

INDICATORS OF ALCOHOL AND DRUG ABUSE TRENDS

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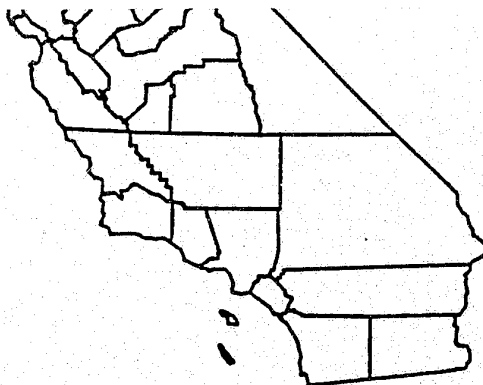
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DEPARTMENT OF ALCOHOL AND DRUG PROGRAMS
DIVISION OF ADMINISTRATION
DATA MANAGEMENT SERVICES BRANCH
STATISTICS AND ANALYTICAL STUDIES SECTION

APRIL, 1989

INDICATORS OF ALCOHOL AND DRUG ABUSE TRENDS

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PREFACE

This report is excerpted from the "FIVE YEAR MASTER PLAN TO REDUCE DRUG AND ALCOHOL ABUSE: YEAR ONE, A Planned Response to Meet the Goals of Senate Bill 2599". Indicators of Alcohol and Drug Abuse is the third chapter of that report.

Users of this special publication are expected to include community leaders, students, government officials, radio, television and print media journalists. Data from five nationwide studies and four state sources are analyzed. The time period of the indicators and trends ranges from 1983 to 1987.

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CHAPTER III: INDICATORS OF ALCOHOL AND DRUG ABUSE TRENDS

INTRODUCTION

Drug and alcohol problems are a serious threat to our society. Resources committed to combat this threat in the private and public sectors through education, prevention treatment and law enforcement are enormous. This section of the report describes the extent and costs of alcohol and drug problems and current trends in California.

A number of the indicators discussed are mentioned in specific SB 2599 goals where there is an emphasis on reducing negative effects, such as driving-under-the-influence of alcohol or drugs, alcohol- and drug-related arrests and drug- and alcohol-related deaths or injuries. The many indicators included in this section will be routinely monitored as a part of the overall impact evaluation process.

EXTENT AND COSTS OF ALCOHOL AND DRUG PROBLEMS

Alcohol is the number one drug of use in California. It is estimated that 4-6 million persons 14 and over drink some form of alcoholic beverage at least once a week. Approximately 2.2 million persons (7.9 percent of the State's population) have a problem with alcohol consumption.

The consumption of alcohol in California is 20 percent greater than the national average. The per capita consumption figure for the population 14 years of age and older was 38.8 gallons of beer, wine, and distilled spirits during 1987.

Approximately 2.1 million persons in California use illicit drugs or use drugs inappropriately; 222,000 use their drugs intravenously, posing a serious threat in the spread of the AIDS virus. Many of those who abuse drugs also abuse alcohol, exacerbating the serious health consequences associated with the abuse of any drug. During 1987, 4,443 emergency room episodes involving alcohol used in combination with other drugs were reported by a sample of hospitals in the Los Angeles, San Francisco, and San Diego areas alone.

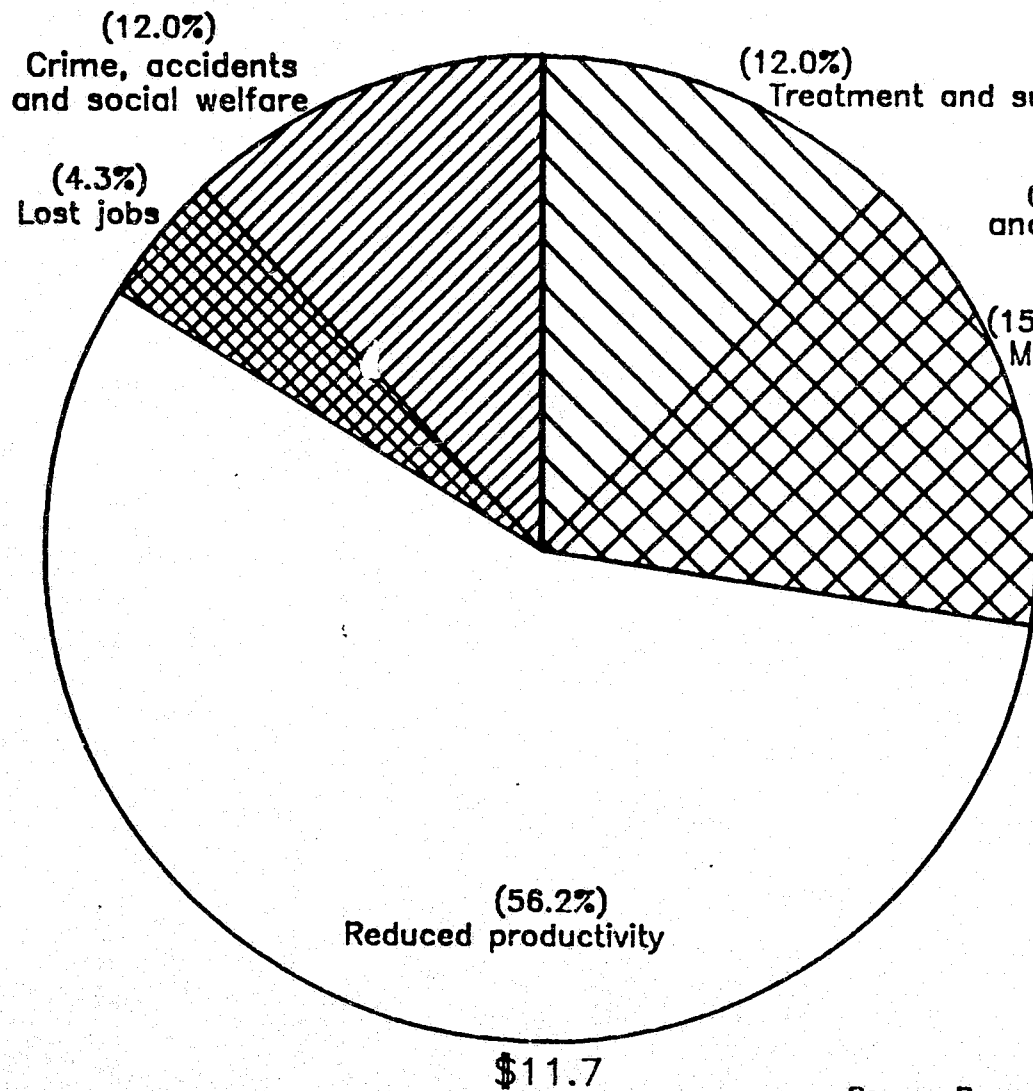
The social costs of this problem include treatment, mortality, reduced productivity, lost employment, motor vehicle accidents, crime, and social welfare programs. It is estimated that the annual costs of these problems to California society are \$17.7 billion (\$11.7 billion for alcohol abuse and \$6.0 billion for drug abuse). This is equivalent to \$631 for every man, woman, and child living in the State.

The human costs of these problems are immeasurable: the anguish of family and friends of a person abusing alcohol and/or drugs, the reduced quality of life for all involved, and the impact of the problem on the community.

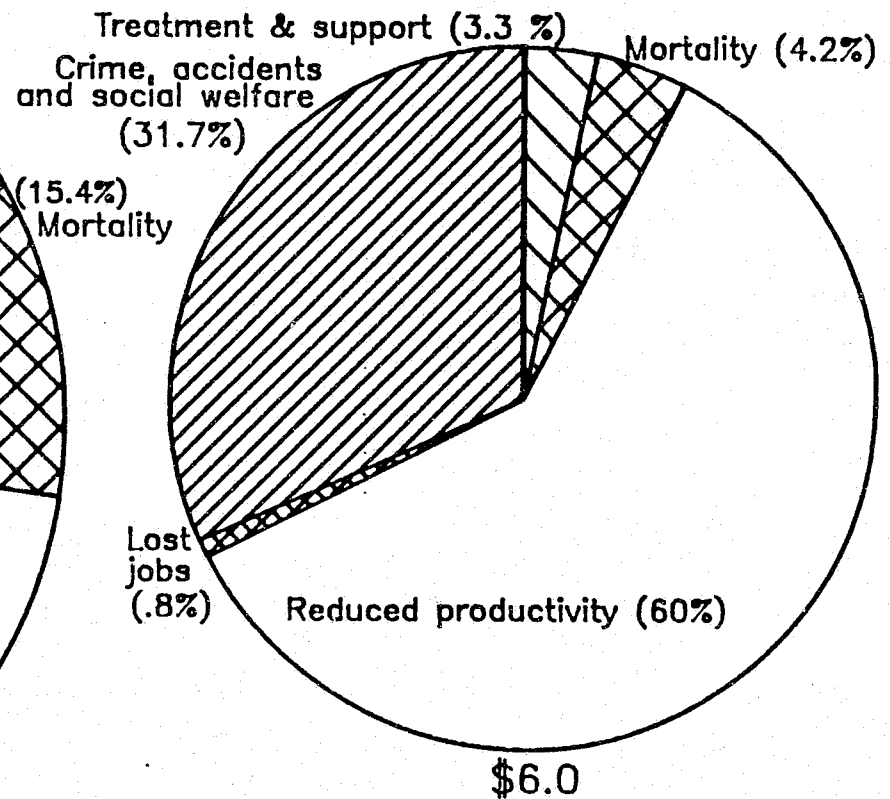
GRAPH 1 ALCOHOL AND DRUG ABUSE COSTS TO CALIFORNIA, 1985

(California Estimate Derived from Research Triangle Institute, \$ Billions)

Alcohol Abuse Costs



Drug Abuse Costs

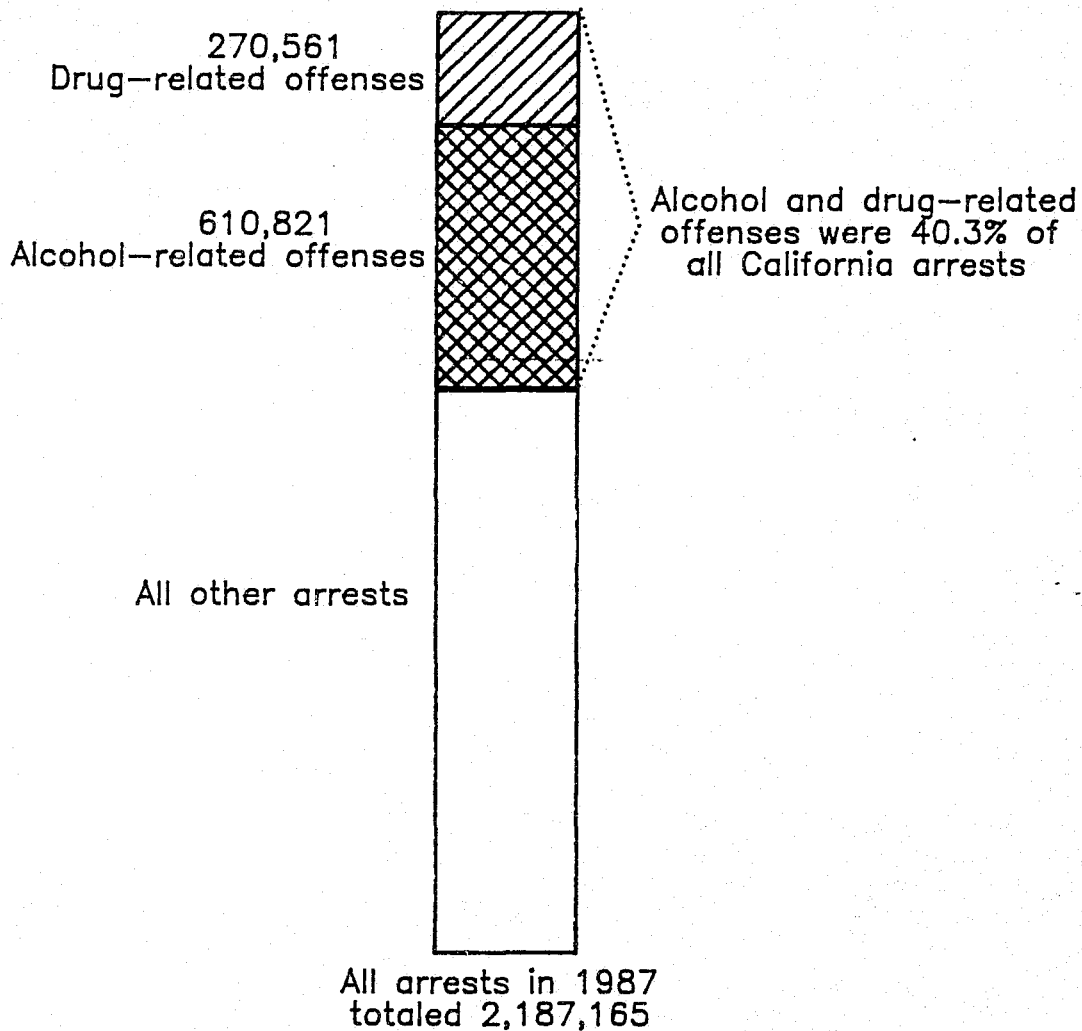


Source: Research Triangle Institute, 1985.

