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13 JUN 1985

2380  
13  
Public Health Service

Alcohol, Drug Abuse, and  
Mental Health Administration  
National Institute on Drug Abuse  
5600 Fishers Lane  
Rockville MD 20857

JUN 7 1985

FB

Mr. Jose E. Valdes  
25-47 41 Street  
Astoria, New York 11103

Dear Mr. Valdes:

Dr. Carlton Turner, Deputy Assistant to the President for Drug Abuse Policy, forwarded a copy of your script, "The White Killer," to the National Institute on Drug Abuse (NIDA).

I appreciated having the opportunity to see your work. The script reflects an awareness and concern about teen drug abuse that is unusual in one your age. It is not easy to capture these ideas as you have.

NIDA is actively involved in teenage drug abuse prevention. One of our current efforts in this area is a national media campaign, consisting of a number of 30 and 60 second television and radio public service announcements. Perhaps you've seen or heard some of them. This prevention campaign, aimed at 10 to 14 year olds and their parents, deals with the issue of peer pressure and uses the general theme "Just Say No." The campaign also uses some booklets, which I've enclosed for your information.

Thank you for sharing your script. Good luck with it and your next project on alcoholism and drunk driving.

Sincerely,

Jerome H. Jaffe, M.D.  
Acting Director  
National Institute on Drug Abuse

Enclosures

cc:  
Dr. Carlton E. Turner ✓

JAN 21 1986

23 JAN 1986  
3216

Dr. Eugene R. Oetting  
Professor of Psychology  
Colorado State University  
Fort Collins, Colorado 80523

Dear Dr. Oetting:

Your letter of November 26, 1985 to Dr. Carlton Turner regarding inhalant use among minority youth, was forwarded to this agency for response. I hope the following will make clear our position.

We are in complete agreement with your position that ethnic differences do exist with respect to inhalant abuse and that such abuse continues to be a significant problem. In the document "Drug Abuse Among Minorities" (copy enclosed), the National Institute on Drug Abuse heavily draws upon your work (pp.7-8), and on page 12, they have reached the conclusion that inhalant abuse is of special concern when viewing minority youth. To my knowledge, the National Institute on Drug Abuse has not seen any data which would lead to any other conclusion.

Thank you for sharing your research findings. If I can be of further assistance, please let me know.

Sincerely,

/s/ Robert L. Trachtenberg  
Robert L. Trachtenberg  
Acting Administrator, ADAMHA

Enclosure

bcc: Carlton Turner



DRUG ABUSE AMONG MINORITIES

Prepared by the Division of Epidemiology  
and Statistical Analysis  
National Institute on Drug Abuse

for the

HHS TASK FORCE ON BLACK AND MINORITY HEALTH



## INTRODUCTION

*There is little reliable statistical information. Estimates of the number of narcotic addicts in the United States range from 45,000 to 100,000, and estimates of the number of addicts in the cities where they are concentrated also vary. How can an accurate epidemiology of addiction be said to exist in view of the disagreement regarding the number of existing addicts? Or if the breakdown by age and sex is unknown. The number of former addicts in the population who are presently off drugs has never been determined. Nor are there statistics on the rate of relapse, or on how many turn to narcotics each year for the first time. As for the abuse of dangerous drugs, almost nothing is known of its incidence or its geographic distribution (1). (The President's Advisory Commission on Narcotic and Drug Abuse. Final Report, November 1963.)*

Despite the historical lack of objective data, drug abuse has been popularly associated with minority populations for more than 100 years. In the 1870's, opium smoking was associated with the Chinese. It has been suggested that people began to fear that opium smoking was one of the ways in which the Chinese were supposed to undermine American society, and this mounting prejudice, coupled with resentment aimed at their entry into the job market after the Depression of the 1870's, culminated in the "Chinese Exclusion Act of 1888" (2). Similarly, at the turn of the century, cocaine use began to become increasingly associated with blacks. In a 1903 report by the American Pharmaceutical Association, it was stated that "the negroes, the lower and criminal classes, are naturally most readily influenced." This report has several quotations which reference the increasing "cocainomania" among the black population (3). Prior to the passage of the Marijuana Tax Act, 1937, marijuana use was associated with Mexican-Americans. Its use was also associated with crimes of violence.

As was recognized in the second report of the National Commission on Marijuana and Drug Use, drug abuse must be evaluated in the content of an interaction between the drug, the user and the user's environment. This report stated, "Many observers believe that American minorities, such as the Spanish-speaking, blacks, and Native Indians have a higher risk potential to drug-dependence in the sense that they are disproportionately poor and have disproportionately higher percentages of drug-dependent persons. Since social and economic forces continue to restrict the upward mobility of these groups, particularly the young males, they remain at high risk to development on drug dependence" (4). This report, written in 1973, went on to say that persons in the predependent or high risk group had been raised in an atmosphere rife with social and psychological pathology: poverty, illiteracy, malnutrition, delinquency, violence, emotional deprivation, mental illness, and alcohol or other drug dependence. Since these unhealthy environmental conditions often exist prior to an individual's becoming drug-dependent, they are exacerbated by the additional problems concomitant with drug dependence.

While citing the inadequacy of the data available to assess the true prevalence of drug use in our society, both the report from the President's Advisory Commission on Narcotic and Drug Abuse in 1963 and the second report of the National Commission on Marijuana and Drug Abuse in 1973, included associations between drug use and minorities, drug use being located primarily in the cities, and drug use being associated with environmental conditions often found in inner cities such as poverty, illiteracy, malnutrition, etc.

While major strides have been made in this Nation's efforts to quantify drug abuse since these reports were written, many gaps remain in our knowledge regarding the epidemiology of drug abuse in the population. For example, at this time, we do not have race- or ethnic-specific rates for drug abuse and for the consequences of drug abuse.

However, we do have a number of sources of data and information from various case studies which suggest that certain minority populations may suffer certain adverse consequences of drug abuse disproportionately to their representation in the population.

