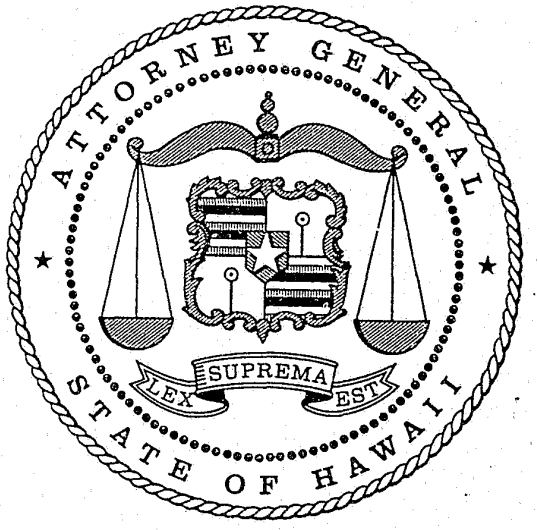
STATE OF HAWAII

Department of the Attorney General



CR-Sent MFI
4-2-90

120834

CONTROLLED SUBSTANCES -- RELATED DEATHS IN HAWAII, 1984 - 1988

HAWAII CRIMINAL JUSTICE DATA CENTER

JOHN WAIHEE
GOVERNOR

WARREN PRICE III
ATTORNEY GENERAL

STATE OF HAWAII
DEPARTMENT OF THE ATTORNEY GENERAL
HAWAII CRIMINAL JUSTICE DATA CENTER
KEKUANAO'A BUILDING, ROOM 101
465 SOUTH KING STREET
HONOLULU, HAWAII 96813

STEVEN E. VIDINHA
ADMINISTRATOR

CONTROLLED SUBSTANCES -- RELATED DEATHS IN HAWAII, 1984 - 1988

October 1989

Research and Statistics Report (RS09)

FOREWORD

In January of 1989, the Hawaii Criminal Justice Data Center (HCJDC) published a report entitled *Drug Laws and Offenders*. This report presented information on state and federal drug laws and statistical information on drug offenders processed through the criminal justice system in Hawaii.

This report, *Controlled Substances -- Related Deaths in Hawaii, 1984 - 1988*, presents information on the adverse effects that drug use and abuse has had on our society. While the previous report presented information on drug law offenders, this report focuses on drug users.

ACKNOWLEDGEMENTS

Information collected for this report was made possible through the assistance of state criminal justice agencies, health professionals, and non-profit organizations in the state of Hawaii. The Hawaii Criminal Justice Data Center (HCJDC) would like to thank the following people for their help and cooperation with this study:

Mr. Douglas Gibb, Chief of Police
Honolulu Police Department

Dr. John Lewin, Director
Department of Health

Kenneth Willinger, Ph.D.
Clinical Psychologist
Alcohol and Drug Abuse Division
Department of Health

Narcotics Enforcement Division Investigators
Department of the Attorney General

Ms. Maria Brown, Community Resources Coordinator
Coalition for a Drug-Free Hawaii

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

According to *A Survey of Hawaii's War on Drugs*, a report published in February 1989 by the Department of the Attorney General, there has been an increase in cocaine trafficking and methamphetamine trafficking in the state. There was an increase in the number of arrests statewide for possession of opium, cocaine, and their derivatives from 353 in 1983 to 530 in 1987. There was also an increase in the number of arrests for sale/manufacture of opium, cocaine, and their derivatives from 126 in 1983 to 280 in 1987.[1]

Data from the Uniform Crime Reporting Program show that the increases in the number of arrests related to opium, cocaine, and their derivatives continued in 1988. There was a 29 percent increase to 685 arrests for possession and a 12 percent increase to 313 arrests for sale/manufacture.[2]

The success of marijuana eradication measures in reducing trafficking and possession violations in Maui County and in the City and County of Honolulu is acknowledged in the report. However, the continuing increase in marijuana cultivation in Hawaii County and a possible increase in marijuana crops in Kauai County are also recognized as a significant drug trafficking problem in those counties.[3]

The deterrence of potential drug offenders and the apprehension, conviction, and sentencing of those already involved in drug-related crime are essential to the survival and the well-being of both the offenders and the victims, who are often one and the same. This report, *Controlled Substances -- Related Deaths in Hawaii, 1984 - 1988*, presents information on the number of drug-related deaths in Hawaii within the last five years, a description of the side-effects of cocaine and marijuana use, and information on "designer drugs". A list of some of the education, prevention, intervention, and treatment programs available to assist the community is also included.

METHODS

Various methods of data collection were employed. The methods are discussed below:

In the section where information on drug-related deaths is presented, 136 death certificates were studied. Each person died while using or abusing drugs. The decedents' death certificates were obtained through files kept in the Narcotics Enforcement Division (NED) of the state Department of the Attorney General. The NED is notified of all drug-related deaths. It collects and files all death certificates of people who died from drug-related causes in Hawaii. All previous criminal history information was gathered from the Offender-Based Transaction Statistics/Computerized Criminal History (OBTS/CCH) files.

For the sections on cocaine, marijuana, and designer drugs, all reference material, periodicals, government documents, and other literature were obtained from various sources. These reference sources included the Alcohol and Drug Abuse Division of the state Department of Health, the Honolulu Police Department, the Drug Enforcement Administration, and the Coalition for a Drug-Free Hawaii. A list of references is provided in Appendix A of this report.

LIMITATIONS

The drug-related death data collected for this study may not include all the drug-related deaths which occurred in Hawaii from 1984 to 1988. All of the death certificates used in this study were sent to the NED from county coroner offices and hospitals on a voluntary basis. There is no accurate way to account for the total number of drug-related deaths.

The NED files were the only collective files on drug-related deaths available. The Department of Health does not list all deaths by drug-related incidents but only by disease and other physical causes. Drug-related deaths are listed in categories such as accidents, suicides, and other. The city and county morgue also does not keep statistics on drug-related deaths separately; they are listed as poisonings.

Some of the other limiting factors of this study include no control over the degree of accuracy of information recorded on each death certificate and the absence of a legal definition for a drug-related death.

County coroner offices and hospitals in the state of Hawaii are authorized to fill out death certificates, however, the death certificates apparently are not all uniformly filled out with the same degree of descriptive comment or breakdown of chemical substances found in the systems of the decedents. For example, some death certificates are filled out describing direct and indirect causes of death, while other certificates list a general term of "overdose" or "multiple drug toxicity" to indicate drug use.

DRUG-RELATED DEATHS IN HAWAII, 1984-1988

Drug-related death is defined in this study as: "a death indirectly attributed to drug use". For example, if a person dies from an overdose of drugs, the direct or primary cause of death is often heart or respiratory failure while the cause of the heart or respiratory failure is drug toxicity. Drugs are considered an indirect cause of death.

For this reason, many deaths caused by drugs are not included in this study. For example, in an auto accident fatality where the driver was under the influence of drugs, that death will not be listed as a drug-related death in the annual Department of Health Statistical report or the county coroner's report. Most statistical reports do not include a specific category for drug-related deaths.

Victims of accidents or crimes, who are killed by drug intoxicated drivers or offenders, are not considered drug-related deaths in this study, even though the indirect causes of the deaths were drug-related incidents.

For the five-year period, 1984 to 1988, 136 people died from using or abusing drugs. The drugs that were used included both legal and illegal substances. Drug-related deaths during this period averaged 27 per year or at least two deaths per month credited to drug use.

TABLE 1
TOTAL DRUG-RELATED DEATHS FROM 1984-1988, PER YEAR

	1984	1985	1986	1987	1988	TOTAL	PERCENT
Decedents	20	30	35	25	26	136	100

SEX OF THE DECEDENTS

The majority, 94 (69 percent) of the 136 decedents, were male and 42 (31 percent) were female. There were predominantly more male decedents than female decedents, in the age range of 26 to 35, each year.

TABLE 2
SEX OF THE DECEDENTS, PER YEAR

	1984	1985	1986	1987	1988	TOTAL	PERCENT
Male	13	19	25	17	20	94	69
Female	7	11	10	8	6	42	31
Total	20	30	35	25	26	136	100

TABLE 2A
SEX AND AGE OF DECEDENTS IN 1984

	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Male	-	2	7	2	2	13	65
Female	-	-	2	1	4	7	35
Total	-	2	9	3	6	20	100

TABLE 2B
SEX AND AGE OF DECEDENTS IN 1985

	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Male	-	3	5	6	5	19	63
Female	-	1	4	1	5	11	37
Total	-	4	9	7	10	30	100

Note: Percentages in the table may not add to 100 due to rounding.

TABLE 2C
SEX AND AGE OF DECEDENTS IN 1986

	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Male	-	2	11	7	5	25	71
Female	1	-	3	4	2	10	29
Total	1	2	14	11	7	35	100

TABLE 2D
SEX AND AGE OF DECEDENTS IN 1987

	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Male	-	1	9	4	3	17	68
Female	-	2	1	4	1	8	32
Total	-	3	10	8	4	25	100

TABLE 2E
SEX AND AGE OF DECEDENTS IN 1988

	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Male	-	2	6	6	6	20	77
Female	-	1	2	2	1	6	23
Total	-	3	8	8	7	26	100

AGE OF THE DECEDENTS

Over half of the decedents, 76 (56 percent), were between the ages of 25 and 39. The median age range of most of the decedents was 35 to 39. Only one drug-related death of a juvenile was reported in this study--a female, age 16.

TABLE 3
AGE OF DECEDENTS, PER YEAR

AGE CATEGORIES	1984	1985	1986	1987	1988	TOTAL	PERCENT
under 18	-	-	1	-	-	1	1
18-24	1	4	1	2	2	10	7
25-29	7	4	3	6	5	25	18
30-34	2	4	10	4	3	23	17
35-39	3	6	8	7	4	28	21
40-44	1	2	5	2	4	14	10
45-49	-	1	2	1	3	7	5
50-54	-	1	1	1	-	3	2
55-59	1	4	-	2	3	10	7
60-64	-	1	1	-	1	3	2
over 65	5	3	3	-	1	12	9
Total	20	30	35	25	26	136	100

RACE OF THE DECEDENTS

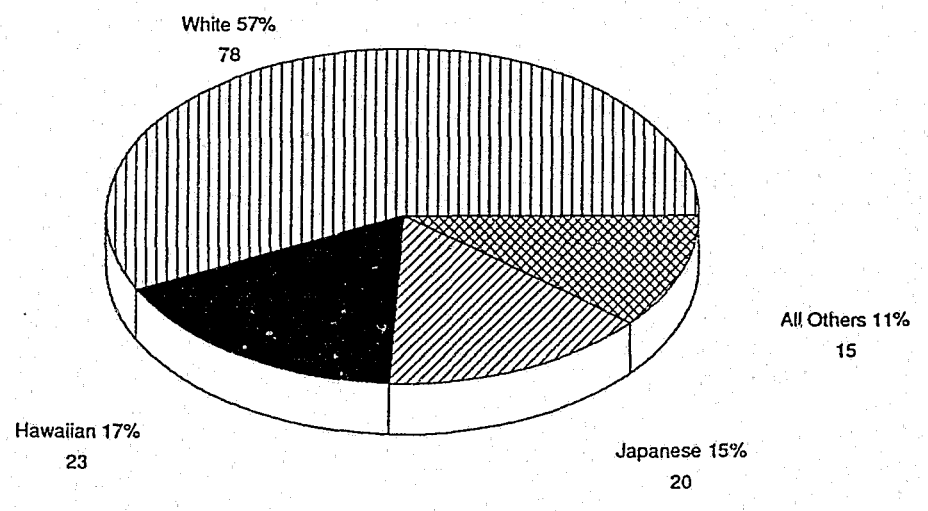
The majority of the decedents, 78 (57 percent) were white; 23 (17 percent) were Hawaiian or of part Hawaiian ancestry; and 20 (15 percent) were Japanese.