GRAPH 2

ALCOHOL AND DRUG-RELATED ARRESTS

CALIFORNIA, 1987



Source: Department of Justice

DESCRIPTION OF IMPACT

LAW ENFORCEMENT AND THE CRIMINAL JUSTICE SYSTEM

Drug and alcohol abuse has a major impact on law enforcement entities and the criminal justice system. During 1987, 270,561 people were arrested for drug-related offenses and 610,821 for alcohol-related offenses. Together, these arrests account for 40.3 percent of all arrests in California. Alcohol and/or drugs are also involved in many other types of crimes. Drug and alcohol abuse may not cause a person to become violent; however, there is clearly a link between being under the influence and crime, suggesting that the abuse of any substance acts as a disinhibiting agent.

Below is a table from a 1985 U.S. Department of Justice study, designed to provide a representative sample of the Nation's prison population. It found that nearly half the convicted inmates had been under the influence of alcohol at the time the criminal offense was committed.

TABLE 1: ALCOHOL USE AMONG CONVICTED OFFENDERS
JUST BEFORE COMMITTING CURRENT OFFENSES,
BY CRIMINAL TYPE

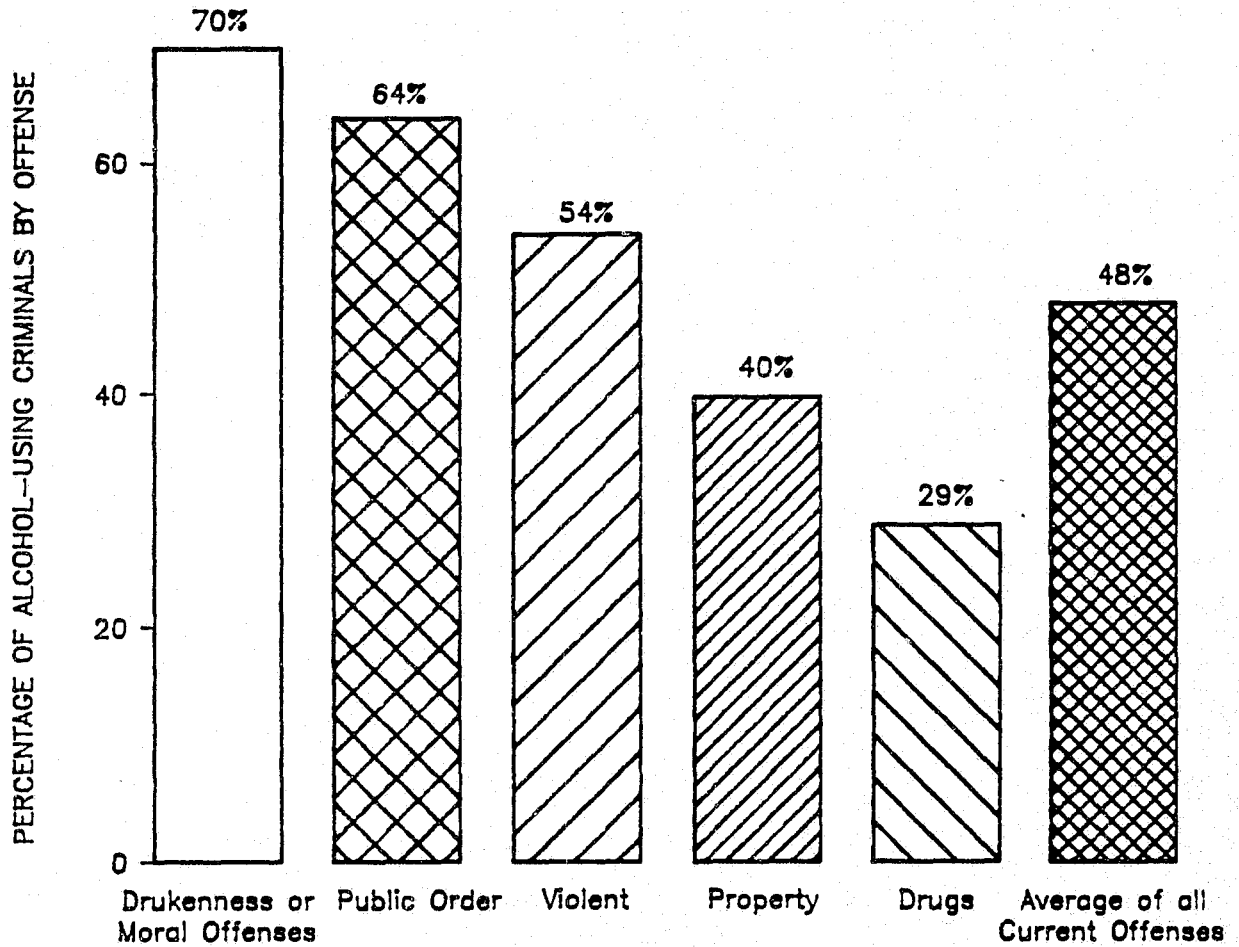
<u>Current Offense</u>	<u>Percentage of Convicted Persons Who Used Alcohol</u>
Total	48%
Violent	54
Murder/Attempted Murder	49
Manslaughter	68
Rape/Sexual Assault	52
Robbery	48
Assault	62
Other Violent	49
Property	40
Burglary	44
Auto Theft	51
Fraud/Forgery/Embezzlement	22
Larceny	37
Stolen Property	45
Other Property	51
Drugs	29
Traffic	26
Possession	30
Other Drugs	44
Public Order	64
Weapons	32
Obstructing Justice	43
Traffic	36
Driving While Intoxicated	93
Drunkenness/Morals Offenses	70
Other Public Order	28
Other	40

Source: U.S. Department of Justice, 1985

GRAPH 3

ALCOHOL-RELATED CRIMINAL ACTIVITY

People Who Used Alcohol Before Committing a Crime



Source: United States Department of Justice

Drug abuse is highly correlated with crime. According to a study by John C. Ball, et al., a narcotic addict, while actively addicted on the street, will be engaged in criminal activities an average of 178.5 days per year to support his/her habit.

The National Institute of Justice recently implemented a system to collect drug use data on arrestees in major cities throughout the Nation. In California, the cities of San Diego and Los Angeles are included. The data, based on urinalysis results, strongly supports the link between crime and drug abuse.

The table below demonstrates the correlation between drug abuse and crime.

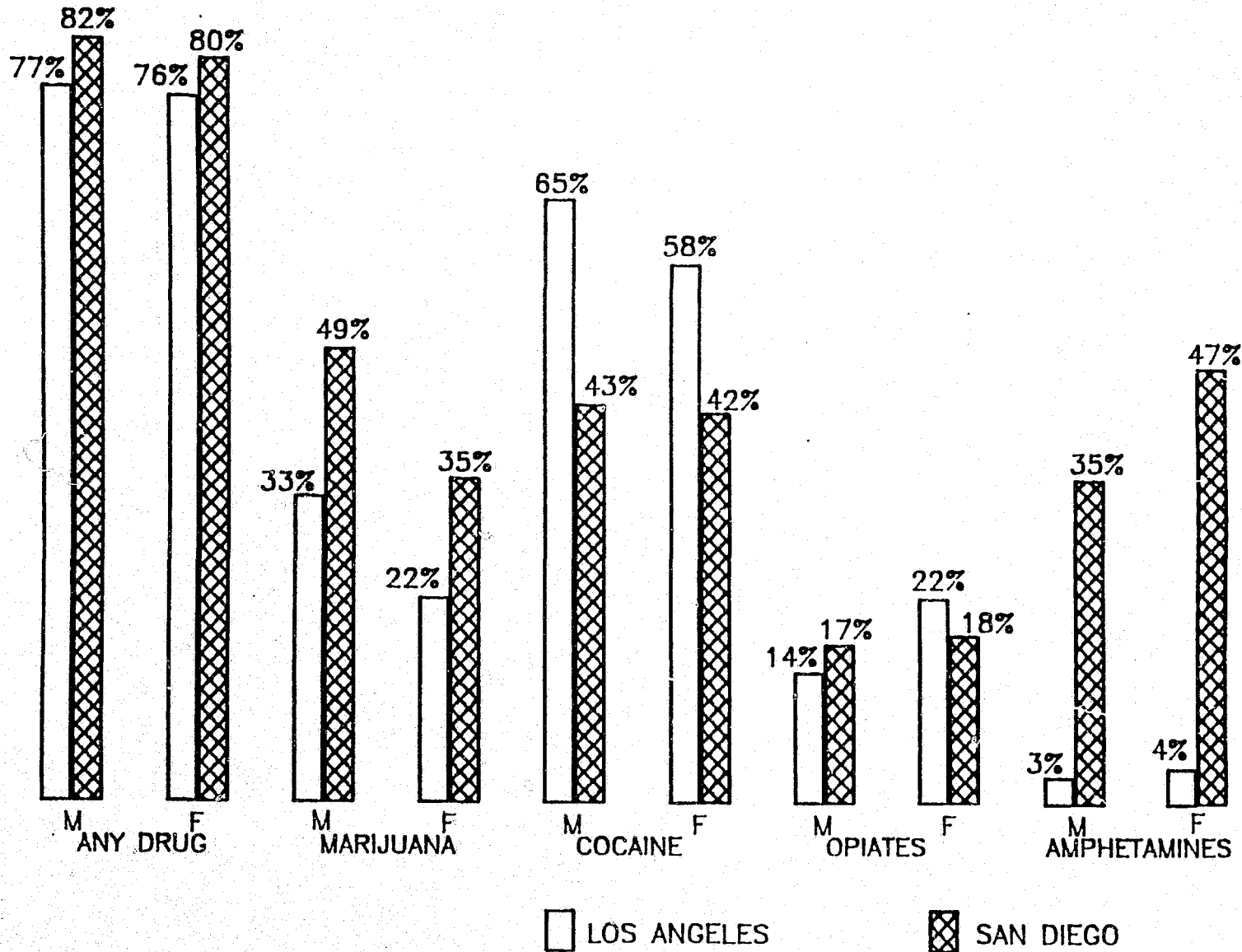
TABLE 2 : PERCENTAGE OF ARRESTEES TESTING POSITIVE FOR DRUGS BY AREA AND SEX

	<u>Los Angeles</u>	<u>San Diego</u>
Positive for Any Drug		
Male	77%	82%
Female	76	80
Positive for Marijuana		
Male	33	49
Female	22	35
Positive for Cocaine		
Male	65	43
Female	58	42
Positive for Opiates		
Male	14	17
Female	22	18
Positive for Amphetamines		
Male	3	35
Female	4	47

In both cities, over 85 percent of the males arrested for drug sale or possession tested positive, as did over 80 percent of males arrested for income-generating crimes such as burglary, robbery, forgery, fraud, and possession of stolen property. Of the males arrested for violent crimes in Los Angeles (assault, homicide, rape, etc.), 55 percent tested positive as compared to 72 percent in San Diego.

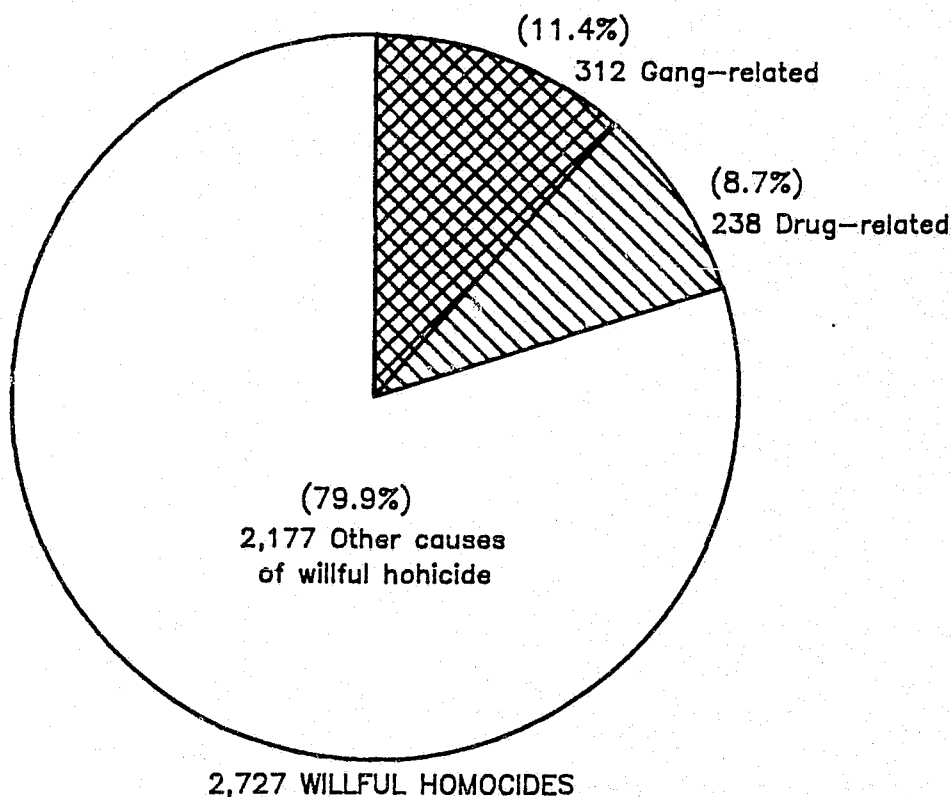
GRAPH 4

PERCENT OF ALL ARRESTED TESTING POSITIVE FOR DRUGS MALE AND FEMALE ARRESTEES BY DRUG, LOS ANGELES AND SAN DIEGO COUNTIES



Source: National Institute of Justice

GRAPH 5
WILLFUL HOMICIDE CRIMES
CALIFORNIA, 1987



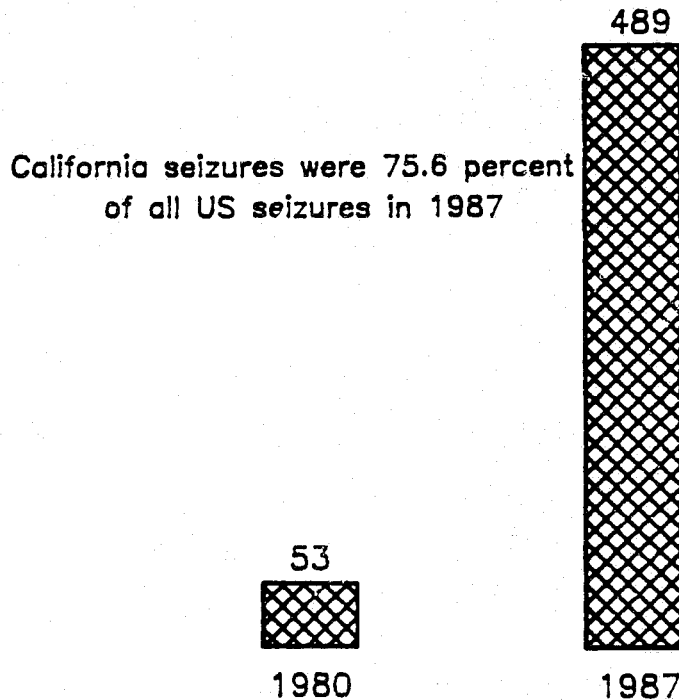
Source: Department of Justice

A more recent phenomenon associated with drugs is gang violence. Activities of the Crips and the Bloods, two major Black street gangs in California, indicate that they are involved in a variety of criminal activities such as burglaries, assaults, homicide, and narcotic trafficking. The gangs are well organized, carrying radio beepers that connect them to their suppliers or customers, while other members carry Uzis for protection. Many members are linked to the crack trade. During 1987, there were 312 gang-related homicides in California, in addition to the 238 drug-related homicides.