For example, from the National Household Survey on Drug Abuse, it is known that the prevalence of drug use within the household population is generally higher in urban areas than in suburban or rural areas. Thus, to the extent that minorities, particularly blacks and Hispanics, are more likely to reside in the inner city areas, they may be more at risk of drug abuse and ultimately the negative social and health consequences associated with drug abuse. In this regard, data from the 1980 census indicates that blacks constitute 11.7 percent of our population and Hispanics 6.4 percent. However, blacks constitute 22.5 percent and Hispanics 10.8 percent of the population of the inner cities (5).

### Prevalence

The overall prevalence of drug abuse in the general household population aged 12 and older is about the same for minorities as it is for whites. Data from the 1982 National Survey on Drug Abuse showed that about one-third



(32%) of each group had used drugs illicitly at some time in their lives (6). This would include having at least tried an illicit drug, such as marijuana, heroin, hallucinogens or cocaine, or having used a prescription psychotherapeutic drug, such as tranquilizers, sedatives, stimulants or analgesics, for nonmedical reasons. Similar levels of current illicit use (use during the month prior to interview) were also reported by both groups--12 percent of whites and 13 percent of minorities.

Estimates of the prevalence of drug abuse obtained from household surveys must be viewed as conservative since certain potentially high risk subgroups are not included in the sample. These would include, for example, persons with no fixed residence, prison inmates, and students living in college dormitories. Another important consideration is that since blacks and Hispanics are sampled proportionately to their numbers in the general population, the actual sample size for minorities, 1,093 in the 1982 Survey, is substantially smaller than that for whites, 4,520.\* This means that estimates for minorities are subject to larger sampling errors than are estimates for whites and also that separate estimates cannot be made for separate race/ethnic groups.

With respect to the types of drugs being abused, heroin use, even though included in the questionnaire, cannot be measured adequately in household surveys both because it is a relatively rare event and because it is more likely to involve the nonsampled population subgroups and also more likely to be underreported. This is a particularly important consideration in any

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\*Blacks and Hispanics are being oversampled in the 1985 National Survey on Drug Abuse in an effort to provide more reliable estimates of drug abuse prevalence in minority populations.

assessment of drug abuse problems among minorities since the data available from hospital emergency rooms and from drug abuse treatment programs indicate that heroin use is a more serious problem among blacks and Hispanics than among whites. (See the discussion of these data under the section on consequences.)

Given these constraints, it is interesting to note that while whites and minorities in the general household population experienced about the same overall levels of drug abuse, minorities were more likely than whites to report marijuana as their only form of illicit drug use. For example, the 13 percent current illicit drug use cited above for minorities was comprised of 10 percent reporting marijuana only and 3 percent reporting other drugs with or without marijuana use. The corresponding figures for whites were 7 and 5 percent, respectively.

Lifetime illicit drug use data show a similar difference between whites and minorities, as shown in the following table:

TABLE 1  
Spectrum of Drug Use  
National Survey on Drug Abuse, 1982

	Past Month Use		Lifetime Use	
	<u>White</u>	<u>Minority</u>	<u>White</u>	<u>Minority</u>
No Use	88%	87%	68%	68%
Marijuana Only	7	10	14	19
Other Illicit Drugs	5	3	18	13

Among both minorities and whites, the highest levels of current drug use were reported by young adult males 18-25 years old. Thirty-six percent of

young adult minority men reported current use of marijuana only and an additional 5 percent reported use of other drugs (with or without marijuana use). Among young adult white men, 21 percent reported current use of marijuana only and 18 percent reported use of other drugs.

Another important aspect of marijuana use among minorities is that unlike whites, a decreasing trend has not been observed among young adults. The decreasing trend among white youths 12-17, however, appears to be paralleled by a decreasing trend among minority youths in that age group.

TABLE 2  
 Marijuana Use for Whites and Minorities by  
 Age Group for 1977, 1979, and 1982  
 National Surveys on Drug Abuse

	Age Groups			
	Youth (12-17)	Young Adults (18-25)	Mid Adults (26-34)	Older Adults (≥35)
Marijuana Use for the Year Preceding the Surveys				
Minorities				
1977	17%	33%	26%	3%
1979	21	37	20	7
1982	16	40	21	4
White				
1977	24%	40%	21%	2%
1979	24	47	25	3
1982	21	40	28	5

(Table 2 continued)



	Age Groups			
	<u>Youth (12-17)</u>	<u>Young Adults (18-25)</u>	<u>Mid Adults (26-34)</u>	<u>Older Adults (≥35)</u>
<b>Marijuana Use in the Month Preceding the Surveys</b>				
<b>Minorities</b>				
1977	14%	25%	13%	1%
1979	14	29	17	4
1982	12	33	15	3
<b>White</b>				
1977	17%	28%	12%	1%
1979	16	34	16	2
1982	12	26	17	3

Minorities include respondents who identified themselves as black, American Indian or Alaskan Native, Asian or Pacific Islander, or Hispanic.

Few studies and surveys of drug abuse have focused on minority subgroups of the population, but one such survey of American Indian 7th through 12th grade students in Indian reservation schools has been conducted annually since 1975. Results from the 1980-81 survey on the lifetime prevalence of use of alcohol, cigarettes, illicit, and nonmedical use of licit psychoactive drugs are presented for American Indian high school seniors (7) in table 3. These data are compared with those from the 1981 National Survey of High School Seniors. For 10 of the 12 substance categories, American Indian high school seniors have higher lifetime prevalence rates than national high school seniors.

TABLE 3

Lifetime Prevalence of Substance Use for  
American Indian High School Seniors  
and National High School Seniors  
1980-81

<u>Substances</u>	<u>American Indian High School Seniors 1980-81</u>	<u>National High School Seniors 1981</u>
Alcohol	95.3%	92.6%
Marijuana	88.0	59.5
Cigarettes	72.3	71.0
Inhalants	34.4	12.3
Stimulants	38.5	32.2
Cocaine	19.4	16.5
Sedatives	12.0	16.0
Hallucinogens	19.1	13.3
Tranquilizers	11.0	14.7
PCP	10.2	7.8
Heroin	2.4	1.1

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Source: Oetting ER, Beauvais F, Edwards R, et al. Drug use among native American youth: Summary of findings (1975-1981). Fort Collins, CO: Western Behavioral Studies, Colorado State University.

Ever-use of marijuana and inhalants by American Indian seniors, in particular, far exceeds that for national high school seniors.

