim. Thus we would expect that drug-user-induced increases in the number of property crime rates would also increase rates for more violent crimes.
the estimated population in 1981 and 1986 was approximately the same.

Also of importance is the size of the incarcerated population. The larger the number of high rate offenders incarcerated, the smaller the population of such offenders on the street, ignoring any specific or general deterrent effect arising from incarceration. Higher incarceration rates should lead to lower reported crime rates. The population of those imprisoned in District corrections facilities rose rapidly through the 1980s, as shown in Fig. 9. Moreover, the numbers of those in prison are quite large relative to the size of the criminally active cohort, so that might be a highly significant variable in explaining changes in the District's crime rate. The total of the average daily population of D.C. corrections facilities plus those in federal facilities on District charges almost doubled over the period 1981 to 1986, from 5,172 to 9,292. Of that average prison population in 1986, we estimate that some 2,800, or 30 percent, are males between the ages of 19 and 25. Roughly 45,000 males ages 18 to 24 are District residents.31

Several factors other than drug enforcement might explain the decline in reported crimes in the District since 1981. It is impossible to separate out their effects, but it seems unlikely that drug enforcement has significantly reduced the crime rate, except in that it has permitted the police to make more felony arrests that lead to incarceration, without much increase in manpower.32

CONCLUSIONS

This section has not provided data on all the consequences of drug enforcement. Indeed, the figures most likely to be cited in the press concern seizures of drugs and other assets of dealers. Godshaw, Koppell, and Pancoast (1987) estimate that local police agencies seized

31 Resident population estimates are based on 1980 census figures. The District's ratio of males to females was assumed to be constant across all age categories, and the percentage of residents aged 18 to 24 was then applied to the total estimated male population. More recent estimates of the D.C. population suggest that although the total number has decreased, the size of this particular age cohort has grown. The estimate of 45,000 may be slightly low. To arrive at the number of 19 to 25 year old males incarcerated at any one time, we have assumed that the demographic composition of those incarcerated in federal prisons on D.C. charges is the same as those incarcerated in D.C. correctional facilities as reported in Department of Corrections quarterly prison profile reports.

32 A striking feature of the District's drug crackdown is the large number of arrests relative to the costs involved. During the first ten months of Operation Clean-Sweep, the District made 13,616 drug arrests at an estimated cost of $5.6 million.
almost as much cocaine and marijuana as did the federal agencies; we were unable to obtain consistent figures on either drug or asset seizures for the local agencies.

Nonetheless, we believe that the above analysis covers the most important indicators of the extent of the drug crackdown in the Washington area and its major consequences. There has been an intensification of pressure against drug markets in the metropolitan area. The District is responsible for most of the pressure, but the suburban jurisdictions have seen some increases in arrests; and there are a few indicators that this has been followed up by the prosecutors and the courts. Table 19 summarizes the change from 1981 to 1986 in the District's enforcement effort. Note that the total years of prison time handed out for drug offenses rose from 470 in 1981 to 9244 in 1986, a 19-fold increase. 

There is unfortunately little to suggest that this enforcement has had many of the intended consequences. The available drug use indicators show no decline; indeed they point to growing use for more

Table 19

<table>
<thead>
<tr>
<th>Activity</th>
<th>1981</th>
<th>1986</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale and manufacture arrests</td>
<td>408</td>
<td>5,274</td>
</tr>
<tr>
<td>Felony drug prosecutions</td>
<td>734</td>
<td>5,101</td>
</tr>
<tr>
<td>(% of all felony prosecutions)</td>
<td>(13.1)</td>
<td>(52.6)</td>
</tr>
<tr>
<td>Felony drug convictions</td>
<td>273</td>
<td>3,309</td>
</tr>
<tr>
<td>(% of all felony convictions)</td>
<td>(9.6)</td>
<td>(52.6)</td>
</tr>
<tr>
<td>Drug commitments to correctional facilities</td>
<td>1,025</td>
<td>4,333</td>
</tr>
<tr>
<td>(% of all commitments)</td>
<td>(12.5)</td>
<td>(36.5)</td>
</tr>
<tr>
<td>Average minimum sentence (months)</td>
<td>5.5</td>
<td>25.6</td>
</tr>
<tr>
<td>Total minimum prison years for drug commitments</td>
<td>469.8</td>
<td>9243.7</td>
</tr>
</tbody>
</table>


33The study estimated that state and local law enforcement seized between 50 and 52 metric tons of cocaine and from 1000 to 1800 tons of marijuana in 1986.

34In making this calculation we assumed that each person committed would serve the average minimum sentence.
dangerous drugs. Although our analysis of the District's crime rates is sketchy, if there has been an effect from drug enforcement, it probably arises largely from the rise in the numbers of incarcerated offenders rather than induced changes in the behavior of drug users. Only for public safety is there some anecdotal basis for optimism that the short-run effects have been substantial.

This analysis has focused on the short run because the available data speak only to that. The long-run implications of the crackdown, in terms of reduced drug use, crime, and public safety, may be highly important. We simply lack any basis for predicting these effects at this time.

The final section contains a discussion of the implications of the analysis for policy decisions in the suburban jurisdictions. In the meantime, we turn to analysis of the treatment system, which has complex interactions with the enforcement effort.
IV. TREATMENT PROGRAMS

Manufacture, importation, sales, and possession of illegal drugs are crimes. Drug dependence is a disease from which some of the people who commit the crimes suffer. Society wishes to treat those who suffer from the disease but drug abuse treatment is complicated, uncertain, and usually expensive. All the jurisdictions in this area provide, or pay for, treatment for those referred by the criminal justice system and for many others who seek help on their own or as a result of pressure from employers, family, or friends. Besides publicly provided or financed treatment programs, there are many private drug abuse treatment centers (either free-standing or connected to hospitals), self-help groups (Alcoholics Anonymous and its offshoots, such as Narcotics Anonymous), and private practitioners who work with drug abusers in the Washington area.

BACKGROUND

Drug programs are classified by "modality" and/or "environment," the major categories being drug-free outpatient (DFO), drug-free residential (DFR), and methadone maintenance programs, the last-named being solely for users of heroin or other opiates. Some agencies separately classify detoxification programs, which are short term and usually hospital based, and which discharge clients within a week or so to DFO or DFR programs.

Publicly funded treatment can include free-standing (usually outpatient) facilities operated by the health department, contractor-operated facilities, and beds or outpatient "slots" purchased from a state mental hospital or private facility. Private treatment is funded mainly by families and private health insurance. Treatment methods are diverse, including short-term residential programs at local hospitals, extended-stay "therapeutic communities," individual or group psychotherapy; and individualized, often experimental therapies using hypnosis, biofeedback, diet therapy, acupuncture, etc.

1 Counties and independent cities in Virginia are covered by Community Services Boards for alcohol, drug abuse, and mental health or mental retardation services, which use state and county funds to purchase some services from outside contractors (e.g., beds in a private residential treatment center), and some from the county health departments (e.g., walk-in counseling) or even another county's health department (e.g., emergency detoxification).
The public-private distinction between programs often becomes blurred because an individual treatment facility may have both private and publicly funded clients. A residential drug-free program, for example, may have 15 clients who are receiving treatment paid for by their health insurer and another 10 whose treatment expenses are contracted for by the local jurisdiction. Because of reporting requirements, more information is available about the public programs (both publicly administered and contracted services). Much of the following discussion will concentrate on these public programs because they provide the treatment source of last resort for the most vulnerable members of the community. With area employers beginning to formalize substance-abuse policies that cover illicit drugs, we also include some discussion of the role of private insurance.

The Cost of Treatment

Most residential substance abuse treatment is paid for directly by the District government, Maryland county governments, or the Community Service Boards in Virginia. The District recently joined the suburban jurisdictions in charging client fees on a sliding scale based on ability to pay, but these cover only a very small portion of the costs of providing the services. Part of the public funds come ultimately from the federal government in the form of Alcohol, Drug Abuse, and Mental Health (ADM) block grants or additional grants authorized by the 1986 Anti-Drug Act (PL-99-570). The state governments and the District also provide funds from their general revenues, and the county governments add funds from their own revenues.

Estimates of the cost of the different treatment modalities for public agencies in this area are those used for planning by the Maryland Drug Abuse Administration. In FY87 Maryland expected to pay $1466 for each “slot” (one place for an entire year) in an outpatient drug-free program and $8583 for each slot in a residential program. Methadone maintenance “slots” were estimated to cost the state $1272 per year. The total cost of methadone maintenance would be higher, but as much as $30 per week of costs for the maintenance programs can be

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2The District of Columbia’s Alcohol and Drug Abuse Services Administration (ADASA) publishes regular statistics on admissions and discharges from treatment programs operated under its jurisdiction. The Drug Abuse Administration in the Maryland Department of Health and Mental Hygiene collects regular statistics on admissions, discharges, client demographics, and outcomes from all certified drug treatment programs, public and private, in the state. Virginia’s Department of Mental Health, Mental Retardation, and Substance Abuse has had until recently a very incomplete reporting system, which state officials believe will be improved in the next few years as a result of new regulatory requirements.
recovered from Medicaid (federally mandated, state run, jointly financed programs for health insurance for the indigent) and direct federal support. The cost of methadone maintenance per client episode (the period of participation in the treatment program) is also higher relative to other modalities, because episodes of methadone maintenance last longer on average than episodes of drug-free programs.

Table 20 presents estimated total drug treatment expenditures for some of the area’s jurisdictions. Estimates for the District and the Maryland counties are based on information from those agencies. Budget information from the three Northern Virginia figures were aggregated in such a way that drug treatment could not be separated

Table 20
PUBLIC EXPENDITURES ON DRUG ABUSE TREATMENT
IN THE DISTRICT AND SUBURBAN JURISDICTIONS,
FY 1987
(Millions)

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Total</th>
<th>Per Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>District of Columbia</td>
<td>$14.5</td>
<td>$23</td>
</tr>
<tr>
<td>Fairfax County/Falls Church</td>
<td>2.4</td>
<td>4</td>
</tr>
<tr>
<td>Prince George’s County</td>
<td>2.0</td>
<td>3</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>2.0</td>
<td>3</td>
</tr>
<tr>
<td>Arlington Countya</td>
<td>0.5</td>
<td>4</td>
</tr>
<tr>
<td>City of Alexandriaa</td>
<td>0.9</td>
<td>8</td>
</tr>
</tbody>
</table>

SOURCES: Authors’ estimates based on figures provided by personal communication from ADASA; Prince George’s County Directorate of Addictions; Montgomery County Division of Alcohol, Drug Abuse, and Adolescent Services; Arlington County Substance Abuse Services; City of Alexandria (1987); Fairfax County/Falls Church Community Services Board. Population estimates for 1984 taken from Bureau of the Census, 1986 State and Metropolitan Area Data Book.

aEstimate based on FY 1986.

Harwood et al. (1987) estimated the average cost of methadone maintenance to be approximately $2,000 per slot per year. Their estimate of the cost of drug-free outpatient treatment was the same. A nationwide survey of treatment facilities estimated 1982 costs to be $2,174 for methadone, $1,575 for drug-free outpatient, and $7,329 for drug-free residential (NIDA, 1983).

In Montgomery and Prince George’s counties public and certified private treatment programs in 1986, the average treatment episode for a client who “completed treatment” in a methadone maintenance program was 750 days. Using the state estimates, the cost to the state of such an episode would be $2,814. This does not include the money recovered from federal sources, which could amount to over $3,000. The average episode for a client in a drug-free out-patient program was 212 days at a cost to the state of $851.
from alcohol abuse treatment.\textsuperscript{5} We assume here that the proportion of addiction treatment expenditures that should be ascribed to drug abuse programs in Northern Virginia is the same as in Montgomery County, 53 percent of total treatment. Not too much should be made of the small differences in per capita spending by the suburban jurisdictions, because the budgets are presented in different ways.\textsuperscript{6}

The important difference that emerges from the table is between the District and the suburban jurisdictions. The District spends a great deal more, both in total and on a per capita basis, than the suburban jurisdictions shown here. Even in the District, however, the amounts are not large, and probably not commensurate with the importance of substance abuse as a mental health problem. ADASA’s budget of $14.5 million for drug abuse treatment, for example, is little more than a tenth as large as the operating budget for St. Elizabeth’s Hospital, the public psychiatric hospital.

\textbf{Insurance Coverage}

Treatment not provided by the public agencies is financed by some combination of private health insurance and personal or family resources. Some of the therapeutic communities for long-term residential care also receive grants (for example, Christian communities that receive some support from charitable donations); and some services, particularly in hospital emergency rooms, are written off as charity care or bad debts. In addition to indirectly paying for some of the costs of methadone maintenance treatment, the Virginia, Maryland, and District Medicaid programs also pay for some clinical services for drug abusers with a primary diagnosis of another mental disease.\textsuperscript{7}

The insurance plans available to employees of the federal government, the area’s largest employer, vary considerably in the types of substance abuse treatment that they will cover and the terms and amounts of reimbursement (see U.S. Office of Personnel Management, 1987, for a summary). Some of the most popular plans provide only

\textsuperscript{5}The distinction between alcohol and other substances of abuse is not always meaningful for treatment programs. Drug treatment clients very commonly have severe problems with alcohol, and the programs to treat abuse often use similar methods.

\textsuperscript{6}Administrative and other shared agency expenses, for example, are in some cases counted in the drug program budgets and in others not. Also, each figure is only for spending by the primary drug abuse treatment agency in each jurisdiction; other health and social service agencies incur expenses related to drug abuse counseling that are not included here.

\textsuperscript{7}For those over age 65, Medicare covers a population in which alcohol and other legal drugs still create much of the substance abuse problem. It pays for treatment in medical settings only.
inpatient benefits, usually with a maximum payment for each calendar year and often with restrictions on the number of episodes per lifetime for which reimbursement will be paid. A common restriction is that plans will pay only for treatment under medical supervision in a facility accredited by the Joint Commission on Accreditation of Hospitals (which is now in the process of revising its provisions concerning substance abuse treatment). This restriction to hospital settings gives insurers some assurance of institutional reputability and quality control and protects them from having to assess the qualifications of all sorts of paramedical practitioners. But it also cuts out cheaper forms of treatment (and less highly paid professionals), when there is no consistent evidence that substance abuse clients are doing better in the inpatient treatment modality (Miller and Hester, 1986).

Federal employees have dozens of choices for health insurance plans, so presumably they could change at every open season and thus evade the lifetime limit on the number of episodes. Most private employers offer only a few health plans, so these limits would quickly become binding on employees. The District has passed, and Maryland is considering, laws requiring insurers to offer coverage for substance abuse treatment in all plans. This initial attempt to make substance abuse treatment both affordable and available to area employees would not be without costs. An increase in premiums would be expected; it could also increase the amount of "rationing by discouragement" (referral requirements, waiting lists, large groups for therapy, etc.) by health maintenance organizations.

The majority of plans available to federal workers cover outpatient treatment as well, under the same heading as other mental health services. Because of the open-ended nature of many courses of treatment in mental health, there are usually limits on either the dollar amount of reimbursement in a calendar year, or on the number of visits, or both, and often some provisions for coinsurance and deductibles as well. Health Maintenance Organizations (HMOs) keep their expenses for substance abuse treatment of members within bounds by requiring referrals from members' primary care physicians and, according to some employee assistance professionals, by allowing lengthy waiting lists, or scheduling few treatment sessions per month. The uninsured, and those who have used up their insurance coverage, will join the queue for the public programs. Given the thinness of coverage, this may be a substantial addition to the demands for public treatment.