TABLE 4
RACE OF THE DECEDENTS, PER YEAR

RACE CATEGORIES	1984	1985	1986	1987	1988	TOTAL	PERCENT
Black	-	-	-	1	-	1	1
Chinese	-	1	-	-	-	1	1
Filipino	-	-	1	2	1	4	3
Hawaiian/ Part Hawaiian	4	3	9	4	3	23	17
Japanese	4	5	4	2	5	20	15
Korean	-	1	1	1	1	4	3
Other	-	1	2	0	0	3	2
Unknown	-	1	1	-	-	2	1
White	12	18	17	15	16	78	57
Total	20	30	35	25	26	136	100

Note: Percentages in the table may not add to 100 due to rounding.

FIGURE 1
TOTAL RACES OF ALL THE DECEDENTS FROM 1984-1988



In 1984, 12 decedents out of 20, (60 percent), were white-- six males and six females. From 1985 through 1987, the predominant race was also white, however, males outnumbered females by a 2 to 1 ratio. In 1988, white females outnumbered white males by a 3 to 1 ratio.

TABLE 4A
RACE AND SEX OF DECEDENTS BY AGE IN 1984

RACE BY SEX	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Black							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Chinese							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Filipino							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Hawaiian/Part Hawaiian							
Male	-	2	2	-	-	4	20
Female	-	-	-	-	-	-	-
Japanese							
Male	-	-	2	-	1	3	15
Female	-	-	1	-	-	1	5
Korean							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Other							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Unknown							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
White							
Male	-	-	3	2	1	6	30
Female	-	-	1	1	4	6	30
Total	-	2	9	3	6	20	100

TABLE 4B
RACE AND SEX OF DECEDENTS BY AGE IN 1985

RACE BY SEX	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Black							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Chinese							
Male	-	-	-	-	-	-	-
Female	-	-	1	-	-	1	3
Filipino							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Hawaiian/Part Hawaiian							
Male	-	-	2	-	-	2	7
Female	-	-	-	-	1	1	3
Japanese							
Male	-	1	-	2	-	3	10
Female	-	-	-	-	2	2	7
Korean							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	1	1	3
Other							
Male	-	-	1	-	-	1	3
Female	-	-	-	-	-	-	-
Unknown							
Male	-	-	-	-	-	-	-
Female	-	1	-	-	-	1	3
White							
Male	-	2	2	4	5	13	43
Female	-	-	3	1	1	5	17
Total	-	4	9	7	10	30	100

Note: Percentages in the table may not add to 100 due to rounding.

TABLE 4C
RACE AND SEX OF DECEDENTS BY AGE IN 1986

RACE BY SEX	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Black							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Chinese							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Filipino							
Male	-	-	-	-	1	1	3
Female	-	-	-	-	-	-	-
Hawaiian/Part Hawaiian							
Male	-	1	4	1	-	6	17
Female	1	-	1	-	1	3	9
Japanese							
Male	-	-	1	-	2	3	9
Female	-	-	-	1	-	1	3
Korean							
Male	-	-	-	-	-	-	-
Female	-	-	-	1	-	1	3
Other							
Male	-	-	-	1	1	2	6
Female	-	-	-	-	-	-	-
Unknown							
Male	-	-	-	-	-	-	-
Female	-	-	1	-	-	1	3
White							
Male	-	1	5	5	1	12	34
Female	-	-	2	2	1	5	14
Total	1	2	14	11	7	35	100

Note: Percentages in the table may not add to 100 due to rounding.

TABLE 4D
RACE AND SEX OF DECEDENTS BY AGE IN 1987

RACE BY SEX	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Black							
Male	-	-	-	-	1	1	4
Female	-	-	-	-	-	-	-
Chinese							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Filipino							
Male	-	-	2	-	-	2	8
Female	-	-	-	-	-	-	-
Hawaiian/Part Hawaiian							
Male	-	-	2	2	-	4	16
Female	-	-	-	-	-	-	-
Japanese							
Male	-	-	-	-	-	-	-
Female	-	1	-	1	-	2	8
Korean							
Male	-	-	-	-	-	-	-
Female	-	-	-	1	-	1	4
Other							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Unknown							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
White							
Male	-	1	5	2	2	10	40
Female	-	1	1	2	1	5	20
Total	-	3	10	8	4	25	100

TABLE 4E
RACE AND SEX OF DECEDENTS BY AGE IN 1988

RACE BY SEX	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Black							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Chinese							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Filipino							
Male	-	-	1	-	-	1	4
Female	-	-	-	-	-	-	-
Hawaiian/Part Hawaiian							
Male	-	-	1	1	1	3	12
Female	-	-	-	-	-	-	-
Japanese							
Male	-	-	-	1	2	3	12
Female	-	-	-	2	-	2	8
Korean							
Male	-	-	-	-	1	1	4
Female	-	-	-	-	-	-	-
Other							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
Unknown							
Male	-	-	-	-	-	-	-
Female	-	-	-	-	-	-	-
White							
Male	-	1	2	-	1	4	15
Female	-	2	4	3	3	12	46
Total	-	3	8	7	8	26	100

Note: Percentages in the table may not add to 100 due to rounding.

OCCUPATION

With respect to occupation, 61 (45 percent) of the decedents had been blue collar workers or laborers, and 25 (18 percent) had been white collar workers or professionals. Where the occupation was known and with the exception of housewives, students, and retirees, 7 (5 percent) of the decedents had been unemployed.

TABLE 5
FORMER OCCUPATIONS OF DECEDENTS

Occupations	1984	1985	1986	1987	1988	TOTAL	PERCENT
Blue Collar	7	14	15	11	14	61	45
White Collar	5	3	6	8	3	25	18
Unemployed	1	-	5	1	-	7	5
Housewife	1	3	3	2	1	10	7
Retired Status	1	3	-	2	1	7	5
Student	2	2	2	-	-	6	4
Unknown	2	4	2	-	2	10	7
Unclassified	1	1	2	1	5	10	7
Total	20	30	35	25	26	136	100

Note: Percentages in the table may not add to 100 due to rounding.

PREVIOUS ARREST HISTORIES

A criminal history record check was done on all decedents using the OBTS/CCH system. Arrest histories were found on 62 (46 percent) of the decedents.

TABLE 6
NUMBER OF DECEDENTS WITH PREVIOUS ARREST HISTORIES

	1984	1985	1986	1987	1988	TOTAL	PERCENT
With Previous Arrest Histories	7	16	17	14	8	62	46
No Previous Arrest Histories Found	13	14	18	11	18	74	54
Total	20	30	35	25	26	136	100

MOST SERIOUS ARREST CHARGES

The most serious offense for each decedent with an arrest history was listed in Table 12 by offense severity. Out of all of the most serious arrest charges listed, 7 (11 percent) were for violating Hawaii Revised Statutes (HRS) 291-4, Driving Under the Influence of Alcohol, a misdemeanor.

Class A felony charges, the most serious charge in the penal code, included arrests for HRS 707-701 (Murder), HRS 708-840 (Robbery), and HRS 712-1241 (Promoting a Dangerous Drug 1). (See TABLE 7 on pages13 and 14.)

MOST SERIOUS PREVIOUS CONVICTIONS

Of the decedents with previous criminal histories, eight (17 percent) were convicted of HRS 291-4 (Driving Under the Influence of Liquor), a misdemeanor charge, and seven (15 percent) were convicted of HRS 710-1077 (Criminal Contempt of Court), also a misdemeanor. The convictions for class A felony charges included HRS 708-840 (Robbery) and HRS 707-702 (Manslaughter). (See TABLE 7A on pages 15 and 16.)

SENTENCES

Of the decedents with previous convictions, four decedents were sentenced to prison terms of at least four years, and ten were given prison terms of less than six months.

The largest fine amount was $1,868.00. The average fine amount under $500.00 was a sum of $87.00 per fine. (See TABLE 7B on pages 17 through 19.)

MOST SERIOUS DRUG ARRESTS

Of the 62 decedents with previous criminal histories, 21 (34 percent), were formerly arrested for a drug offense. Six of the 21 decedents (29 percent) were formerly charged with a Narcotic Drug Offense, a class C felony. The most serious drug charge was for HRS 712-1241 (Promoting a Dangerous Drug 1), a class A felony. (See TABLE 8 on page 20.)

MOST SERIOUS DRUG CONVICTIONS

Of the 21 decedents that were charged with drug offenses, 10 (48 percent), were formerly convicted. The most serious drug convictions noted were for class C felonies including HRS 712-1241 (Promoting a Detrimental Drug 1). (See TABLE 8A on page 21.)

SENTENCES SERVED FOR DRUG OFFENSE CONVICTIONS

There were no prison terms given that were longer than 6 months for those decedents convicted of a drug offense. All the decedents given prison terms were also granted suspended prison sentences for the same length of time or longer. (See TABLE 8B on page 22.)

TABLE 7
TOTAL MOST SERIOUS ARREST CHARGES OF DECEDENTS WITH CRIMINAL ARREST HISTORIES

HRS	Severity	1984	1985	1986	1987	1988	Total	Percent
707-701 Murder	FA	-	-	-	1	-	1	2
708-840 Robbery 1	FA	-	1	1	1	1	4	6
712-1241 Promoting a Dangerous Drug 1	FA	-	-	1	-	-	1	2
707-702 Manslaughter	FA	-	1	-	-	-	1	2
707-734 Sodomy	FB	-	-	1	-	-	1	2
708-810 Burglary 1	FB	1	-	2	-	-	3	5
712-1242 Promoting a Dangerous Drug 2	FB	-	-	-	1	1	2	3
Narcotic Drug Offense [a]	FC	-	-	-	-	1	1	2
134-9 No Permit to Carry a Weapon	FC	-	1	-	-	-	1	2
708-831 Theft 1	FC	1	-	3	-	-	4	6
712-1243 Promoting a Dangerous Drug 3	FC	-	1	-	-	-	1	2
712-1247 Promoting a Detrimental Drug 1	FC	-	-	1	-	1	2	3
708-811 Burglary 2	FC	-	1	1	-	-	2	3
707-716 Terroristic Threatening 1	FC	-	-	-	1	1	2	3
708-852 Forgery 2	FC	-	-	2	-	-	2	3

Note: [a] The term "Narcotic Drug Offense" is a converted code from the Honolulu Police Department's files indicating a drug offense. It is not known whether the charge was for possessing, using, or selling illegal drugs.

Note: For Severity Code definitions, see Appendix C.

TABLE 7 (Continued)
TOTAL MOST SERIOUS ARREST CHARGES
OF DECEDENTS WITH CRIMINAL ARREST HISTORIES

HRS	Severity	1984	1985	1986	1987	1988	Total	Percent
329-42 Fraudulently Obtain Controlled Substances	FC	-	-	-	1	-	1	2
712-1248 Promoting a Detrimental Drug 2	MD	-	1	-	-	-	1	2
710-1077 Criminal Contempt of Court	MD	3	-	-	2	1	6	10
712-1250 Promoting Intoxicating Compounds	MD	1	-	1	-	-	2	3
291-4 Driving Under the Influence of Liquor	MD	-	2	-	3	2	7	11
708-832 Theft 2--Amended to Theft 3, 1/1/87	MD	-	-	2	-	-	2	3
Narcotic Drug Offense [a]	MD	-	3	-	-	-	3	5
707-712 Assault 3	MD	-	-	1	2	-	3	5
712-1226 Possession of Gambling Device	MD	-	-	1	-	-	1	2
286-44 Unlawful to Possess Certain Motor Vehicle Parts	MD	-	-	-	1	-	1	2
712-1249 Promoting a Detrimental Drug 3	PM	1	1	-	-	-	2	3
708-833 Theft 3--Amended to Theft 4, 1/1/87	PM	-	3	-	1	-	4	6
708-814 Criminal Trespass 2	PM	-	1	-	-	-	1	2
Annual Total		7	16	17	14	8	62	100

Note: [a] The term "Narcotic Drug Offense" is a converted code from the Honolulu Police Department's files indicating a drug offense. It is not known whether the charge was for possessing, using, or selling illegal drugs.