While lifetime prevalence rates provide an indication of exposure, figures on frequency of use for a given time period provide a better indication of consequential and/or problem use. When frequency of substance use is compared for American Indian youth (in grades 7 through 12) with a sample of similarly aged non-Indian city youth, striking differences are evident for categories of marijuana and alcohol use. For instance, in 1980-81, 13.4 percent of American Indian youth reported daily use of marijuana in the 2 months before the survey compared with 2.6 percent of the non-Indian city youth. And nearly 28 percent of American Indian youth reported that they

got high on alcohol and 26 percent got drunk one to two times in the 2 months before the survey. These figures are about twice the reported frequencies of 13 percent and 14 percent, respectively, in the non-Indian city youth (7).

These and other data led the survey researchers to conclude that drug involvement among Indian youth is very high, particularly for marijuana, but also for alcohol, inhalants, and stimulants (7).

Assessing the problem of drug abuse prevalence alone is inadequate. Some measure of consequence is also needed. Data are available on admissions to treatment, emergency room cases, and medical examiner cases. The remaining portion of this paper will discuss various consequences associated with drug abuse.

#### Treatment Data

Data from the treated portion of the population provide information on drug users whose patterns of abuse leads them to seek, voluntarily or involuntarily, treatment for their drug abuse problem. The National Drug and Alcoholism Treatment Utilization Survey (NDATUS) is a point prevalence survey which collects unit identifying and some client in treatment data from all known existing units in the Nation (8). Information from this survey on clients in treatment, when used in conjunction with census data, provide race- and ethnic-specific rates for clients in treatment (table 4).



TABLE 4

## Clients in Treatment per 100,000 Population

<u>Race</u>	<u>Rate</u>
Black	290
American Indian Eskimo and Aleutians	170
Other (including whites)	90

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Ethnicity

Hispanic*	260
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\*Persons of Hispanic origin may  
be of any race.

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Source: NDATUS, 1982  
Census 1980, Volume PC 80S1  
persons aged 15-64

As this table demonstrates, the rate of black, Hispanic, American Indian, and Eskimo and Aleutian clients in treatment in the Nation per 100,000 population is greater than it is for whites.

Through 1981, treatment data were collected nationally through the Client Oriented Data Acquisition Process (CODAP). Since 1982, States have submitted data on a voluntary basis. In the past, the data have been criticized as biased since they represent primarily clients admitted to publicly-funded programs. Even if the overall distributions of admissions by race did differ from admissions to privately-funded programs, it would still be legitimate to examine the distributions within race/ethnic categories.

The following discussion will focus on treatment data submitted by 23 States, Puerto Rico, Washington, D.C., Guam, and the Virgin Islands during

part or all of the year of 1983. In looking at these data it is important to know that California accounted for approximately 46 percent of the admission data.

Table 5 shows number and percent distributions for the 182,002 clients admitted to treatment by race.

TABLE 5  
Distribution of Clients by Race/Ethnicity  
at Admission (excluding alcohol)  
CODAP, 1983\*

<u>Race/Ethnicity</u>	<u># Client Admissions</u>	<u>Percent</u>
White	98,504	54.1
Black	40,538	23.4
Hispanic	40,625	22.3
American Indian	862	0.5
Alaskan Native	12	0.1
Asian/Pacific Islander	1,461	0.8

\*Based on 23 States, Washington, D.C., and territories; California represented 46 percent of treatment admissions.

Over half of all clients admitted to treatment in 1983 were white, and about equal proportions were black or Hispanic (23 and 22 percent, respectively). American Indians, Alaskan Natives and Asian/Pacific Islanders together made up the remaining 1.3 percent.

Black clients were more likely than white clients to report a primary problem with heroin, cocaine, and PCP. Hispanic clients were more likely than white clients to report a primary problem with heroin and PCP, and American Indians were more likely than white clients to report a primary

problem with heroin, marijuana, PCP. Black, Hispanic and American Indian clients were also more likely to report "other" drugs than white clients. This is significant in that the most common drug included in the "other" category is inhalants (table 6).

TABLE 6  
 Percent Distribution of Clients by  
 Primary Drug According to Race/Ethnicity  
 at Admission (excluding alcohol)  
 CODAP, 1983\*

<u>Primary Drug</u>	<u>White</u>	<u>Black</u>	<u>Hispanic</u>	<u>American Indian</u>
Heroin	43.8%	60.3%	70.6%	44.8%
Other Opiates	8.5	3.4	1.0	2.3
Marijuana	19.1	12.0	13.0	27.4
Barbiturates	2.0	1.2	0.5	1.0
Amphetamines	9.0	2.9	1.2	5.6
Cocaine	8.3	9.7	2.8	5.0
PCP	2.2	7.1	7.8	5.0
Other Hallucinogens	1.5	0.3	0.3	1.5
Tranquilizers	2.0	0.7	0.3	1.0
Other Sedatives	2.2	0.5	0.3	1.2
Other	1.5	1.9	2.1	5.2
Total	98,504	40,538	40,625	862

\*Based on 23 States, Washington, D.C., and territories; California represented 46 percent of treatment admissions.

Black clients were likely to be older than white, Hispanic or American Indian clients at admission for each of the four drugs of heroin, cocaine, marijuana, and PCP (table 7).



TABLE 7

Percent Distribution of Clients by  
Selected Primary Drug According  
to Race/Ethnicity and Age  
at Admission  
CODAP, 1983\*

Primary Drug	White		Black	
	Under 24	24 and Over	Under 24	24 and Over
Heroin	16.1	83.9	8.2	91.8
Cocaine	45.3	54.7	31.0	69.0
Marijuana	76.4	23.6	68.5	31.5
PCP	63.3	36.7	47.4	52.6

  

Primary Drug	Hispanic		American Indian	
	Under 24	24 and Over	Under 24	24 and Over
Heroin	21.4	78.6	17.1	82.9
Cocaine	46.4	53.6	39.5	60.5
Marijuana	74.4	25.6	83.1	16.9
PCP	73.4	26.6	69.8	30.2

\*Based on 23 States, Washington, D.C., and territories; California represented 46 percent of treatment admissions.