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8Insurers have threatened to quit writing policies for District residents, not so much in response to this as to a similar provision covering treatment for AIDS.
Effectiveness of Treatment

Some private programs advertise success rates that sound impressive but cannot be taken at face value. These programs use various definitions of "success;" they usually have little ability to follow-up clients who may have relapsed; and many programs, especially residential ones, eject those who break the rules, making their graduates a select group who have succeeded almost by definition.

Studies of post-treatment relapse show just how precarious sobriety is for those who have undergone treatment. The majority of the published substance abuse treatment research concerns treatments for alcohol and heroin abusers; often statements about treatment for abusers of other drugs are based largely on inferences from experience with alcohol and heroin. The largest nationwide study of drug treatment outcomes (the Treatment Outcomes Prospective Study, or TOPS) showed that the majority of those treated for heroin or heavy cocaine use were again using drugs on at least a weekly basis within a year of their discharge (Hubbard and Marsden, 1986). Only among those who had been treated for "minimal involvement" with alcohol and marijuana were a majority either abstinent or using drugs only occasionally a year after the end of treatment. As in treatment of alcoholism, the general conclusion appears to be that no absolute predictors of treatment outcome exist. "In general, the fewer problems a patient had upon admission the more likely he was to benefit from the program" (Semlitz and Gold, 1986, p. 463). Recovery from drug dependency is a long process, often requiring the dependent person to rebuild his life; one episode of "drying out" rarely suffices.

Statistics from local programs support this view. The Drug Abuse Administration of the Maryland Department of Health and Mental Hygiene provided unpublished data for Montgomery and Prince George's residents discharged from certified public and private treatment programs in 1986. As Table 21 shows, only 20 percent of those admitted for heroin use were classified at discharge as having completed treatment and not using drugs at the time of discharge. For cocaine, marijuana, and PCP abusers, this figure is somewhat higher, reaching 50 percent for marijuana; but still the majority of admissions result in a discharge code of "noncompliance," "client left," or "com-

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9 For example, all but one of the data analyses in a recent research monograph on "Relapse and Recovery in Drug Abuse" issued by the National Institute on Drug Abuse (Tims and Leukefeld, 1986) dealt with tobacco, alcohol, and/or opiate abusers; only one investigated post-treatment outcomes for those who were treated for cocaine and marijuana use as well.
Table 21

STATUS AT DISCHARGE FOR RESIDENTS OF MARYLAND SUBURBS IN DRUG TREATMENT PROGRAMS, 1986a

(Percent)

<table>
<thead>
<tr>
<th>Primary Drug of Abuse (discharges)</th>
<th>Noncompliance or &quot;Client Left&quot;</th>
<th>Not Using Drugs</th>
<th>Using Drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heroinb (380)</td>
<td>78</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Cocaine (429)</td>
<td>58</td>
<td>38</td>
<td>4</td>
</tr>
<tr>
<td>Marijuana (584)</td>
<td>45</td>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>PCP (697)</td>
<td>68</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Otherc (166)</td>
<td>61</td>
<td>35</td>
<td>4</td>
</tr>
</tbody>
</table>

SOURCE: Maryland Drug Abuse Administration. Personal communication.

aDoes not include discharges coded as referrals, deaths, or incarceration.
bIncludes opiates other than heroin.
cAlcohol as primary drug in drug treatment program, amphetamines, over-the-counter drugs, hallucinogens, etc.

Completed, with some drug use at time of discharge.10 National studies of treatment outcomes show that even of those not using drugs at the time they complete treatment, a large number relapse within the first year to frequent drug use, usually in the first three or so months following treatment (Hubbard and Marsden, 1986).

One still unresolved debate that could have great importance for public policy is whether intensive treatment in residential settings is sufficiently more effective than outpatient treatment to justify the extra cost. A recent review of available alcoholism treatment studies that used proper control groups concluded that they "have consistently shown no overall advantage for residential over nonresidential settings, for longer over shorter inpatient programs, or for more intensive over less intensive interventions in treating alcohol abuse" (Miller and Hester, 1986, p. 794), a view that has been disputed hotly by many treatment providers.

10These codes are based on reports filed by program staff; many programs include urine testing, but many clients using drugs when they leave programs may be able to keep clean for the test, or will not admit their drug use (when urinalysis is not used), so the estimate of the proportion abstinent is if anything likely to be an overestimate.
THE SUPPLY OF AND DEMAND FOR TREATMENT SERVICES

Growth in Admissions

Table 22 shows the numbers of admissions per year to the programs operated or funded by ADASA in the District of Columbia and of Montgomery and Prince George's residents to publicly funded or certified private programs in Maryland. The number of people considered to be actively in treatment in these programs at one time was just over 3000 in the ADASA programs in May and June 1987 and just under 1500 Montgomery and Prince George's residents in March 1987. Using available treatment program census data, we estimate that the numbers of clients in treatment in programs in Northern Virginia was about the same as the number in programs in the Maryland suburbs.\(^{11}\) Assuming

<table>
<thead>
<tr>
<th>Years</th>
<th>Number</th>
<th>Percent New Admissions</th>
<th>Montgomery and Prince George's Residents Admitted to Maryland Public or Certified Private Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>2239</td>
<td>30</td>
<td>1563</td>
</tr>
<tr>
<td>1980</td>
<td>2914</td>
<td>35</td>
<td>1915</td>
</tr>
<tr>
<td>1982</td>
<td>3224</td>
<td>39</td>
<td>na</td>
</tr>
<tr>
<td>1985</td>
<td>3907</td>
<td>56</td>
<td>2402</td>
</tr>
<tr>
<td>1986</td>
<td>5922</td>
<td>61</td>
<td>2887</td>
</tr>
</tbody>
</table>

SOURCES: Maryland Dept. of Health and Mental Hygiene, 1985; McFarland, 1987; Powell, 1981; Sheridan, Levine, and Ney, 1983;
\(^{a}\)Refers to fiscal year for the District, calendar year for Maryland.

\(^{11}\)In 1982, a survey by the National Institute on Drug Abuse attempted a complete census of drug treatment programs, public and private. In the whole Washington SMSA, there were 5,511 clients recorded as being in treatment on September 30, 1982, in the 55 area programs responding to the survey; of these, 3,555 (64 percent) were in public and private programs located in the District of Columbia (NIDA, 1983). From another source, the monthly utilization reports submitted by all certified programs in Maryland, we know that there were 956 clients in treatment in programs located in Montgomery and Prince George's counties in July 1983. This would suggest that about 1000 clients
that suburban Virginia admissions are the same as suburban Maryland ones, and that ADASA admissions are 80 percent of the total for District residents, we estimate that in 1987 there were about 13,000 admissions per year in the whole metropolitan area, or about 6,000 persons in treatment at any one time. These figures do not necessarily equal the numbers of residents of the different jurisdictions who are in treatment, since people can cross boundaries to attend treatment programs, even, in some cases, when the treatment is publicly financed.

As Table 23 shows, the drug most often named as the primary drug of abuse for ADASA admissions was heroin, followed by PCP. For

| Table 23 |
| PRIMARY DRUG OF ABUSE BY CLIENTS ADMITTED TO TREATMENT PROGRAMS  |
| (Percent) |
| District-ADASA Programs, 1986 | Montgomery and Prince George's Residents, All Maryland Certified Programs | State-Supported Programs, U.S. Total, 1986 |
| 1984 | 1986 | 1986 |
| Heroin | 55 | 24 | 20 | 31 |
| PCP | 27 | 22 | 32 | 3 |
| Cocaine | 11 | 16 | 23 | 18 |
| Marijuana | 6 | 30 | 20 | 24 |
| Other | 1 | 8 | 5 | 24 |
| Total number | (5922) | (2296) | (3221) | (324,987) |

SOURCES: Butynski et al., 1987; Maryland Drug Abuse Administration (personal communication); McFarland, 1986.

*Includes other opiates.

bDoes not include 65,254 clients for whom information on primary drug of admission was unavailable.

(5511 - 3555 - 966 = 1000) were in treatment in programs in Northern Virginia around that time.

These estimates exclude clients of psychiatrists, psychologists, and individual mental health practitioners, but include private clients of licensed drug treatment facilities, free-standing or attached to hospitals.

These figures for "primary drug of abuse" do not reflect the relative proportions of the drugs consumed, even in the restricted population of those who are admitted to treatment programs. The person completing an intake reporting form designates the primary drug, apparently usually choosing the "hardest" drug in the user's list. Abuse of multiple drugs and alcohol is common, and the treatment professionals we interviewed all told us
Maryland residents in 1986, PCP was the most common primary drug, followed by cocaine, marijuana, and heroin. Also presented in this table are data for Montgomery and Prince George's residents in 1984 (the first year for which county of residence is available in the data) and for programs supported by state governments in the whole United States. The most striking change in Maryland during the two years covered is the doubling in PCP admissions. Cocaine admissions nearly doubled in the same short period.

Compared with the nation as a whole, Washington area residents are far more likely to name PCP as their primary drug of abuse. In FY 1986, the District and Maryland accounted for 29 percent of all of the PCP admissions to state-sponsored treatment facilities in the country. The average age of those admitted to treatment with different primary drugs of abuse varies from 23 years for PCP to 31 for heroin.

The great majority of clients admitted to treatment programs are men (74 percent of ADASA clients and 79 percent of Maryland residents). Several of the people we interviewed said that women were more likely now to seek treatment than in the past, but no such trend is yet reflected in the admission statistics. Just under 90 percent of ADASA clients are black, a proportion that has held constant for some years. Of Montgomery and Prince George's residents in treatment programs, 60 percent are white. The racial distribution varies somewhat for different primary drugs of abuse, but no drug is exclusively "black" or "white" in this area. Of Montgomery and Prince George's residents admitted for treatment in 1986 with heroin as the primary drug, 245 (45 percent) were white. For PCP, 548 (53 percent) were white. The majority of Maryland residents admitted to methadone maintenance and prison-based programs are black, while the drug-free programs (outpatient and residential other than prison) are more than two-thirds white.

Adolescents and Dual Diagnosis Clients

Most drug treatment for adolescents takes place in programs similar to those designed for adults, although there are very few young people in maintenance programs for heroin users, as adolescents are far less likely than adults to be involved with opiates. Semlitz and Gold
(1986), summarizing the results of studies of drug treatment outcomes for adolescents, conclude there is some evidence that family therapy is especially useful for adolescents, because their substance abuse is likely to be embedded in behavioral problems and dysfunctional patterns in the family. Drug use is one form in which behavioral and mental problems show up in adolescence; it may need specialized treatment but the treatment has to equip the drug user to deal with a whole range of issues.

One of the topics debated in the literature on the etiology of drug abuse is the degree to which users of illegal drugs are “self-medicating” for depression and other mental illnesses. Some longitudinal studies of adolescents have found that symptoms of depression are good predictors of self-reported cocaine use at following interviews a year later (see discussion in Brower and Anglin, 1987).

A clinical psychologist in Northern Virginia who sees drug-involved young people from a wide variety of backgrounds told us that most of her young clients first came to the attention of the medical system (e.g. at age two for failure to thrive) or the school system (for learning disabilities). School nurses tell us it is quite common for young people later disciplined for drug use to have very frequent minor illnesses, occasioning visits to the school nurse (a sign of depression). This does not mean that specialized treatment for the substance abuse is not needed—the underlying problem can often not be treated effectively until the patient is free of the drugs. But it may have implications for the design and targeting of prevention and early intervention programs.

The dual diagnosis client presents an additional challenge to the treatment professional. County mental health departments and substance abuse treatment sections have often been administratively separate. Funding comes from different sources, staff arrive with different backgrounds and credentials, etc. Substance abuse programs have traditionally recruited some recovering dependent persons as counselors. This helped perpetuate distinctions between alcohol and drug abuse treatment, which made more sense administratively than clinically. It also kept a barrier between these staff and the mental health departments, staffed by psychiatrists, clinical psychologists, and nurses with higher academic credentials.

These barriers appear to be lower now than in the past. Many of the recovering dependent counselors have themselves obtained graduate degrees, and alcoholism and drug abuse counselors have begun their own processes for professional certification. But problems can still arise. Mental health staff may not recognize drug intoxication; drug counselors have a hard time using “talk therapy” with clients who also suffer from schizophrenia or borderline personalities. Both schizo-
phrenia and depression respond well in many cases to medicines, but
drug treatment programs often do not have a psychiatrist on staff who
can write the prescriptions. Clients can get lost when referred from
one unit to another at a different site.

Arlington County provides one example of how mental health and
addictions counselors have learned to work together with these clients,
making appropriate referrals (e.g., to the drug unit for detoxification
and then back to mental health for long-term therapy): the practice is
facilitated for both staff and clients by "one-stop shopping." Mont"gomery County also has made recent attempts to streamline their
system in this manner.

The dual diagnosis clients clearly pose a professional challenge to
the counselors and a management challenge to the administrators.
Though no prevalence estimates exist, either nationwide or from local
jurisdictions, the problem is reported by public treatment programs to
be a growing one.

Sources of Admissions

Criminal Justice Referrals. The most common way to get into
the public treatment system in recent years, both in the District and in
the suburbs, has been through a referral from the criminal justice sys-
tem. In the early 1980s, only a third of ADASA admissions were crim-
nal justice referrals, but this has risen to just over a half in recent
years. About 60 percent of all admissions of suburban Maryland
residents to drug programs (public and private) in 1986 were criminal
justice referrals.

The rise in the proportion of such referrals has been caused by
intensified drug enforcement. Criminal justice system referrals (not
admissions) in the District were averaging 800 per month in late 1985
and shot up to over 3000 in October 1986 (the first month of Operation
Clean-Sweep) before falling back to just over 2000 per month in the
first half of 1987.

Most of these clients are referred to drug treatment programs as a
condition of probation or a suspended sentence. Besides those sent
directly, the law enforcement system generates an unknown number of
indirect referrals. For example, it is not uncommon for some clients to
"refer themselves" to treatment after being advised by their court-
appointed attorneys that it would look good the next time they came
up before a judge on a drug charge.
The D.C. prison system, like those in 36 states, is operating under court orders to reduce overcrowding. As we pointed out in Sec. III, a new city program provides early release for the less-violent felons; about half of the 700 released so far were convicted of drug sales. Thus it is likely that the continued pressure of law enforcement will generate a continuing wave of referrals from all points in the criminal justice system.

Employee/Referrals. An important recent development is the increase in the number of Employee Assistance Programs (EAPs), either internal to large firms and government agencies or providing services to smaller ones under contract. One of the Surgeon-General’s public health objectives for 1980 is to have most large employers providing some form of employee assistance for substance abuse, and it looks as though this goal will be met. EAPs traditionally were concerned with detecting alcohol abuse among employees and getting them into treatment. In recent years most have begun dealing with use of illegal drugs as well, and the more thorough ones do not just make referrals to treatment programs or self-help groups, but provide limited counseling and follow-through care. (See Walsh, 1982, for a description and history of EAPs.)

Personnel policies of the the federal government can have a profound effect on the tasks of local treatment agencies. Should worksite testing become more common, it could add considerably to the number of employer referrals. Several large employers in the Washington area, including the Metropolitan Area Transit Authority, utilities, and some retailers, have recently started or intensified drug testing of both applicants and current employees. The federal government also has announced testing policies that will intensify pressure on its civilian workforce in all agencies.