Note: For Severity Code definitions, see Appendix C.

TABLE 7A
TOTAL MOST SERIOUS CONVICTIONS
OF DECEDENTS WITH CRIMINAL HISTORIES

HRS	Severity	1984	1985	1986	1987	1988	Total	Percent
708-840 Robbery	FA	-	-	-	-	1	1	2
707-702 Manslaughter	FA	-	1	-	-	-	1	2
Narcotic Drug Offense[a]	FC	-	-	-	-	1	1	2
134-9 No Permit to Carry a Weapon	FC	-	-	1	-	-	1	2
708-831 Theft 1	FC	-	-	2	-	-	2	4
712-1247 Promoting a Detrimental Drug 1	FC	-	-	1	-	1	2	4
708-811 Burglary 2	FC	1	1	1	1	-	4	9
707-716 Terroristic Threatening 1	FC	-	-	-	-	1	1	2
708-852 Forgery 2	FC	-	-	2	-	-	2	4
712-1248 Promoting a Detrimental Drug 2	MD	-	1	-	-	-	1	2
710-1077 Criminal Contempt of Court	MD	1	-	1	3	2	7	15
712-1200 Prostitution	MD	-	1	-	-	-	1	2
711-1101 Disorderly Conduct	MD	-	-	1	-	-	1	2
708-822 Criminal Property Damage 3	MD	-	-	-	1	-	1	2
712-1250 Promoting Intoxicating Compounds	MD	1	-	1	-	-	2	4

Note: [a] The term "Narcotic Drug Offense" is a converted code from the Honolulu Police Department's files indicating a drug offense. It is not known whether the charge was for possessing, using, or selling illegal drugs.

Note: For Severity Code definitions, see Appendix C.

TABLE 7A (Continued)
TOTAL MOST SERIOUS CONVICTIONS
OF DECEDENTS WITH CRIMINAL HISTORIES

HRS	Severity	1984	1985	1986	1987	1988	Total	Percent
291-4 Driving Under the Influence of Liquor	MD	-	2	-	3	3	8	17
708-832 Theft 2	MD	-	-	2	-	-	2	4
Narcotic Drug Offense[a]	MD	-	-	1	-	-	1	2
707-712 Assault 3	MD	-	1	-	-	-	1	2
286-44 Unlawful to Possess Certain Motor Vehicle Parts	MD	-	-	-	1	-	1	2
712-1249 Promoting a Detrimental Drug 3	PM	-	1	-	-	-	1	2
708-833 Theft 3, Amended to Theft 4 1/1/87	PM	1	3	-	1	-	5	11
Total		4	11	13	10	9	47	100

Note: [a] The term "Narcotic Drug Offense" is a converted code from the Honolulu Police Department's files indicating a drug offense. It is not known whether the charge was for possessing, using, or selling illegal drugs.

Note: For Severity Code definitions, see Appendix C.

TABLE 7B
TOTAL SENTENCES OF THE MOST SERIOUS CONVICTIONS OF THE DECEDENTS WITH CRIMINAL HISTORIES

Decedents	Prison Sentence	Suspended Sentence	Fine Amount	Suspended Fine Amount	Probation	Community Service	Restitution	Driver's License Suspension	Other
Decedent 1	6 Months		$0.00	$0.00	5 Years		$0.00		
Decedent 2	1 Day		50.00	0.00			0.00		
Decedent 3			25.00	0.00			0.00		
Decedent 4			50.00	0.00			0.00		
Decedent 5			0.00	0.00			0.00		DAG [a]
Decedent 6			45.00	0.00			0.00		
Decedent 7	6 Months	6 Months	300.00	0.00	5 Years		1,022.00		
Decedent 8			100.00	0.00			0.00		
Decedent 9			75.00	0.00		20 Hours	0.00		
Decedent 10			25.00	0.00			0.00		
Decedent 11			101.00	0.00			0.00		
Decedent 12			25.00	0.00			0.00		
Decedent 13	10 Days	10 Days	150.00	50.00			0.00		
Decedent 14	10 Years		0.00	0.00			0.00		
Decedent 15			25.00	0.00			0.00		
Decedent 16			0.00	0.00	5 Years		0.00		

Note: [a] "DAG" is the abbreviation for a Deferred Acceptance of Guilty .

TABLE 7B (Continued)
TOTAL SENTENCES OF THE MOST SERIOUS CONVICTIONS OF THE DECEDENTS WITH CRIMINAL HISTORIES

Decedents	Prison Sentence	Suspended Sentence	Fine Amount	Suspended Fine Amount	Probation	Community Service	Restitution	Driver's License Suspension	Other
Decedent 17			$0.00	$0.00	1 Year	25 Hours	$0.00		
Decedent 18	12 Days	12 Months	1868.00	0.00	5 Years		0.00		
Decedent 19	6 Months		0.00	0.00	1 Year		0.00		
Decedent 20	1 Year	1Year	0.00	0.00			0.00		
Decedent 21	4 Years		0.00	0.00			0.00		
Decedent 22	10 Days		250.00	0.00	5 Years		0.00		
Decedent 23			10.00	0.00			0.00		
Decedent 24			0.00	0.00	5 Years		0.00		
Decedent 25			0.00	0.00			0.00		DAG [a]
Decedent 26	1 Year		0.00	0.00	5 Years		0.00		
Decedent 27			90.00	0.00		30 Hours	0.00		
Decedent 28	30 Days	30 Days	150.00	0.00			0.00		
Decedent 29			100.00	0.00			0.00		
Decedent 30			30.00	0.00			0.00		
Decedent 31	5 Years		0.00	0.00			0.00		
Decedent 32	5 Days	6 Months	0.00	0.00			0.00		

Note: [a] "DAG" is the abbreviation for a deferred acceptance of guilty .

TABLE 7B (Continued)
TOTAL SENTENCES FOR THE MOST SERIOUS CONVICTIONS OF THE DECEDENTS WITH CRIMINAL HISTORIES

Decedents	Prison Sentence	Suspended Sentence	Fine Amount	Suspended Fine Amount	Probation	Community Service	Restitution	Driver's License Suspension	Other
Decedent 33			50.00	0.00			0.00		
Decedent 34			25.00	0.00			0.00		
Decedent 35			150.00	0.00			0.00	90 Days	
Decedent 36			150.00	0.00			0.00	90 Days	
Decedent 37			76.00	0.00			0.00		
Decedent 38			150.00	0.00			0.00		
Decedent 39			25.00	0.00			0.00		
Decedent 40			150.00	0.00			0.00	90 Days	
Decedent 41		12 Months	0.00	0.00			0.00		
Decedent 42	10 Years		0.00	0.00			0.00		
Decedent 43	6 Months	6 Months	0.00	0.00	5 Years		0.00		
Decedent 44			25.00	0.00			0.00		
Decedent 45			1500.00	0.00			0.00		
Decedent 46			0.00	0.00		50 Hours			
Decedent 47			50.00	0.00					

TABLE 8
TOTAL MOST SERIOUS DRUG ARRESTS

HRS	Severity	1984	1985	1986	1987	1988	Total	Percent
712-1241 Promoting a Dangerous Drug 1	FA	-	-	1	-	-	1	5
712-1242 Promoting a Dangerous Drug 2	FB	-	-	-	1	1	2	10
712-1247 Promoting a Detrimental Drug 1	FC	-	-	2	-	1	3	14
329-42 Fraudently Obtaining Controlled Substances	FC	-	-	-	1	-	1	5
Narcotic Drug Offense[a]	FC	-	2	2	-	2	6	29
712-1248 Promoting a Detrimental Drug 2	MD	1	1	-	-	-	2	10
Narcotic Drug Offense[a]	MD	-	1	1	-	-	2	10
712-1249 Promoting a Detrimental Drug 3	PM	-	1	1	1	1	4	19
Total		1	5	7	3	5	21	100

Note: [a] The term "Narcotic Drug Offense" is a converted code from the Honolulu Police Department's files indicating a drug offense. It is not known whether the charge was for possessing, using, or selling illegal drugs.

Note: For Severity Code definitions, see Appendix C.

Note: Percentages in the tables may not add to 100 due to rounding.

TABLE 8A
TOTAL MOST SERIOUS CONVICTIONS FOR DRUG OFFENSES

HRS	Severity	1984	1985	1986	1987	1988	Total	Percent
712-1247 Promoting a Detrimental Drug 1	FC	-	-	1	-	1	2	20
Narcotic Drug Offense[a]	FC	-	-	2	-	1	3	30
712-1248 Promoting a Detrimental Drug 2	MD	-	1	-	-	-	1	10
712-1249 Promoting a Detrimental Drug 3	PM	-	1	-	-	2	3	30
712-1250 Promoting Intoxicating Compounds	MD	1	-	-	-	-	1	10
Total		1	2	3	-	4	10	100

Note: [a] The term "Narcotic Drug Offense" is a converted code from the Honolulu Police Department's files indicating a drug offense. It is not known whether the charge was for possessing, using, or selling illegal drugs.

Note: For Severity Code definitions, see Appendix C.

TABLE 8B
TOTAL SENTENCES FOR DECEDENTS WITH DRUG OFFENSE CONVICTIONS

Decedents	Prison Sentence	Suspended Sentence	Fine Amount	Suspended Fine Amount	Probation	Community Service	Restitution	Driver's License Suspension	Other
Decedent 1	3 Months	3 Months	$0.00	$0.00			$0.00		
Decedent 2			25.00	0.00			0.00		
Decedent 3	30 Days	30 Days	0.00	0.00			0.00		
Decedent 4	6 Months	1 Year	0.00	0.00			0.00		
Decedent 5			0.00	0.00	5 Years		0.00		
Decedent 6			75.00	0.00			0.00		
Decedent 7		12 Months	0.00	0.00			0.00		
Decedent 8	6 Months	6 Months	0.00	0.00	5 Years		0.00		

DRUG CLASSIFICATIONS

The drug substances in this study are classified according to the Uniform Crime Reporting (UCR) Program definitions of narcotic drugs plus two added categories to account for "other" drugs and "unidentified" drugs. The drug classifications are listed as follows:

1. Opium or Cocaine. This category includes opium or cocaine derivatives such as morphine, heroin, codeine, and crack, among others.

2. Marijuana. This category includes all marijuana by-products and chemical derivatives.

3. Synthetic Narcotics. This category includes all manufactured narcotics which can cause addiction such as demerol and methadone.

4. Dangerous Non-Narcotic Drugs. This category includes barbiturates, and other addicting stimulants or depressants such as crystal methamphetamine.

5. Other. This category includes legal prescription drugs, over-the-counter drugs, and poisons.

6. Unidentified Drugs. This category includes all drugs or substances not specifically identified on the decedent's death certificate.