GRAPH 6

SEIZURES OF ILLICIT LABORATORIES

CALIFORNIA, 1980 AND 1987



Source: Department of Justice

In addition to collecting data and targeting impacted groups for remedial programs, law enforcement efforts include the interdiction of the supply of drugs from both foreign and domestic sources. The interdiction effort includes patrolling borders to prevent movement of illicit drugs by land, sea, and air. The emergence of a domestic marijuana industry and, more recently, illicit laboratories has increased the need for surveillance of this fast-growing segment of the illicit drug trade. During 1980, federal, state, and local law enforcement agencies reported 53 illicit laboratory seizures in California; by 1987, 489 were reported. The 489 seizures in California represent 75.6 percent of the 647 seizures nationwide.

The cost to society to incarcerate those convicted of drug crimes is high. During 1987, there were 7,971 drug commitments to the Department of Corrections at a cost of over \$19,000 per person per year. The California Youth Authority received 705 commitments at a cost of over \$24,000 per person per year.

EFFECT OF ALCOHOL ON THE BODY

Drug and alcohol abuse impair the functioning of the abuser. Impairment of the mental and motor processes often leads to injury or death of the individual, and, as is often the case in driving under the influence, the lives of innocent people are in jeopardy. Data from studies on the role of alcohol as a primary cause of accidental injury are sufficient to describe the situation. However, studies to determine the role drugs play as a causal factor, while widely recognized, are minimal, and the magnitude of the effect of drugs cannot be determined. Therefore, this section will concentrate on the role of alcohol.

As a person consumes alcohol, various physical and mental changes occur, as the Blood Alcohol Concentration (BAC) increases. Table 3 summarizes the major effects.

TABLE 3: EFFECTS OF INCREASED BLOOD LEVEL ON A TYPICAL PERSON

Blood Alcohol Concentration	Effects
.02	Reached after approximately one drink; light or moderate drinkers feel some effect, e.g., warmth and relaxation.
.04	Most people feel relaxed, talkative and happy. Skin may flush.
.05	First sizable changes begin to occur. Lightheadedness, giddiness, lowered inhibitions, and less control of thoughts may be experienced. Both restraint and judgment are lowered; coordination may be slightly altered.
.06	Judgment somewhat impaired; normal ability to make a rational decision about personal capabilities is affected, e.g., concerning driving ability.
.08	Definite impairment of muscle coordination and a slower reaction time; driving ability suspect. Sensory feelings of numbness of the cheeks and lips. Hands, arms, and legs may tingle and then feel numb. (Legally impaired in Canada and in some states.)
.10	Clumsy; speech may become fuzzy. Clear deterioration of reaction time and muscle control. Legally drunk in most states and in California it is illegal to operate a motor vehicle with this or greater BAC.
.15	Definite impairment of balance and movement. The equivalent of a half-pint of whiskey is in the bloodstream.
.20	Motor and emotional control centers measurably affected; slurred speech, staggering, loss of balance, and double vision can all be present.
.30	Lack of understanding of what is seen or heard; individual is confused or stuporous. Consciousness may be lost at this level, i.e., individual "passes out".
.40	Usually unconscious; skin clammy.
.45	Respiration slows and can stop altogether.
.50	Death can result.

Source: Paley, W., et al, Alcoholism, A Treatment Manual, 1979.



BLOOD ALCOHOL CONCENTRATION (BAC) CHARTS
DRINKING UNDER 21 YEARS OF AGE IS ILLEGAL

(Drivers under 18 years old with a BAC of .05-.09 can be cited for violation of Section 23140 CVC.)

IF YOU DRINK, DON'T DRIVE!

Prepared by the Department of Motor Vehicles in cooperation with the California Highway Patrol, The Office of Traffic Safety, the Department of Alcohol and Drug Programs and the Department of Justice.

There is no safe way to drive after drinking. These charts show that a few drinks can make you an unsafe driver. They show that drinking affects your **BLOOD ALCOHOL CONCENTRATION (BAC)**. The BAC zones for various numbers of drinks and time periods are printed in white, grey, and black.

HOW TO USE THESE CHARTS: First, find the chart that includes your weight. For example, if you weigh 160 lbs., use the "150 to 169" chart. Then look under "Total Drinks" at the "2" on this "150 to 169" chart. Now look below the "2" drinks, in the row for 1 hour. You'll see your BAC is in the grey shaded zone. This means that if you drive after 2 drinks in 1 hour, you could be arrested. In the grey zone, your chances of having an accident are 5 times higher than if you had no drinks. But, if you had 4 drinks in 1 hour, your BAC would be in the black shaded area...and your chances of having an accident 25 times higher. What's more, it is **ILLEGAL** to drive at this BAC (.10% or greater). After 3 drinks in 1 hour, the chart shows you would need 3 more hours—with no more drinks—to reach the white BAC zone again.

REMEMBER: "One drink" is a 12-ounce beer, or a 4-ounce glass of wine, or 1½-ounce shot of 80-proof liquor (even if it's mixed with non-alcoholic drinks). If you have larger or stronger drinks, or drink on an empty stomach, or if you are tired, sick, upset, or have taken medicines or drugs, you can be **UNSAFE WITH FEWER DRINKS**.

TECHNICAL NOTE: These charts are intended to be guides and are not legal evidence of the actual blood alcohol concentration. Although it is possible for anyone to exceed the designated limits, the charts have been constructed so that fewer than 5 persons in 100 will exceed these limits when drinking the stated amounts on an empty stomach. Actual values can vary by bodytype, sex, health status, and other factors.

DL 606 (REV. 3/88)

BAC Zones: 90 to 109 lbs.		110 to 129 lbs.		130 to 149 lbs.		150 to 169 lbs.	
TIME FROM 1st DRINK	TOTAL DRINKS	TOTAL DRINKS	TOTAL DRINKS	TOTAL DRINKS	TOTAL DRINKS	TOTAL DRINKS	TOTAL DRINKS
	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
1 hr	Grey	Black	Black	Black	Black	Black	Black
2 hrs	White	Grey	Black	Black	Black	Black	Black
3 hrs	White	White	Grey	Black	Black	Black	Black
4 hrs	White	White	White	Grey	Black	Black	Black

BAC Zones: 170 to 189 lbs.		190 to 209 lbs.		210 to 229 lbs.		230 lbs. & Up	
TIME FROM 1st DRINK	TOTAL DRINKS	TOTAL DRINKS	TOTAL DRINKS	TOTAL DRINKS	TOTAL DRINKS	TOTAL DRINKS	TOTAL DRINKS
	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
1 hr	Grey	Black	Black	Black	Black	Black	Black
2 hrs	White	Grey	Black	Black	Black	Black	Black
3 hrs	White	White	Grey	Black	Black	Black	Black
4 hrs	White	White	White	Grey	Black	Black	Black

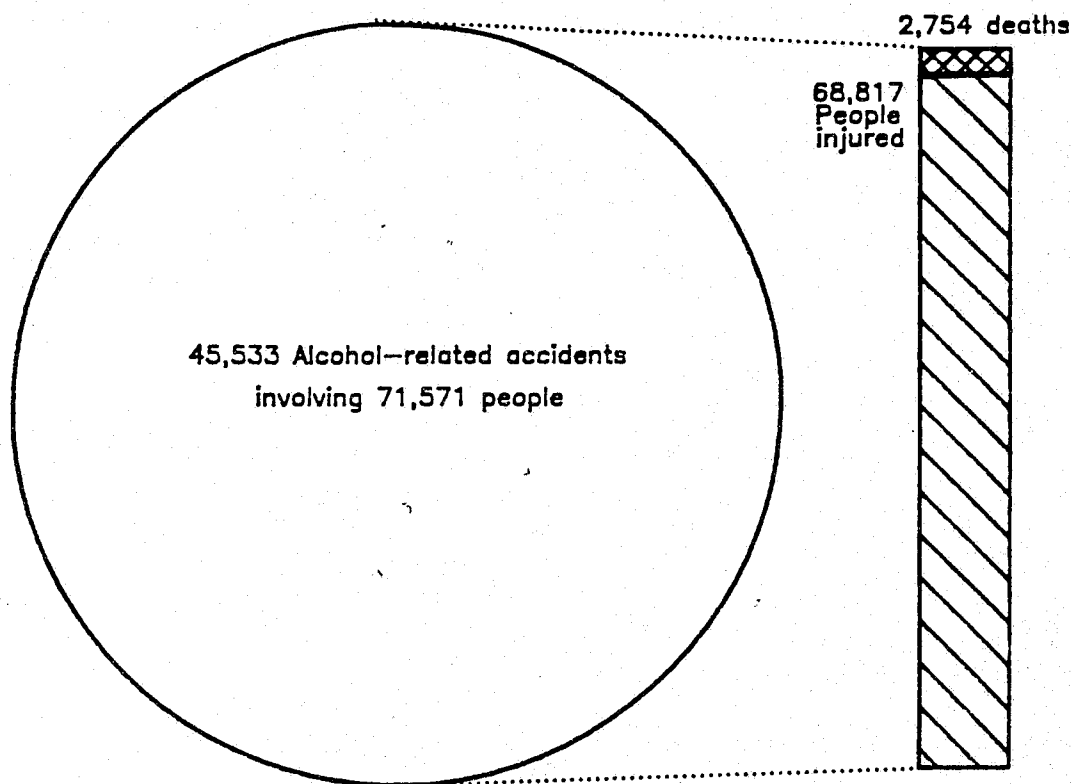
SHADINGS IN THE CHARTS ABOVE MEAN:

- (.01%-.04%) Seldom illegal
- ▤ (.05%-.09%) May be illegal
- (.10% Up) Definitely illegal
- ▥ (.05%-.09%) Illegal if under 18 yrs. old

GRAPH 7

ALCOHOL-RELATED ACCIDENTS AND VICTIMS

MOTOR VEHICLE ACCIDENTS IN CALIFORNIA, 1987



Source: California Highway Patrol

ALCOHOL-RELATED MOTOR VEHICLE ACCIDENTS AND VICTIMS

Motor vehicle accidents are the most common nonnatural cause of death in the United States, accounting for more fatal injuries than any other type of accident. Although most states define legal intoxication as having a BAC of 0.10 percent or higher, alcohol may cause a deterioration of driving skills at 0.05 percent or even lower, and deterioration progresses rapidly with rising BAC.

After analyzing case reports, simulated driving conditions and epidemiologic data, researchers have consistently concluded that alcohol contributes significantly to traffic accidents. The higher the amount of alcohol consumed, the greater the likelihood that an accident will occur and that the accident will be serious or fatal. During 1987, there were 45,533 alcohol-related motor vehicle accidents involving 71,570 people, of which 2,754 died and 68,816 were injured. About half of the people killed in motor vehicle accidents were killed in alcohol-related incidents; one-fifth of all injuries occurred in alcohol-involved accidents.

OTHER ALCOHOL-RELATED INJURIES

Alcohol as a causal factor in nontraffic injuries is clear. The alcohol abuser is more likely to sustain injury in traumatic situations, and is more likely to be injured seriously. Recent studies indicate that alcohol is frequently involved when a person is admitted to a hospital. The estimated percentage of total cases by category is shown in Table 4.

TABLE 4: PERCENTAGE OF HOSPITAL ADMISSIONS BY TYPE OF ADMISSION

<u>Type of Admission</u>	<u>Percentage of All Cases</u>
All persons hospitalized	20-25%
Emergency room trauma	20-27%
Accidental fires and burns	up to 64%
Hypothermia and frostbite	up to 48%
Injuries due to falls	up to 40%

DRUG AND ALCOHOL-RELATED MORTALITY

Thousands of Californians die each year as a result of alcohol and drug abuse. During 1987, 2,488 people died as a direct result of alcohol abuse and 2,000 from drug abuse.