Federal employee unions have started litigation to stop random testing and to limit supervisory discretion in testing for cause; the legal status of new drug testing programs in both federal and private workplaces is still to be clarified (Hoyt et al., 1987). Whatever policies emerge at the end of the litigation, they will probably be stricter than those prevailing in the past. But the “appropriate community programs” to which federal EAPs are supposed to refer employees are already operating at their full capacities, at least in the public sector.

14Like most governmental matters in the Washington metropolitan area, corrections policy is complicated because the metropolitan area is spread over two states and one quasi-state. The prison complex for adults convicted in D.C. is in Virginia (although about a tenth end up in federal prisons), and the detention center for juveniles is in Maryland. Legislators from each state have successfully blocked expansion and have objected strenuously to plans for early release to alleviate overcrowding. New prison construction in the District has been delayed because of the inability to find sites.
Some directors of public drug abuse treatment programs in the District have reported an increase in applications from transit and utility employees. Supervisors are referring more employees to EAPs under the new tougher policies, and more employees are “self-referring,” even if reluctantly, because company policies, either explicitly or implicitly, call for more leniency toward the employee who acts first before the supervisor forces the issue. Those with adequate insurance coverage can enter private treatment programs, but it is very common for health insurance policies to have caps on the number of times an employee can use substance abuse or other mental health services.

Unwilling clients, whether in the workplace or the criminal justice system, have poor prognoses for successful treatment. Most residential programs are based on some variant of the therapeutic community model, involving unpleasant, authoritarian, and frequent confrontation, meant to force the client to acknowledge the consequences of his addictive behavior. These methods, at least as implemented in the setting of public treatment programs, were geared to deal with those whose lives had been manifestly ruined.

The clients driven into treatment by strict workplace programs, almost by definition are at least minimally functional. Denial, always the first obstacle to be overcome by recovering addicted persons, is especially strong among those who are still economically self-sufficient, often with intact families. By the strict standards of their employers, these people have substance abuse problems. By their own standards, things may have gotten a little out of hand; they were “partying too much.” The extraordinary motivation required to set a goal of abstinence and to rebuild one’s life may not be there.

Other Sources of Admissions. As noted above, several of the directors of public treatment programs contacted in the course of this research listed as one of their growing problems the need to cope with the dual diagnosis clients, those who have major underlying mental disorders as well as substance abuse. Patients formerly consigned to state hospitals and to St. Elizabeth’s were “deinstitutionalized” during the 1960s and 1970s; the other side of the reform, the development of community mental health centers on a scale sufficient to treat them on an outpatient basis, did not keep pace with the decrease in the number of inpatient beds in public asylums and psychiatric wards. The community mental health centers have never had the funds or the staffing, in Washington as elsewhere, to do the outreach necessary to keep troubled clients in regular contact with health care providers. This has contributed to the increase in the number of homeless, and also presented a problem to public substance abuse facilities (detoxification centers and long-term facilities alike), because many people with substantial mental health problems turn up at their doors.
A second factor that could contribute to increased admissions is increased use in cocaine and specifically the powerful cocaine derivative, crack. As Table 23 above showed, cocaine is currently named as the primary drug of abuse by just over a tenth of all those admitted to ADASA treatment programs and by almost a quarter of those admitted to Maryland programs. These cocaine abusers include the full range of age/race/sex and social classes, and nearly all types of treatment programs, both publicly and privately funded, contain considerable numbers of cocaine users.\textsuperscript{15}

With the recently reported introduction of crack into this area, admissions to treatment for cocaine abuse may rise sharply. Two of crack's attributes, its low cost and highly addictive nature, could send more cocaine users to drug treatment. A vial can sell for as little as $15, giving the younger user, who might not have been able to afford cocaine before, an opportunity to experiment.\textsuperscript{16} Although experimentation with crack may appear less expensive, NIDA reports that treatment clients who used the largest amounts of cocaine were those who smoked (freebased) the drug as opposed to snorting or injecting it (NIDA, 1986b).

We can only speculate about the effect crack will have on the treatment system, but if Washington's experience reflects that of treatment programs in New York, an increase in cocaine and crack clients should be expected soon. New York's Phoenix House, the nation's largest therapeutic community system, has witnessed its cocaine admissions rise in recent years; approximately 60 percent were crack users. Its crack clients display particularly acute psychological signs and a higher incidence of violent episodes. In addition, crack users seek treatment after a much shorter period of dependency, feeling their lives have become completely out of control since their involvement with the drug (DeLeon, 1986).

HEROIN ABUSERS AND METHADONE MAINTENANCE

It was already clear by the early 1970s that the epidemic of heroin usage had peaked in Washington (Dupont and Greene, 1973). In the late 1960s, many believed that heroin addiction was so injurious that we would never face the problem of dealing with older addicts who had been using heroin for years or even decades; most users would die

\textsuperscript{15}There are no publicly funded chemical maintenance programs for cocaine abusers, but there is some research on chemicals that block the cocaine "high."

\textsuperscript{16}Preliminary data from the 1987 high school senior survey suggests that while fewer seniors report having tried any form of cocaine (from 16.9 percent in 1986 to 15.2 percent in 1987), the number who have experimented with crack rose (from 4.0 percent to 5.6 percent).
young. A more optimistic view was that heroin addicts would eventually "mature out" of their addiction. Neither expectation was borne out; instead we have a gradually aging cohort of addicts, those who were in their late teens and early twenties during the late 1960s and early 1970s, for whom episodic treatment followed by relapse and more treatment is a way of life.

The cohort effect can be seen, albeit indirectly, in arrest, hospital, and treatment program statistics. The District's urinalysis program indicates that the proportion of arrestees testing positive for opiates has fluctuated between 13 and 23 percent since March 1984 (see Fig. 3). As shown earlier in Table 4, positive tests for opiates were most common among those aged 31–45; among those aged 18–21, fewer than 5 percent tested positive for opiates. Of admissions to emergency rooms involving heroin, the average age also has risen steadily since the mid-1970s. The average age of heroin ER admissions in this area was 25.2 in 1976, 29.0 in 1980, and 31.1 in 1985 (NIDA, 1987b). The average age of a heroin addict entering treatment in Montgomery or Prince George's counties in 1984 was 29.6; in 1986, it was 31.1.17

Treatment of heroin users is expensive because an individual may require a series of long treatment episodes. Heroin users are the most likely of all those admitted to drug programs to have been in treatment before: Of Maryland residents admitted for heroin use three-quarters reported previous treatment episodes. As Table 21 indicated, heroin users in general compile some of the worst completion records for particular treatment episodes. The picture is of a group of users, most well into their thirties, coming back again and again to maintenance programs and consuming a disproportionately large share of the resources of the treatment system.

The above data are all cross-sectional, based on admissions rather than individuals, and some figures pertain to maintenance admissions rather than heroin admissions. But the picture is consistent with what has been learned from studies in other areas of longitudinal data on individuals. Maddux and Desmond (1986), for example, followed a group of opiate users in San Antonio for up to thirty years (1954–84), and found patterns of recurring heavy use, treatment, abstinence, and heavy use. Most of the users in their sample had begun their "careers" before methadone was widely available, but high rates of relapse and returns to treatment are found as well in studies of other cities and more recent years, even of addicts recorded as successfully completing treatment (McAuliffe et al., 1986).

17In 1986 the average age of clients listing cocaine or PCP as their primary drug of abuse in these two counties was 26.5 and 23.0 years, respectively (Maryland Drug Abuse Administration, personal communication).
This is not to say that methadone maintenance does no good, still less that treatment of heroin use does no good. But our available treatments for heroin addiction are at best what Lewis Thomas (1974) calls "halfway technologies," expensive long-term methods of keeping those with a disease functional, rather than what laypersons think of as a "cure."

Maintenance programs receiving any support from federal block grant funds are required to have an array of therapy, job counseling, and other social services, as well as procedures to prevent the diversion of program-supplied methadone to the street markets. The old "vending-machine" model of maintenance is out of favor; the new programs with ancillary services can be very labor-intensive, which adds considerably to their expense.

Although the notion of keeping an individual "functional" is a valid goal, two other consequences of methadone maintenance have a greater effect on the entire community. First, while they are in methadone treatment, heroin addicts commit fewer crimes. Beginning in 1968, numerous studies have found this relationship to hold true when comparing the criminal behavior of addicts in treatment with their behavior while not enrolled in a program.\(^\text{18}\)

Data from the TOPS study of criminal behavior and treatment indicate that heroin addicts in methadone maintenance committed on the average 9.6 predatory crimes in the three months before treatment and 3.1 crimes during the first three months of treatment. Heroin addicts in drug-free outpatient programs committed 2.4 and 2.6 crimes before and during treatment respectively (Collins et al., 1983). High-rate offenders appear to prefer, or are assigned more often to, methadone maintenance programs; the program has a dramatic effect on the level of criminal activity while they are participating.

A second societal benefit generated by treatment of heroin addicts is keeping contact with a high-risk group for AIDS, IV drug users. Although no study has been conducted in this metropolitan area, 29 percent of the IV drug users tested in Baltimore were carrying the AIDS antibody; in New York City, over 60 percent tested positive (NIDA, 1987/1988). The threat of AIDS provides a particularly strong incentive to keep heroin addicts in treatment and away from needle-sharing. Various sources, ranging from the *New England Journal of Medicine* (Weinberg and Murray, 1987) to the President's Commission

\(^{18}\)Dole, Nyswander, and Warner (1968) reported that in studying the convictions of 912 patients in methadone treatment, they calculated a rate of 52 convictions per 100 man-years of addiction before treatment and 5.8 convictions after entering treatment. Collins et al. (1983) reach similar conclusions.
on AIDS, recommend that expanded drug treatment for IV drug users be a major component of the campaign to combat AIDS.

Methadone maintenance keeps clients in the treatment system for the longest period of time, compared with other modalities. In the Food and Drug Administration's 1984 census of methadone treatment facilities, 48 percent of the clients had been in continuous treatment for two years and 33 percent for four years or more (Brown, 1986). The largest public drug treatment system in the area, that of the District of Columbia, has dealt primarily with heroin users. Before 1986, the majority of ADASA drug admissions were to methadone maintenance programs (Table 24). In 1986, because of a change in policy, only 18 percent of admissions were to maintenance programs (just over a thousand admissions), although a majority of admissions still had heroin listed as the primary drug of abuse (Table 23).

The recent wave of new admissions, driven in large part by the increasing criminal justice referrals, crowded out methadone slots. These new admissions include many nonopiate users as well as heroin

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Table 24

ADASA ADMISSIONS BY TREATMENT MODALITY,
FY 1982 to 2ND QUARTER 1987

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<td>2734</td>
<td>2994</td>
<td>3907</td>
<td>5922</td>
<td>2872</td>
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20 The proportion of admissions going to maintenance programs is much smaller in the Maryland suburbs: 8 percent of admissions to programs other than prison programs in both 1984 and 1986. Outpatient drug-free programs alone accounted for over 80 percent of nonprison program admissions in Maryland in recent years.
users entering the system for the first time.\footnote{The heroin admissions figures for 1986 and 1987 may be artificially high. If clients not in maintenance programs exit sooner and have a higher probability of readmission within the same year, the same number of admissions in a year might involve a smaller number of individuals. However, this is probably a second order effect.} Figure 10 plots the number of ADASA admissions for methadone maintenance, new admissions, criminal justice referrals, and those that list heroin (or other opiates) as their primary drug of abuse. With the decrease in methadone slots in 1986, a gap developed between the number of heroin addicts entering treatment and the number receiving methadone maintenance. This change coincided with a dramatic increase in the number of criminal justice referrals and new admissions for the second straight year. The 1987 admissions figures, based on data from the first two quarters of the fiscal year, indicate that heroin addicts are continuing to come to ADASA for treatment. But if heroin abusers become frustrated by the lack of methadone slots and stop seeking treatment, the system loses contact with them.\footnote{It is not unusual for a new-admission heroin user to be placed in a drug-free program initially, and only after one or more unsuccessful treatment episodes will that client enter the methadone program.} This would be an extremely undesirable situation, particularly with respect to the two issues discussed above, crime and AIDS.

THE TREATMENT OF PCP ABUSERS

The general view in the treatment field is that “You treat the user, not the drug.” Treatment plans are molded to the background and social situation of the individual, and it is mainly a matter of circumstance which of the many available substances he or she is abusing. This view may have to be modified somewhat in the case of PCP. Without exception, treatment professionals interviewed during this project considered the PCP abusers to be a group especially difficult to treat. Those who work with them, both in the District and in the suburbs, told us that PCP users are confrontational, anxious, ornery. . . . They don’t understand what you are telling them. . . . They live in a world of their own. . . . They are least likely to be successful in treatment. The director of a residential program told us that the idea of treating PCP users in six months is a joke; the director of a detoxification center said that PCP is the hardest drug to get out of a patient’s system. They have violent episodes even after being at the center for a month.

There is not a large literature on clinical management and treatment of PCP abusers (reflecting its low place in national research priorities).
What exists generally supports the view that PCP is a dangerous substance, "unique in that it affects almost all the neurotransmitters," producing in users the symptoms of schizophrenia, depression, mania, and/or opiate addiction (Price and Giannini, 1985). This capability of bringing on the symptoms of just about any serious mental disease means that the "initial clinical diagnosis of PCP intoxication is difficult and often mistaken for other conditions" (Garey, Daul, and Samuel, 1987), a view that was also expressed to us by a local psychologist who directed a specialized ward for acute PCP intoxication. Detoxification requires careful medical supervision; fatal heart arrhythmia and hypertension can develop without warning. Those who have used PCP may not be aware that they have used it, because PCP is often sold as a look-alike or an adulterant for other drugs.23

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23 In a recent study of teenagers in a suburban Virginia private treatment program, 90 percent of whom were white and all of whom were from middle-class families, 39 percent said that they had not known they were taking PCP the first time they had used it, and 27 percent said they had given others PCP without telling them what it was (Schwartz et al., 1987).
Clearly, some people can use PCP as a recreational drug and not manifest the psychotic symptoms that police and treatment officials associate with the drug. Most of the arrestees who have traces of PCP in their urine are not brought in for the violent and bizarre acts popularly associated with PCP abuse. Most PCP users admitted to hospital emergency rooms are medicated and restrained and then sent home. But users apparently can "lunch out" (the users' term, adopted by the treatment professionals) at any time—on their first use, or their thousandth.

PCP is stored in the body's fat tissue and can be mobilized long after ingestion through mechanisms that are as yet poorly understood. PCP users who end up in drug treatment programs tend to be those whose family or neighbors can no longer deal with their strange and aggressive behavior. Many (an unknown fraction) fall into the category of "dual diagnosis" clients discussed above.

Treatment after the acute intoxication stage follows the therapeutic community or other drug-free treatment methods with family counseling where possible (Fram and Stone, 1986). Although the treatments sound similar to those for other drugs, there may be an advantage to segregating the PCP users from others, as Fram and Stone point out. Treatment practitioners report that getting through to PCP users requires frequent repetition and that they react badly to the confrontation that is a major component of most treatment therapies. According to two of the treatment providers interviewed for this project, other clients are very nervous having the PCP users around and thus their own treatment is disrupted.