DRUGS OF CHOICE

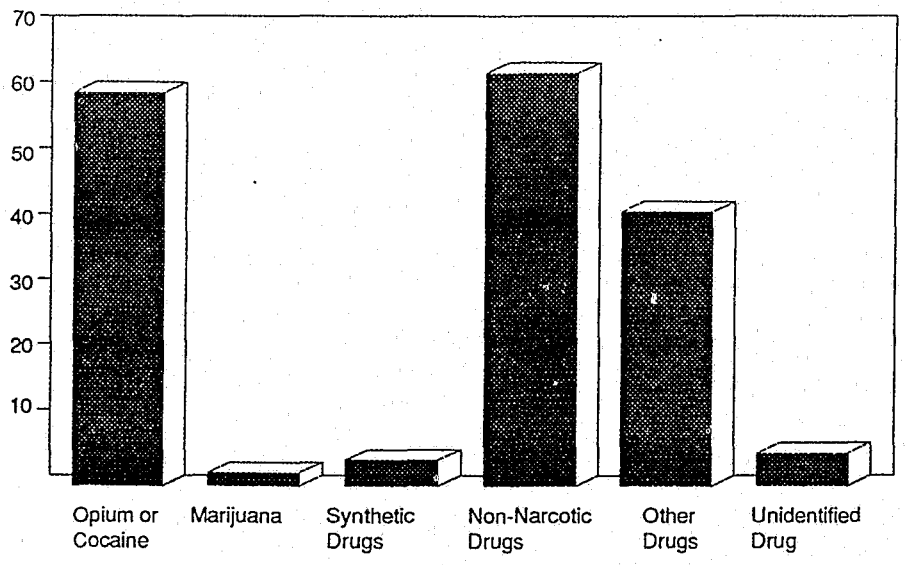
All drug substances found in the systems of the decedents were counted in Table 9. Multiple drugs from the same drug classification used by the same person were counted only once in this table. For example, when a person used both heroin and cocaine together, only one count was tallied in the table under the drug classification "Opium or Cocaine". This table shows the general classification of the drugs most often used by the decedents.

Sixty-three of the drugs (36 percent) found in the systems of the decedents were dangerous non-narcotic drugs; 60 substances (34 percent) were either opium or cocaine products; and 42 substances (24 percent) were other non-narcotic drugs.

TABLE 9
ALL DRUG SUBSTANCES, BY CLASSIFICATION, FOUND IN THE BODIES OF THE DECEDENTS

	1984	1985	1986	1987	1988	TOTAL	PERCENT
Opium or Cocaine	6	10	15	13	16	60	34
Marijuana	0	0	0	0	2	2	1
Dangerous Synthetic Drugs	0	1	3	0	0	4	2
Dangerous Non-Narcotic Drugs	13	13	16	11	10	63	36
Other Drugs	6	11	9	7	9	42	24
Unidentified Drugs	0	2	3	0	0	5	3
Total	25	37	46	31	37	176	100

FIGURE 2
TOTAL NUMBER OF DRUG SUBSTANCES, BY CLASSIFICATION,
FOUND IN THE BODIES OF THE DECEDENTS
FROM 1984-1988



COCAINE USE

Forty-one decedents, (68 percent), used cocaine products. Of the 41 decedents, the majority, 30 (73 percent), used cocaine exclusively as their drug of choice.

TABLE 9A
NUMBER OF TIMES COCAINE WAS FOUND
IN THE SYSTEMS OF THE DECEDENTS, PER YEAR

	1984	1985	1986	1987	1988	TOTAL	PERCENT
Cocaine With Other Drug Substances	2	2	3	1	3	11	27
Cocaine Only	2	3	5	11	9	30	73
Total	4	5	8	12	12	41	100

MOTIVATION FOR DRUG USE

The known motives or reasons why these drug-related deaths occurred included accidental overdose and suicide. Many other motives were not determined by the coroner or the police department.

The circumstances surrounding many overdose deaths indicated that the person using the drugs may not have realized the toxicity of the amount of drug used or the lethal combination of the different types of drugs ingested. There were no obvious indications that many of these decedents were suicidal when they engaged in the act of using drugs.

Most drug-related suicides are marked by suicide notes found near the body. Other suicide fatalities had a host of empty vials or drug paraphernalia scattered around the area where the body was found.

Of the total number of drug-related deaths, 57 (42 percent) were reported as suicides and 53 (39 percent) were undetermined as to the person's intentions or motives for using the drugs.

TABLE 10
MOTIVATION FOR DRUG-RELATED DEATH, PER YEAR

Motivation	1984	1985	1986	1987	1988	TOTAL	PERCENT
Accident	1	3	8	6	8	26	19
Suicide	12	14	9	11	11	57	42
Undetermined	7	13	18	8	7	53	39
Total	20	30	35	25	26	136	100

In tables 10A, 10B, 10C, 10D, and 10E, the motives for drug use are divided by age and sex of the decedents for each year in this study.

The age range, 26 to 35 years, accounted for the most drug-related fatalities each year. More males than females died from drug-related accidents every year. In the case of suicides, females either committed more suicides or the same number of suicides as males each year from 1984 through 1986. From 1987 through 1988, males committed more suicides than females.

TABLE 10A
SEX AND AGE OF DECEDENTS BY MOTIVE IN 1984

	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Accident							
Male	-	-	-	1	-	1	5
Female	-	-	-	-	-	-	0
Suicide							
Male	-	1	1	1	2	5	25
Female	-	-	2	1	4	7	35
Undetermined							
Male	-	1	6	-	-	7	35
Female	-	-	-	-	-	-	0
Total	-	2	9	3	6	20	100

TABLE 10B
SEX AND AGE OF DECEDENTS BY MOTIVE IN 1985

	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Accident							
Male	-	1	1	-	-	2	7
Female	-	-	-	-	1	1	3
Suicide							
Male	-	1	1	1	4	7	23
Female	-	1	2	1	3	7	23
Undetermined							
Male	-	1	3	5	1	10	33
Female	-	-	2	-	1	3	10
Total	-	4	9	7	10	30	100

TABLE 10C
SEX AND AGE OF DECEDENTS BY MOTIVE IN 1986

	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Accident							
Male	-	1	3	1	1	6	17
Female	-	-	1	1	-	2	6
Suicide							
Male	-	-	-	1	3	4	11
Female	1	-	1	3	-	5	14
Undetermined							
Male	-	1	8	5	1	15	43
Female	-	-	1	-	2	3	9
Total	1	2	14	11	7	35	100

TABLE 10D
SEX AND AGE OF DECEDENTS BY MOTIVE IN 1987

	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Accident							
Male	-	-	4	1	1	6	24
Female	-	-	-	-	-	-	0
Suicide							
Male	-	1	2	3	1	7	28
Female	-	-	1	3	-	4	16
Undetermined							
Male	-	-	3	-	1	4	16
Female	-	2	-	1	1	4	16
Total	-	3	10	8	4	25	100

TABLE 10E
SEX AND AGE OF DECEDENTS BY MOTIVE IN 1988

	Under 18	18-25	26-35	36-45	Over 45	TOTAL	PERCENT
Accident							
Male	-	1	4	1	1	7	27
Female	-	-	-	1	-	1	4
Suicide							
Male	-	-	2	1	4	7	27
Female	-	-	2	1	1	4	15
Undetermined							
Male	-	1	-	4	1	6	23
Female	-	1	-	-	-	1	4
Total	-	3	8	8	7	26	100

SINGLE VS MULTIPLE DRUG USERS

The majority of decedents, 82 (60 percent), were single-drug users, while 54 (40 percent) used more than one drug at a time according to the reports on their respective death certificates. The amount or frequency of the drugs used prior to the death of the decedents was not revealed.

TABLE 11
NUMBER OF MULTIPLE DRUG USERS AND SINGLE DRUG USERS

	1984	1985	1986	1987	1988	TOTAL	PERCENT
Multiple Drug User	8	12	15	8	11	54	40
Single Drug User	12	18	20	17	15	82	60
Total	20	30	35	25	26	136	100

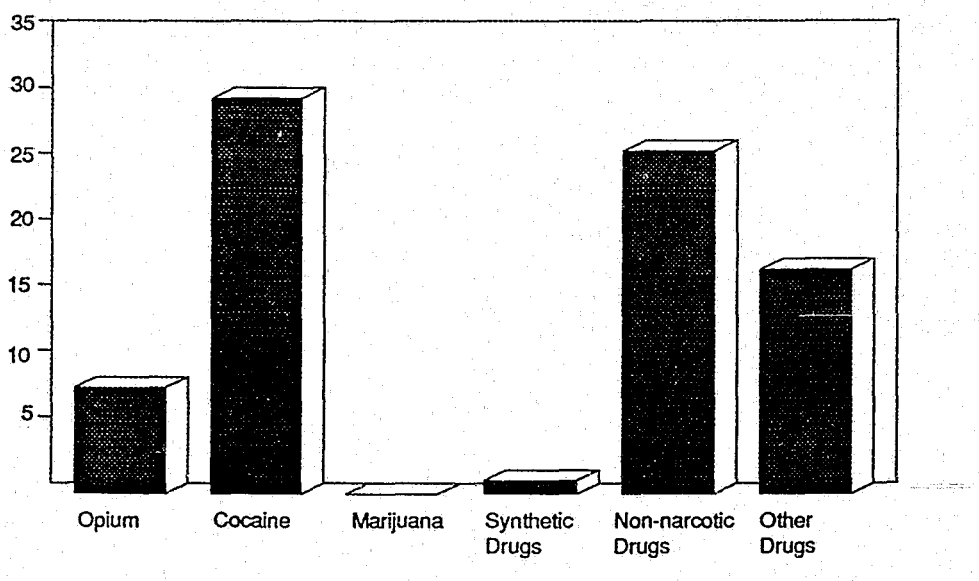
DRUG OF CHOICE FOR SINGLE DRUG USERS

Of the single-drug users, 30 (37 percent) used cocaine as their drug of choice and 26 (32 percent) used a dangerous non-narcotic drug.

TABLE 11A
SINGLE DRUG USERS BY DRUG CLASSIFICATION, PER YEAR

	1984	1985	1986	1987	1988	TOTAL	PERCENT
Opium	-	3	4	-	1	8	10
Cocaine	2	3	5	11	9	30	37
Marijuana	-	-	-	-	-	-	-
Synthetic Narcotic Drugs	-	-	1	-	-	1	1
Dangerous Non-Narcotic Drugs	7	7	7	4	1	26	32
Other Drugs	3	5	3	2	4	17	21
Total	12	18	20	17	15	82	100

FIGURE 3
TOTAL NUMBER OF DRUGS USED BY SINGLE-DRUG USERS FROM 1984-1988



CIRCUMSTANCES OF THE DRUG-RELATED DEATHS

All circumstances surrounding the conditions of where or how the body was found were described on each death certificate. Circumstances may include whether the body was found at home or in a public place or may describe any unusual incident or action displayed by the person shortly before his death.

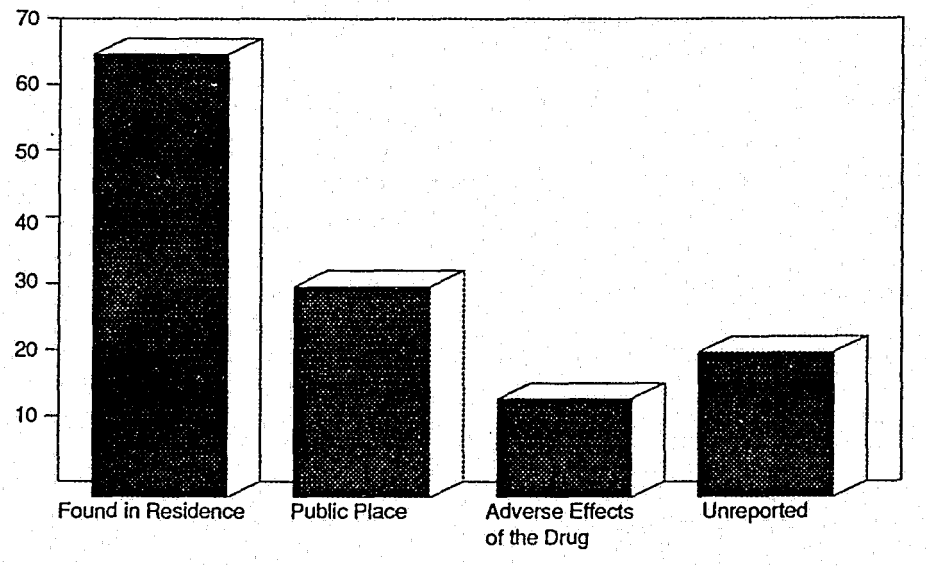
Sixty-seven (49 percent) of the decedents were found dead at home. Thirty-two (24 percent) of the decedents were discovered dead or unconscious in a public place.