Accidental deaths are more likely to occur while a person is under the influence of alcohol. In addition to motor vehicle deaths, alcohol is also a factor in deaths due to falls (25 percent), fire (25 percent), and drowning and suffocation (35 percent). About 30 percent of suicides and 50 percent of all homicides are committed under the influence of alcohol.

While the mechanism of cancer is unknown, heavy alcohol consumption has been related to an increased risk of cancer. Alcohol is cited as a contributing factor in 25 percent of the deaths associated with cancer of the lip, oral cavity, and pharynx, 25 percent with cancer of the larynx, 20 percent with cancer of the stomach, and 25 percent with liver cancer.

Data from the Drug Abuse Warning Network (DAWN) indicate that about three-quarters of all drug deaths are drug induced or overdoses, and the remaining quarter are a drug-related contributing factor to the death (accidents, violence, suicide). The synergistic effects of drugs in the body are particularly volatile, particularly when mixing drugs with alcohol. During 1987, there were 1,890 drug-induced or drug-related deaths as reported by medical examiners in the Los Angeles, San Diego, and San Francisco areas. The 1,890 deaths involved 4,274 drugs, with alcohol used in combination with other drugs cited most frequently.

ALCOHOL, DRUG ABUSE, AND PREGNANCY

The abuse of drugs and alcohol during pregnancy can result in a variety of physical, developmental, and behavioral problems in the infant. Defects caused by the abuse of drugs and alcohol are entirely preventable, unlike other birth defects.

Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Effects (FAE) are the results of heavy maternal drinking during pregnancy. The symptoms of these birth defects include mental retardation, deformities, hyperactivity, and growth retardation. Approximately 4,500 infants are born annually in California with FAS or FAE, affecting up to 69 percent of all infants born to women who

drank heavily during their pregnancy. It is estimated that the annual cost of caring for people with FAS (excluding FAE) is \$214 million.

Although absolute numbers of drug-addicted babies born to mothers who abuse drugs during pregnancy are not available, it is estimated that two to five percent of all infants have been exposed to illicit drugs; and recent reports show it is an increasing problem. The withdrawals of newborns of opiate-addicted mothers has been well-documented, including tremors, agitation, and convulsions requiring medication. Birth weight is often low. With the recent cocaine epidemic, more cases of cocaine-addicted babies have been reported. Cocaine has also been implicated in premature birth, miscarriage, and an increased risk of Sudden Infant Death Syndrome (SIDS). The pregnant addict who uses drugs intravenously risks passing the virus causing AIDS to her infant. The long-term health and mental needs of drug addiction in the newborn are not as well-documented as for children born with fetal alcohol syndrome, but Californians can expect to pay the costs associated with the care of these individuals. For infants manifesting developmental problems, costs could be as high as \$70,000 annually per person requiring the services of a state developmental center, or \$5,500 per person annually for the services of a regional center community.

AIDS

While the majority of AIDS cases to date have involved the homosexual community in California, IV drug use can be considered the gateway for AIDS to reach the general population. As of January 31, 1989, 649, or 4 percent, of the reported AIDS cases were heterosexual IV drug users, and 1,752, or 10 percent, were homosexual/bisexual IV drug users. While many people associate heroin with IV drug use, currently two much more widely used drugs pose a serious threat to the AIDS crisis -- cocaine and methamphetamine. Cocaine is injected by about ten percent of the clients reported to the Department of Alcohol and Drug Programs, and methamphetamine by about 30 percent. The proportions of those who injected, as reported to DAWN, are similar for amphetamines and much higher for cocaine. Unlike the heroin addict, the cocaine addict is more likely to draw blood into the needle to obtain a more intense rush, and is more inclined to share his/her needle, greatly increasing the risk of spreading AIDS.

YOUTH

The abuse of drugs and alcohol among the youth of California can lead to disastrous consequences such as accidents, suicide, and homicide. Youth who abuse substances are more likely to attract the notice of the criminal justice system, to drop out of school, and to disrupt family life. Youthful abusers tend to end up "on hold" in their emotional growth, some never regaining what they lost.

To attack the problem before it has started is probably the most cost effective way to combat the alcohol and drug abuse problem, and the necessary education and prevention efforts must begin with youngsters. A 1987 study prepared by Dr. Victor Tabbush for the Department of Alcohol and Drug Programs which analyzed the benefits derived from prevention programs conservatively concluded that for every dollar spent on prevention, 31 dollars of benefits were derived. Classroom instruction, solid media information, and knowledgeable parents are imperative to these efforts. The California Attorney General's Office conducted a survey of 7th, 9th, and 11th grade students in California in 1988, gathering data regarding drug use, as well as their perception regarding the influence of education and prevention classes on their decisions regarding alcohol and drug abuse.

The percentage of students who used a substance within the last six months is presented in Table 5.

**TABLE 5: DRUG USE BY CALIFORNIA STUDENTS IN GRADES 7, 9 AND 11
PAST SIX MONTHS BY TYPE OF DRUG**

<u>Substance</u>	<u>Grade</u>		
	<u>7</u>	<u>9</u>	<u>11</u>
Beer	40.3%	57.7%	68.3%
Wine	38.2	52.4	59.1
Liquor	18.4	38.9	52.4
Marijuana	5.8	21.6	32.8
Amphetamines	1.3	3.9	10.6
Inhalants	12.6	13.2	10.2
Polydrug	8.8	21.2	30.5

At the 9th and 11th grade levels, the reason for using drug or alcohol cited most frequently was that their friends also used (60.5 percent of the 9th graders; and 63.7 percent of the 11th graders). This underlines the importance of peer acceptance at this critical time of adolescence.

While the figures presented above are down from the previous 1986 survey figures, they are extremely high. Prevention and education efforts are designed to undermine the perception of youngsters that, if their peers take drugs, then, to be accepted, so must they.

Prevention classes do make an impact on students. Students in 9th and 11th grades reported that the classes helped them to avoid harmful and dangerous forms of drug use, avoid or reduce alcohol and/or drug consumption, and to resist peer pressure to consume alcohol or drugs. Less than ten percent of the students reported that the classes had no influence on them. The responses given by the 7th graders were even more positive than those of the older students.

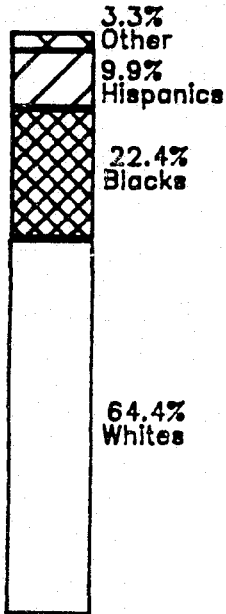
DRUG AND ALCOHOL PROGRAMS -- PARTICIPANT CHARACTERISTICS

The Department of Alcohol and Drug Programs presently tracks participant data from three major sources on persons receiving services primarily for alcohol or drug abuse. Under all systems, one individual can be counted more than once during a given period if he/she is admitted and discharged from program services more than once. The populations from the systems are quite different. Most people receiving services in providers funded via the Department of Alcohol and Drug Programs could not afford private care, while those receiving care in nonfederal acute care hospitals are primarily able to pay through insurance or other resources.

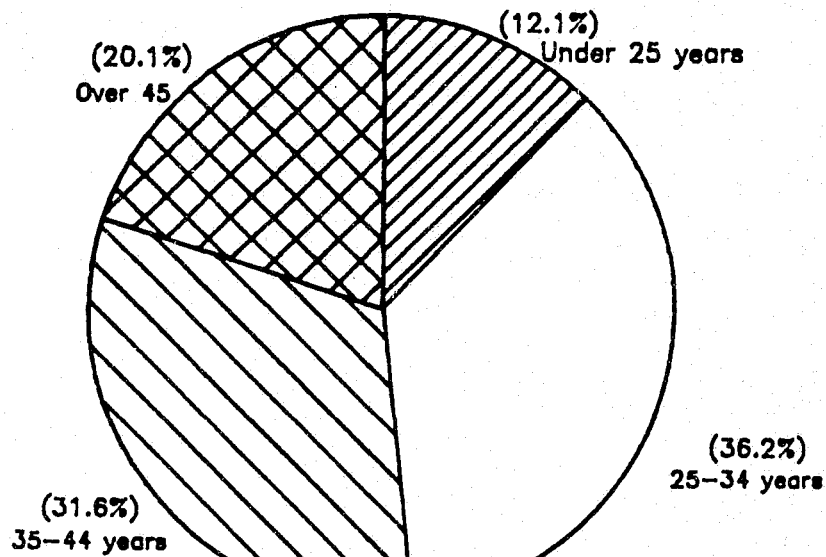
GRAPH 8 PARTICIPATION IN ALCOHOL PROGRAMS

DIRECT ALCOHOL SERVICES, 1987/88

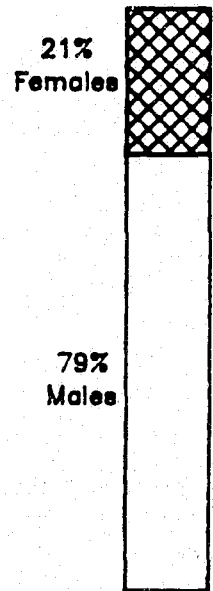
RACE/ETHNICITY



AGE OF PATIENTS



SEX



108,000 ALCOHOL PROGRAM PARTICIPANTS

Source: Department of Alcohol and Drug Programs

DIRECT ALCOHOL SERVICES

SERVICES RECEIVING FUNDING FROM THE DEPARTMENT OF ALCOHOL AND DRUG PROGRAMS

The Department of Alcohol and Drug Programs has \$33.6 million of state and federal funds budgeted for direct alcohol services for Fiscal Year 1988/89. Admissions to direct alcohol services supported in part by state and/or federal funds numbered approximately 108,000 during Fiscal Year 1987/88. Over three-quarters (79.0 percent) of the admissions were male; 21.0 percent were female. Over one-third (36.2 percent) were 25-34 years of age, and 31.6 percent were 35-44 years of age, with 20.1 percent over the age of 45 and 12.1 percent under 25.

White admissions accounted for 64.4 percent of the total; Blacks accounted for 22.4 percent. Hispanics accounted for 9.9 percent, Native Americans for 1.9 percent, and Asians or Pacific Islanders and all others for 1.4 percent.

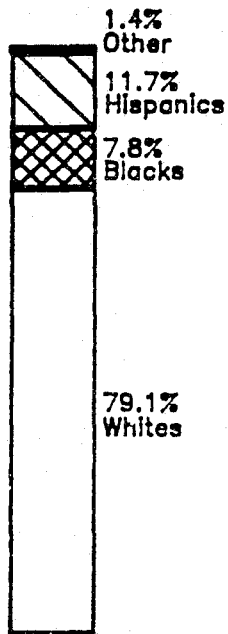
Most of the services supported by state and/or federal funds are community-based alcohol recovery services, and serve participants who probably would not be able to pay for the services themselves. Approximately 20 percent of these participants were employed at time of admission.

GRAPH 9

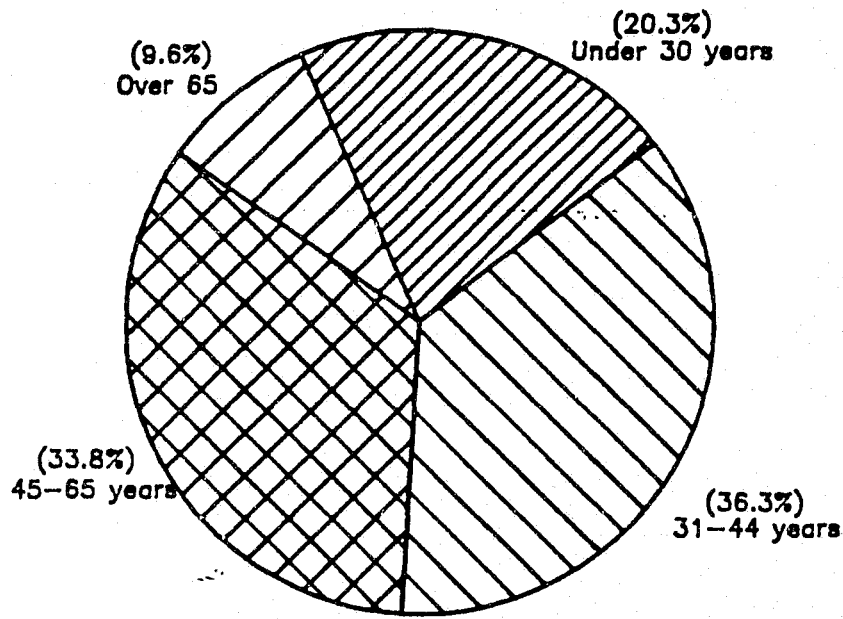
HOSPITAL ALCOHOL TREATMENT

PATIENT DISCHARGES IN CALIFORNIA, 1986

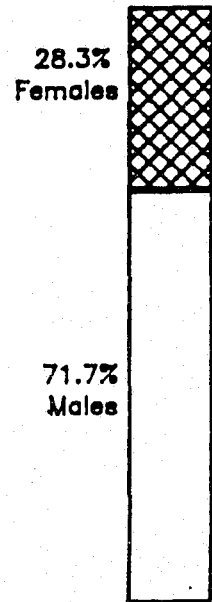
RACE/ETHNICITY



AGE OF PATIENTS



SEX



41,363 ALCOHOL PATIENT DISCHARGES

Source: Office of Statewide Health Planning and Development

HOSPITAL DISCHARGES

The Office of Statewide Health Planning and Development obtains data on patients discharged from nonfederal acute care hospitals.