The District has two specialized centers for treatment of acute PCP episodes, at D.C. General Hospital and at the D.C. Children's Medical Center. Prince George's county has recently received additional state funds to specifically expand PCP treatment. About half of the 85 beds at Spring Grove State Mental Hospital purchased by the Prince George's County Health Department are occupied by PCP abusers. At least one private program, the Psychiatric Institute of Washington, has a specialized PCP treatment facility (described by Fram and Stone, 1986). There is clearly a need for more treatment facilities, especially public ones, specializing in PCP treatment; such users tend to be younger, are less likely to be employed at the time of admission, and are the least likely to have sufficient insurance coverage or private means to pay for treatment.
CONCLUSIONS

Local publicly supported programs are operating at full capacity. Even so, there are far more regular drug users than people in treatment, so the potential demands on the system could increase even if indicators of drug usage among young people stayed stable for some years.

There is a particular need in this area for innovative programs to deal with PCP abusers, who constitute a group of young clients with special problems requiring a range of diagnostic and therapeutic skills. Local funding to develop such programs may be especially necessary since PCP is not so prominent elsewhere in the nation.

Research on the effectiveness of drug treatment programs is not so well developed that we can say what works, and for which clients abusing which drugs. This is not the same as saying “nothing works;” only that there are no firm generalizations at this point that can guide public policy in choosing cost-effective treatment programs and getting everyone who could benefit into them. Overall, the results from nationwide studies, both of drug and alcohol treatment, do suggest that some treatment is better than none.

Until a few years ago, most people in public treatment were heroin addicts, usually self-referred. Partly as a result of a policy to get heroin users off methadone and into other forms of treatment, heroin users may now be in less regular contact with the health system, which could be a dangerous trend given concern about the spread of AIDS.

Increased pressure from the criminal justice system has created a new wave of referrals, mainly users of drugs other than heroin, and workplace testing and the natural history of cocaine addiction are expected to put increasing and new demands on the system in the near future. Public programs have more than numbers to cope with in the waves of referrals produced both by drug sweeps and workplace campaigns. There is a problem of therapeutic style. Counselors in public programs can adapt to changes in the composition of the client population but doing so may well take some time, add strains on the system, and decrease even the limited effectiveness of current treatment programs.
V. PREVENTION OF DRUG ABUSE

Cutting off the flow of illegal drugs through interdiction and local enforcement appears impossible. "Curing" drug abuse for those who are already substantially involved is difficult, time-consuming, and expensive, and in any case works only after some damage has already been done. Although enforcement and treatment programs are clearly needed for specific purposes and populations, the major hope for long-term reduction in drug abuse lies in prevention.

In this section we briefly review the state of knowledge about prevention of drug abuse. We next discuss programs in the Washington metropolitan area, distinguishing for convenience between those conducted by the local school systems and "community-based" programs. Throughout, we present suggestions concerning types of programs, and institutional means for supporting them, that should receive high priority.

BACKGROUND

Primary prevention programs are aimed at deterring first or early use of illegal drugs. There are also secondary prevention programs aimed at getting those who are experimenting with some of the "gateway drugs" to quit or not to move on to harder drugs. Some examples of primary prevention programs for different audiences include units on drug abuse in school health courses, special school assemblies on drug abuse, "Just Say No" clubs for pre-teenagers, and public service announcements on local radio or television. Secondary prevention activities include short, intensive programs organized by local school districts for students who have been caught using drugs, and special counselling programs and self-help groups for children and family members of current substance abusers. Many of these programs are directed at the preteen and early teenage years because that is the period in which many individuals are initiated into drug use (Kandel and Logan, 1984). If teenagers make it through this period without using or experimenting with drugs, they are more likely to avoid using drugs (particularly "harder" drugs such as heroin) later on in their lives.

For a fuller description and analysis of prevention programs, particularly their varying rationales, see Polich et al. (1984, Sec. V).
Although everyone acknowledges the importance of prevention, it has until recently received much less program and research funding than treatment (and both have always received much less funding than has drug law enforcement). The terms governing the federal Alcohol, Drug Abuse, and Mental Health (ADM) block grants required that at least 20 percent of those funds be spent on prevention programs, and most states spent little more than that. In fiscal year 1986, prevention activities are reported to have consumed 14 percent of all public funds for drug and alcohol abuse prevention and treatment in the District and 3 percent in the state of Maryland (Butynski et al., 1987). An Interdepartmental Committee on Substance Abuse in Montgomery County estimated that prevention will account for 4 percent of county government, court, and school district budgets for all drug-related functions (enforcement, treatment and prevention) in FY 1988 (Department of Family Resources, 1987).

We have no figures for school district spending for regular instruction that is related to substance abuse, nor do we have a way of assigning a value to the time and materials that volunteers devote to drug abuse prevention. Even if these data were available, they would probably not affect the conclusion that prevention receives a much smaller share of drug-related funding than treatment and enforcement.

Partly because of its low priority in the past, and partly because of the sheer difficulty of changing people’s health-related attitudes and behaviors, one cannot find in the prevention literature any clear guidance on which programs work for which types of audience. There is considerable agreement on what does not work and some promising but still unproven ideas, many of them taken from the better-developed programs against tobacco use.

The types of programs that do not appear to work are the information programs, either scare programs or programs that simply convey pharmacological knowledge on the assumption that well-informed people will stop using drugs. Such programs were popular in the 1960s and early 1970s. Indeed, there was some evidence that the information programs could be counterproductive: Young people learned about drugs of which they had not previously been aware and tried them out (Blum, Blum, and Garfield, 1976). The “general skills” approach that was used in the 1970s also appears to be ineffective, experiencing only moderate success at best. It attempted to make children more aware of how they would make decisions in general, often avoiding any mention of drugs to remove any appearance of lecturing or preaching. General

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2Virginia spent $29.5 million on treatment and prevention but did not disaggregate this figure any further.
principles, however, do not automatically provide guidance to young people facing immediate perceived pressure to use drugs; the teacher's posture of neutrality was impractical and confusing; and those adolescents at greatest risk tended not to have acquired values conducive to sobriety from the families and the culture at large (Blum, Blum and Garfield, 1976; Ellickson and Robyn, 1987).

More recently, several models of prevention programs have been developed that are unequivocal in counseling against use of illegal drugs, that focus on near-term negative consequences of drug use, and that seek to equip young people with specific skills for avoiding drug use in particular situations. These programs often start from a type of "infectious disease" model of drug use. Most young people have no strong views in favor of drug use, they simply drift into it because it is what (they think) other kids are doing. Older, socially adept teenagers are the counselors in some of the recent programs.

Adolescents' time horizons are short, and they tend not to worry about the long-term consequences of their actions. They also tend to have unrealistic views about their own chances of suffering the bad consequences of drug use, even if they know about them. Thus messages in many of the new programs emphasize the drug user's loss of control, inability to function, and immediate health risks, not on the future danger or low-probability catastrophic events.

Efforts are also made to disprove the notion that "everybody is doing it." Adolescents often believe that more of their peers are using drugs than in fact are (Ellickson, 1984). The "epidemic" rhetoric that frequently accompanies discussion of drug issues reinforces these misconceptions. Even if one accepts that half of the high school seniors have tried marijuana, a considerable number of high school and junior high students have not; and only a distinct minority are current users.

Most of the evidence about the effectiveness of these new techniques concerns delays in initiation of smoking tobacco. Use of these techniques to deter drug use and drinking and driving is still mainly in the experimental stages (Ellickson and Robyn, 1987; Tobler, 1986).

Most primary prevention programs are aimed at "gateway drugs"—alcohol, tobacco, and marijuana. It may well be that PCP should be considered a gateway drug in the Washington area, because of its prevalence among adolescents and because it is commonly used with the other three.

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3This lack of realism about one's own chances of becoming dependent on drugs or dangerously ill is characteristic of young people's thinking about many health issues. Phelps (1987) shows how drastically, and consistently, college students underestimate the excess risk associated with drinking and driving.
Many prevention programs now operating in Washington-area school districts have incorporated the lessons of the first two decades of drug prevention research, and many students passing through the area’s public schools are receiving concentrated drug education programs as they reach the years when large numbers are starting to experiment with drugs.

**SCHOOL-BASED PROGRAMS**

We gathered information on substance abuse programs in the Washington metropolitan area by interviewing school district personnel responsible for substance abuse education. These interviews dealt with the placement of substance abuse in the curriculum, the time allotted, the training of teachers of substance education, program approaches, and curriculum objectives. Additional information on discipline policies, suspensions and expulsions, school district characteristics, and budgets was also sought. We did not collect information from private schools.

**DESCRIPTION OF COURSES**

Substance abuse education programs in the Washington metropolitan area school districts are typical of those in substance abuse education in the nation. None of the school districts in this area has what could be considered “first generation” drug education programs relying on pharmacological information and scare tactics. Instead, many school districts begin substance abuse education very early in the elementary grades—kindergarten or first grade—by introducing general concepts of health and wellness. Alcohol, tobacco, and drugs are discussed within this context of health and safety.

Programs for intermediate (grades 7 to 9) school children move away from an information approach toward developing decisionmaking skills and peer resistance techniques. Only a small percentage of high school students receive substance abuse education in the classroom. Instead students are reached more sporadically through schoolwide assemblies and clubs, and an information approach predominates. Appendix B provides examples of the types of extracurricular programs that can be found in the area school districts.

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4In the District of Columbia; Montgomery, Prince George’s, Fairfax, and Arlington counties.
Elementary Level (K-6)

Substance abuse education at the elementary level is a delicate matter. One seeks to provide information to discourage drug use while neither raising children's curiosity nor frightening them. Prevention programs around Washington attempt to walk this fine line by emphasizing good health in general. The hope is that this instruction will lay the foundation for more specific prevention programs in the later grades.

Elementary school students in this area receive nine to twelve hours of health education as part of the health curriculum. Usually this class time is spread through the school year. In Prince George's County for example, students receive health instruction for 45 minutes a day for eight to twelve days a year.

Basic texts are heavily supplemented by pamphlets, brochures, posters, and workbooks developed by nonprofit organizations. Pamphlets and brochures provide more current and specialized information. Information on PCP, for example, is not likely to be found in any textbook, but the Lions Club of Temple Hills publishes a pamphlet on the subject and makes the pamphlets available to Prince George's County public schools. Using pamphlets and brochures, posters, and the like also allows for more flexibility in the curriculum. In addition, nonprofit organizations frequently donate materials or provide them in exchange for a teacher's or curriculum specialist's evaluation. This effectively extends the budget for instructional materials.

The approach of substance abuse education courses at the elementary level includes clear labeling of what is bad for one's health and well-being taught by regular classroom teachers. These classroom teachers may or may not have training in drug education or in the particular curriculum. The State of Maryland, for example, requires that teachers of drug education have training in drug education; and teachers in the District of Columbia are required to pass a hygiene test, which includes information on drug abuse, and to take a drug education course. Appendix B summarizes teacher preparation at the various education levels.

Arlington County is an exception in school prevention efforts in that regular instructors come from outside the classroom at the elementary level. Uniformed police officers are the instructors for Project DARE.\(^5\) DARE is a preventive program developed in Los Angeles. It

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\(^5\)Project DARE officers were trained for a total of 120 hours over three weeks during the summer. The training was sponsored by the Virginia State Police and conducted by officers from Los Angeles. Information on Project DARE from "DARE to Say No!" a brochure from the Virginia Department of Education and the Virginia Department of State Police.
emphasizes four areas: (1) providing accurate information about alcohol and drugs, (2) teaching students decisionmaking skills, (3) showing students how to resist peer pressure, and (4) giving students ideas for alternatives to drug use.

Under Project DARE, a police officer visits the school once a week for a semester. The officer instructs the DARE curriculum to fifth or sixth grade classes, whichever is the exit grade for that school. These lessons require 45 minutes to one hour of class time. A culmination assembly is held for these students as well. The officer also visits at other grade levels for approximately 20 minutes. In addition to student education, a 30-minute faculty awareness session is held and a two-hour parent education evening is offered.

Intermediate/Junior High Level (Grades 7–9)

Given that the typical age for introduction to alcohol and drugs is the early teens, usually 13 or 14 years old (Kandel and Logan, 1984), prevention efforts at the junior high school level are particularly important. Junior high students are usually experiencing a transitional period in their lives. They begin to place more emphasis on friends and social activities and are becoming quite concerned about how others perceive them. It is at this point in their development that “fitting in” with their peers is rapidly moving up on their list of priorities. Their perceptions of what everybody else is doing, whether or not their perceptions are accurate, can greatly influence their choices. The prevention programs in the Washington metropolitan area are designed to address some of the pressures and confusion that students are experiencing.

At the intermediate or junior high school, substance abuse education is usually still a part of the health curriculum, except in Montgomery County where it is part of the science curriculum (seventh grade) or the physical education curriculum (eighth grade). The curriculum for intermediate students is often based on a textbook supplemented by additional materials from nonprofit organizations. In Prince George's County, the focus of the curriculum is the SMART program (Self-Management and Resistance Training). The program is not information oriented, but instead emphasizes attitudes and behaviors. Students learn about decisionmaking and do role-playing.

As the description of Project SMART indicates, although substance abuse education may still be located in the health curriculum and the curriculum may still be based on a text and supplemental materials, the approach has usually changed. By the sixth or seventh grade, the
primary approach is an individual deficiency model\textsuperscript{6} or a social pressures model rather than the health informational model used in the lower grades.

At the intermediate level, health educators (rather than the regular classroom teacher) teach substance abuse education. The advantage of this is that such instructors are presumably more knowledgeable about the subject area. A possible disadvantage is that since health educators do not spend as much time with students as a regular classroom teacher, they do not know the students as well and are less likely to be able to serve as a resource for them. Teachers teaching a substance abuse education unit are frequently approached by students who have problems in their families and who are perhaps concerned about an older sibling or a parent.

Drug abuse education at the intermediate level takes on added importance because it is frequently the last time most students will receive substance abuse education.\textsuperscript{7}

**Secondary Level/High School (Grades 9–12)**

At the secondary level, substance abuse education is provided in health courses, usually as electives. The issue for this level of education is therefore not simply content or approach, but also the number of students reached. Some 8-10 percent of all high school students in Prince George’s County enroll in one of the elective health courses. In Montgomery County only 5 percent of all high school students enroll in health courses. One effect of the recent reforms in education and changes in graduation requirements is that a student has less time for electives. Furthermore, those who enroll are not always motivated by the course content. They may enroll because the course fits their schedule, it is considered an easy course, or they need the credits to graduate.

Not all school districts offer drug education at the secondary level. Fairfax County, for example, offers Drivers’ Education in the tenth grade and does not offer health courses in the eleventh and twelfth grades. Teacher preparation at the secondary level is similar to that at

\textsuperscript{6}The individual deficiency model assumes that a person turns to drugs in an effort to compensate for a lack of self-esteem. See Polich et al., 1984, pp. 136-137.

\textsuperscript{7}The last grade that substance abuse education is required is in the seventh grade in Prince George's County, eighth grade in Montgomery County, and ninth grade in Fairfax County. High school students in the District of Columbia Public Schools must take 1.5 credits of health and physical education, which include drug abuse elements. High school students in Arlington County Public Schools must take 2 credits of health and physical education, usually in the 9th and 10th grades, but possibly as late as 11th and 12th grades.
the intermediate level, and most teachers of substance abuse education are health educators or physical education teachers.