Hispanic clients tend to be the youngest at admission for the above cited drugs, with 21 percent of heroin clients and 73 percent of PCP clients being under the age of 24 at admission.

With the exception of white, Hispanic, and American Indian clients with primary heroin problems and with Hispanic clients with primary marijuana problems, the majority of the clients admitted to treatment for the four drugs listed in table 8 are admitted with multidrug problems.

TABLE 8

Percent Distribution of Clients by  
Selected Primary Drugs According to  
to Race/Ethnicity and Other Drugs Used  
at Admission  
CODAP, 1983\*

<u>Primary Drug</u>	<u>White</u>		<u>Black</u>	
	<u>None</u>	<u>Other</u>	<u>None</u>	<u>Other</u>
Heroin	61.4%	38.6%	45.8%	54.2%
Cocaine	18.7	81.3	25.6	74.4
Marijuana	27.3	72.7	39.5	60.5
PCP	18.5	81.5	33.6	66.4

  

<u>Primary Drug</u>	<u>Hispanic</u>		<u>American Indian</u>	
	<u>None</u>	<u>Other</u>	<u>None</u>	<u>Other</u>
Heroin	67.3	32.7	59.1	40.9
Cocaine	16.8	83.2	14.0	86.0
Marijuana	51.4	48.6	19.5	80.5
PCP	38.7	61.3	39.5	60.5

\*Based on 23 States, Washington, D.C., and territories;  
California represented 46 percent of treatment admissions.

Black and American Indian clients with a primary problem with heroin were more likely than white clients to report a problem with at least one other drug and Hispanic and American Indian clients with a primary cocaine problem were more likely than white clients to report a problem with at least one other drug. American Indian clients with a primary problem with marijuana were more likely than white clients to report a problem with at least one other drug.

Thirty-one percent of black clients reporting a primary problem with heroin at admission reported a secondary problem with cocaine. This figure was three times the figure reported by primary white heroin clients as shown in table 9.

TABLE 9

Percent Distribution of Primary Heroin Clients by  
Secondary Drug of Abuse According to  
Select Race/Ethnicity Groups  
at Admission  
CODAP, 1983\*

<u>Secondary Drug</u>	<u>Primary Heroin</u>	
	<u>White</u>	<u>Black</u>
None	61.5%	45.9%
Other Opiates	12.2	7.0
Marijuana	4.3	4.7
Barbiturates	1.3	0.8
Amphetamines	1.8	2.5
Alcohol	5.6	6.1
Cocaine	10.1	30.7
PCP	0.4	0.2
Other Hallucinogens	0.2	0.1
Tranquilizers	1.7	0.8
Other Sedatives	0.9	0.5
Other	0.2	0.8

\*Based on 23 States, Washington, D.C., and territories; California represented 46 percent of treatment admissions.

Twenty-seven percent of black clients admitted to a drug abuse treatment program with a primary problem with cocaine reported smoking (or freebasing) as their preferred route of administration, compared to 5 percent of white clients. Black primary cocaine admissions were more likely to report intravenous use than whites (table 10).

TABLE 10

Percent Distribution of Primary Cocaine Clients  
by Route of Administration According to  
Selected Race/Ethnicity Groups at Admission  
CODAP, 1983\*

<u>Primary Cocaine</u>		
<u>Route of Administration</u>	<u>White</u>	<u>Black</u>
Oral	2.3%	1.3%
Smoking (freebasing)	5.3	27.4
Inhalation	66.9	41.4
Intramuscular	0.7	0.5
Intravenous	24.8	29.4

\*Based on 23 States, Washington, D.C., and territories; California represented 46 percent of treatment admissions.

It should be noted that this does not include "speedballing" which is the intravenous combination of heroin and cocaine. Speedballing is reported with heroin as a primary problem and cocaine as secondary problem. Analysis of these data indicate that this particular problem predominates among the minority population, particularly blacks and Puerto Ricans who represent 76 percent of speedballing admissions.

#### Morbidity/Mortality

Drug abuse-related hospital emergency room cases provide one measure of the morbidity associated with drug abuse. While such data cannot provide prevalence estimates, per se, they do indicate which drugs are associated with medical emergencies. Over time, they indicate if problems associated with a particular drug are increasing or decreasing. In addition to prevalence, these trends may be influenced by a number of factors, such as



increased dosages, increased frequency of use, aging of existing users, more dangerous routes of administration, and the concomitant use of two or more drugs.

The race/ethnic distribution for the 96,047 emergency room episodes reported to the Drug Abuse Warning Network (DAWN) in 1984 is reflected in table 11.

TABLE 11  
Distribution of Patients by Race  
DAWN, 1984\*

	<u>Number of Episodes</u>	<u>Percent</u>
White	51,533	53.7
Black	28,474	29.7
American Indian/Alaskan Native	212	0.2
Other	883	0.9
Unknown	6,162	6.4

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\*Based on 27 metropolitan areas and a panel of emergency rooms outside these metropolitan areas; generalizations to the total population cannot be made.

Since DAWN emergency rooms are located primarily in metropolitan areas, they reflect individuals who seek emergency room treatment who reside near DAWN participating emergency rooms in those areas. Since these facilities do not constitute a statistical sample, inferences cannot be made to the general population.

Black and Hispanic patients were more likely than were white patients to mention one of the major illicit drugs--heroin, cocaine, marijuana, or PCP--in conjunction with an emergency room visit. This was generally true for both males and females as shown in table 12.

TABLE 12

Most Frequently Mentioned Drug Categories  
for Emergency Room Patients  
According to Race and Sex  
(alcohol-in-combination excluded)  
DAWN, 1984\*

<u>Black Male</u> (N episodes = 16,121)		<u>Black Female</u> (N episodes = 12,325)	
Heroin	32.9%	Heroin	18.0%
Cocaine	19.1	Cocaine	11.9
PCP	15.6	PCP	8.8
Marijuana	6.3	Acetaminophen	6.4
Diazepam	2.5	Diazepam	6.3
 <u>Hispanic Male</u> (N episodes = 4,700)		 <u>Hispanic Female</u> (N episodes = 4,074)	
Heroin	25.4%	Diazepam	9.5%
Cocaine	20.6	Acetaminophen	9.5
PCP	15.4	Heroin	8.8
Marijuana	7.0	Cocaine	8.6
Diazepam	5.5	Aspirin	8.1
 <u>White Male</u> (N episodes = 22,955)		 <u>White Female</u> (N episodes = 28,521)	
Diazepam	11.9%	Diazepam	12.5%
Cocaine	11.4	Aspirin	8.8
Heroin	10.2	Acetaminophen	7.1
Marijuana	6.5	Cocaine	5.0
PCP	4.7	Heroin	4.3

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\*Based on 27 metropolitan areas and a panel of emergency rooms outside these metropolitan areas; generalizations to total population cannot be made.