During 1986, 41,363 persons diagnosed as abusing alcohol were discharged from nonfederal acute care hospitals in California. Of these, 71.7 percent were male and 28.3 percent were female. Over three-quarters (79.1 percent) of the patients were White, 11.7 percent were Hispanic, 7.8 percent were Black, 0.9 percent were Asian, and 0.5 percent were Native American.

The population receiving hospital care for an alcohol abuse problem is older than those admitted to community-based recovery services. Almost 10 percent

Total charges for the hospital stays excluding physician fees were \$253.9 million. Sources of payment are shown in Table 6.

TABLE 6: SOURCE OF PAYMENT FOR ALCOHOL AND DRUG HOSPITAL STAYS

<u>Source of Payment</u>	<u>Percent</u>
Insurance Companies	36.8%
Medicare	15.1
Self-Pay	10.4
Health Maintenance or Prepaid Health Plan	8.7
Blue-Cross/Blue-Shield	8.3
Medically Indigent Services	6.8
Medi-Cal	6.1
Other Government	5.9
Other/No Charge	1.9

While these two sources of direct care data can provide a general idea of persons affected by alcohol abuse, it can by no means provide a complete one. There are many recovery services for alcohol abuse, such as Alcoholics Anonymous and Community Recovery Centers, which provide many alcohol abusers with the supportive environment necessary to stop drinking and to stay on the path to recovery.

DRUG TREATMENT -- CLIENT CHARACTERISTICS

UNITS REPORTING TO THE DEPARTMENT OF ALCOHOL AND DRUG PROGRAMS

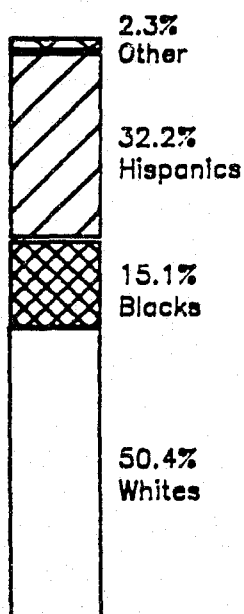
The Department of Alcohol and Drug Programs receives data on all clients receiving state and/or federal funds for drug abuse treatment as well as all units which dispense methadone for treatment. The federal and state funds for treatment are budgeted at \$49.2 million for Fiscal Year 1988/89.

GRAPH 10

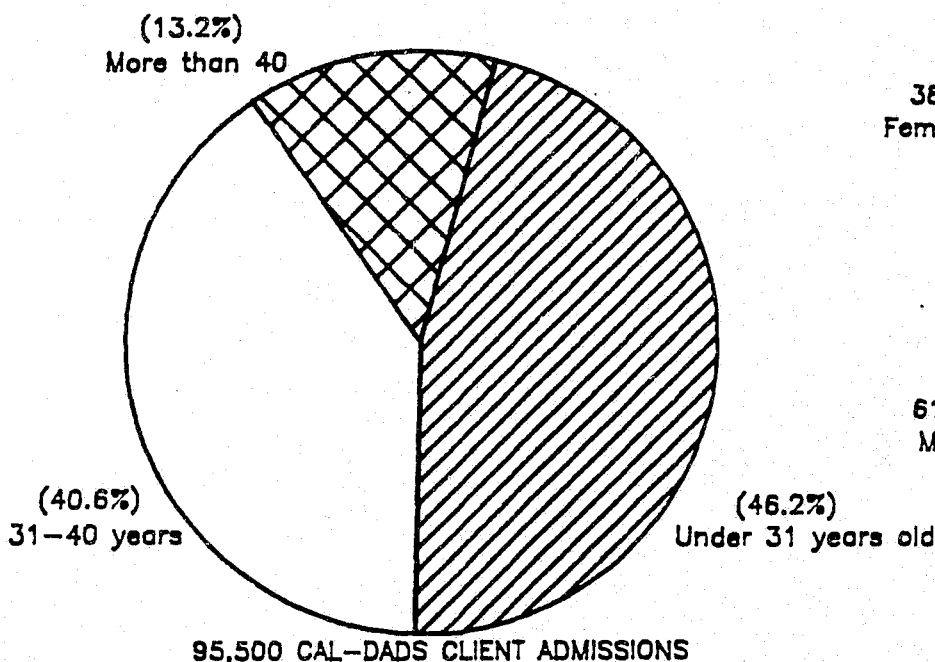
ADMISSIONS INTO DRUG PROGRAMS

CALIFORNIA, 1987/88

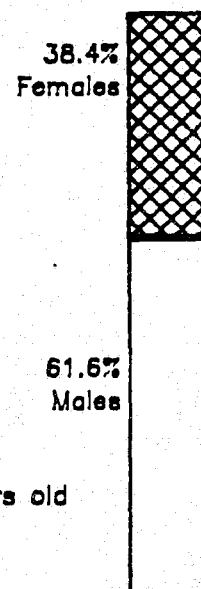
RACE/ETHNICITY



AGE OF PATIENTS



SEX



Source: Department of Alcohol and Drug Programs

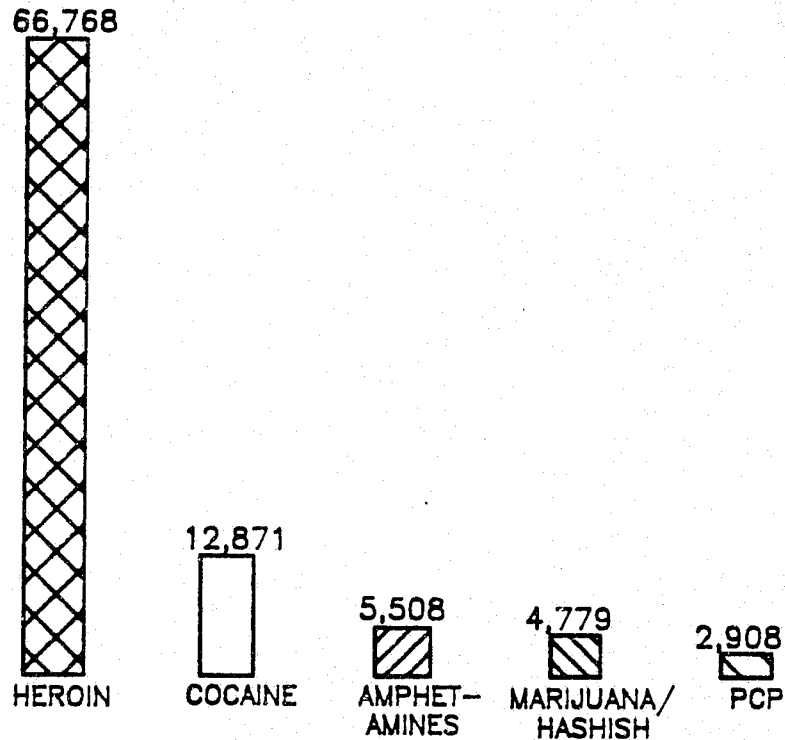
Over 95,500 clients were admitted to treatment within this system during Fiscal Year 1987/88; 61.6 percent were male, and 38.4 percent were female. Slightly over half (50.3 percent) were White, 32.2 percent were Hispanic, 15.1 percent were Black, 1.6 percent were Asian, and 0.8 percent were Native American.

Slightly less than half of the clients (46.2 percent) were under the age of 31; the age group of 31-40 accounted for an additional 40.6 percent, leaning toward a younger population than those receiving alcohol services. The primary drug of abuse at admission is shown in Table 7.

GRAPH 11

DRUG TREATMENT ADMISSIONS

SELECTED DRUGS IN CAL-DADS CLINICS, 1987/88



Source: Department of Alcohol and Drug Programs

TABLE 7: NUMBER AND PERCENT OF CLIENTS ADMITTED TO DRUG SERVICES BY PRIMARY DRUG AT TIME OF ADMISSION

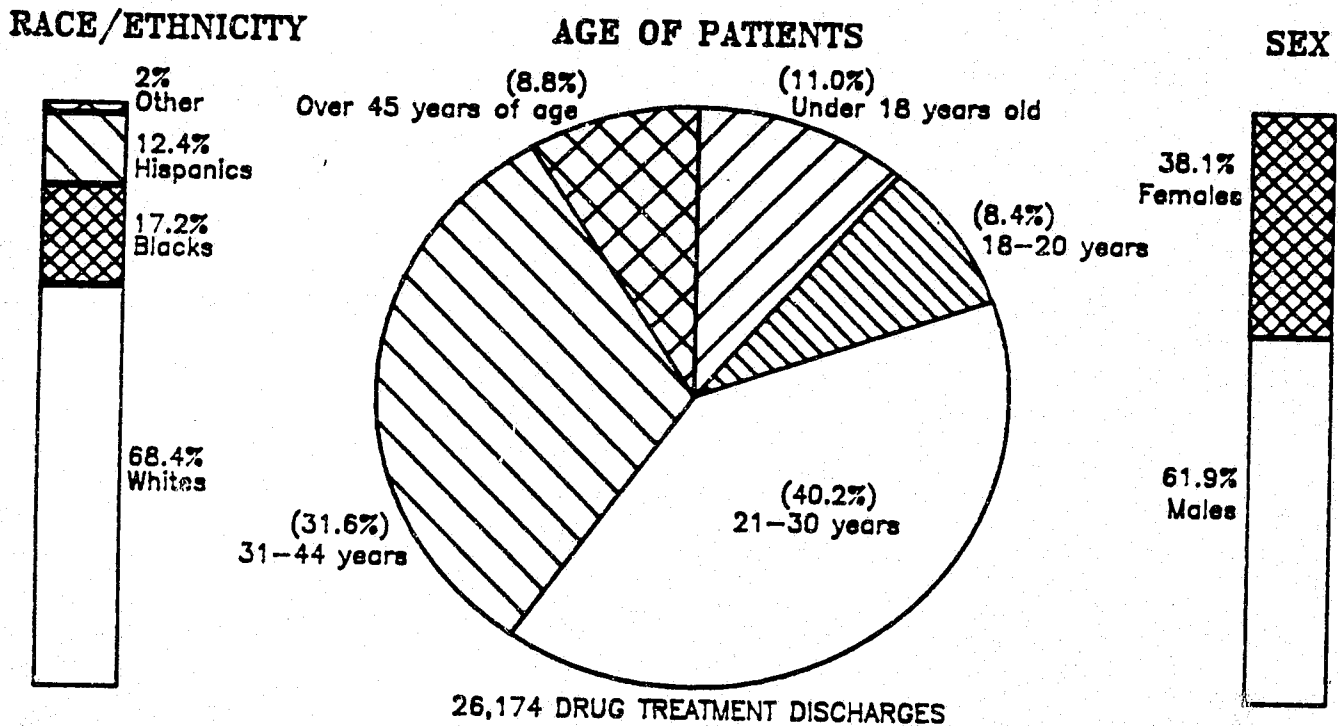
<u>Drug</u>	<u>Number</u>	<u>Percent</u>
Total	95,625	100.0%
Heroin	66,768	69.8
Cocaine	12,871	13.5
Amphetamines	5,508	5.8
Marijuana/Hashish	4,779	5.0
PCP	2,908	3.0
All Other Drugs	2,791	2.9

About 31 percent of the population was employed, 18 percent were referred to treatment by the criminal justice system, and 70.3 percent injected their primary drug of abuse.