OTHER RESPONSIBILITIES OF THE SCHOOLS

In addition to presenting drug prevention information, teachers and school administrators perform other functions that can affect drug use. The referral and discipline policies discussed below represent both primary and secondary prevention, deterring some students from ever trying drugs and identifying those who are already experimenting.

Health Personnel, Teachers, and Referral Policies

Whether as the consequence of policy or not, school nurses are among those most likely in a school to see students with substance abuse problems. Such students visit the nurse’s office frequently with related complaints—headaches, stomachaches, watery eyes, etc. Each time a student reports to the nurse’s office, that visit must be logged on the student’s record card. Students with a substance abuse problem can often be identified by an unusually long health record card, as most students visit the nurse only once or twice a year. Unfortunately, some nurses are assigned to multiple responsibilities in the community and see each student only briefly. Although nurses may have the opportunity to see substance abusers they are not likely to identify them or spend much time with them.

The person in school most likely to recognize a student’s drug problem is the teacher. What action that teacher can take depends on the school district.

The State of Virginia provides immunity to teachers who refer a student to drug treatment.8 In Arlington County, teachers are likely to refer students to the nurse. In Fairfax County, teachers receive training about drug abuse and are encouraged to recognize and refer students with substance abuse problems to the Substance Abuse Resource Center (SARC). Each school in Fairfax County must designate an administrator as the substance abuse resource person, with responsibility for referring the student for any needed help and handling the situation administratively; usually this means enforcing the disciplinary policy.

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8Currently there is legislation before the Virginia Assembly that would allow prosecution of teachers who do not report suspected drug abuse. This is similar to a statute covering child abuse reporting requirements.
Maryland law also protects those students who seek information from teachers on how to overcome drug abuse problems. No statement made by a student to a teacher is admissible in any proceeding. Neither are educators under legal duty to inform the parents of a student about his or her drug abuse problem. Educators cannot be compelled by the school administrator or other authorities to divulge the identity of any student who seeks drug abuse information. This protection, however, extends only to information received during a drug counseling or student-information session. No information is available as to whether this policy has generated more referrals. All incidents concerning possession, use, or distribution of illegal drugs must be reported to the principal.

In Maryland, all school personnel—teachers, counselors, nurses, and administrators—can refer a student to a treatment program. They are encouraged, however, not to make judgments or diagnoses about a student's problem and instead are urged to refer the student to the nurse.

In the District of Columbia, teachers and other school personnel cannot refer a student directly to a drug treatment center. Such a referral requires parental consent. If a student does not look well or is behaving oddly, that is treated as a health problem and the student must be referred to a health professional. School personnel may not make a diagnosis or accuse a student of drug abuse.

More recently, some schools have begun to experiment with the use of Student Assistance Program counselors, adapting the model of Employee Assistance Programs at worksites. This may provide the access to a specialized professional who does not have conflicting roles and demands.

**Discipline and Reinstatement Policies**

Students who use or sell drugs may also be subject to disciplinary action up to and including expulsion. In general, a first offense for possession or use warrants a suspension. A parent conference or attendance at a seminar is often a requirement for readmission. A second offense for possession or distribution generally warrants expulsion. School officials who suspect a student of distributing illicit substances are required to contact law enforcement officials.

Some area school districts have instituted disciplinary policies that go beyond the suspension-expulsion model. In Fairfax County Schools the first violation of the ban on illicit drugs and alcohol requires out-of-school suspension for five days and suspension for 30 calendar days
from all school activities. A second (and any subsequent) violation requires out-of-school suspension for ten school days and suspension from all school activities for the remainder of the school year. Fairfax students who are suspended must participate in a reinstatement program so that their absences for five or ten days are recorded as excused. A student who is not excused will receive a failing grade for the course for the quarter. Students and parents participate in a three day program designed for self-assessment. The schools cannot mandate drug assessment for legal and financial reasons. The program is held evenings every week for the previous week’s suspensions. Parents are separated from students in order to make the program more effective.

The Fairfax suspension procedure provides an important example because it is, in effect, a prevention program targeted at known users. This example of early intervention highlights the importance of acknowledging that some students already have experimented (or are using) drugs. A prevention program is not comprehensive if its sole objective is to discourage first use; such a message will be lost on a large share of the audience.

COMMUNITY-BASED PROGRAMS

School-based programs have the limitation that many of the young people who most need help are either disaffected from school, frequently absent, or have dropped out by age 16. Community-based programs at least have the potential to reach the difficult youngsters, and they can often reach other groups with special needs (adult women, employees, etc.) But community-based prevention does have the disadvantage of lacking the captive audience the schools have. No one has the attention of the target population for long enough to carry out intensive counseling.

Community-based prevention is a mixture of public-sector and private-sector activities, without sharp boundaries between the two. For example, Alexandria’s Community Services Board has a “Peer Advisor Program” in one recreation center, which is being revised to focus on “personal social skill building” (City of Alexandria, 1987, pp. 6–7). Montgomery County makes “mini-grants” to community organizations for various prevention activities and funds the Care

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9In the 1985–86 school year, Fairfax County Schools recorded 185 high school suspensions regarding drugs and 288 regarding alcohol. These numbers represent incidents, and some students were suspended more than once. Fairfax County had approximately 44,000 high school students enrolled that year.
Center (which has school system and private funding as well) to keep such groups in touch and provide them with materials and professional support. Both of the Maryland counties submit annual prevention plans to the Prevention Coordinator in the State Drug Abuse Administration\(^{10}\) for spending block grant funds.

Many voluntary groups are active in drug prevention in the Washington area, with or without support from public funds. For example, the Washington Area Council on Alcohol and Drug Abuse, Inc. (WACADA) under contract from ADASA, provides a telephone hotline and supports prevention coordinators in two wards (WACADA, 1987). WACADA also publishes the most comprehensive guide to drug and alcohol abuse services of all descriptions in the Washington area (Wright, 1987).

Local drug treatment programs often have outreach activities, sending recovering clients into schools or recreation centers to speak to young people about the dangers of drug abuse. Self-help programs using the Twelve Steps (the basis of recovery worked out by Alcoholics Anonymous) place great emphasis on the ability of the recovering person to share the gift of sobriety with others. Service organizations such as the Kiwanis produce and distribute educational materials and arrange speakers for groups. A newly formed business group in Montgomery County, Business Against Drugs (BAD, Inc.), distributes prevention materials to workplaces. This is one of the few prevention programs outside the mass media aimed at age groups other than adolescents. One radio station sponsored a public lecture series on various drug-related issues in 1987, and local television and radio stations have broadcast public service spots directed against substance abuse. Many local churches and scout groups have programs directed against drug abuse. \textit{Ad hoc} neighborhood groups have arisen in some places to demand action against open drug markets. Recreation centers, often on the initiative of individual staff members, are involved in drug prevention and counseling.

There has been a good deal of interest lately in supporting the development of parent groups. Parents Associated to Neutralize Drug and Alcohol Abuse (PANDAA) in Northern Virginia is an especially active model. The group was started by parents whose children had become involved with drugs. PANDAA volunteers have produced three guide books concerning drug use, the schools, and the courts; they publish a newsletter, staff a telephone hotline, and lobby assiduously for passage and enforcement of laws against drug abuse and alcohol use by minors.

\(^{10}\)Beginning in 1987, the Drug Abuse and Alcohol Administrations within the Maryland Department of Health and Mental Hygiene have merged.
Such volunteer efforts have been one mainstay of prevention programs outside the schools (and have contributed in many ways to the programs within the schools). But despite some clear successes, they often suffer from a lack of continuity. Parents’ groups, for example, frequently rely on the efforts of a small group of people, motivated by their own children’s imminent promotion to junior high- or middle-school, or by their own children’s current involvement with drugs. Both District and county health officials told us that it is unusual for *ad hoc* anti-drug groups to stay active for very long.

Proposals for community-based prevention come from small groups of parents, businesses, and civic organizations, which do not usually require large grants for their small-scale efforts. If they are to achieve much, they require support from outside professionals who could generate and sustain volunteers’ interest, help in the development of proposals, mediate between small groups and the government agencies that favor large grants and copious reporting, keep the small groups in touch with others and with the wider world of professionals in the field, etc., all the activities described summarily by those who perform them as “hand-holding.”

This is one of the roles that is to be filled by the prevention coordinators in county governments and in each ward of the District. These positions have only recently been created or become full-time in most local jurisdictions. Fairfax and Prince George’s counties have just upgraded part-time prevention positions in health departments to full-time positions, and ADASA now plans to place one full-time prevention coordinator in each of the eight wards of the District.

**Mass Media Campaigns**

As is the case with other types of prevention programs, the effectiveness of mass media campaigns has rarely been evaluated.\(^1\) It seems reasonable to assume that because television and, especially for teenagers, radio occupy such a large part of the day for most people, they should form a large part of the campaign against illegal drug use. Station owners, besides their concern for the communities in which they live, also have the stimulus of FCC licensing requirements to get them to participate. But what types of message should they transmit, aimed at which audiences?

When compared with the school programs, the broadcast messages usually sound old-fashioned, designed to deter drug use with a stern

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\(^1\)We refer to “mass media” here as including print as well as broadcasting, but in fact most of the research concerns only broadcasting, which seems to put out far more public service messages than the print medium.
statement from a baseball or basketball star close up to the camera. The broadcast messages do not have the same emphasis on positive reinforcement of healthy living or on specific ways of getting out of situations in which drug use is the path of least resistance. Nor does one usually see older, socially adept teenagers giving the messages. The broadcast messages tend to come from people one would otherwise see on television.

Perhaps these messages work, but there is a good deal of debate on the point. (See Ellickson and Robyn, 1987, for a short summary.) The advertising may just serve to associate glamour and athletics with drug use. Messages from athletes who have been treated for alcohol or drug abuse, whatever the intent, may just reinforce the impression that this is what stars do, and you can get away with it. ("He does coke, and he looks pretty good.") Apparently there is little research on who should make the announcements (someone young and famous? old and famous? not famous but identifiable like the viewers?). Media campaigns almost always just assume that the person delivering the message should be well-known.

One-shot messages may not have much effect. Flay (1987) has reviewed studies of the effectiveness of mass-media anti-smoking campaigns. His main conclusion was that they can affect attitudes and even behavior, but the effect is larger and more certain when the broadcast campaign is connected to the more targeted, face-to-face approaches. If this is also the case in drug-use prevention, then local television stations should try to coordinate their public service messages and programs with what is going on in the schools and recreation centers at the same time. It would be preferable to broadcast a whole flurry of messages, designed to use the same approach as the school curriculums, the same week that the school courses are covering drug use or that assemblies are being held, rather than distribute the same messages throughout the year. There is a model for this in the campaign against drunk driving—the Washington Regional Alcohol Program (WRAP), a combined private and public-sector effort, which elicits the help of radio disk jockeys during graduation week at local high schools, when other WRAP activities are also at their peak.

**High-Risk Groups**

For community-based programs, there is a new emphasis on secondary prevention, concentrating on a specific population to prevent experimental use of "lighter" drugs from turning into frequent use of the more debilitating drugs. Like some primary prevention programs, these early interventions are aimed at youths already identified as
high-risk (those who have been suspended from school or arrested for possession, children of substance-abusing parents, etc.). The nonschool prevention money made available under the 1986 Drug-Free Schools and Communities Act (Title IV of PL-99–570, the Anti-Drug Abuse Act of 1986) is targeted for new programs aimed at such “high-risk youth.” The goal is to increase the cost-effectiveness of prevention efforts by targeting those believed to be in imminent danger.

Children of adults who abuse alcohol and other drugs are known to be at exceptionally high risk of developing addiction problems themselves. Children of alcoholics, for example, have a risk of developing alcoholism three to four times as high as the general population.\(^{12}\) Most young people with a serious alcohol problem also use illegal drugs, according to treatment professionals in the Washington area, where there are many chapters of self-help groups using the principles of Alcoholics Anonymous for members of the families of alcohol or narcotics abusers—Al-Anon, AlaTeen, and Narc-Anon. In Montgomery and Arlington counties, counselors in the public drug treatment programs also have started groups primarily for family members. Montgomery County has submitted a proposal for a “Comprehensive Prevention Service System,” with a particular emphasis on new programs for high-risk youth, to the new Office of Substance Abuse Prevention (OSAP) demonstration grants program. High-risk youth are also the concern of some of the proposals to OSAP that ADASA is coordinating for the District.

Intensive prevention efforts involving face-to-face counselling, long-term and usually in small groups, are infeasible on a large scale outside the schools, unless vastly increased resources are devoted to substance abuse prevention. The idea of having a spectrum of programs, ranging from low-intensity, often mass media campaigns for the population at large, to very intensive efforts for smaller groups defined as high risk, seems attractive. However, programs aimed at high-risk groups suffer from the same lack of hard information about effectiveness as the rest of the prevention sector.

New Federal Funding for Prevention

The 1986 Anti-Drug Act (PL 99–570) authorized additional federal grants to the states totalling $200 million in FY 1987 and $250 million in FY 1988 and 1989 for drug-abuse prevention and education programs. Of the money allocated to each state (on the basis of its share of the nation’s school-aged population) 70 percent is to be used by the

\(^{12}\) See Helzer (1987) for a review.
state educational agency to make grants to local school districts for development and implementation of programs. The remaining 30 percent makes up the "Governor's Discretionary Fund" for grants to public agencies and private organizations for community-based prevention and education programs.

Like most states, Maryland and Virginia have chosen to allocate the new prevention grant funds to the state drug abuse agencies, which in turn will allocate funds to the counties for local programs operated either by county agencies or by local organizations. The District grant will be used to help finance ADASA's prevention contracts. There is also new funding being awarded on a competitive basis by ADAMHA, after review of proposals from public agencies and private groups that have been "coordinated" by the state agencies.

In relative terms, prevention still takes up a modest share (13 percent) of the money authorized for FY 1987 drug programs. But compared with what has been available before, the new prevention money could be fairly influential because it would nearly double the amounts available outside the schools for public spending. Of course, this depends on whether the Congress is willing to appropriate the money that was authorized and will continue to make funds available.

Given that drug use prevention is inherently a complex task requiring patient development and nurturing of new ideas, the timing as well as the size of the flow of funds becomes an issue. If there is no guarantee of funding continuity, programs will be reluctant to experiment with new ideas and be unable to keep and promote quality staff. The recent infusion of funds has not been met with an equally sudden profusion of full-scale, mature, efficient programs in the communities. A one-time increase in the level of funding may increase the number of people reached by the same old programs and yet do little to improve the effectiveness of the message.

CONCLUSIONS

Prevention programs are much more dispersed and various than the enforcement and treatment efforts analyzed in previous sections. They involve specialized and nonspecialized government agencies, as well as a wide variety of private institutions. It is therefore difficult to assemble a complete description of the prevention activities of the metropolitan area.

Drug prevention gets little of the drug policy budget, even when we add in the private efforts. What is carried out under the prevention rubric is very mixed in quality, A major problem is obtaining any
systematic evidence as to what works and what does not. This is not just a local shortcoming but a national one, reflecting the persistent shortage of funds in past years for prevention research and experimentation.

We began this section with the statement that prevention presents the major prospect for large-scale reduction in drug use. In large part this arises from well founded pessimism about the alternatives: Neither treatment nor enforcement offers any prospect for major changes in drug use, although both serve important purposes. There is little evidence that prevention programs have changed behavior much to date, but at least the prevention efforts in many Washington area schools are taking advantage of the little information available. In general, these programs have implemented some of the promising new techniques such as resistance training. Health department and private sector efforts appear to be less current in this respect and would probably benefit from adopting some of the approaches now being tried in school programs.