The percentages of males reporting above mentioned illicit drugs was greater than that reported by their female counterparts. It is interesting to note that the percent of black females mentioning heroin, 18.0 percent, was even greater than the percent of white males, 10.2 percent.

As in treatment admission data, blacks tended to be older than whites or Hispanics in emergency cases involving cocaine, heroin, and/or marijuana.

For PCP, however, somewhat similar percentages of blacks and whites (49 percent and 55 percent, respectively) were under 25 years of age, while 68 percent of Hispanics PCP-related cases involved persons under 25.

Individuals who abuse drugs frequently use two or more drugs (including alcohol) in combination. A majority of DAWN emergency room cases involve such combination use. Approximately four out of five of the marijuana-related emergency room visits reported to DAWN in 1984 involved other drugs, with blacks (78%) being less likely than whites (84%) or Hispanics (84%) to report combination marijuana use. For cocaine-related cases, blacks (61%) and Hispanics (60%) were somewhat less likely than were whites (66%) to report such use. A majority of the heroin-related and PCP-related cases did not involve other drugs except for white PCP cases as shown in table 13.

TABLE 13

Percent Distribution of Emergency Room Patients by Select Drugs According to Race and Drug Concomitance DAWN, 1984\*

	Percent of Mentions	
	<u>Alone</u>	<u>In Combination</u>
Heroin		
Black	63	37
Hispanic	56	45
White	53	47
PCP		
Black	61	39
Hispanic	67	33
White	47	54

\*Based on 27 metropolitan areas and a panel of emergency rooms outside these metropolitan areas; generalizations to total population cannot be made.



Of the top 10 drug combinations reported by DAWN emergency rooms in 1984, 8 of the 10 involved alcohol-in-combination with another drug. Cocaine and heroin combinations were the second most frequently reported drug combinations.

Table 14, which shows the 6 of the 10 top combinations that contain an illicit drug, indicates that of the patients reporting combination use of cocaine and heroin, alcohol and heroin, and alcohol and PCP, blacks clearly predominated.

Another factor that may contribute to a cocaine-related medical emergency is the route used to administer the drug. Consistent with treatment data, blacks and, to a lesser extent, Hispanics were somewhat more likely than were whites to use the more dangerous routes of cocaine administration-- injection (used by 49% of blacks, 42% of Hispanics, and 40% of whites) and smoking or freebasing (9% of blacks, 6% of Hispanics, and 3% of whites).

The most dramatic recent trend in DAWN emergency room data involves cocaine-related cases. Between 1982 and 1984, cocaine-related cases more than doubled. Similar trends have occurred in each race/ethnic group. Heroin trends have been relatively stable for each race/ethnic group over the same period, following substantial increases in the early 1980s. Recent increases in PCP mentions, however, have primarily involved blacks and other minorities (51% of all clients mentioning PCP in 1984 were black compared to 46% in 1983).



TABLE 14

Sex, Race, and Age Distributions for Six Leading  
Combinations of Illicit Drugs  
in DAWN Emergency Rooms  
January-August 1984\*

	<u>Cocaine and Heroin</u>	<u>Alcohol and Cocaine</u>	<u>Alcohol and Heroin</u>	<u>Alcohol and Marijuana</u>	<u>Cocaine and Marijuana</u>	<u>Alcohol and PCP</u>
<u>Sex</u>						
Percent Male	70	65	81	70	71	74
<u>Race</u>						
Percent White	27	48	26	53	49	29
Black	55	35	57	31	34	56
Hispanic	13	12	14	10	13	12
<u>Age</u>						
Percent <20	2	9	1	29	18	11
20-29	43	53	28	49	56	60
≥30	55	37	71	24	26	29
Total Number	1,442	1,320	1,316	1,139	922	818

\*Based on 27 metropolitan areas and a panel of emergency rooms outside these metropolitan areas; generalizations to total population cannot be made.

The Drug Abuse Warning Network, in addition to providing a measure of morbidity associated with drug abuse also provides a measure of mortality by providing information on drug related deaths as reported by medical examiners in 26 metropolitan areas. Data from the New York metropolitan area, whose data were reflected in the emergency room data, are not included in mortality data. As with the emergency room component, information on decedent demographics, drugs most frequently found in the decedents, drug concomitance and preferred route of administration in addition to other types of data are collected. Also, these data do not represent a statistical sample, thus, generalizations to the total population cannot be made.

The race/ethnic distribution for the 3,297 decedents reported to DAWN in 1984 is shown in table 15.

TABLE 15  
Distribution of Decedents by Race/Ethnicity  
DAWN, 1984\*

<u>Race/Ethnicity</u>	<u>Number of Episodes</u>	<u>Percent</u>
White	1,904	57.8
Black	1,054	32.0
Hispanic	298	9.0
American Indian/Alaskan Native	8	0.2
Other	23	0.7
Unknown	10	0.3

\*Based on 26 metropolitan areas, excluding New York;  
generalizations to the total population cannot be made.

Due to the relatively small number of episodes involving American Indians/Alaskan Natives, discussion in this area of drug related deaths will focus

primarily on those drug related deaths involving blacks and Hispanics as compared to whites.