Fifteen of the decedents, 11 percent, exhibited unusual behavior while intoxicated by drugs before collapsing. Such behavior included trying to swim at night and subsequently drowning, running nude through the streets until collapsing, and drowning while bathing.

TABLE 12
CIRCUMSTANCES SURROUNDING DRUG-RELATED DEATHS, PER YEAR

	1984	1985	1986	1987	1988	TOTAL	PERCENT
Found in Residence	10	17	21	10	9	67	49
Found in Public Place	4	6	10	3	9	32	24
Actions Caused by Effects of Drug	1	-	-	9	5	15	11
Unreported	5	7	4	3	3	22	16
Total	20	30	35	25	26	136	100

FIGURE 4
TOTAL CIRCUMSTANCES SURROUNDING DRUG-RELATED DEATHS FROM 1984-1988



COCAINE SIDE-EFFECTS

The use of coca plant products, from which the alkaloid named cocaine was isolated, can be traced back to 3000 B.C. Leaves from the coca plant were chewed, smoked, or otherwise ingested by the people of South America. In 1850, coca plant products were brought to Europe.

In 1859, the alkaloid cocaine was first isolated from the coca leaves by an assistant chemist named Albert Nieman at the University of Gottingen in Germany. By the mid 19th century, coca products included extracts, wines, cordials, lozenges, tablets, ointments, nasal sprays and many other goods. They were used mostly for medicinal purposes.

Coca and cocaine were eventually used in soft drinks and tonics, the most famous soft-drink was "Coca-cola". Coca-cola contained cocaine products for about seventeen years. The Pure Food and Drug Act in 1906 and the Harrison Act of 1914 controlled all aspects of cocaine manufacture, possession, sale, distribution and use. Cocaine use became virtually non-existent in the 1930's through the 1960's.[4]

In the early 1970's, the popularity of the drug cocaine re-emerged as the nation's recreational drug of choice. Most users believed cocaine to be a safe non-addicting drug. A study in 1975 by researchers J.L. Phillips and R.D. Wynne revealed several myths commonly believed by cocaine users including cocaine is an aphrodisiac; cocaine enhances performance; there are no adverse side-effects associated with cocaine; and cocaine intoxication can be remedied by a cold shower, among others.[5]

In the 1980's, a different view has evolved concerning the recreational and compulsive use of cocaine. Regular cocaine use may lead to both physical and psychological dependence.

PHYSICAL DEPENDENCE

A drug may be considered physically dependent when a high tolerance for the drug's effects is experienced by the user and when withdrawal symptoms occur when not using the drug. A drug tolerance develops when a user finds he must take larger doses to achieve the same high.[6] Withdrawal symptoms may include depression, social withdrawal, intense craving for the drug, body tremors, muscle pain or cramping, and disturbances in eating and sleeping patterns.[7]

Dr. David L. Ohlms, M.D., wrote a 1987 publication called "Cocaine". He explains that cocaine creates changes in the way the human brain functions. Cocaine dependence or addiction is now considered a disease. Simply put, the brain is a complex organ used for, among other functions, thinking and feeling. The feeling part of the brain is also referred to as the pleasure center of the brain. When cocaine reaches the pleasure center of the brain, the result is a feeling of extreme pleasure. Although cocaine is legally labeled as a narcotic drug, it is also a powerful stimulant.

Stimulants, in general, release neurotransmitters which stimulate or excite the brain. Neurotransmitters are chemicals naturally produced in the brain. Cocaine stimulation produces a massive discharge of neurotransmitters generating an intense pleasurable feeling. The intensified pleasure effect is mainly due to the blocking of the re-uptake system of neurotransmitters released by the ingestion of cocaine. Normally, the neurotransmitters are released, stimulate the brain, and are stored or recycled in the brain cells for future use. The recycling is known as "re-uptake". Neurotransmitters are difficult for the body to produce, therefore the re-uptake process is vital to replenish the supply. Cocaine blocks the re-uptake process allowing the neurotransmitters to keep on stimulating the brain until eventually they are passed from the body and destroyed.

Research indicates that cocaine primarily acts on three neurotransmitters: norepinephrine, serotonin, and dopamine. The most important neurotransmitter is dopamine. Dopamine is the primary neurotransmitter which delivers the most powerful reward to the brain's pleasure center.

A reward is the motivation or reinforcement that encourages a person to repeat a certain behavior over and over again. A cocaine user can temporarily deplete his brain of neurotransmitters resulting in severe depression. Depression often leads the user to feel restless and agitated with an intense craving for more cocaine to re-produce the good feeling.[8]

The irony of cocaine use is that the "high" is very short-lived and the intensity of the high is dependent on the chosen route of administration by the user. Users are often unaware of the large amounts of cocaine taken per binge or per social-recreational event. The user must continually take the drug to stay "high". When the high wears down, even though his blood will be saturated with the drug, he will compulsively use more. Cocaine is a stimulant which keeps the body awake and active, whereas depressants such as heroin or alcohol put the body to sleep after large amounts of the drug are ingested, thus the cocaine user takes in more cocaine per binge.

The routes of administration also differ in the time it takes for a "rush" to be experienced and in the amount or dosage of the drug ingested per administration or "hit". The usual routes of administration include oral ingestion, intravenous injection, intranasal snorting, and smoking.

In general, a cocaine high from one dose lasts from 10 to 20 minutes and the stimulant effect lasts up to five hours. Cocaine can be ingested orally by chewing coca leaves or powdered coca leaves. Most cocaine users do not ingest cocaine orally. The much sought after high is not reported with oral ingestion since it is not known whether the cocaine is absorbed buccally (through the mouth) into the blood stream or is destroyed through the gastrointestinal process when swallowed.

The most common method of taking cocaine is intra-nasally through snorting or inhaling the drug in its hydrochloride form. Most cocaine sold on the streets is in this form. The drug is absorbed through the nasal mucous membrane, although there is no initial rush associated with intranasal use. The user usually experiences 20-40 minutes of intense stimulation. Dosages of cocaine to be taken intra-nasally are laid out in lines of powder averaging a dosage of 20-30 milligrams per line.

Cocaine injected intravenously sends an intense rush to the user within 1 to 2 minutes after use. Cocaine injections may also be injected intra-muscularly and under the skin, however, the same fast rush as experienced by intravenous use has not been noted. The average dose of cocaine injected intravenously is approximately 16 milligrams per injection. [9]

The byproduct of cocaine called coca paste may be readily smoked. Cocaine in its hydrochloride (powder) form cannot be smoked but must first be chemically altered to become free-base cocaine. One of several methods may be used to separate or free the cocaine alkaloid from its hydrochloride salt. The free-base cocaine is ineffective if snorted or injected, but becomes volatile at temperatures above 90 degrees centigrade. Free-base cocaine is smoked in a specially designed glass pipe with a chamber which holds a flammable solvent. It must be volatilized into smoke using a solvent to heat it to the correct temperature. The free-base usually reaches the brain within six seconds after inhalation. It is a potent and extremely unstable form of cocaine.[10]

Another form of cocaine known as "crack" or "rock" cocaine is also smoked. Crack is cocaine mixed with baking soda and water, then heated through or cooked. The end product is dried and broken into small chunks resembling rocks.

Crack is much more addictive and cheaper to buy than cocaine in its hydrochloride form. Dealers may sell "crack rocks" for about $10.00 a rock. It is also easier to smoke than free-base cocaine. The crack form of cocaine is easily heated, and also smoked in a glass pipe. Crack is said to deliver a fast, intense rush upon inhalation but the high only lasts for a few minutes. The adverse health effects of crack are the same as for cocaine only intensified.[11]

The stimulant methamphetamine (also known as crystal meth) has been referred to as "the poor man's cocaine". Crystal meth is not necessarily less expensive than cocaine but its stimulant effect may last up to 14 hours per administration. Crystal meth does not have to be administered as often to achieve the same stimulant effect, thus a user takes less of the drug per binge.

Crystal meth most commonly is sold as small transparent rocks often resembling "rock candy". It is also usually smoked in a glass pipe. The adverse health effects from crystal meth use include such conditions as irritability, insomnia, anxiety, delirium, paranoia, cardiac arrhythmias, nausea, abdominal cramps, convulsions, coma, and death.[12]

PSYCHOLOGICAL DEPENDENCE

In 1976, researchers R.B. Resnick and E. Schuyten-Resnick described five profiles of typical cocaine-using behavior patterns. The patterns included the experimental user, the recreational or social event user, the specific circumstance user, the intense daily user, and the compulsive user. Compulsive users displayed a high psychological drug dependence and experienced both withdrawal depressions and sleep disturbances. Cocaine dependence often dominates every aspect of the individual's life--socially, economically, and physically. [13]

Cocaine has a powerful reinforcing property which often causes the user, even a recreational-social user, to re-administer the drug repeatedly. The psychological need to retain that initial high develops into dependence.

Compulsive use behavior noted in humans resembles the same cocaine driven reinforcement effect in animal studies. Findings from a study on the reinforcement properties of drug users found that animals worked more persistently at pressing a bar for cocaine than for any other drug, including opiates. The animals in the experiment chose the bar which offered a larger dose of cocaine with an electric shock than the bar that offered a lower dosage of cocaine without shock. In other similar scientific studies, it was discovered that animals preferred cocaine over food and sex. They would self-administer cocaine until they were totally exhausted and unable to physically administer the drug or had suffered cocaine induced convulsions.

The same conclusion for the behavior of cocaine users was reached for both humans and animals. Under unlimited access to cocaine, all types of users may become compulsive users. Psychological dependence may lead the user to forfeit personal property, steal from family and friends, or resort to crime to acquire a steady supply of the drug. [14]

ANHEDONIA

Cocaine users will eventually develop a user tolerance for larger dosages of cocaine often temporarily depleting the body's reserve of chemical neurotransmitters stored in the brain. Severe depression will result from the depletion of neurotransmitters to the point where no amount of cocaine can produce the same type of high. This depression is known as anhedonia. Anhedonia is the inability to experience pleasure. Some users may contemplate suicide as a remedy to alleviate anhedonia. Anhedonia may last for several weeks at a time, or up to two years after stopping cocaine use. [15]

PHYSICAL CONSEQUENCES

Cocaine users reported both positive and negative effects from using the drug. Some of the positive effects of the drug reported were a general feeling of increased energy and well being, and weight loss. Negative effects experienced from cocaine use were conditions of restlessness, irritability, decreased attention span, nasal problems for users who snorted or inhaled the drug, fatigue, lassitude, insomnia, blurred vision, skin infections, and other general health problems.

Cocaine use can also have adverse toxic reactions. Physical toxic reactions to the drug usually include one or more of the following symptoms: myoclonic jerking, chest pains, nausea, vomiting, respiration difficulties, respiratory failure, seizures, convulsions, or unconsciousness. Toxic psychological reactions to the drug result in bouts of hallucinations with delusions, violent loss of impulse control, suicidal tendencies, depression, paranoia or situational impotency. [16]

Researchers have found cocaine users may suffer the same debilitating effects of over stimulation regardless of the route of administration of the drug. In 1975, researcher G.R. Gay and associates described cocaine stimulation reactions in three distinct categories of stimulation: initial use, advanced levels, and chronic levels. Initial episodes of cocaine stimulation can be followed by a sense of excitement, apprehension, nausea, vomiting, and twitching of voluntary muscles. Advanced cocaine stimulation may result in episodes of hyperkinesis convulsions, rapid pulse, high blood pressure, and irregular respiration. Chronic cocaine stimulation usually leads to depression often accompanied by loss of reflexes, unconsciousness, circulatory and respiratory failure, and sometimes death.[17]

COCAINE INDUCED DEATH

The most severe consequence of using cocaine is death. An overdose of cocaine often results in death. Cocaine use can also cause death by accelerating the severity of existing health problems or by physically depleting healthy organs. For example, cocaine use can result in ventricular fibrillation in the heart, cardiac arrest, and apnea or asphyxia. Chronic cocaine use can also cause repeated episodes of convulsions which may be fatal. Convulsions may cause the airway to become obstructed, cause heart rhythm failure, or inactivate the respiratory center. There are even a few cases documented where cocaine use caused a brain aneurysm to rupture resulting in cerebral hemorrhaging.[18]

PRE-NATAL RISKS

Research suggests that even a single dose of cocaine used by a pregnant woman may cause adverse consequences to her unborn fetus. According to Dr. Ira J. Chasnoff of Northwestern University Medical School, cocaine and its metabolites leave the adult body within 48 hours after use, however, an unborn fetus is exposed to the same drug used by its mother for up to five days. The drug cocaine is a fat soluble substance which is easily absorbed through the placenta. The placenta is the vascular organ which nourishes the fetus through the uterus. The placenta converts much of the cocaine to a cocaine byproduct known as norcocaine.