Given the low level of funding in the past for prevention programs, particularly for prevention research, the above argument is enough to justify an expansion of local prevention efforts. Our recommendations for how to begin this expansion are given in the next section.
VI. CONCLUSIONS AND RECOMMENDATIONS

Washington’s drug problems have clearly not gone unnoticed. The public sector and, more recently, the private sector have both invested substantial and growing resources to deal with illicit drug use. These efforts have sometimes been extremely well executed and innovative, as in the case of the District’s drug enforcement effort. Yet the problem certainly is not declining. Something more than a clarion call to action is required.

THE VARIETIES OF DRUG PROBLEMS

It is important not to think of just one “drug problem” in the Washington area, or of one drug policy (or agency) that will solve that problem. Many different groups of people are involved with illicit drugs in different ways. Prevention and treatment programs vary in their effectiveness and appropriateness for different groups. Enforcement efforts serve several purposes, including maintenance of neighborhood order; as drug policy, they can disrupt supply networks, get some hardcore users into treatment, and deter some casual users. Each of the policy instruments involves multiple agencies in all the local jurisdictions, and each is best suited to solving some of the problems of part of the area’s drug-using population.

The principal illicit drugs used here differ in the types of people using them and in their direct physiological and psychological consequences. Most users use more than one drug, but there are variations in the preferred drugs or primary drugs of abuse for different parts of the local drug market.

Cocaine is a stimulant, apparently very addictive for many regular users (especially in its new forms), and attractive to a broad range of the population. Regular use is found in all income and racial-ethnic groups and across a wide range of ages. Heroin is a highly addictive narcotic, consumed by a fairly small number of mostly black males aged between 25 and 40. PCP is very much a young person’s drug, inducing a wide range of effects in users. It occasionally can precipitate very violent and bizarre behavior, and there is some concern that it seriously harms the mental capacity or exacerbates underlying mental problems of a substantial number of users. Marijuana is a mild euphoric, consumed by a very large number of adolescents and adults, which can cause chromosomal damage and possibly other physiologic
problems. It is not physically addictive in the same ways as opiates and cocaine, but it can lead to psychological dependency.

These drugs differ not only in who uses them and what effects they induce but also in what modes of treatment are most efficacious and in the methods by which they are distributed in illegal markets. For heroin a substitute drug, methadone, accomplishes as much of a cure as seems to be attainable for the committed street user. No counterpart to methadone exists for any other illicit drug. Those who enter treatment for cocaine, however, have a greater prospect of at least completing the drug-free therapy session. This probably reflects both variation in the effects of the drug itself and in the population of users presenting at treatment facilities.

Heroin seems to be retailed largely in street transactions, while marijuana is often sold in private settings. Street enforcement may be able to affect the behavior of heroin addicts but is unlikely to seriously disrupt that of most marijuana users. Prevention programs will probably affect marijuana use most, at least in the short run, because marijuana use almost invariably precedes use of other illicit drugs. Heroin use is not likely to be affected by prevention programs; it simply comes too late in the standard progression of drug use, which moves from alcohol and tobacco to marijuana, PCP, cocaine, and heroin. Most users of marijuana will not go beyond that drug in this chain, at least in terms of regular use, but no heroin user will reach that drug without having previously tried many others (Kandel, 1978; Richards, 1980).

Clearly one policy will not work for all. There are different prospects for each drug with respect to enforcement, treatment and prevention. We have some reason for optimism that it is possible to reduce marijuana use through targeted prevention campaigns; the same cannot be said for heroin. Street enforcement aimed at heroin markets is likely to drive users into treatment but the sheer scale and privacy of marijuana markets makes it fairly insensitive to such enforcement.

One argument against this notion of different policies for different drugs is that the drugs are all substitutes for each other. An effective policy against cocaine use, particularly an enforcement campaign, might simply shift users to other drugs. Although the research on consumption patterns is limited, there is no reason to believe that substitution is easy and complete. If we reduce the availability or attractiveness of cocaine we might expect to see some groups reduce their drug consumption, however measured.

The remainder of this section ties instruments to particular user groups, problems and kinds of drug use. In that spirit we now turn to the most recent and disturbing drug-specific consequence of use, namely AIDS.
DRUG USE AND AIDS

Two populations are particularly at risk from AIDS, homosexual men and intravenous drug abusers (IVDA). Nationally the latter account for about 25 percent of all recorded AIDS cases.\(^1\) Locally the figure seems to be lower, at 13 percent (IVDA only) as of March 1987 (McFarland, 1987) in the District of Columbia; but that only heightens the need for measures that reduce the community's risk of AIDS from IVDA.

Sharing needles with others, particularly anonymous sharing with large groups, substantially elevates the risk of spreading AIDS. This behavior has been common among heroin users in New York City; somewhere between 50 and 60 percent of that population seems to have been infected with the AIDS virus and hence is at considerable risk of contracting the disease within the next few years. Other drugs, particularly amphetamines, are also taken intravenously by many users, but the same pattern of large-scale needle sharing does not seem to have developed.

We do not have figures of the prevalence of the AIDS antibodies in the Washington heroin addict population. However, given that shooting galleries have been a common feature of heroin addict life here for some years, the population is possibly highly infected.

AIDS in the drug addict population exposes the rest of the community to some risk of infection, largely through female prostitution. The prostitute population includes large numbers of female addicts and sexual partners of infected addicts. A small sample of Washington prostitutes showed an AIDS seroprevalence rate of over 50 percent. Few cases of infection through prostitution have yet been reported, but some researchers believe that this route of infection represents a considerable future threat.

Regardless of how infected the current heroin population in Washington is, or the risk that this infection poses to non-users, it is clearly incumbent on the community to consider methods for reducing the probability of further spreading of the disease among heroin addicts.

REALISTIC EXPECTATIONS

Before we present our recommendations, it is important to note the limits of what can be achieved in the near future through local policy efforts. The causes of the changes in drug use patterns are not well

\(^1\) We include here those at risk from IVDA only (17 percent) and those who are at risk from both IVDA and homosexual activity.
understood, and there has been little research or analysis on the effect of particular policies.

We have offered no explanation as to why Washington’s drug problem seems peculiarly severe. It does have a slightly higher proportion of its population in the peak drug-using age groups, but demographic differences apparently account for only very small part of variation in drug use across cities or over time. The affluence of some of Washington’s suburbs, occasionally suggested to be associated with large-scale self-indulgence, fares little better as an explanation; drug use is also common in less affluent populations in the area. Nor could affluence account for the apparently high incidence of heroin addiction, an affliction of poorer communities.

To some extent current use patterns are a matter of history. The per capita population of heroin users is high in 1987 because it was high in 1977. Because heroin users do not mature out of the condition and rarely move to other cities, the population now consists mostly of those Washingtonians who were addicted to that drug some years ago. Unless new treatment methods emerge, or unless AIDS carries off large numbers, Washington will have this population for many years to come. As we have already argued, ensuring that there are enough slots for all those who wish to enter methadone programs is a high priority. But that can do no more than ensure that heroin users lower their consumption, reduce their risk of contracting AIDS, and commit fewer crimes.

We suggest that history also explains the high incidence of PCP use in the area. Epidemiological models of drug use suggests that once a particular drug is established in a population, it is likely to stay there. Those who become drug users will have a high probability of using that particular drug, because they will come into contact with many who are already using that drug themselves. In Washington, PCP is very common but amphetamines uncommon; in Philadelphia the opposite pattern is found. Even if drug prevalence declines, we should expect to find that this pattern of variation continues.

Drug use levels change for reasons that we do not understand. Although public attention has been directed toward recent increases, there have also been important declines. Recruitment into marijuana use, by many indicators, peaked in the late 1970s and has declined substantially since then. For example, the percentage of high school seniors reporting daily use in the previous thirty days after rising from

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2We qualify this statement about incidence with the word “apparently” because systematic estimates of heroin addict numbers in different metropolitan areas are not available. However, the treatment and DAWN indicators suggest a large heroin addict population in Washington.
6 percent in 1975 to 11 percent in 1978 fell to 6 percent in 1982.\footnote{As stated in Sec. II, there were not correspondingly large increases in the prevalence of other drugs.} There is no evidence that the retail price rose in the period 1978–1982, and the vast majority of the 1982 survey respondents still reported the drug to be readily available. Attitudes toward the health consequences of marijuana use changed, but there is no research that ties the changes in behavior and attitudes together.

We have little evidence that any policy measure can substantially affect drug use. There are some exceptions, but each seems to be a special case. For example, recruitment into heroin use declined dramatically in the mid-1970s, probably because intensified enforcement made the drug much more expensive than it had been in the late 1960s and also ensured that those who were addicted led demonstrably unpleasant and hazardous lives. We seem to be unable to reproduce this effect (which has certainly had some adverse consequences, both to the users and to the rest of society) for other, more populous drug markets.

This is not to suggest despair but only to point to the limits of our ability to predict the consequences of changes in local drug policy on levels of drug use. It also makes clear that the problem does not always worsen.

RECOMMENDATIONS

The following recommendations are aimed at policymakers in the community, both public and private. They deal primarily with local, rather than federal, policy.

Enforcement

One obvious question raised by the analysis of Sec. III is whether the suburban jurisdictions might be able to increase their drug enforcement efforts to a level (in terms of resource commitment) comparable to that provided by the District. We do not believe that is either necessary or feasible given the different nature of suburban drug transactions.

The District crackdown on drugs is in large part driven by a concern with street order and the crimes surrounding the street markets for drugs. Suburban jurisdictions appear to suffer less acutely from these problems. Rockville Pike, locus of the activities of the jump-out squad, may have been a source of annoyance to the surrounding community
but the very fact that the market there was for transactions from automobiles made it a modest threat to the safety of the area. Other areas of the suburban jurisdictions—parts of Prince George's County close to the District line and sections of Alexandria—present similar problems to those confronted in the District, but these appear to aggregate to something much smaller than the order and safety problem associated with drug marketing in the District.

The street markets represent both a problem and an opportunity for enforcement. Their visibility constitutes an important element of their danger to the community; they are conspicuous evidence that the citizenry has lost control. But that same visibility is also what makes them so vulnerable. Operation Clean-Sweep may have been carried out particularly well, but the fact that such a small investment in targeted enforcement could produce so many arrests for serious offenses is also indicative of how rich the pickings were.

Suburban police are unlikely to have an opportunity to increase their pressure against drug sellers so rapidly. Certainly they should be expected to tackle any concentrated street market that appears. But beyond that they may only be able to exert pressure against drug sellers by the more arduous process of undercover operations.

There is in some ways a division of labor among drug enforcement agencies and levels of government. The federal level (DEA, Customs, the Coast Guard) primarily attacks the higher ends of the marketing chain—importers, high-level dealers. Local agencies are charged with clearing up neighborhoods and disrupting the retail traffic. Effective local enforcement may also encourage some users (notably heroin addicts) to turn to treatment as an alternative, and it may also deter some new or casual users. These latter functions may lack the glamour associated with announcements of large busts with artificially high "street values" of drugs confiscated, but the confiscation of huge amounts of drugs from high-level dealers rarely does much to reduce street availability. The drugs are replaceable, and so are the dealers.4

The quality of life may be affected more by the neighborhood clearance and deterrence of new or casual users that are local responsibilities than by federal enforcement.

There is persistent pressure on all law enforcement agencies to go after big dealers, but we suggest that local agencies may have the strongest long-term effect on local drug use by aiming for the maximum disruption for the lives of street sellers and their customers. This would mean directing resources toward "sweeps" and even arrest

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4 This point is discussed at greater length, using information from interviews with high-level dealers now in federal prisons, in Reuter and Haaga (1987).
for small sales and possession. The deterrent effect on local suburban users of some well-publicized arrests of people like themselves might have more influence than the arrests of some Jamaican or South American dealers, even if the latter have far more drugs in their possession.

We do not want to overemphasize this point. The large dealers are often very violent people, especially in recent months, as new groups are attempting to break into local markets. Ending the violence clearly is a more pressing task for the police than helping in the long-range goal of deterring the otherwise law-abiding drug user. But we recommend that policymakers and the public keep in mind the unique responsibilities of local enforcement and judge success by the numbers of violent crimes solved, the numbers of neighborhoods saved, and the potential long-term deterrence of drug use, not by the more newsworthy statistics on confiscations.

**Improve Coordination Among Programs and Jurisdictions**

The metropolitan area needs a program to facilitate coordination among the many agencies involved with the drug problem. The growing concern with drug use has generated major expansion in the scale of funding for drug control programs of all kinds. Even at the federal level the expansion has been of an uncoordinated nature, although a single legislature makes the allocation. Congress has bemoaned that lack of coordination and has attempted to create a “drug czar.” The administration has succeeded in defeating that effort and has tried to calm Congress’s concern with the creation of an interagency group called the National Drug Policy Board, which is intended to ensure budgetary, strategic, and tactical coordination in drug policy.\(^5\)

At the local level there has been a similar expansion of the various programs. Like the federal effort, it has been dominated by the growth of enforcement efforts. In the Washington area, the number of drug enforcement arrests increased by 70 percent between 1981 and 1986. This increase in enforcement, along with the other changes discussed above, has changed the scale and nature of demands on the treatment system. There is as yet little effort at drug policy coordination, a goal that will be particularly difficult to achieve because of the multi-jurisdictional and interstate character of this metropolitan area.

The lines of reporting, meeting people at conferences, moving on to new jobs, etc. all seem to be intrastate. Officials in county governments could name (and had phone numbers in their Rolodexes for)

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\(^5\)For an evaluation of the National Drug Policy Board’s early efforts see U.S. House of Representatives (1987).
their counterparts in the other county governments within their state, and in other organizations public or private within their county, but not “across the river” or “over the District line.” Indeed, we are aware of only three committees dealing with substance abuse issues that regularly bring together persons from different jurisdictions: The Washington Regional Alcohol Program (WRAP), a business-funded group with government representatives that promotes campaigns against drunk driving; the Council on Governments (COG) subcommittee on health issues, which is not yet heavily involved with drugs; and the COG law enforcement subcommittee.

According to testimony given to the House District Committee, cooperation among the law enforcement agencies (which include U.S. Park Police as well as District of Columbia, county, and some small city police departments) is effective and easy (U.S. House Committee on the District of Columbia, 1985). Success in this area may be due in part to the stimulus provided by the federal government, which pays for the sharing of information, training, etc., through a regional clearinghouse (Mid-Atlantic Great Lakes Organized Crime Law Enforcement Network, or MAGLOCLEN) for the Mid-Atlantic area. The Metropolitan Washington Council of Governments has also been active in promoting coordination among metropolitan enforcement agencies.

Drug policy other than enforcement does not yet have the attention of any strong regional or metropolitan institutions, despite potential economies of scale, unique area problems such as PCP abuse, and considerable externalities that one jurisdiction’s programs can produce for neighboring jurisdictions.

It may well be that drug policy does not really need much coordination at the federal level, where most of the responsibility outside of enforcement consists of making block grants to the states and grants for research and demonstrations. Where coordination is needed, and is currently lacking (in other metropolitan areas as well as Washington), is at the local or metropolitan level, where agencies implement programs whose effects spill over institutional and jurisdictional boundaries. For example, the treatment system, though growing, was clearly not equipped to cope with a near quadrupling of the monthly rate of criminal justice referrals in late 1986. Similarly, government workplace testing programs are likely to exacerbate the problem.