Drugs most frequently mentioned in conjunction with drug-related deaths are shown in table 16 for blacks, whites, and Hispanics:

TABLE 16

Most Frequently Mentioned Drugs by  
Decedents According to Race/Ethnicity  
(alcohol-in-combination excluded)  
DAWN, 1984\*

<u>Total Black</u> (N episodes = 1,054)		<u>Total Hispanic</u> (N episodes = 298)		<u>Total White</u> (N episodes = 1,904)	
Heroin	45.3%	Heroin	37.2%	Heroin	23.1%
Cocaine	19.4	Cocaine	15.8	Cocaine	20.6
PCP	11.9	PCP	13.4	Codeine	15.0
Codeine	8.4	Diazepam	5.0	D-Propoxyphene	13.3
Amitriptyline	4.1	Codeine	5.0	Diazepam	11.8
Diazepam	3.8	Amitriptyline	3.7	Amitriptyline	11.3

\*Based on 26 metropolitan areas, excluding New York; generalizations to the total population cannot be made.

As can be seen, the two illicit drugs most frequently involved in drug-related deaths among each of the three race categories of blacks, Hispanics, and whites, were heroin and cocaine. The frequency at which they were mentioned, however, varied. The percent of black decedents involved in a drug-related heroin death was greater than the percent for Hispanics or whites. The percent of Hispanic decedents involved in a drug-related cocaine death was lower than it was for blacks or whites. PCP was not included in the top five drugs for whites but it ranked number three among blacks and Hispanics.



Differences among male and female decedents by race are shown in table 17.

TABLE 17

Most Frequently Mentioned Drugs by  
Decedents According to Race/Ethnicity and Sex  
(alcohol-in-combination excluded)  
DAWN, 1984\*

<u>Black Male</u> (N episodes = 818)		<u>Black Female</u> (N episodes = 235)	
Heroin	43.8%	Heroin	50.6%
Cocaine	18.6	Cocaine	22.6
PCP	10.9	PCP	15.7
Codeine	7.3	Codeine	12.3
Diazepam	2.8	Amitriptyline	11.1
Methadone	2.3	Phenobarbital	8.1
<u>Hispanic Male</u> (N episodes = 258)		<u>Hispanic Female</u> (N episodes = 40)	
Heroin	38.8%	Heroin	27.5%
Cocaine	15.5	Cocaine	17.5
PCP	12.8	PCP	17.5
Codeine	4.7	Methadone	12.5
Diazepam	4.3	Diazepam	10.0
D-Propoxyphene	2.7	D-Propoxyphene	10.0
<u>White Male</u> (N episodes = 1,181)		<u>White Female</u> (N episodes = 723)	
Heroin	28.9	D-Propoxyphene	19.5
Cocaine	25.6	Amitriptyline	17.4
Codeine	15.7	Codeine	13.8
Diazepam	12.5	Heroin	13.6
D-Propoxyphene	9.5	Cocaine	12.6
Methadone	8.9	Acetaminophen	11.8

\*Based on 26 metropolitan areas, excluding New York; generalizations to the total population cannot be made.

Heroin and cocaine continue to be the two most frequently mentioned illicit drugs in medical examiner cases except among white females. It is interesting to note that the percent of black females mentioning illicit

drugs such as heroin, PCP, and cocaine was greater than it was reported by their male counterparts.

As with CODAP treatment admissions and emergency room DAWN patients, black decedents tend to be older than white or Hispanic decedents in medical examiner cases involving cocaine or heroin. For PCP-related deaths, black and Hispanic decedents were older than white decedents.

A majority of DAWN medical examiner reports frequently show combination use. As shown in table 18, the majority of the decedents in cases involving heroin or PCP were using other drugs. This distribution differs from the one displayed in the emergency room section of this report in which a majority of the heroin-related and PCP-related emergency cases, among blacks and Hispanics, did not involve other drugs. However, this was not the case among whites.

Although not shown, the majority of cocaine-related deaths in each race category occurred in conjunction with other drugs, i.e., 76 percent of blacks, 79 percent of Hispanics, and 68 percent of whites were using other drugs at the time of death. The most frequently used drugs in combination with cocaine were heroin, PCP, and alcohol.

TABLE 18

Percent Distribution of Decedents for Select Drugs  
According to Race and Drug Concomitance  
DAWN, 1984\*

	Percent of Mentions	
	<u>Alone</u>	<u>In Combination</u>
<u>Heroin</u>		
Black	14	86
Hispanic	23	77
White	19	81
<u>PCP</u>		
Black	29	71
Hispanic	30	70
White	25	75

\*Based on 26 metropolitan areas, excluding New York; generalizations to the total population cannot be made.

As was the case for emergency room episodes, recent medical examiner data involving cocaine show dramatic increases over the past 3 years. Between 1982 and 1984 cocaine-related deaths among blacks and Hispanics tripled. Among the whites, cocaine-related deaths doubled. Heroin trends have been relatively stable over the same period following substantial increases in the early 1980's. The recent increases in PCP-related deaths have been primarily involved with blacks and other minorities. The percent of PCP-related deaths involving blacks increased from 50 percent in 1983 to 58 percent in 1984.



## Specific Health Consequences of Drug Abuse

There are many potential negative consequences of drug abuse. Some of these include fatal and nonfatal overdose, hepatitis B infection, acquired immune deficiency syndrome, and bacterial endocarditis. Drug abuse may increase the risk of homicides and crime, accidents and injuries, Parkinson's disease, low birth weight, and suicide and psychiatric problems.

In addition, drug abuse may have negative effects on employment, school achievement, socioeconomic status, and family stability, although it is difficult to determine if these factors are causes or effects of drug abuse. The associations between drug abuse and many of these negative consequences are based primarily on case studies or case reports. There are few known methodologically sound epidemiological case-control or prospective studies that have been done in either white or nonwhite populations.

When these studies are accomplished, it will be possible to document if an association exists between drug abuse and the untoward outcome under investigation and also to quantify the size of the drug abuse-associated risk. The following provides a brief summary of recent studies of the associations between various negative consequences and drug abuse.

Intravenous drug use appears to increase the risk of potentially fatal infections. One recent study of 6,503 adult male inmates in Tennessee prisons found that 29.5 percent had one or more serum markers for hepatitis B virus (9). Various risk factors were found to be independently associated with possession of hepatitis B serum markers by multiple logistic regression

analysis. These included intravenous drug use while not incarcerated, intravenous drug use while incarcerated, older age, black race, and longer duration of incarceration for current and prior imprisonments. This study establishes that intravenous drug use is associated with increased risk of hepatitis B virus infection. It is not known if the finding for race has been replicated in other study populations.