Norcocaine is water-soluble and is dispersed into the amniotic fluid. The amniotic fluid is the substance which the fetus ingests and excretes as a normal function of development. The norcocaine trapped in the amniotic fluid continually exposes the fetus to the drug.

Cocaine-exposed babies may suffer retarded growth, subtle neurological abnormalities, learning disabilities, stiff limbs, hyper-irritability, increased risk of crib-death, strokes, seizures and other serious health side-effects.[19]

The extent to which children are testing positive at birth for the presence of drugs in their systems is an issue that must be addressed. However, complete data for Hawaii are not currently available. Data collection is presently partial and was intensified only within the past two years.

MARIJUANA SIDE-EFFECTS

Marijuana products are cultivated from the "Cannabis Sativa" plant originally found in central Asia. The cannabis sativa plant has been cultivated for about 5000 years mainly for its fiber, oil, and psychoactive resin. The psychoactive resin is chemically known as delta-9-tetrahydrocannabinol or THC. Marijuana contains over 400 other chemicals or natural cannabinoids besides THC. Most of the other cannabinoids are not psychoactive substances but can have biological effects on the body.

The harmful effects of marijuana, in general, are related to the amount of drug taken and the frequency of use. The percentage of THC contained in a typical marijuana cigarette, about 1 gram of finely chopped leaves and flowers, is 1 to 2 percent; hashish, a concentrated cannabis plant resin, contains up to 12 percent THC; and hash oil, an oil chemically extracted from the cannabis plant, contains up to 60 percent THC. [20]

THC is a fat soluble substance which quickly leaves the bloodstream after administration and enters fatty tissues in the body. Fatty tissues mainly include the brain, adrenal glands, gonads, and the placenta. THC metabolites bind to proteins in the blood and are stored in body fats. The THC stored in fatty tissues are slowly released back into the bloodstream. The body may take up to 30 days to completely eliminate THC from the system. The body's ability to store THC is great. A daily user may reach a "steady state level" where the THC elimination rate matches the THC absorption rate into the fatty tissues in about 4 weeks.[21]

CARDIOVASCULAR EFFECTS

The most common way to consume THC is to smoke the marijuana product either as a cigarette or in some other way. The lungs absorb marijuana smoke transporting THC to the brain in about 14 seconds. When tobacco is smoked, it is estimated that 70 percent of the particulate matter in the smoke is retained by the lungs. Tar residue is also deposited into the lungs from the various particulate matter in the tobacco smoke. The smoking technique for marijuana smokers includes deep inhalation and holding the smoke in the lungs for maximum absorption. This technique permits a greater retention of particulate matter than regular tobacco smoking and deposits greater amounts of tar into the lungs. Respiratory and pulmonary functions are impaired as a result of frequent or chronic marijuana use.

Clinical observations of cannabis or marijuana users show that they have more instances of laryngitis, pharyngitis, bronchitis, asthma-like symptoms, cough, hoarseness, and dry throats. The same degree of pre-cancerous cellular changes has been detected in the bronchial biopsies of both heavy smokers of marijuana in their early twenties and heavy tobacco smokers in their forties. [22]

REPRODUCTIVE EFFECTS

During the early 1980's, various studies were conducted at prenatal centers around the United States and abroad studying the effects of marijuana use among pregnant women. The studies compared marijuana users with non-users during the events of pregnancy and delivery. The results showed that generally more women users experienced sudden or precipitate labor, more prolonged periods of labor, passed more meconium, needed more medically assisted deliveries, and required manual removal of the placenta more often. [23]

Other studies reported similar results that also showed users having low weight gain during pregnancy and higher incidences of early delivery before the end of the 40 week gestation period.[24]

IMMUNE SYSTEM

The recreational use of drugs can weaken the body's immune system. The immune system naturally fights virus infections and other contracted diseases. In 1986, researchers from the Medical College of Virginia found that THC, among other drugs, contained immuno-suppressive qualities.

Specifically, they found that THC interferes with the healing process of the immune system by suppressing interferon production, delaying the response time of white blood cells, and slowing the production of anti-bodies in the body. Interferon is produced in the body to suppress virus infections . White blood cells kill virus-infected cells. Anti-bodies neutralize virus particles to prevent the spread of further infection to other healthy cells.[25]

DESIGNER DRUGS

Underground chemists have designed near substitutes for controlled substances that are legal. The "designer drugs" are created by changing the molecular structure of a drug and creating a new analogue. Analogues have chemical compounds that are structurally similar to their precursor drugs. The difference in the analogue from its precursor drug may be as little as a different single element of the same chemical valence and chemical group of the periodic table.[26] Unless a drug is listed under a state or federal government's controlled substance schedules, it is both legal to make and use.

Designer drug use can be dangerous. Structurally the slightest modification of a drug's molecular pattern can produce a potent drug effect several times stronger and more lethal than its precursor drug. A good underground chemist can produce enough synthetic heroin, known on the street as China White, for about $500.00 that can be worth up to $2 million dollars on the black market.[27]

Designer drug use is difficult to detect or stop. Forensic scientists usually are the first people to discover the use of designer drugs in a community. Corpses of drug overdoses test negative for narcotic use yet show typical signs of a fatal overdose. Once the drug is discovered and the chemical make-up is identified, then the process of scheduling it as a controlled substance can begin.[28]

SYNTHETIC DRUGS

Designer drugs are not the same as drugs classified in the "synthetic drugs" category. They are in fact synthetic drugs but differ in their non-medical purpose and their temporary legal status. Although synthetic narcotics are often legally produced, such as methadone and demerol, these drugs were made for medical purposes, not purely recreational use.

Synthetic drugs are often scheduled as controlled substances. Designer drugs were fashioned to produce the same high as their precursor controlled substances , however, bypassing the legal penalties.

DUPLICITOUS (LOOK-ALIKE) DRUGS

Duplicitous or look-alike drugs are designed to resemble illegal stimulants and are often similarly labeled, however, they are legal. Legitimate manufacturers and suppliers usually advertise their products in magazine ads labeling them as diet-aids or anti-fatigue medicine. They are not scheduled as controlled substances since they do not contain narcotic or dangerous chemicals. Most duplicitous drugs contain caffeine and/or phenylpropanolamine (PPA) as the active ingredient of the drugs. PPA is a clinically effective decongestant.

In 1977, black capsules and small white double-crossed tablets were advertised as black beauties and mini-whites. Black beauties were the street name used for the stimulant biphetamine-20 that was packaged in black gelatin capsules, and small white double-crossed tablets were associated with non-branded amphetamines in the late 1960's.[29]

SCHEDULING STATE CONTROLLED SUBSTANCES

The illegal promotion and possession of dangerous or harmful drugs or controlled substances are serious offenses as listed in both state and federal penal codes. Although there are stiff penalties for the violation of drug offenses, there continues to be a high demand for drugs as is noted by the approximately 20 percent increase in drug arrests in Hawaii from 1982 to 1987.[30]

The legal authority to make amendments to the Hawaii Revised Statutes (HRS) schedules of controlled substances is ultimately vested in the Hawaii State Legislature as mandated by HRS 329-11. The Hawaii State Legislature session convenes in January and ends in April each year.

As required by HRS 329-11, the State Department of Health (DOH) must make an annual report to the legislature recommending amendments to the controlled substances schedules in HRS 329-14, HRS 329-16, HRS 329-18, HRS 329-20 and HRS 329-22. The DOH assesses all drugs recommended for addition, deletion, or revision into a controlled substance schedule by measuring its degree of danger and potential for abuse. As is noted in HRS 329-11, the following considerations are used:

1. The actual or probable abuse of the substance including its history and current pattern of abuse.

2. The biomedical hazard including its pharmacology, toxicology, and therapeutic alternatives for substances currently used for medical purposes.

3. The probable physical and social impact of abuse.

4. Whether the substance is an immediate precursor of a substance already scheduled as a controlled substance.

5. The current state of scientific knowledge of the drug substance.[31]

The Hawaii Advisory Commission on Drug Abuse and Controlled Substances also works with the DOH in an advisory capacity. The Governor of the state of Hawaii appoints 15 members to serve on the commission. The commission publishes an annual report to the Governor regarding the state problem of drug abuse, whereupon he may address the legislature directly to schedule certain drugs into law.[32]

The DOH is in charge of publishing and distributing updated schedules of controlled substances to the public. HRS 329-23 requires the DOH to publish the schedules annually or as often as necessary. (See Appendix B for the Hawaii Revised Statutes Schedule of Controlled Substances)

PROGRAMS WORKING AGAINST DRUG ABUSE

Community-organized education, prevention, intervention, and treatment programs have joined government and law enforcement efforts to curtail and to eradicate drug abuse. Services rendered vary from the provision of information to detoxification and therapy. There does not yet exist, however, any central regulatory agency for drug abuse programs.

Listed in this section are some of the programs working to reduce the problem of drug abuse in Hawaii. Inclusion or exclusion of a program from the list suggests neither endorsement nor disapproval of the program by the Department of the Attorney General. The list is not comprehensive; it is meant only to provide a general view of the availability of services in Hawaii.

Education/Prevention

The programs and agencies listed below emphasize education and prevention.

Alcohol and Drug Abuse Division
Department of Health
P.O. Box 3378
Honolulu, HI 96801-9984
Phone: 548-4280

Alternative Skills and Communication for Youth
Susannah Wesley Community Center
1117 Kaili Street
Honolulu, HI 96819
Phone: 841-2152

Coalition for a Drug-Free Hawaii
547 Halekauwila Street, Suite 109
Honolulu, HI 96813
Phone: 522-5050

Community Crusade Against Drugs
Hawaii Conference of Seventh Day Adventists
2728 Pali Highway
Honolulu, HI 96817
Phone: 595-7591 or (after hours) 235-4110

Drug Abuse Awareness
Community Relations Division
Honolulu Police Department
1455 South Beretania Street
Honolulu, HI 96814
Phone: 943-3351

Drug Abuse Resistance Education (DARE)
Community Relations Section
Hawaii Police Department
349 Kapiolani Street
Hilo, HI 96720
Phone: 961-2269

Drug Abuse Resistance Education (DARE)
Community Relations Division
Honolulu Police Department
1455 South Beretania Street
Honolulu, HI 96814
Phone: 943-3351

Drug Abuse Resistance Education (DARE)
Youth Services Section
Kauai Police Department

Note: Services are provided specifically to fifth graders on Kauai, as arranged with the Department of Education.