The District of Columbia’s policy shift to reducing reliance on methadone maintenance and assigning more of the heroin users to drug-free treatment programs may produce another example of the cross-border effects of local drug policies. Two of the suburban jurisdictions also operate maintenance programs and fear that they will be flooded by applicants crossing the District line. District officials, of
course, have their own legitimate complaints about paying for more than their share of the area's drug-related programs: Detoxification centers for noninsured persons are scarce, especially in the suburbs; and it is reported that patients from the suburbs have been taken to D.C. facilities. In summary, the fact that a treatment program requires an address within the appropriate jurisdiction has proven to be a surmountable barrier to those seeking admission.

Besides these instances of a need for more cooperation among agencies in different jurisdictions, there are also instances of a need for more cooperation among different agencies within a jurisdiction. Referrals from the criminal justice system to treatment programs are a case in point. The rising wave of criminal justice referrals puts the counselors in these programs in an awkward position as pseudo corrections-officials. The therapies for drug treatment are not things done to a patient, they are things done by a client, in an environment that the counselors try to make supportive. In therapeutic communities, the model is one of confrontation, making the user come to terms with the effects of his use. In drug-free outpatient programs, various forms of family or group therapy deal with the dysfunctions that lead to and maintain drug use. Even maintenance programs provide a lot of counseling on how to perform life's tasks. These methods all depend critically on the motivation of the client. Not all those referred by the criminal justice system lack motivation, but enough are just playing a game, according to treatment professionals, to interfere with the whole process. A wave of criminal justice referrals to public treatment programs not only can lengthen the queues for others who rely on the public system, it can alter the character of the system as a whole.

Enforcement of drug laws will no doubt continue. To cut back on enforcement would entail ignoring the legitimate demands of residents of many parts of the city and suburbs for improved public order. Operation Clean-Sweep, beginning in October 1986, resulted in a great increase of arrests, prosecutions, and convictions for drug-related felonies. It would be demoralizing to the police and a great many citizens now to simply drop the effort, to turn loose convicted felons without some term of incarceration, or, in the case of those whose crime plausibly stems from a disease of dependence, court-ordered treatment.

But to avoid overloading and distorting the treatment system, there must be some means of selecting from the flood of arrestees the stream of clients who could benefit from treatment. In Montgomery County, this is already quasi-formalized. Officials of the county department that provides treatment frequently go to the detention center, conduct short interviews, and select arrestees who are the most likely candi-
dates for treatment. Thanks to the mutual confidence built up over many years among the agency, the judges, and the police, this system results in a steady, apparently manageable flow of referrals. In other local jurisdictions, we have heard complaints from treatment officials about judges trying to make their own prognoses and assigning clients to particular types of programs.

If the selection model is operated on a large scale, it could easily violate our standards of fairness. The clients who do best in treatment tend to be middle class, female, older, with jobs and families, and sometimes younger people with parents who will attend therapy with them. If selection were to be based simply on predictions about who is going to do well, then we would be faced with a system that sends young black drug dealers to prison and their older suppliers and suburban customers to a rural retreat.

We present these problems without offering a specific solution. A regional drug “czar” is probably not feasible; there are simply too many jurisdictions, agencies, and interests involved. More modestly one might suggest a regional drug planning program, designed to collect data from the many agencies, to facilitate the adoption of promising innovations in prevention and treatment, and to present analyses of trends and problems in the system to local agencies and their legislatures. This may be a function that the Metropolitan Washington Council of Governments will wish to assume. A metropolitan planning and coordinating effort would go a long way toward ensuring that the various components reinforce each other systematically.

**Expand and Restructure Prevention Programs**

Prevention expenditures should be increased substantially, whether from private or public sources. As recently as FY 1985, the State of Maryland reported total prevention expenditures of only $850,000, for prevention programs aimed at both alcohol and drugs, compared with treatment expenditures of over $25 million. Whatever our uncertainties about the best design for drug prevention efforts, too little of the drug control budget currently goes to prevention programs.

Prevention programs do not have to be either financed or operated by the public sector, at least outside of schools. Community-based programs that harness the energies of volunteer organizations and provide them with professional support and technologies may be appropriately funded by private organizations. Given the uncertainty about what are

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6In 1985, the District’s nonvoting representative and a congressman representing a suburban Virginia district introduced a bill creating a Washington Metropolitan Drug Authority; it did not pass.
the best of these programs, a great variety should be encouraged. Little will be gained, however, unless these efforts are monitored closely. Such monitoring is not intended to curtail programs, but to ensure that the community learns which attempts are most effective.

As discussed in Section V, promising programs are those in which resistance skills are introduced and the focus is on short-term damage rather than long-term or low-probability consequences of substance use. These have proven useful in reducing use of tobacco, and illegal drugs are the emphasis in some experimental programs now under way.

So far, primary prevention programs have depended mostly on captive populations of adolescents in schools. Community-based prevention is much more difficult because no one has the attention of the target population for long enough to carry out intensive counseling. For community-based programs, the emphasis now appears to be on secondary prevention—that is, interventions to prevent experimental or occasional use of “lighter” drugs from turning into frequent use of the most debilitating drugs. These are aimed at youths already identified as high risk (those who have been suspended from school or arrested for possession, children of substance-abusing parents, etc.). The non-school prevention money made available under the 1986 Drug-Free Schools and Communities Act is meant to go for new programs aimed at such youth. The utility of untargeted, primary prevention efforts outside the schools (e.g., “Just Say No” campaigns) is a matter of considerable dispute. Again, the best evidence comes from tobacco use prevention, and there is evidence that mass media campaigns have some effect. But the effect is greatest when the media campaigns are synchronized with and reinforce the messages of more personalized face-to-face communications. Many local community prevention activities rely on old-fashioned scare tactics or information provision. They might do better to coordinate with the up-to-date school programs and to adopt their content.

As a result of the uncertainty about what programs might work for what types of people, the problem for local administrators has been that prevention funding is both too big to spend sensibly on feasible and effective programs and too small to develop and evaluate new ones locally. As it now stands, prevention requires an act of faith that with enough money and time we will develop better programs. Paradoxically, prevention funding has been much too small, but because research and demonstrations have been so underfunded in the past, funding is not necessarily the binding constraint in any given year.

The suburban counties, and even the Districts's Alcohol and Drug Abuse Services Administration, are not big enough to have specialized research and evaluation staffs. The development and testing of new
programs is inherently a function of some higher level of government, such as COG and the states.

National institutes may provide only part of what is needed for the drug problem. Drug abuse in the Washington area differs from that in, say, New York, in ways that arthritis and heart disease do not differ between the two areas. PCP abuse is a fairly minor problem nationwide but is a very large one in this region. Preliminary results from a sample of arrestees in 12 cities shows that amphetamines are very prevalent in western cities where PCP is almost unknown. Primary prevention programs may or may not require adaptation to different drugs, but secondary prevention and treatment programs are likely to benefit from customization for the PCP abusers. A regional program might be a high enough level to pool the limited research and evaluation funds from local jurisdictions, but low enough to keep its agenda from being governed by national rather than regional needs.

**Increase PCP Treatment Research and Funding**

The national research agenda has slighted PCP simply because it is a minor element of the national problem. Only Los Angeles seems to have a PCP problem comparable to that found in Washington. As a consequence, there is little research on appropriate methods for treating those who use PCP. The existing research points to the distinctive nature of the problem but suggests more about what not to do than what is an effective treatment modality.

We recommend that the metropolitan community make a substantial effort to seek funding for research and demonstration programs to deal with PCP. This area is rich in research facilities competent to take on such a task; and the proximity to Congress, many of whose members are parents with children in the area, should help to make an effective case for increased federal funding. There is no necessity that such an effort be publicly funded entirely; private funds could also be used.

The time and resources needed to make progress in this area are difficult to estimate, but millions of dollars and many years will probably be needed before much progress can be assured. Research on drug treatment is a slow business, requiring clinical trials of different regimes. Such trials consume substantial resources. But given the importance of the area’s PCP problems, a long-range and expensive program can certainly be justified.

We are less certain that there is need for a distinctive prevention program for PCP. Certainly local prevention materials, for both school based and community-based programs, could include more references to PCP, but this is unlikely to require much additional funding.
Expand the Treatment System, Particularly Methadone Maintenance

Although local jurisdictions have been spending more for public drug treatment programs in recent years, programs are now full; and as we have argued, new waves of referrals are to be expected from law enforcement, from employer pressure, and possibly from fear of AIDS. It seems unfair, particularly if we take seriously the idea that drug use is often a symptom of mental disease as well as a crime, not to make treatment available to those with the motivation to take advantage of it.

The District now bears the heaviest burden of publicly financed treatment, but even so, the amounts spent are only around $23 per resident per year. The District’s drug treatment budget is approximately 10 percent of the operating cost of St. Elizabeth’s hospital. Suburban jurisdictions usually spend (on a per capita basis) less than a quarter of what the District does. Drug abuse treatment is dishearteningly difficult and slow, but if progress is made in matching drug users to the types of treatment that will work for them, it seems reasonable to recommend that more money be invested in local programs.

Choosing the most cost-effective forms of investment is not possible given the paucity of information, but we recommend that priority be given to outpatient programs and halfway houses, especially those aimed at younger abusers. We do not doubt the arguments of various treatment professionals that many clients need a period of complete removal from the environment in which they have been heavily involved with drugs. Nor do we doubt that residential programs have done many users a great deal of good. But for the foreseeable future, the number of users who can be supported by public funds in residential settings is going to be quite small compared with the total drug-using population in need of treatment. Unless drug treatment turns out to be very different from alcohol abuse treatment (which seems to us unlikely), there is no strong evidence for preferring the more expensive residential setting.

Halfway houses are useful in any case to enable users who come from abusive homes (a very large proportion of young users), or who are re-entering society after time in a residential program, to learn how to live in the world with a modicum of supervision but without their old crutches. The most dangerous period for relapse is the few months after release from intensive therapy; many persons who learn how to stay sober in the hothouse atmosphere of full-time treatment do not adapt well to normal adult freedom and responsibility.
The problem is that realism requires halfway houses in places where “normal” people live, and the latter do not usually want to live near the halfway houses. Many halfway houses now end up located at the same sites as the residential programs, which largely defeats their purpose. It avails little for citizens and businesses to demand that the governments do something more to rehabilitate drug users if they are not also willing to lend support at hearings for facilities in their own communities. There are no drug-free communities in this area, and all would benefit from a wider array of treatment facilities.

The pressure of nonopiate user referrals from the criminal justice system has led the District, the major treatment provider within the metropolitan area, to greatly reduce the number of methadone slots; in 1985 there were about 2,500 heroin addicts in methadone maintenance programs, but a year later there were only 1,000 in such programs. Methadone maintenance is the most expensive form of treatment per episode, and the system could not provide treatment for the new users and support the same level of funding for the maintenance programs.

The social costs of this decision to shift heroin users to other programs are potentially very high. Experienced heroin users have a strong preference for methadone maintenance over other programs. The available literature suggests that the users drop out of the other programs earlier and are more likely continue use of heroin during treatment in these other programs. Given the risk of increased spread of AIDS from needle sharing when they are using heroin, it is extremely important to ensure that there are sufficient slots that any user who wishes to enter methadone maintenance can speedily find a program slot. That is not the case now.

Thus we recommend that the District and, if need be, suburban jurisdictions rapidly expand the number of publicly funded methadone maintenance slots, even if this means that a smaller percentage of nonopiate referrals get treatment.

Further Research

Research always generates questions as well as answers; this project is no exception. We have already recommended that the region fund substantial research on the effects of PCP and on appropriate treatment for that drug. Beyond that, we suggest three major areas for further research that could be of specific importance to Washington.

Sentencing of Drug Offenders. Drug enforcement is not a single program but a set of activities. One of those activities is the sanctioning of those convicted of drug sale or possession offenses. As demonstrated in Sec. III, the current sanctioning is quite severe; a high
percentage of those convicted receive (potentially) lengthy prison sentences.

A large share of the available prison space is now being taken up by drug dealers. Is this appropriate, given the difficulty of expanding the prison system? Are there less punitive (and less expensive) methods for persuading those involved with drug crimes to end their involvement? These questions require examination of the criminal careers of those convicted of drug dealing offenses and of the goals of sentencing.

Terms of imprisonment for criminal offenders serve three distinct goals: incapacitation, deterrence (both of the individual and of other potential offenders), and punishment. In rationing limited prison space among various types of offenders, it is important to determine whether there are differences among them in the incapacitative and deterrent consequences of imprisonment. Assume, for example, that drug offenders are specialized (do not commit other serious crimes) and have short criminal careers (mature out of chronic offending at a fairly young age). Then, lengthy prison terms for young adult drug offenders may do little through incapacitation, because they would generally have dropped out of offending before their prison term was over.

The sentencing question is particularly acute for drug offenders because there is an alternative "sanction," drug treatment. Most of those caught for drug distribution are themselves drug users, and it is quite possible that the distribution is primarily motivated by the seller's own drug use.\(^{7}\) If some types of drug offenders are amenable to treatment, then it may be preferable to commit those types of offenders to treatment rather than to prison.

This is not a new idea. Indeed, in the past there have been large scale "diversion" programs of this nature (McGlithlin, Anglin, and Wilson, 1977). However, changes in the nature of drug use and the population of users in the last few years require reexamination of the effectiveness of such programs. For example, cocaine use requires different treatment modalities than does heroin addiction, which has been the major emphasis of previous diversion programs. We need to determine just how much such quasi-coerced treatment of cocaine users reduces their criminal activity and future drug use. This is particularly acute because the user population is now younger and has greater socioeconomic diversity than before.

Moreover, differences across communities make community level research appropriate. In Washington, the presence of PCP is itself enough to suggest the need for a specific Washington study of the effectiveness of treatment, the characteristics of the offender

\(^{7}\)The evidence primarily concerns heroin. The statement may be less true for cocaine.
population, and an assessment of the consequences of criminal sanctions.

The Effect of Employee Assistance Programs. Workplace testing programs and EAPs seem to be growing rapidly in number, yet there is no systematic information available about the consequences of this growth. Are large numbers of persons found to test positive? What happens to those persons in terms of treatment, changes in drug use, and employment? These questions are particularly important for Washington because of the institution of testing in the federal workforce.

A study of workplace testing and EAPs is clearly overdue. Data should be collected on the extent and nature of such programs in the Washington area, emphasizing the flow of referrals to the public treatment system. Such a study would permit an assessment of the adequacy of insurance coverage for substance abuse and the prospects for changes in the demand for public treatment.

Studying Drug Use in the General Population. All of the indicators presented in Sec. II pertain to specific populations (arrestees, those in treatment, high school seniors) or to those with acute problems (emergency room admissions, medical examiner cases). We cannot make statements about the distribution of drug use in the general population in the Washington area, an important matter for the decisions about the distribution of secondary prevention and treatment resources.

It would be useful to gather data through a household survey of drug use that is modeled on the National Household Survey fielded by the National Institute on Drug Abuse every three years. Such data have limitations (e.g., lack of coverage of institutionally domiciled populations and nonresponse by some heavy users), but if carried out regularly, they can provide, critical indicators of changes in the nature and extent of drug use in the metropolitan area.