A few clusters of fulminant hepatitis B have occurred in intravenous drug abusers. One cluster of nine persons with fulminant hepatitis B was reported in a small town in North Carolina in 1979 (10). All nine patients admitted to using or were reported to have used illicit drugs intravenously. No information on the ethnic or racial characteristics of the affected individuals was given. A larger outbreak of fulminant hepatitis B Delta infection that began in 1983 in Worcester, Massachusetts, has also been reported (11). Of the 50 outbreak-related cases, 43 patients were parenteral drug abusers. Twenty-nine cases were white, non-Hispanic; 17 were Hispanic; 2 were black; and 2 were of unknown race. From these reports, it can be concluded that intravenous drug abuse is a risk factor for fulminant hepatitis B virus infection. It cannot be concluded that race, independent of parenteral drug abuse, is a risk factor for fulminant hepatitis B virus infection.

Another disease that has been associated with intravenous drug abuse is acquired immune deficiency syndrome (AIDS). Surveillance of AIDS in the United States through November 1984, has determined that among the 6,921 adult AIDS patients, 17.2 percent were intravenous drug users, and among the 72 patients less than 13 years of age, 29 (40%) came from families in which

one or both parents had histories of drug abuse (12). Of all adult AIDS cases, 59 percent have occurred among whites; 25 percent among blacks; 14 percent among persons of Hispanic origin; and 2 percent among persons of other or unknown race/ethnicity. However, no breakdown by race was provided for the intravenous drug abusers affected with AIDS.

There has been some debate about whether to attribute the cause of AIDS in victims who are homosexual-bisexual intravenous drug abusers to their sexual activity or to their drug abuse. Of the first 1,552 AIDS victims, about 132 (8.5%) identified themselves as homosexual or bisexual with a history of intravenous drug abuse (13). A somewhat different picture of the illness and the high risk groups emerges with classification of these individuals into either one or the other high risk category. For instance, when New Jersey investigators classified AIDS victims, they found that 455 (25%) of 1,831 AIDS cases reported through June 1983 in their State could be classified as intravenous drug abusers without taking into account their sexual activity. A breakdown by race of New Jersey intravenous drug abusers with AIDS showed that 33 percent were white, 40 percent were black, 26 percent were Hispanic, and about 1 percent were of other or unknown race and ethnicity (14). Using this classification scheme, it would appear that blacks and Hispanics are overrepresented among intravenous drug abusers with AIDS in New Jersey.

In addition to the studies on hepatitis B and AIDS, there have been several hospital-based studies of bacterial endocarditis in intravenous drug abusers. Various organisms have been identified as causative in the studies. One report found that from 1969 to 1974, 19 cases of *Serratia*



marcescens endocarditis were observed in the San Francisco Bay Area; 17 patients were intravenous drug users and Serratia caused 14 percent of all addict-associated endocarditis in San Francisco (15). No information was provided on the race or ethnic background of the affected individuals.

A recent review of drug abuse patients diagnosed with endocarditis at Cook County Hospital in Chicago determined that there was a high degree of correlation between intravenous pentazocine and tripeleminamine (T's and Blue's) abuse and endocarditis caused by Pseudomonas aeruginosa (16). No information was given on the racial or ethnic background of the cases; however, 1983 data from the Drug Abuse Warning Network showed that 707 of 818 pentazocine and tripeleminamine emergency room episodes occurred in blacks. It is not known if these data are representative of pentazocine and tripeleminamine users, but to the extent that users are more likely to be black, then blacks are at greater risk of endocarditis caused by Pseudomonas aeruginosa. Reports of other hospital-based series occur in the literature, but the racial or ethnic characteristics of the individuals probably only reflect the characteristics of the population served by the hospital(s).

Some data are available to suggest a drug abuse-homicide relationship. The Crime Analysis Unit of the New York City Police Department found that in 1981, 393 (23.7%) of 1,656 homicides that were able to be categorized by circumstance in New York City were drug-related (17). Similarly, in 1982, 349 (21%) of 1,663 homicides were determined to be drug-related (17). In 1981 and 1982, 53.1 and 46.4 percent of drug-related homicides involved black victims, and for the same years, 34.2 and 41.8 percent involved Hispanic victims. Although the racial and ethnic background of perpetrators



is not known in a large proportion of drug-related homicides, 60 (42%) of 143 drug-related homicides in 1982 involved a black victim and a black perpetrator, and 38 (26.6%) involved a Hispanic victim and a Hispanic perpetrator. These results cannot be generalized to other areas of the United States; however, they do suggest that blacks and Hispanics are overrepresented in drug-related homicides in New York City.

Data are not yet available to determine if traffic accidents are associated with illicit and licit psychoactive drug use in any population (18). Likewise, data are not available to determine if drug abuse is associated with adverse reproductive outcomes. Some reports suggest that heroin addiction during pregnancy may result in a greater than expected frequency of complications of labor and delivery (19) and low birth weight (20,21). However, since lack of prenatal care, alcohol use, poor nutrition, and cigarette smoking are known to be associated both with adverse reproductive outcomes and with drug abuse, studies must consider these important confounding variables in the analysis before attributing the negative outcome to drug abuse.

Recently, intravenous use of MPTP has been associated with early onset of chronic parkinsonism in California drug addicts (22). Identification of individuals exposed to MPTP and case ascertainment is still continuing, so that the ethnic and racial composition of the cases is not yet known; however, a large proportion of the initial cases was Hispanic (23).

A few follow-up studies of narcotics addicts suggest that they experience greater than expected rates of accidents, suicides, homicides, and deaths due to overdose (24-27). However, most of these studies have been conducted among individuals who have been hospitalized and treated for their drug problems. No known study has identified and followed a representative group of narcotic addicts in a free-living population to determine their subsequent treatment and hospitalization rates, and rates of accidents, suicides, homicides, and fatal and nonfatal overdoses. Thus, it is not known what proportion of narcotic users are able to continue parenteral narcotic abuse without accompanying problems, although the proportion is likely to be small.