Drug Abuse Resistance Education (DARE)
Community Relations
Maui Police Department
55 Mahalani Street
Wailuku, HI 96793
Phone: 244-6380

Hawaii Substance Abuse Information Resource Center
Volunteer, Information and Referral Service
200 North Vineyard Blvd., Room 603
Honolulu, HI 96817
Phone: 537-1678

Health Education Programs
State Department of Education
189 Lunalilo Home Road
Honolulu, HI 96825
Phone: 395-8810

The McGruff Drug Prevention and Child Protection Program
The Hawaii Criminal Justice Commission
222 South Vineyard Street, Suite 703
Honolulu, HI 96813
Phone: 548-6714

Narcotics and Vice Division
Honolulu Police Department
1455 South Beretania Street
Honolulu, HI 96814
Phone: 943-3101

Pakalolo, Ice, and Crack: For Parents
American Lung Association of Hawaii
245 North Kukui Street
Honolulu, HI 96817
Phone: 537-5966

Peer Education Program
[Joint project of the Department of Health (DOH) and the Department of Education (DOE)]
Department of Education
1302 Queen Emma Street, Room A-207
Honolulu, HI 96813
Phone: 548-6079 (DOE)
732-2289 (DOH)

The Windward Drug Prevention Coalition
45-229 Namoku Street
Kaneohe, HI 96744

Intervention/Treatment

Services provided by the programs and agencies listed below include early intervention, detoxification, or therapy.

The Adolescent Chemical Dependency Program
Kahi Mohala
91-2301 Fort Weaver Road
Ewa Beach, HI 96706
Phone: 671-8511

Aloha House
P.O. Box 490
Paia, HI 96779
Phone: 579-9585

Anodyne, Inc.
1188 Bishop Street, #3205
Honolulu, HI 96813
Phone: 545-5020

Big Island Substance Abuse Council
P.O. Box 38
Hilo, HI 96721-0038
Phone: 935-4927

Castle Alcoholism and Addictions Program
640 Ulukahiki Street
Kailua, HI 96734
Phone: 263-5326

Central Oahu Youth Services Association, Inc.
66-528 Haleiwa Road
Haleiwa, HI 96712
Phone: 637-9344

Cocaine/Crystals Addiction Services of Hawaii
1188 Bishop Street, #3205
Honolulu, HI 96813
Phone: 545-7706

Drug Addiction Services of Hawaii
2849-A Kaihikapu Street
Honolulu, HI 96819
Phone: 836-2330

The Hawaii Addiction Center
P.O. Box 703
Waipahu, HI 96797
Phone: 671-7573

Kauai Outreach Program
4444 Rice Street, Suite 230
Lihue, HI 96766
Phone: 245-3071

Levelcare Chemical Dependency Program
Queen's Medical Center
1301 Punchbowl Street
Honolulu, HI 96808
Phone: 547-4900

The Maui Medical Group Chemical Dependency Center
130 Prison Street
Lahaina, HI 96761
Phone: 661-0051

New Horizons
84-183 Makau Street, #100
Waianae, HI 96792
Phone: 696-2668

Serenity House, Inc.
P.O. Box 707
Kapaa, HI 96746
Phone: 822-3922

Student Assistance Program
Department of Education
1302 Queen Emma Street, Room A-207
Honolulu, HI 96813
Phone: 548-6079

The Substance Abuse Program of
Maui Youth and Family Services
P.O. Box 6
Paia, HI 96779
Phone: 242-4757

The Waianae Coast Community Mental Health Clinic, Inc.
85-670 Farrington Highway
Waianae, HI 96792
Phone: 696-4211

The Women's Alcohol Treatment Center of Hawaii
2230 Liliha Street
c/o WATCH
Honolulu, HI 96817
Phone: 547-6117 or 547-6273

The YMCA Outreach Services
1335 Kalihi Street
Honolulu, HI 96819
Phone: 847-0838

SUMMARY AND DISCUSSION

The drug problem in Hawaii has taken a toll on society as clearly shown through the adverse effects of recreational drug use. This report examines some of the adverse effects relating to the number of drug-related deaths which occurred from 1984 through 1988, some side-effects from using cocaine and marijuana products, information on "designer drugs", and the availability of community-organized programs addressing the problem of drug abuse in the state.

There were 136 deaths attributed to drug use and abuse from 1984 through 1988. Drug-related deaths during this period averaged 27 deaths per year or about two deaths per month.

The drug of choice used by the decedents was primarily dangerous non-narcotic drugs. Forty percent of the decedents used dangerous non-narcotic drugs and 32 percent used either opium or cocaine products. Dangerous non-narcotic drugs include addicting stimulants and depressants, such as crystal methamphetamine, and barbiturates.

Sixty out of 136 decedents used opium or cocaine products. Of the 60, 41 (68 percent) used cocaine products and 30 (50 percent) used cocaine exclusively.

More people used drugs to commit suicide than any other motive listed in this report. Of the total number of deaths, 57 (42 percent) were reported as suicides, and 53 (39 percent) were undetermined as to the person's intentions or motives when using the drugs. Recreational drug use, especially of illicit drugs, seemed to have resulted in untimely deaths for many of its users as was seen in the large number of deaths with undetermined motives.

The majority of decedents, 82 (60 percent) were single-drug users, while 54 (40 percent) used more than one type of drug at a time. Cocaine was the drug of choice for 30 of the single-drug users.

The circumstances surrounding the conditions of the body showed that almost half of the decedents, 67 (49 percent), were found in their homes, and 32 (24 percent) were discovered dead or unconscious in a public area.

Fifteen of the decedents, 11 percent, exhibited unusual behavior while intoxicated by drugs before collapsing. Such behavior included trying to swim at night and subsequently drowning, running nude through the streets until collapsing, and drowning while bathing.

The majority of decedents were male, 94 out of 136. The median age range for males per year was ages 26 to 35. The majority of the decedents, 78 (57 percent) were white; 23 (17 percent) were Hawaiian or part-Hawaiian; and 20 (15 percent) were Japanese.

Drug users and abusers come from all walks of life as seen in the former occupations of the decedents. They are not necessarily poor, unemployed addicts with criminal records. Most of the illicit drugs used, especially cocaine products, are expensive. Cocaine users must have access to a lot of money in order to support their habit. With respect to occupation, 61 (45 percent) had been blue collar workers or laborers, and 25 (18 percent) had been white collar workers or professionals. Where the occupation was known and with the exception of housewives, students, and retirees, 7 (5 percent) of the decedents had been unemployed.

No criminal records were located on the majority, 74 (54 percent), of the decedents. Of the most serious arrest charges per person, 7 of the decedents were formerly arrested and charged with Hawaii Revised Statutes (HRS) 291-4, Driving under the Influence of Alcohol, a misdemeanor. Other arrests include HRS 707-701 (Murder), HRS 708-840 (Robbery), and HRS 712-1241 (Promoting a Dangerous Drug 1), all of which are class A felony offenses.

Of the decedents with previous criminal convictions, 8 were convicted of HRS 291-4, Driving Under the Influence of Alcohol. Felony class A convictions included HRS 708-840 (Robbery) and HRS 707-702 (Manslaughter).

Of the 62 decedents with previous criminal histories, 21 had been arrested for a drug offense and 10 had former convictions for a drug offense.

Some of the side-effects of cocaine use include physical and psychological dependence, drug tolerance, anhedonia, physical effects, and death. Regular cocaine use leads to both physical and psychological dependence. Compulsive use of cocaine can result in a high psychological drug dependence, withdrawal depressions, and sleep disturbances. Cocaine dependence tends to dominate every aspect of the individual's life--socially, economically, and physically. Under unlimited access to cocaine, all types of users may become compulsive users. Psychological dependence may lead the user to forfeit personal property, steal from family and friends, or resort to crime to acquire a steady supply of the drug.

Researchers have found that users may suffer the same debilitating effects of over stimulation from cocaine regardless of the route of administration. Initial episodes of cocaine stimulation can be followed by a sense of excitement, apprehension, nausea, vomiting, and twitching of voluntary muscles. Advanced cocaine stimulation results in episodes of hyperkinesis, convulsions, rapid pulse, high blood pressure, and irregular respiration. Chronic cocaine use usually leads to depression often accompanied by loss of reflexes, unconsciousness, circulatory and respiratory failure and sometimes death. Cocaine use by pregnant women may also have adverse consequences to their unborn children.

Some of the side-effects of using marijuana include cardiovascular problems including respiratory and pulmonary effects, pre-natal effects in pregnant women using the drug during pregnancy and impairment of the body's immune system. The harmful effects of marijuana, in general, are related to the amount of drug taken and the frequency of use. THC is a fat soluble substance which quickly leaves the bloodstream after administration and enters fatty tissues in the body. Fatty tissues include the brain, adrenal glands, gonads, and the placenta.

Smoking marijuana exposes the lungs to a greater amount of particulate matter than regular tobacco smoking, and deposits greater amounts of tar into the lungs. Respiratory and pulmonary functions are impaired as a result of frequent or chronic marijuana use. Clinical observations of cannabis or marijuana users show that they have more instances of laryngitis, pharyngitis, bronchitis, asthma-like symptoms, cough, hoarseness, and dry throats.

"Designer drugs" are drugs created by underground chemists which were designed to have the same effects as illegal narcotic and psychoactive drugs. The chemists tamper with the molecular structure of the drug creating new drug analogues which are not listed as controlled substances under state or federal schedules. These drugs are legal to make and use, however, the actual potency and side-effects from using the drugs are unknown to the user and the designer.

In general, the focus of most drug education programs is to deter people from continuing to use illegal drugs or from ever starting the habit. Community organized education, prevention, intervention, and treatment programs help battle the war against drug abuse in Hawaii.

NOTES

[1] The Department of the Attorney General, A Survey of Hawaii's War on Drugs, February 1989, pp. 7-9

[2] Hawaii Criminal Justice Data Center, Crime in Hawaii 1988, p. 63

[3] The Department of the Attorney General, A Survey of Hawaii's War on Drugs, February 1989, p. 9

[4] Siegel, Ronald, K. "Changing Patterns of Cocaine Use: Longitudinal Observations, Consequences, and Treatment", National Institute of Drug Abuse (NIDA) Research Monograph Series 50: Cocaine: Pharmacology, Effects, and Treatment of Abuse 1984, p.94

[5] Ibid, p. 94

[6] Cohen, Sidney "Reinforcement and Rapid Delivery Systems: Understanding Abuse Consequences of Cocaine", National Institute of Drug Abuse Consequences of Cocaine Monograph Series 61: Cocaine Use in America: Epidemiologic and Clinical Perspectives 1985, p. 152

[7] Jones, Reese, T. "The Pharmacology of Cocaine", National Institute of Drug Abuse Research Monograph Series 50: Cocaine: Pharmacology, Effects, and Treatment of Abuse 1984, p. 47

[8] Ohlms, M.D., David, L. Cocaine, Publisher: Gary Whiteaker Co., Belleville, Illinois, Copyright 1987, p. 4

[9] Fischman, Marian, W. "The Behavioral Pharmacology of Cocaine in Humans", National Institute of Drug Abuse Monograph Series 50: Cocaine: Pharmacology, Effects, and Treatment of Abuse 1984, p.73

[10] Hammer, Signe and Lesley Hazelton, "Cocaine and the Chemical Brain", Science Digest, October 1984, p. 103

[11] Time, "Crack", June 2, 1986, p. 16

[12] Laurence, Larry and Alan Matsumura "Methamphetamine", Honolulu Police Department Publication, Narcotics/Vice Division, 1988, p.2

[13] Siegel, Ronald, K "Changing Patterns of Cocaine Use: Longitudinal Observations, Consequences, and Treatment", National Institute of Drug Abuse Research Monograph Series 50: Cocaine: Pharmacology, Effects, and Treatment of Abuse 1984, p.95

[14] Cohen, Sidney "Reinforcement and Rapid Delivery Systems: Understanding Adverse Consequences of Cocaine", National Institute of Drug Abuse Research Monograph Series 61: Cocaine Use in America: Epidemiologic and Clinical Perspectives 1985, p. 151