GRAPH 12

HOSPITAL DRUG TREATMENT

PATIENT DISCHARGES IN CALIFORNIA, 1986



Source: Office of Statewide Health Planning and Development

HOSPITAL DISCHARGE DATA

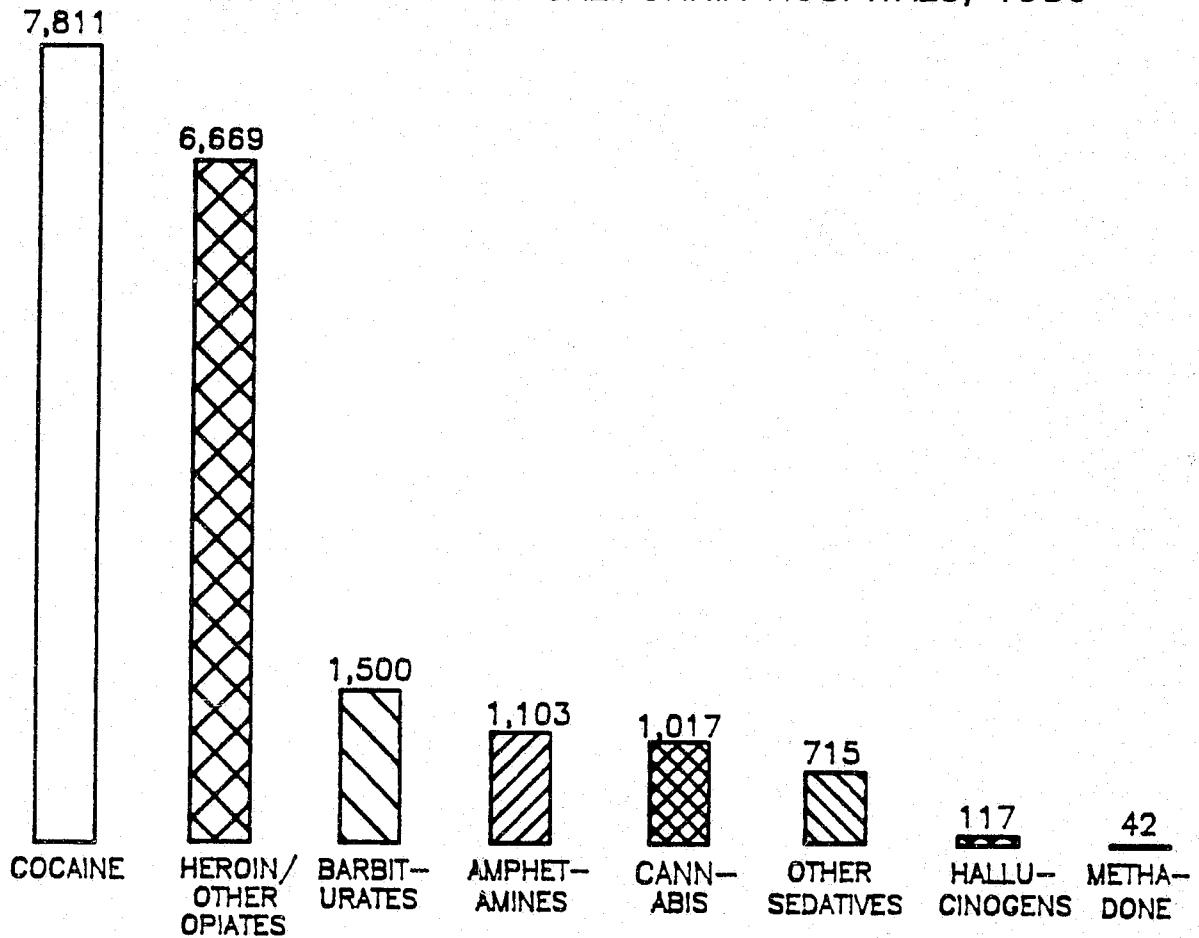
During 1986, there were 26,174 discharges from nonfederal acute care hospitals treating drug abusers. Of the discharges, 61.9 percent were male and 38.1 percent were female. Whites accounted for 68.4 percent of the discharges, 17.2 percent were Black, 12.4 percent were Hispanic, 1.8 percent were Asian, and 0.2 percent were Native American. Eleven percent were under the age of 18, 8.4 percent were 18-20 years old, 40.2 percent were 21-30, 31.6 percent were 31-44 and 8.8 percent were 45 years or over.

The principal diagnoses by drug type are shown in Table 8.

GRAPH 13

DRUG TREATMENTS BY PRINCIPAL DIAGNOSIS

SELECTED DRUGS IN CALIFORNIA HOSPITALS, 1986



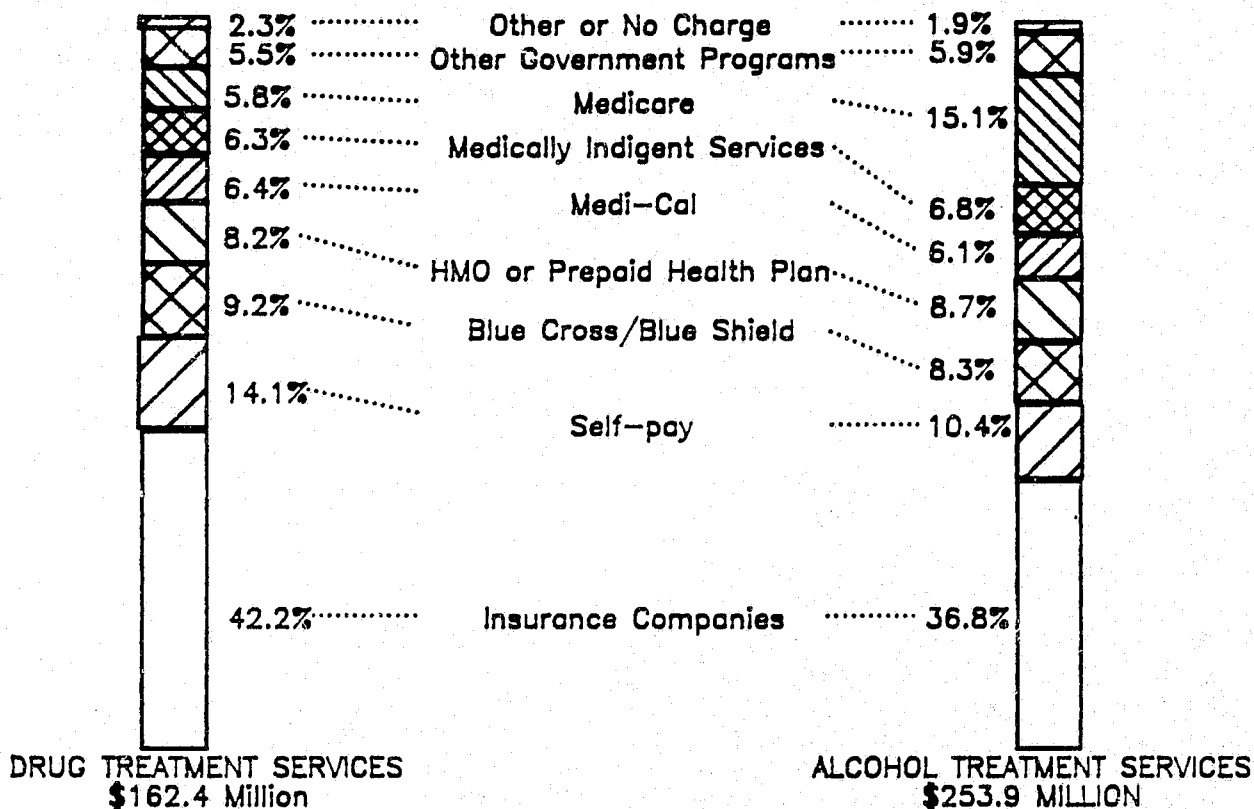
Source: Office of Statewide Health Planning and Development

TABLE 8: HOSPITAL DISCHARGES: PRIMARY DIAGNOSIS BY DRUG TYPE

	<u>Number</u>	<u>Percent</u>
Total	26,174	100.0%
Heroin/Other Opiates	6,669	25.5
Methadone	42	.2
Barbiturates	1,500	5.7
Other Sedatives	715	2.7
Amphetamines	1,103	4.2
Cocaine	7,811	29.8
Cannabis	1,017	3.9
Hallucinogens	117	.5
All Other	7,200	27.5

Total hospital charges for services rendered (excluding physician fees) were \$162.4 million. The sources of payment for the hospital charges are shown in Table 9.

GRAPH 14 HOSPITAL TREATMENT PAYMENT SOURCES IN CALIFORNIA, 1986



Source: Office of Statewide Health Planning and Development

TABLE 9: HOSPITAL DISCHARGES: SOURCE OF PAYMENT

<u>Source of Payment</u>	<u>Percent</u>
Insurance Companies	42.2%
Self-Pay	14.1
Blue-Cross/Blue-Shield	9.2
Health Maintenance or Prepaid Health Plan	8.2
Medi-Cal	6.4
Medically Indigent Services	6.3
Medicare	5.8
Other Government	5.5
Other/No Charge	2.3

ALCOHOL PROBLEM INDICATOR TRENDS

ALCOHOL CONSUMPTION

The per capita consumption rate of alcoholic beverages by the California drinking age population (persons 14 years of age and older) has remained fairly stable from 1983 to 1987, hovering around 39 gallons. The 38.8 gallons consumed per capita during 1987 consisted of 30.7 gallons of beer, 5.8 gallons of wine, and 2.3 gallons of distilled spirits. While total per capita gallons consumed remained stable, the slight difference in types of beverages consumed (more beer, less distilled spirits) resulted in a slight decrease in per capita absolute alcohol or ethanol consumed from 3.22 gallons in 1983 to 3.07 gallons during 1987 (Table 10).

TABLE 10: PER CAPITA ALCOHOL BEVERAGE CONSUMPTION
1983 versus 1987

	<u>1983</u>	<u>1987</u>
Total Gallons	38.9	38.8
Beer	30.4	30.7
Wine	5.8	5.8
Distilled Spirits	2.7	2.3
Absolute Alcohol (gallons)	3.22	3.07

ALCOHOL-RELATED ARRESTS

Total alcohol-related arrests moved up and down from 1983 to 1987, ending with a net decrease of 25,286 (4.0 percent) to 610,821. Felony arrests (drunk driving) rose each year, from 6,812 during 1983 to 8,488 during 1987, a 24.6 percent increase. Over the same period, misdemeanor alcohol arrests had a net decrease of 26,962 to 602,333, for a 4.3 percent decrease. The bulk of the decrease occurred in arrests of people found drunk in public places, creating a nuisance, or obstructing public thoroughfares (Penal Code (P.C.) drunk 647f). Table 11 outlines the alcohol-related arrests by type and net change over the period 1983 to 1987.

GRAPH 15 ALCOHOL-RELATED ARRESTS

CALIFORNIA, 1983 AND 1987

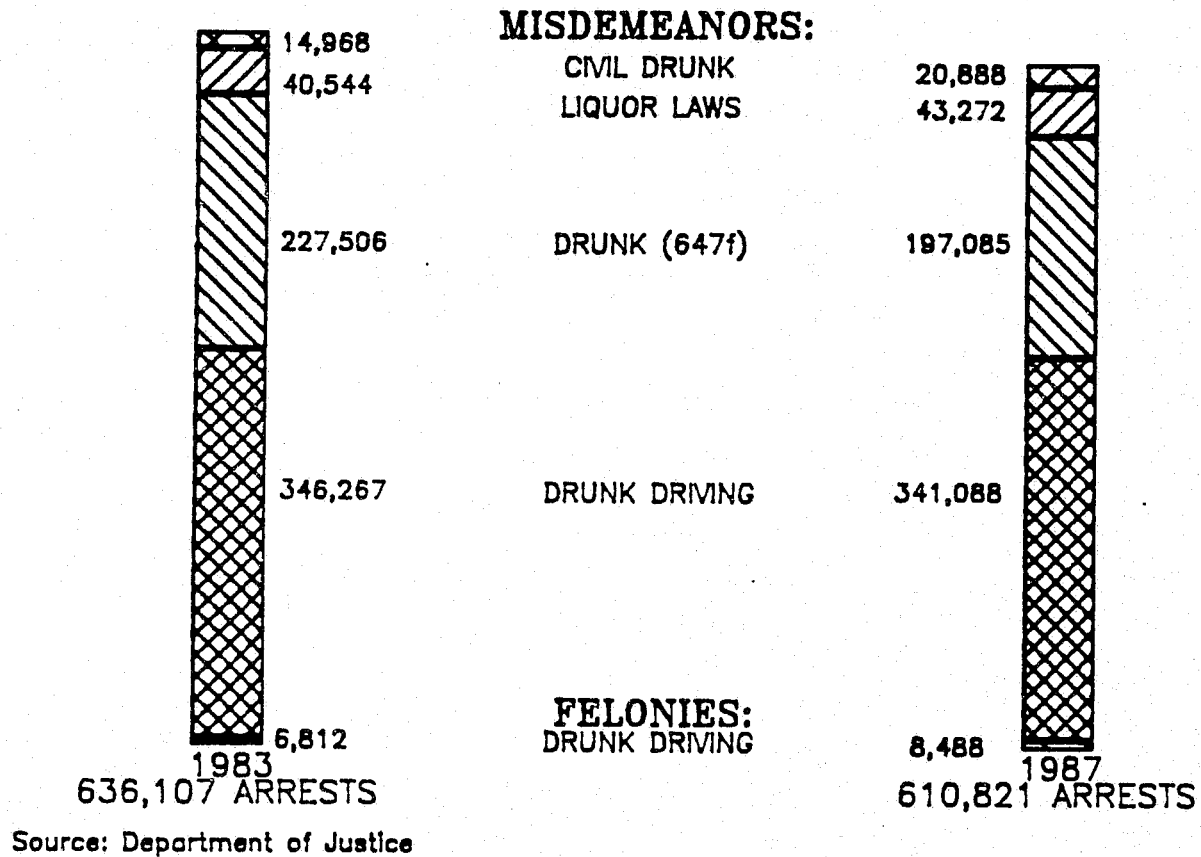


TABLE 11: ALCOHOL-RELATED ARRESTS IN CALIFORNIA
1983 versus 1987

<u>Offense</u>	<u>1983</u>	<u>1987</u>	<u>Net Percent Change</u>
Felony Total			
Drunk Driving	6,812	8,488	14.6
Misdemeanor Total	629,295	602,333	-4.3
Drunk Driving	346,267	341,088	-1.5
Drunk (647f P.C.)	227,506	197,085	-13.4
Liquor Laws	40,554	43,272	6.7
Civil Drunk	14,968	20,888	39.6

ALCOHOL-RELATED MOTOR VEHICLE ACCIDENTS

During 1983, there were 44,707 alcohol-related accidents; 2,089 (4.7%) involved fatalities and 42,618 (95.3%) resulted in injury. Alcohol-related accidents during 1987 reached 45,533, an increase of 1.8 percent since 1983. Of the 45,533 accidents, 2,425 (5.3 %) involved fatalities and 43,108 (94.7 %) involved injuries only. The percentage of fatal alcohol-related accidents to all fatal accidents was down slightly from 1983 to 1987, decreasing from 51.1 percent of the total to 49.3 percent. Alcohol-related injury accidents as a percent of all injury accidents was also down, moving from 21.7 percent of the total during 1983 to 18.0 percent during 1987.

A total of 2,754 people were killed in alcohol-related accidents during 1987, up from 2,386 in 1983, for a 15.4 percent increase. During 1983, alcohol-related fatalities represented 52.2 percent of all fatalities. In 1987, the percentage decreased to 50.1 percent.