There have also been several reviews of medical examiners cases of sudden and unexpected deaths. Several reports based on New York City medical examiner cases noted marked increase in the number of deaths of narcotic addicts from 1967 through 1970, a rise that appeared to parallel a marked increase in the addict population (28, 29). Investigation of the 591 deaths in 1967 that were considered by the Office of the Chief Medical Examiner of New York City to have occurred in narcotics users determined that 52 percent of the deaths occurred in blacks, 24 percent in Puerto Ricans (defined by Spanish surname), and 22 percent in whites, with 2 percent of unknown ethnicity (28). A similar investigation of 927 deaths among New York City narcotic addicts during a 9-month period in 1971 found that 56 percent of deaths were in blacks, 28 percent were in whites, and 16 percent were in Puerto Rican (30). Although a large Oriental population resides in New York City, only 2 percent of the deaths were in Orientals.

Since 23.4 percent of the population of New York City in 1970 was nonwhite (31), these figures indicate an overrepresentation of black and Hispanic narcotic addiction deaths.

An epidemic of heroin-related deaths that occurred in Washington, D.C. from 1979 through 1982 was investigated to try to determine the cause of the epidemic. A case-control study based on toxicological analyses of postmortem blood samples indicated that concentrations of both heroin and ethanol are substantial risk factors for heroin-related deaths (32). In this epidemic, 93 percent of the decedents were black; this large proportion of blacks reflects the fact that the population of the District of Columbia is largely black. However, these data suggest that heroin in combination with alcohol is an important risk factor for death related to heroin use. To the extent that blacks and other minorities compared with whites are more likely to use heroin in combination with alcohol, they are at greater risk of heroin-related deaths.

More epidemiological studies are needed on the consequences of drug abuse in all race/ethnic groups. These should include case-control studies in which the frequencies of drug abuse are compared in individuals with the disease or condition hypothesized as being associated with drug abuse and in those without the disease or condition. However, from the brief overview of the literature presented in this section and from data presented in previous sections of this report, blacks and minorities may be at greater risk of fatal and nonfatal consequences of drug abuse due to their preferences for intravenous administration and for use of drugs in combination.



## Discussion and Summary

Data from the National Household Survey on Drug Abuse indicate that lifetime and current prevalence of illicit drug use is equal between the white and minority populations. Although whites, compared with minorities, tended to have more experience with drugs other than marijuana. However, as has been noted, the Household Survey does not include institutionalized populations (e.g., prisons, colleges, etc.) or populations without a fixed residence. These populations probably have higher rates of drug abuse than the more stable household populations.

Some evidence of higher rates of drug use in populations having no fixed residence is provided by a study of drug use among tenants of single room occupancy hotels (S.R.O.) in New York City. Results from this study suggest that blacks and Hispanics have higher rates of drug use than whites for marijuana, cocaine, heroin, and illicit methadone. This is important since blacks and Hispanics constitute 67 percent of the S.R.O. population compared to 40 percent of the household population in New York City. Further analysis of a matched sample of blacks from the two populations indicated that S.R.O. tenants were three times as likely to have used drugs recently as were New York City household residents (33).

A survey done in Indian reservation schools indicated that while levels of drug use in general were higher than that in the National High School Survey of Seniors, lifetime prevalence of marijuana and inhalants, in particular, were substantially higher.



It has recently been suggested that prevalence of inhalant use by Hispanic youths is high. While this cannot be supported by household and high school population surveys, a study of Mexican-American children and adolescents in Los Angeles barrios found prevalence of inhalants 14 times the prevalence found among the general population (34).

Data obtained from a national survey of public and private treatment units, the National Drug and Alcoholism Treatment Utilization Survey, suggest that minorities are two to three times more likely to be in treatment for a drug abuse related problem than are whites.

From data obtained from treatment admissions, emergency room cases, and medical examiner cases, it would appear that minorities are more likely to be involved with more dangerous drugs. That is, they are more likely to be in treatment for the use of heroin, cocaine, and PCP than are whites. This preponderance of heroin, cocaine, and PCP use, especially for black and Hispanic males and black females, was consistent across all data sets.

While there was some tendency for whites, Hispanics, and American Indians to report heroin as a primary drug problem with no secondary drug problem, multiple drug use was a problem across all races. One dramatic difference, however, was that among decedents (medical examiner cases) where the drug involved was either heroin or PCP over 70 percent of the cases were using drugs in combination compared to less than 50 percent of emergency room cases.

Treatment data suggest that blacks are more likely to be involved in speedballing, that is, the use of heroin and cocaine in combination. Data from the Drug Abuse Warning Network support this finding and in addition indicate that blacks are more likely to be involved with other heroin combinations and also the combination of PCP and alcohol. This apparent tendency to become involved in more dangerous combination drugs cannot be stressed too much. For example, recent studies of overdose deaths in Baltimore and the District of Columbia suggest that the heroin overdoses may in fact be due to combinations of alcohol and heroin rather than high potency heroin (32). In Baltimore, although the city is slightly more than 50 percent black over 80 percent of the heroin-related medical examiner cases are found among blacks. In addition to being involved with more dangerous combinations of drugs, blacks were also more likely to be involved in more dangerous routes of administration, such as intravenous (I.V.) administration. It should be noted that clients admitted to treatment for heroin abuse are likely to be intravenous users regardless of race. However, blacks and Hispanics, as previously noted, were more likely to be admitted for the use of heroin. Cocaine is a drug in which I.V. use is not the normal route of administration. Inhalation or "snorting" is the usual mode of administration. However, even with cocaine, blacks tend to inject the drug more than whites and also smoke freebase more than whites. Both intravenous use and freebasing of cocaine lead to more frequent administration of the drug. For example, I.V. users and freebasers of cocaine are twice as likely to be daily users than are snorters of the drug (35).

To the extent that minorities, especially blacks, are more involved in intravenous use of drugs they are more likely to suffer medical complications which have been associated with drug use, such as hepatitis B, acquired immune deficiency syndrome, and bacterial endocarditis.

In summary, while there is no evidence to suggest that the prevalence of drug use differs between whites and nonwhites in the household population, there is evidence to suggest different patterns of use in selected treatment and decedent populations. To what extent these differing patterns of use are affected by environmental conditions such as poverty, overcrowding, illiteracy, and unemployment is unknown. What is clear, however, is that blacks and other minorities may suffer disproportionate complications associated with drug abuse.



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