CONCLUSION

The above recommendations and research suggestions do not form a comprehensive drug policy for the metropolitan area. There is much in place already to perform specific functions, and increased awareness of the problem has led to more resources being made available, particularly in the last two years, for many of the program components.

A lack of understanding of the relationships between all the components of the system, both across jurisdictions and across programs within jurisdictions, will become more important as the various drug
control efforts expand. The peculiar jurisdictional structure of this area exacerbates this problem and requires particularly focused efforts to ensure that each jurisdiction bears its fair share of the burden and that its policies are not undercut by the other jurisdictions.

More generally, there needs to be a realization that drug policy is not a monolithic entity whose component parts can be borrowed from elsewhere. It involves many different elements and must be tailored to the specific problems of the area. We believe that the recommendations we have provided will help in this respect. However, they are just steps in a continuing process of local policy formation for a problem that will be with us for a long time to come.
Appendix A

THE VARIETIES OF DRUGS AND THEIR EFFECTS

As is true in other parts of the nation, Washington drug users consume a considerable variety of drugs. Each major drug presents its own set of problems, and different groups prefer different drugs. This section presents some information about the effects and dangers of the various drugs common in Washington.

HEROIN

Heroin, a highly refined form of opium made from poppy gum, was the first drug to attract serious attention as a social problem in modern times. When injected, heroin initially produces a "rush," following which the user becomes drowsy and lethargic. The regular user population is addicted, and addiction careers are very lengthy. The drug has many adverse side effects, including nausea, vomiting, and constipation. All these effects are aggravated by the conditions of use faced by heroin addicts in the United States: uncertain dosage, unknown adulterants, dirty needles, high price. Heroin is retailed at very low purity levels, typically between 2 and 7 percent.¹

The peculiar problem with heroin is its relationship to property and violent crime. A large body of research (summarized in Johnson, Lipton, and Wish, 1987) which shows that heroin users, when not in treatment, commit very large numbers of crimes. In treatment they commit many fewer crimes. Initially it was believed that heroin users committed few violent crimes, but more recent analyses suggest that is not the case.

The relationship between heroin and crime arises from the high cost of procuring heroin and the debased condition of most users. Total annual expenditures for heroin use may be no more than about $15,000 (Johnson et al., 1984), but users are typically unable to maintain regular employment. Crime, including drug sales, appears to be the usual source of their income; almost all of their expenditures are for drug consumption.

¹See Kaplan (1983) for a detailed analysis of U.S. experience with heroin.
Recent research has also made clear that heroin use is preceded by criminal activity. Although continued use may lengthen and intensify criminal careers, heroin does not seem to lead individuals to initiate their criminal activity.

Heroin use has been stable or declining for the last decade. National estimates of the addict population have been between 450,000 and 550,000 for over a decade. Indeed, there have been few new recruits into the pool of addicts since the early 1970s. However, few addicts mature out of the addiction. For example, the average age of those treated for heroin-related problems in a sample of emergency rooms in metropolitan areas throughout the nation rose from 26.8 years in 1976 to 32.1 in 1985 (NIDA, 1987b). The user population is predominantly male and black. Users are arrested for many criminal offenses and spend a large share of their time incarcerated. Treatment is inefficacious in the sense that few users seem able to maintain a drug-free life for any length of time without treatment. Finally, heroin users often use many other morphine substances, as well as drugs with quite different effects.

COCAINE

Cocaine is a stimulant whose properties have only recently been intensely researched. It induces intense feelings of energy, well-being, and confidence. Until recently it was usually ingested by snorting, though some cocaine is injected.\(^2\) New modes of administration have emerged in the 1980s. Some involve smoking the drug; the user can either convert cocaine hydrochloride himself (freebasing) or can purchase a very pure form of cocaine called "crack" (Post et al., 1986).

Until 1984, it was widely believed that cocaine was not addictive. It is now clear that, in the smoked form, it is at least as addictive as heroin. Moreover, addiction is associated with very sharply increasing doses (Siegel, 1982).

Although the price of cocaine has fallen sharply since 1980 (from about $600 per pure gram to about $250), it is still so high that regular users devote very large sums to its purchase. Heroin users are concerned with "maintenance" of their habits, but addicted cocaine users seem to go on sprees during which they consume enormous quantities in a short period of time. Cocaine is typically sold in 1 gram units, with a purity of about 50 percent; a session will cost between $50 and $100.

\(^2\)On patterns of use of cocaine before the introduction of crack, see Grinspoon and Bakalar (1976).
Regular cocaine use is much more widely distributed in the population than is regular heroin use. Once treated as the drug of the rich, cocaine users now can be found across all social classes and over a very wide age range. The introduction of crack, which can produce a short sharp high very rapidly with a much smaller quantity of cocaine, has permitted younger users (unable to afford $50 for a session) to acquire the habit. The age of first use appears to be declining rapidly.

The link between cocaine and crime has not been examined in any detail. Given that it is expensive and addictive, and that its use is common in demographic groups who are at high risk for criminal involvement, it seems highly plausible that cocaine has become an important criminogenic substance, but there is only a little research on the causal relationship (Collins et al., 1985).

MARIJUANA

Marijuana has been widely used by adolescents and young adults for two decades now. The drug is usually smoked and results in mild euphoria among its users; they also report heightened sensations and a slowing down of time. Research on its pharmacology demonstrates that marijuana smoke contains carcinogens; it is estimated that smoking one joint has adverse health effects on the lungs equivalent to that provided by smoking three cigarettes.

Marijuana remains the cheapest of mood-altering substances. An ounce of high potency marijuana, enough to make 60 to 100 joints, costs only $75 to $100. Survey data consistently indicate that the drug is readily available to high school students (Johnston et al., 1986).

Perhaps the prime reason for concern about marijuana is that it is the "pathway" drug to use of more dangerous drugs. Research on the etiology of drug use shows quite clearly that cocaine and heroin use are preceded by marijuana use (Kandel and Faust, 1975).

Despite this and the clear evidence of adverse effects on health and behavior, we give little attention to this drug in our study, except as an indicator of illicit drug use generally. This represents a judgment that it is less important a social problem than heroin, cocaine, and PCP. There is no evidence that the drug is addictive or that it has substantial criminogenic qualities.

PHENCYCLIDINE (PCP)

PCP is remarkably prevalent among drug users in Washington. In other metropolitan areas, apart from Los Angeles, it appears to be
quite rare. It has earned a reputation as an extremely dangerous drug, although it induces a very wide range of responses in users. PCP was originally tested in the early 1960s for use as an anesthetic, but its adverse side effects prevented its approval for any medical use. Many users experience altered perception; there are also reports of euphoria, intoxication, stimulation, and paranoia. It appears to induce bizarre behavior in some users; they suffer delusions of strength that lead them to violent assaultive behavior, as well as attempts to jump through windows and other dangerous acts. The pharmacological effects of PCP and related compounds have not been studied as intensively as those of other illicit drugs. PCP apparently interferes with the action of at least two neurotransmitters and produces symptoms comparable to Parkinson’s disease and schizophrenia. Treatment professionals in several programs in the Washington area expressed the view that irreversible neurological damage makes long-term PCP abusers extremely difficult to treat.

Among the drugs commonly found in Washington, PCP is the only one that is manufactured from synthetic chemicals. The equipment required is inexpensive, and the expertise for manufacture is readily accessible. PCP and several related compounds are synthesized in small clandestine laboratories. It has become somewhat difficult to obtain piperidine, one of the necessary precursor chemicals, since the U.S. Congress increased the penalties for its possession and distribution in 1978. PCP is sold in many forms, often as an adulterant (or even a substitute) for other drugs, either in liquid or powder form, or mixed together with marijuana (or some other similar vegetable substance) as “love boat.” The combination is then smoked, which is the most common mode of administration, though liquid PCP can be injected or ingested. Users consume very small quantities at a session and a dose costs only about $10–15.

Use of PCP is thought to be related to crime, but the relationship has a very different basis from that between heroin use and crime. PCP has a low dosage price and does not appear to be addictive; obtaining income to purchase PCP is not likely to be a major incentive for commission of crimes. However, PCP can lead users to violent crime (Wish and Johnson, 1986).

There is little research on the use patterns of PCP outside of Washington, precisely because it is so rare. Users are young, usually in the teens or early 20s. It is used by all ethnic and income groups, although disproportionately by the poor.

\[3\text{In this area, marijuana thus can be especially damaging to health because it is often sold laced with PCP—with or without the buyer’s knowledge.}\]
OTHER DRUGS

Numerous other illicit drugs are used in the Washington metropolitan area. Tranquilizers and sedatives are stolen from legal sources or are prescribed by doctors who abuse their prescribing privileges. Illegally manufactured amphetamines are widely sold in some areas. Heroin users, when unable to obtain heroin itself, will shift to such substitutes as Dilaudid and Preludin.

We have chosen to concentrate on heroin, cocaine, and PCP because they consistently show up as presenting a more serious problem than other drugs. We have also reported some data on marijuana use simply because it is the illicit drug most widely used in the Washington area. At least at this time, other drugs appear to be a less serious problem.
Appendix B

PROGRAM TIMING, TEACHER PREPARATION, AND EXTRACURRICULAR ACTIVITIES IN SCHOOL-BASED PREVENTION PROGRAMS

Although school-based prevention programs in the Washington area are similar, there are some differences between the jurisdictions. Tables B.1–B.3 present information about how prevention efforts fit the curriculum and how teachers are prepared to present the material. Also included is a brief description of some examples of the extracurricular prevention activities that have been tried by area schools.

Table B.1

<table>
<thead>
<tr>
<th>School District</th>
<th>Place in Curriculum</th>
<th>Time Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prince George's County</td>
<td>Health</td>
<td>45 min/day</td>
</tr>
<tr>
<td>K-5 or K-6</td>
<td></td>
<td>8-12 days/year</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>Health</td>
<td>10 hr/yr</td>
</tr>
<tr>
<td>K-3</td>
<td></td>
<td>20 hr/yr</td>
</tr>
<tr>
<td>4-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>District of Columbia</td>
<td>Health</td>
<td>na</td>
</tr>
<tr>
<td>1-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arlington County</td>
<td>Health</td>
<td>na</td>
</tr>
<tr>
<td>K-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project DARE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K-5</td>
<td>Five 20 min lessons/yr</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>45 min/wk, 16 wks</td>
<td></td>
</tr>
<tr>
<td>Fairfax County</td>
<td>Health</td>
<td>One class period</td>
</tr>
<tr>
<td>1-6</td>
<td></td>
<td>every two weeks</td>
</tr>
</tbody>
</table>
EXTRACURRICULAR PROGRAMS IN THE SCHOOLS

Drug education and awareness programs are not confined to the classroom. All of the school districts studied supplement the curriculum with additional activities. Some of these are school-wide activities or services, some are student group activities, and others are tied to community groups.

A typical school-wide activity is an assembly on drug-free schools such as the one required during the first week of the 1987 school year in the District of Columbia public schools where all students were required to sign pledges to remain drug-free. School system administrators also visited the schools during this week. Grades 4 through 9 participated in a program based on the film Wasted, produced by the American Council on Drug Education. Another typical school-wide activity is an alcohol or drug awareness week including poster contests, assemblies with special speakers, etc.

A specific type of awareness week is "Project Graduation," a prevention program to warn students about the dangers of drinking and driving, usually presented at a student assembly near graduation. The Readers' Digest provides posters for the program.

Other types of extracurricular activities include the District of Columbia's information centers, where both teachers participating in in-service programs and students doing research projects have access to a variety of drug information. The District of Columbia public schools also have the Youth Awareness Program, an in-house program run by the security office. It is provided for four hours per week and includes education on pregnancy, drug abuse, and safety. Another program in the District, Peer Counseling, teaches students to help other students. Previously conducted on a small scale at a few schools, the program has been contracted for development on a larger scale at secondary schools in the District. The District of Columbia public schools particularly rely on interagency programs—both public and private—to supplement the school curriculum. These programs include church groups, recreation centers, treatment and rehabilitations centers, boys' and girls' clubs, and the ADASA Substance Abuse Mobile (SAM).

In Arlington public schools, each of the senior high schools has a Students Against Drunk Driving (SADD) group, which sponsors special projects and provides peer support activities, and drug awareness programs. Students also participate in ALATEEN, Alcoholics Anonymous, and Narcotics Anonymous.

Montgomery County public schools also have ties to many community programs. Community Action Teams, for example, include members of school administration, nurses, guidance counselors, and
### Table B.2

**TEACHER PREPARATION AT THE ELEMENTARY LEVEL**

<table>
<thead>
<tr>
<th>School District</th>
<th>Teacher</th>
<th>Preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prince George's County</td>
<td>Classroom</td>
<td>Teachers who have not completed college coursework in drug education must participate in an in-house workshop.</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>Classroom</td>
<td>Teachers receive additional training before teaching drug education courses.</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>Classroom</td>
<td>All teachers must take a drug education course. They may choose to take a 6-hour mini-course available in-house or to take a course at a local university.</td>
</tr>
<tr>
<td>Arlington County</td>
<td>Classroom</td>
<td>Teachers do not necessarily have training for substance abuse education. Such courses are available and workshops are offered by the district.</td>
</tr>
<tr>
<td></td>
<td>Police Officers</td>
<td>Officers participating in Project DARE are trained by officers from the DARE program in Los Angeles for a total of 120 hours over three weeks.</td>
</tr>
<tr>
<td>Fairfax County</td>
<td>Classroom</td>
<td>Teachers receive one inservice session on drug abuse. Teachers receive two inservice sessions on the curriculum.</td>
</tr>
</tbody>
</table>

interested teachers, parents, and members of the student body. Another program is CARE, Community and Resource Exchange. CARE offers a speaker's bureau, a film library, and a hotline. It employs two full-time and three part-time employees and has
approximately 100 volunteers, including students. MADART, Maryland Alcohol Drug Abuse Resource Teams is a peer counseling and peer assistance program. Two other programs are SHOP (Students Helping Other People) and QUEST, a life-skills program for adolescents supported by the Lions Club.

This list of extracurricular programs is by no means exhaustive, but rather constitutes a sampling of the types of programs and services available to students. They can be important because they supplement the curriculum and they reinforce the message of no drugs. In secondary schools where few students are enrolled in health education they may be the only source of drug abuse counseling.

Table B.3
TEACHER PREPARATION AT THE INTERMEDIATE AND SECONDARY LEVEL

<table>
<thead>
<tr>
<th>School District</th>
<th>Teacher</th>
<th>Preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prince George's County</td>
<td>Health Educator</td>
<td>Health Educators are certified regular assignment teachers whose subject area is health.</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>Physical Education (Health Educator)</td>
<td>Teachers receive extra training to teach health courses or they upgrade their skills through in-house workshops.</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>na</td>
<td>All teachers must take a drug education course. They may choose to take a 6-hour mini-course available in-house or take a course at a local university.</td>
</tr>
<tr>
<td>Arlington County</td>
<td>Health and Physical Education</td>
<td>Courses in substance abuse education are available and workshops are offered by the district.</td>
</tr>
<tr>
<td>Fairfax County</td>
<td>Health Educators</td>
<td>Health educators are presumed to know more about drugs than regular classroom teachers, but they do receive additional training in the curriculum.</td>
</tr>
</tbody>
</table>
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