People injured in alcohol-related accidents numbered 68,816 during 1987, representing 19.1 percent of all persons injured in motor vehicle accidents. The corresponding number for 1983 was 66,909, which represented 22.9 percent of all persons injured.

Although the numbers of accidents and injuries have increased from 1983 to 1987, the change is small when compared to the increase in the number of licensees (11.5 percent) and the increase in the number of miles driven per year (23.9 percent).

DEATHS

Deaths due to alcohol decreased from 1983 to 1985 and then rose again through 1987 to reach 2,488, 43 more deaths than in 1983 (Table 12). Deaths directly due to alcohol are deaths associated with chronic liver disease and cirrhosis, alcoholic psychosis, accidental poisoning and toxic effects of alcohol.

TABLE 12: DEATHS DUE TO ALCOHOL, YEARS 1983 THROUGH 1987

<u>Year</u>	<u>Number</u>
1983	2,445
1984	2,498
1985	2,189
1986	2,393
1987	2,488

DRUG PROBLEM INDICATOR TRENDS

DRUG-RELATED ARRESTS

Total arrests for drug-related offenses increased by 43.6 percent from 1983 to 1987, moving from 188,433 to 270,561. Most increases occurred in the felony category, which grew from 79,422 to 146,588 over the period, for an increase of 84.6 percent. Many of these increases are probably due to the recent cocaine epidemic and the emergence of methamphetamine. The increases occurred in the narcotics and dangerous drug categories where these two drugs are classified.

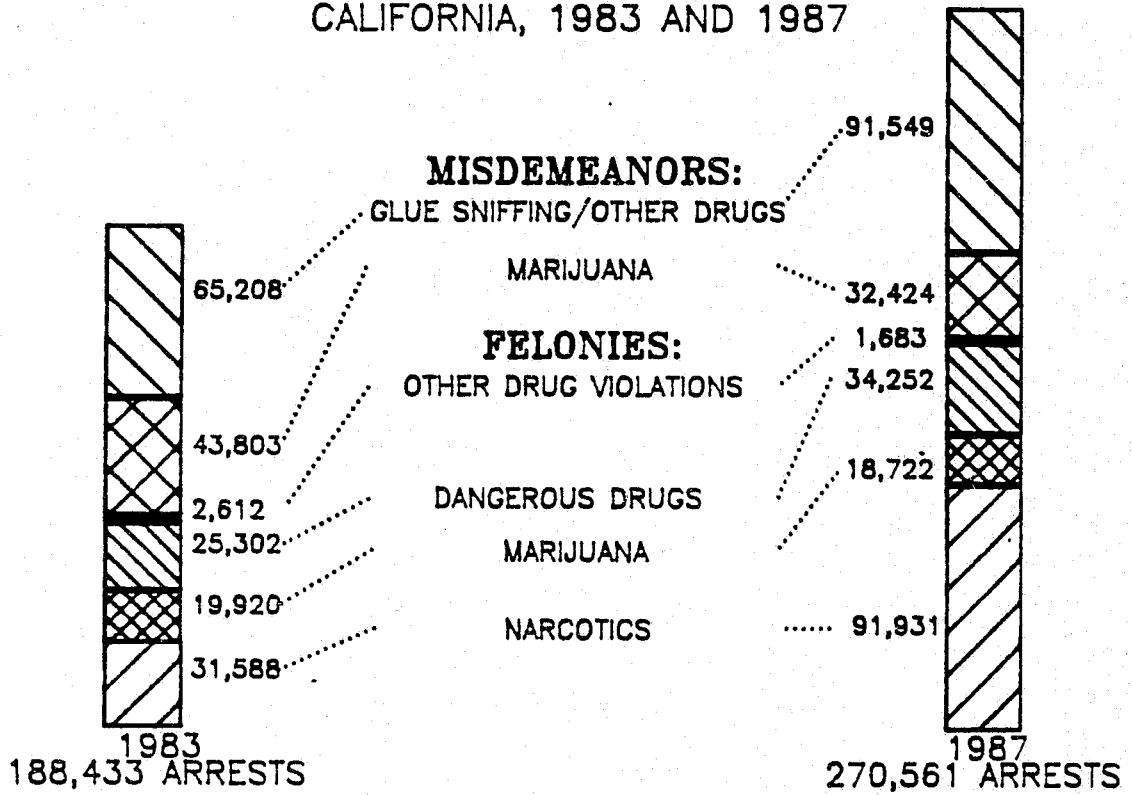
Misdemeanor arrests also increased, although to a lesser extent. During 1983, there were 109,011 misdemeanor drug arrests, rising to 123,973 during 1987, for a net increase of 13.7 percent (Table 13).

TABLE 13: DRUG-RELATED ARRESTS IN CALIFORNIA
1983 versus 1987

	<u>1983</u>	<u>1987</u>	<u>Net Percent Change</u>
Total Arrests	188,433	270,561	43.6
Felony			
Total Felony	79,422	146,588	84.6
Narcotics	31,588	91,931	191.0
Marijuana	19,920	18,722	-6.0
Dangerous Drugs	25,302	34,252	35.4
Other Drug Violations	2,612	1,683	-35.6
Misdemeanor			
Total Misdemeanor	109,011	123,973	13.7
Marijuana	43,803	32,424	-26.0
Other Drugs	62,655	90,504	44.4
Glue Sniffing	2,553	1,045	-59.1

GRAPH 16 DRUG-RELATED ARRESTS

CALIFORNIA, 1983 AND 1987



Source: Department of Justice

DRUG COMMITMENTS TO CORRECTIONAL FACILITIES

Drug commitments to the Department of Corrections rose steeply from 1983 to 1987, moving from 2,007 to 7,971, for a 297.2 percent increase.

Commitments to Youth Authority for drug-related offenses also increased. During 1983, there were 148 commitments, by 1987 the number had risen to 705.

SPECIFIC DRUGS OF ABUSE

Cocaine

For the past few years, California has experienced an epidemic of cocaine use of a magnitude not seen in many years for any drug. All indicators of cocaine abuse remain extremely high; however, the numbers are moving up more slowly, suggesting a peak in the level of the epidemic.

Admissions for a primary problem of cocaine abuse to providers reporting to the California Drug Abuse Data System (CAL-DADS) have risen dramatically since Fiscal Year 1982/83, from 4,427 then to 12,871 during Fiscal Year 1987/88, an overall increase of 190.7 percent. However, the increase from Fiscal Year 1986/87 to Fiscal Year 1987/88 was only 356, or 2.8 percent. This increase is in sharp contrast to previous years' increases of between 20 and 39 percent per year.

Part of the huge increase in cocaine abuse is due to the emergence of crack, which is affordable and gives the user an intense rush when smoked. The increase in crack use can be tracked by the increase in cocaine-smoking clients entering treatment. During Fiscal Year 1982/83, 17.2 percent, or 761, of the primary cocaine clients smoked the drug. By Fiscal Year 1987/88, 6,789 were admitted for smoking cocaine. This represents 52.7 percent of all cocaine clients, and surpasses all other methods of administering cocaine.

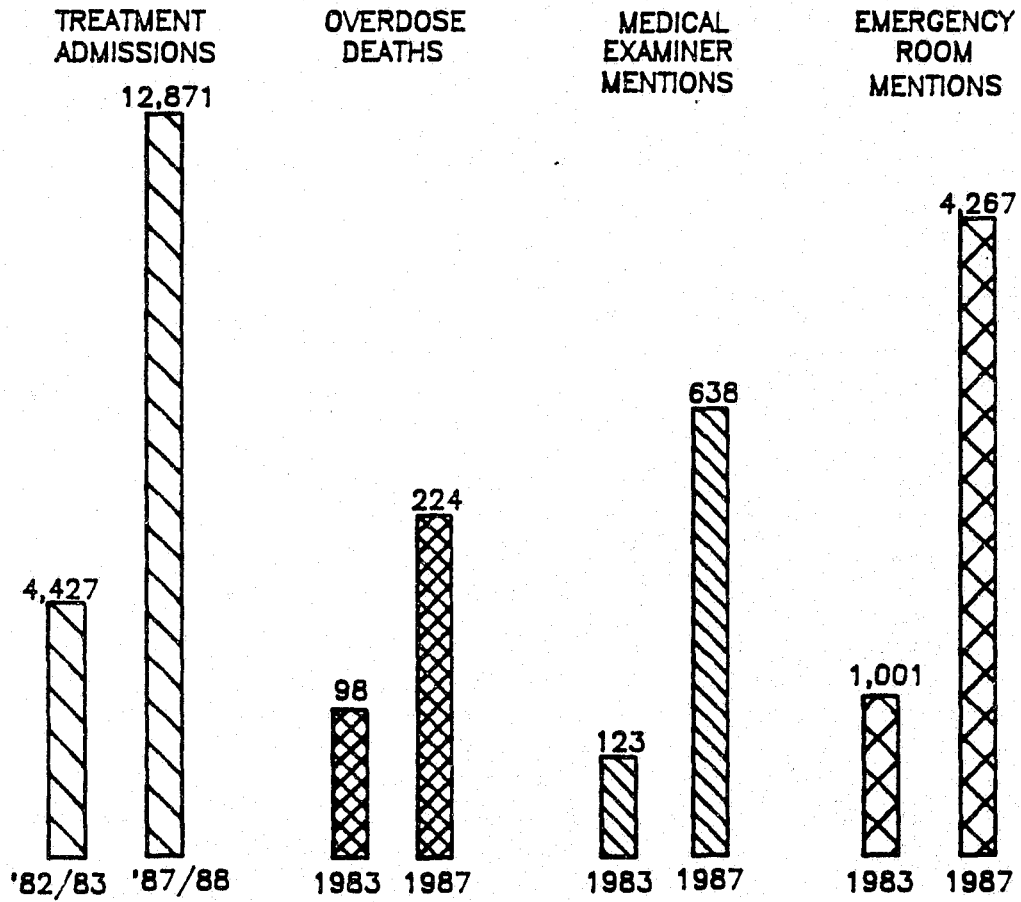
Emergency room episodes involving cocaine in the San Diego, San Francisco, and Los Angeles areas, as reported by the DAWN, also increased but at a decreasing rate. During 1983, there were 1,001 emergency room episodes involving cocaine; by 1987, the number was 4,267, for an increase of 326.3 percent. The increase from 1986 to 1987 was 23.6 percent.

Deaths related to cocaine, as reported to the DAWN system by medical examiners, numbered 638 during 1987, up 418.7 percent from the 1983 total of 123. The increase from 1986 to 1987 was 23.1 percent, as compared to the 46.0 percent increase from 1985 to 1986.

Cocaine-induced deaths (overdoses) for California during 1987 were 224, as compared to 98 during 1983, a 128.6 percent increase. The count rose by 20 deaths from 1986 to 1987, as compared to 74 from 1985 to 1986.

GRAPH 17 COCAINE

TRENDS BETWEEN 1983 AND 1987



Sources: CAL-DADS Admissions, Vital Statistics and DAWN

Amphetamines

Indicators of amphetamine abuse are showing alarming increases. Admissions to CAL-DADS treatment units of persons with a primary problem of amphetamine abuse rose 19.5 percent from 4,611 during Fiscal Year 1986/87 to 5,508 during Fiscal Year 1987/88. Over the last five years, admissions for amphetamine abuse have increased 116.9 percent. While San Diego, San Bernardino, and Riverside show the largest numbers of admissions for amphetamine abuse, there is also a severe problem in some of the smaller rural areas. Shasta and Siskiyou Counties reported over 50 percent of their total admissions as primary amphetamine clients. Much of this increase is due to the illicit laboratory manufacture of methamphetamine. During 1987, there were 465 methamphetamine laboratory busts.

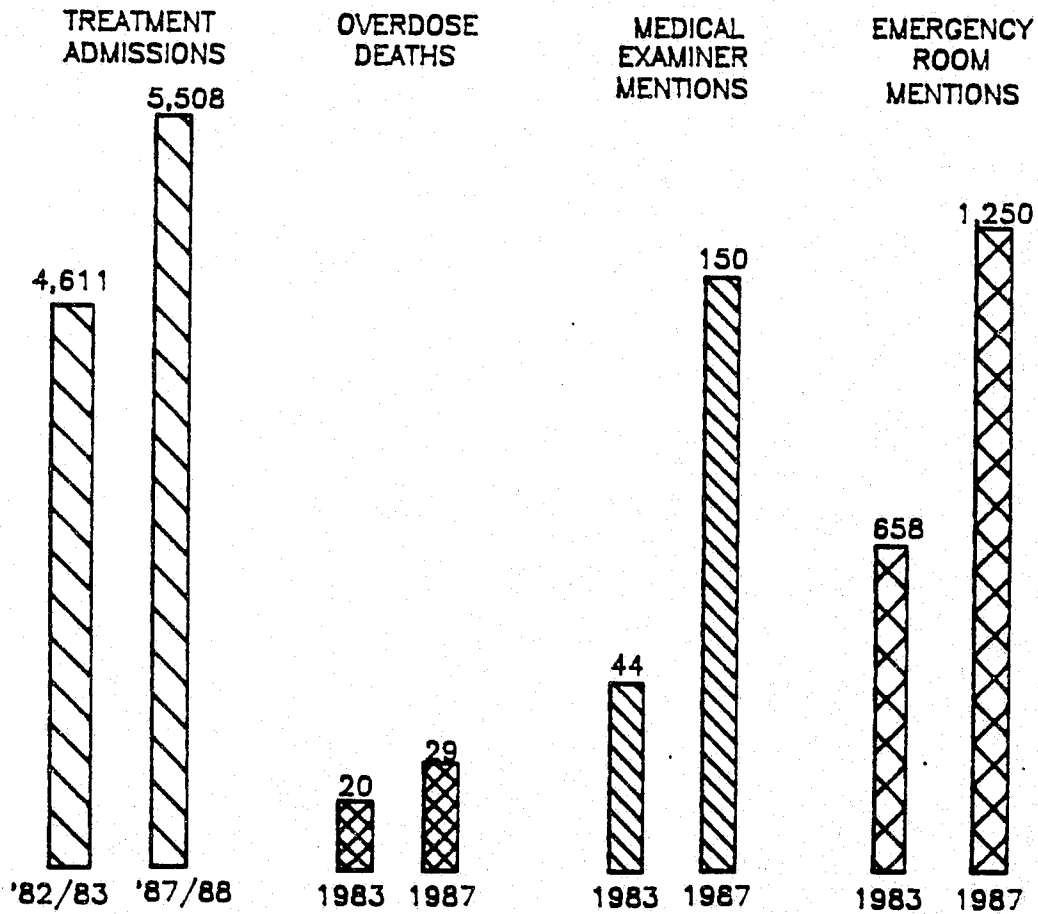
Emergency room episodes involving amphetamine rose 41.4 percent to 1,250 from 1986 to 1987. Since the 1983 level of 658, there has been a 90.0 percent increase.

There were 150 amphetamine-related deaths as reported to the DAWN system during 1987, up 240.9 percent from the 1983 figure of 44.

Increases in amphetamine abuse are particularly alarming, due to the high rate of intravenous use. Approximately one-third of all clients admitted to CAL-DADS treatment units inject amphetamines. As reported to DAWN, slightly over one-third of clients admitted to emergency rooms for episodes involving amphetamines had injected the drug.

GRAPH 18 AMPHETAMINES

TRENDS BETWEEN 1983 AND 1987



Sources: CAL-DADS Admissions, Vital Statistics and DAWN

Heroin

With the exception of CAL-DADS admissions, the indicators of heroin abuse have generally declined since about 1985 or 1986, verifying that the most recent wave of heroin abuse has receded (Graph 19).

Admissions to the CAL-DADS system increased to 66,768 during Fiscal Year 1987/88, up 3.6 percent from the Fiscal Year 1986/87 count of 64,393. The admissions during Fiscal Year 1987/88 are still 6.4 percent below the Fiscal Year 1985/86 high of 71,342.

Hepatitis type B cases continued to decrease during 1987, falling from 5,061 in 1986 to 4,372, or 13.6 percent. This was a 26.8 percent drop from the 1985 high of 5,969.

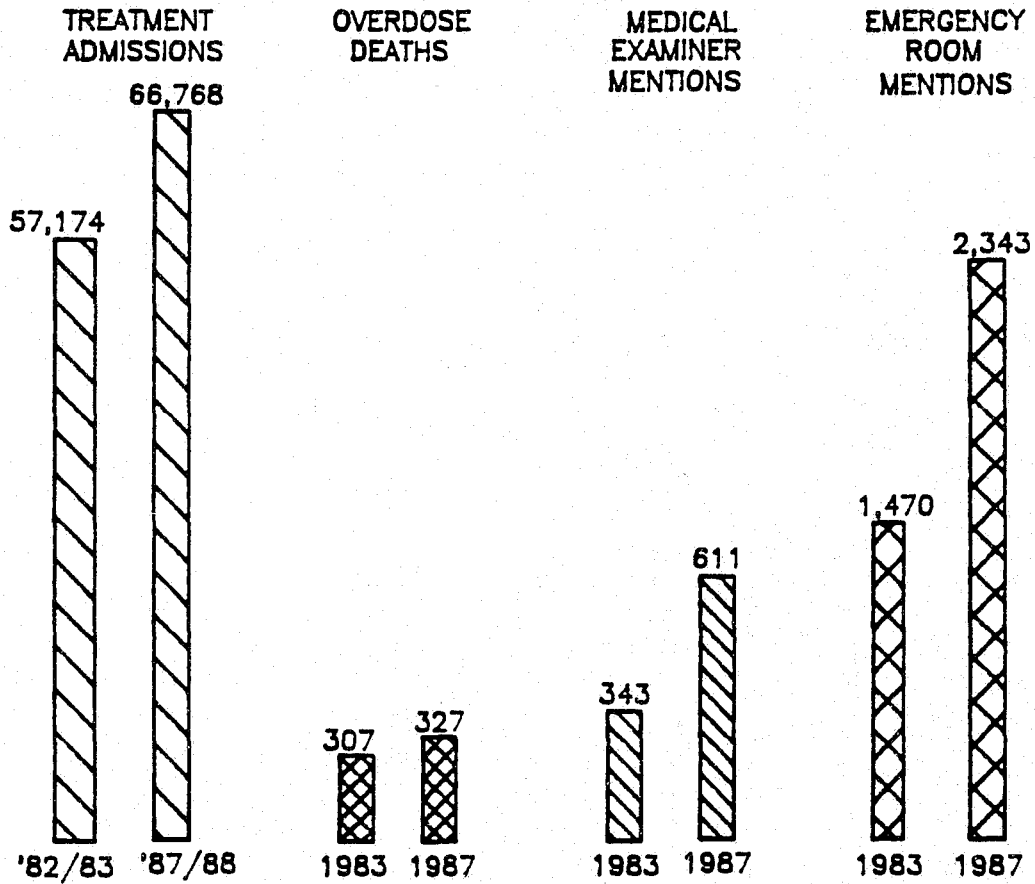
Emergency room mentions of heroin/morphine as reported to DAWN decreased by 24.2 percent from 1986 to 1987 (3,092 to 2,343). This is the lowest level reported since 1984.

Heroin-/morphine-related deaths reported to DAWN decreased to 611 during 1987 from 694 during 1986, a 12.0 percent decrease.

Opiate overdose deaths in California fell from 546 during 1986 to 327 during 1987, a decrease of 40.1 percent. This is the lowest level of opiate overdose deaths since 1983.

GRAPH 19 HEROIN

TRENDS BETWEEN 1983 AND 1987

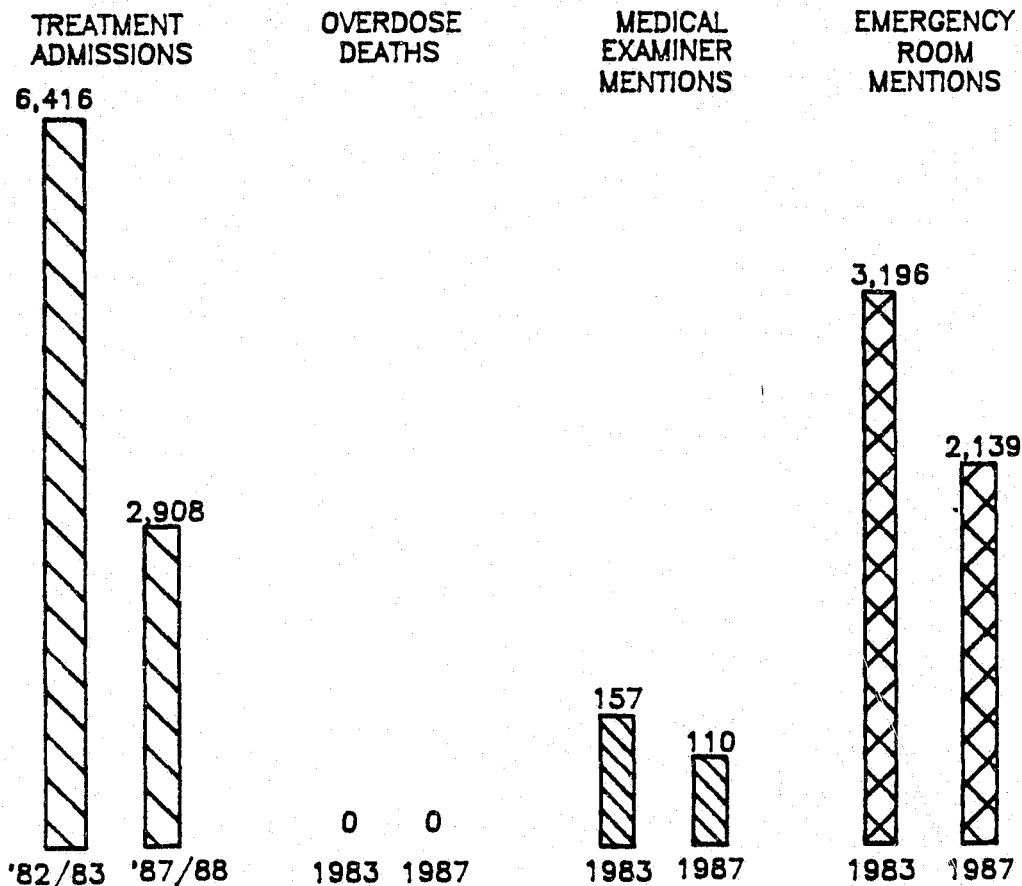


Sources: CAL-DADS Admissions, Vital Statistics and DAWN

GRAPH 20

PCP

TRENDS BETWEEN 1983 AND 1987



Sources: CAL-DADS Admissions, Vital Statistics and DAWN

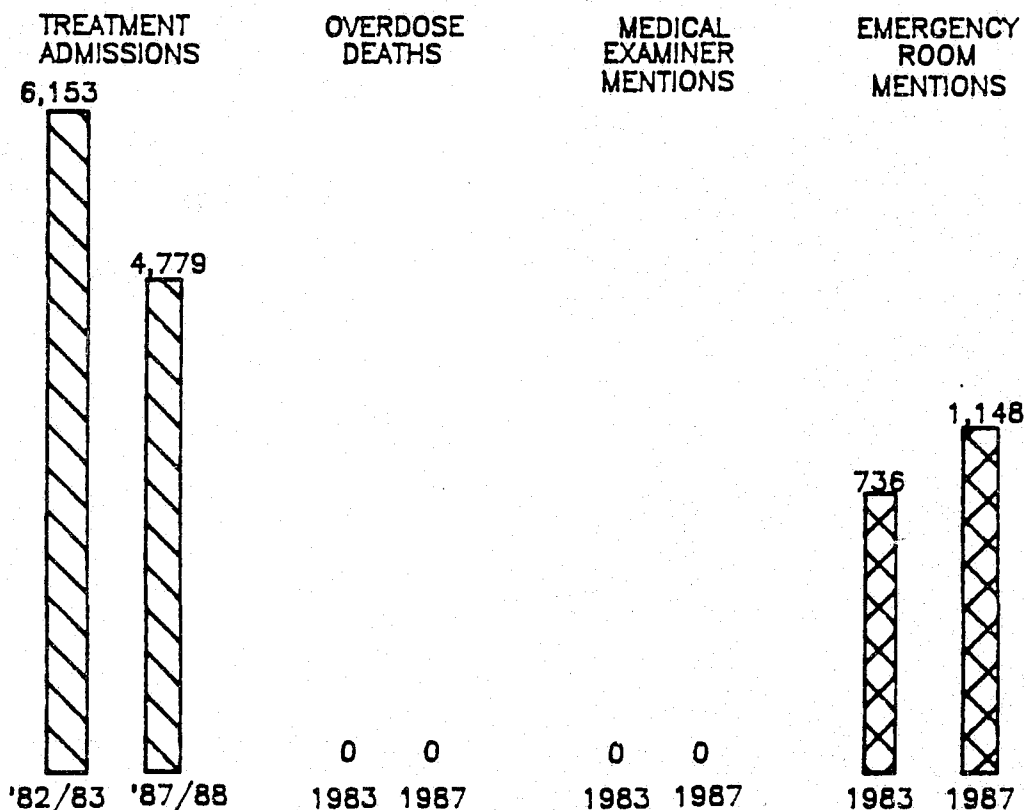
PCP

Most indicators of PCP abuse continue to decline. CAL-DADS admissions for the primary problem of PCP abuse have been declining since Fiscal Year 1983/84, when they totaled 6,862. The overall decline since that time is 57.6 percent bringing the total down to 2,908 during Fiscal Year 1987/88.

Following a four-year decline, PCP emergency room mentions reported to DAWN rose by 147 mentions to 2,139 during 1987, an increase of 7.4 percent from 1986. Surprisingly, the increase occurred in San Francisco, an area which has not been associated with PCP in the past. Future years' data will determine whether PCP will become more popular or if the increase in the area was a one-time occurrence. DAWN PCP-related deaths numbered 110 during 1987, down from 141 during 1986, and slightly higher than than the 1985 level of 104.

GRAPH 21 MARIJUANA

TRENDS BETWEEN 1983 AND 1987



Sources: CAL-DADS Admissions, Vital Statistics and DAWN

Marijuana

Marijuana is probably the most widely used illicit drug. While the admissions to CAL-DADS units move up and down from year to year, there has been an overall decline since Fiscal Year 1982/1983. During Fiscal Year 1982/83, total admissions for marijuana abuse were 6,167, declining to 4,779 during Fiscal Year 1987/88, or 22.5 percent.

As presented in the arrest data earlier, arrests for marijuana offenses have also decreased from 1983 to 1987.

It is encouraging that student surveys for California, as well the Nation, also show declining marijuana use. According to the 1985 National Household Survey, there has been a slight decrease in current marijuana use from 1982. Hopefully, the decrease will continue to make a dent in the number of people using this drug, which is often viewed as a "gateway" to the abuse of other drugs.