[15] Ibid, p. 153

[16] Siegel, Ronald, K. "Changing Patterns of Cocaine Use: Longitudinal Observations, Consequences, and Treatment", National Institute of Drug Abuse Research Monograph Series 50: Cocaine: Pharmacology, Effects, and Treatment of Abuse 1984, p. 102

[17] Fischman, Marian, W. "The Behavioral Pharmacology of Cocaine in Humans", National Institute on Drug Abuse Research Monograph Series 50: Cocaine: Pharmacology, Effects, and Treatment of Abuse 1984, p. 85

[18] Cohen, Sidney "Reinforcement and Rapid Delivery Systems: Understanding Adverse Consequences of Cocaine", National Institute of Drug Abuse Research Monograph Series 61: Cocaine Use in America: Epidemiologic and Clinical Perspectives 1985, p. 152

[19] Brody, Jane, E. "Cocaine: Litany of Fetal Risks Grows", New York Times September 6, 1988, p. C-1

[20] Jones, M.D., Reese, T. "Human Effects: An Overview", National Institute of Drug Abuse Research Monograph Series 31: Marijuana Research Findings:1980 1981, p. 56

[21] Ibid, p. 59

[22] Ibid, p. 66

[23] Tennes, M.A., Katherine "Effects of Marijuana on Pregnancy and Fetal Development in the Human", National Institute of Drug Abuse Research Monograph Series 44: Marijuana Effects on the Endocrine and Reproductive Systems 1982, p.115

[24] Ibid, p. 118

[25] Dunnett, Bill "Marijuana, Morphine, Drugs that Suppress Immunity", American Health November 1986, p.43

[26] Webster's Ninth New Collegiate Dictionary, copyright 1983, p. 82

[27] Shafer, Jack "Designer Drugs", Science 85 March 1985, p. 84

[28] Ibid, p. 83

[29] Morgan, M.D., John, P. et al. "Duplicitous Drugs: The History and Recent Status of Look-Alike Drugs", Journal of Psychoactive Drugs, January-March 1987, Volume 19, No. 1, p. 21

[30] Hawaii Criminal Justice Data Center Drug Laws and Offenders, January 1989, p. 1

[31] Hawaii Revised Statutes, Chapter 329 Section 329-11, Authority to Schedule Controlled Substances, p. 520

[32] Hawaii Revised Statutes, Chapter 329 Section 329-2, Hawaii Advisory Commission on Drug Abuse and Controlled Substances: Number; Appointment, p. 519

GLOSSARY

Amphetamine	Any of various derivatives of amphetamine used as stimulants for the central nervous system.
Analogue	A chemical compound structurally similar to another but differing often by a single element of the same valence and group of the periodic table as the element it replaces.
Aneurysm	A permanent abnormal blood-filled dilatation of a blood vessel resulting from disease of the vessel wall.
Aphrodisiac	Sexual pleasures; exciting sexual desire.
Apnea	Transient cessation of respiration; Asphyxia.
Asphyxia	Stopping of the pulse; A lack of oxygen, or excess of carbon dioxide in the body that is usually caused by interruption of breathing and that causes unconsciousness.
Cerebral	Of or relating to the brain or the intellect; Of, relating to, or being the cerebrum.
Chemical	A substance (as an element or chemical compound) obtained by a chemical process or used for producing a chemical effect.
Clandestine	Held in or conducted with secrecy.
Controlled Substance	Any drug or substance listed on federal or state controlled substance schedules.
Convulsions	An abnormal violent and involuntary contraction or series of contractions of the muscles; An uncontrolled fit.
Fetus	An unborn child.
Fibrillation	An act or process of forming fibers or fibrils; A muscular twitching involving individual muscle fibers acting without coordination; Very rapid irregular contractions of the muscle fibers of the heart resulting in a lack of synchronism between heartbeat and pulse.
Forensic	Belonging to, used in, or suitable to courts of judicature or to public discussion and debate; specializing in or relating to forensic medicine.
Forensic Medicine	A science that deals with the relation and application of medical facts to legal problems.

Hemorrhage	A copious discharge of blood from the blood vessels.
Hyperkinesis	Abnormally increased and usually purposeless and uncontrollable muscular movement.
Metabolite	A product of metabolism; a substance essential to the metabolism of a particular organism or to a particular metabolic process.
Narcotic	A drug (as opium) that in moderate doses dulls the senses, relieves pain, and induces profound sleep but in excessive doses causes stupor, coma, or convulsions; A drug (as marijuana or LSD) subject to restriction similar to that of addictive narcotics whether in fact physiologically addictive or not.
Neurological (Neurology)	The scientific study of the nervous system.
Paranoia	A psychosis characterized by systematized delusions of persecution or grandeur usually without hallucinations; A tendency on the part of an individual or group toward excessive or irrational suspiciousness and distrustfulness of others.
Periodic Law	A law in chemistry: The elements when arranged in the order of their atomic numbers show a periodic variation in most of their properties.
Periodic Table	An arrangement of chemical elements based on the periodic law.
Placenta	The vascular organ in mammals except monotremes and marsupials that unites the fetus to the maternal uterus and mediates its metabolic exchanges through a more or less intimate association of uterine mucosal with chorine and allantoic tissues.
Respiration	The placing of air or dissolved gases in intimate contact with the circulating medium of a multicellular organ; A single complete act of breathing. The physical and chemical processes by which an organism supplies its cells and tissues with the oxygen needed for metabolism and relieves them of the carbon dioxide formed in energy producing reactions.
Seizure	A sudden attack (as of disease).
Stimulant	An agent (as a drug) that produces a temporary increase of the functional activity or efficiency of an organism or any of its parts.

Valence	The degree of combining power of an element or chemical group as shown by the number of atomic weights of a univalent (as hydrogen) element with which the atomic weight of the element of the partial molecular weight of the group will combine, or for which it can be substituted or with which it can be compared.
Vascular	Of or relating to a channel for the conveyance of a body fluid (as blood of an animal or sap of a plant) or to a system of such channels.
Ventricle	A chamber of the heart which receives blood from a corresponding atrium and from which blood is forced into the arteries.
Ventricular	Of, relating to, or being a ventricle or ventriculus.

Reference Note: The majority of definitions were taken from Websters Ninth New Collegiate Dictionary copyright 1963.

APPENDIX A
References

Brody, Jane E. "Cocaine: Litany of Fetal Risks Grows." The New York Times 6 September 1988

Chasnoff, M.D., Ira J. "Effects of Maternal Narcotic vs. Nonnarcotic Addiction on Neonatal Neurobehavior and Infant Development." National Institute on Drug Abuse Research Monograph Series 59: Current Research on the Consequences of Maternal Drug Abuse 1985

Cherek, D. et al. "Effects of Secobarbital on Aggressive and Non-Aggressive Responding of Normal Male Subject." National Institute on Drug Abuse Monograph Series Research 81: Problems of Drug Dependence 1987

Chiang, Ph.D, Nora C. and Rao S. Rapaka, Ph.D. "Pharmacokinetics and Disposition of Cannabinoids." National Institute on Drug Abuse Research Monograph Series 79: Structure-Activity Relationships of the Cannabinoids 1987

Childress, A. et al. "Conditioned Craving and Arousal in Cocaine Addiction: A Preliminary Report." National Institute on Drug Abuse Research Monograph Series 81: Problems of Drug Dependence 1987

Chitwood, Dale D. "Patterns and Consequences of Cocaine Use." National Institute on Drug Abuse Research Monograph Series 61: Cocaine Use in America: Epidemiologic and Clinical Perspectives 1985

Clayton, Richard R. et al. "Gender Differences in Drug Abuse: An Epidemiological Perspective." National Institute on Drug Abuse Research Monograph Series 65: Women and Drugs: A New ERA for Research 1986

Cohen, Sidney. "Reinforcement and Rapid Delivery Systems: Understanding Adverse Consequences of Cocaine" National Institute on Drug Abuse Research Monograph Series 61: Cocaine Use in America: Epidemiological and Clinical Perspectives 1985

Cohen, M.D., D.Sc., Sidney. "Therapeutic Aspects." National Institute on Drug Abuse Research Monograph Series 31: Marijuana Research and Findings 1980

Cohn, Jordan. "The Perils of Pot." Seventeen, May 1986

Department of the Attorney General, A Survey of Hawaii's War on Drugs February 1989

Dunnett, Bill. "Marijuana, Morphine, Drugs that Suppress Immunity." American Health November 1986

Ferraro, Ph.D, Douglas P. "Acute Effects of Marijuana on Human Memory and Cognition." National Institute on Drug Abuse Research Monograph Series 31: Marijuana Research and Findings 1980

Fischman, Marian W. "The Behavioral Pharmacology of Cocaine in Humans." National Institute on Drug Abuse Research Monograph Series 50: Cocaine: Pharmacology, Effects, and Treatment of Abuse 1984

Fligiel, M.D., Suzanne E.G. et al. "Bronchial Pathology in Chronic Marijuana Smokers: A Light and Electron Microscopic Study." Journal of Psychoactive Drugs January-March 1988

Foltin, R. et al. "Interactions Between Social Behavior and Smoked Marijuana." National Institute on Drug Abuse Research Monograph Series 81:Problems of Drug Dependence 1987

Gallagher, Winifred. "The Looming Menace of Designer Drugs." Discover August 1986

Gallagher, Winifred. "Marijuana." American Health March 1988

Gieringer, Dale H. "Marijuana, Driving, and Accident Safety." Journal of Psychoactive Drugs January-March 1988

Gladwell, Malcolm. "A New Addiction to an Old Story." Insight 27 October 1986

Gong, M.D., Henry, Jr. et al. "Sensitivity and Specificity of Serum ^9-Tetrahydrocannabinol and 11-nor-9-carboxy-^9-Tetrahydrocannabinol by Radioimmunoassay in Identifying Habitual Daily Smokers of Marijuana." Journal of Psychoactive Drugs January-March 1988

Hall, James N. et al. "Trends and Patterns of Methamphetamine Abuse in the United States." National Institute on Drug Abuse: Department of Epidemiology and Statistical Analysis September 1988

Hammer, Signe and Lesley Hazelton. "Cocaine and the Chemical Brain." Science Digest October 1984

Hanson, G. et al. "Neurochemical Basis for Cocaine and Methamphetamine Interactions." National Institute on Drug Abuse Research Monograph Series 81: Problems of Drug Dependence 1987

Hawaii Criminal Justice Data Center, Crime in Hawaii 1988 June 1989

Honolulu Police Department. "Methamphetamine." Honolulu Police Department Narcotics/ Vice Division 1988

Hollister, Leo E. "Cocaine-1988" Human Psychopharmacology 1988: Vol. 3,1 2.

Hollister, M.D., Leo E. "Marijuana and Immunity." Journal of Psychoactive Drugs January-March 1988: Vol 20 (1).

Johnson, John L. "The Challenge of Substance Abuse." Teaching Exceptional Children Summer 1988.

Jones, Reese T. "Human Effects: An Overview." National Institute on Drug Abuse Research Monograph Series 31: Marijuana Research and Findings 1980

Jones, Reese T. "The Pharmacology of Cocaine." National Institute on Drug Abuse Research Monograph Series 50: Cocaine: Pharmacology, Effects, and Treatment of Abuse 1984

Kaplan, D. et al. "Pediatric Surveillance of AIDS Among Infants of I.V. Drug-Using Mothers." National Institute on Drug Abuse Monograph Series 81: Problems of Drug Dependence 1987

Karler, Ph.D, Ralph et al. "Different Cannabinoids Exhibit Different Electrophysiological Properties." National Institute on Drug Abuse Research Monograph Series 79: Structure-Activity Relationships of the Cannabinoids 1987

Karler, Ph.D, Ralph et al. "Different Cannabinoids Exhibit Different Pharmacological and Toxicological Properties." National Institute on Drug Abuse Research Monograph Series 79: Structure-Activity Relationships of the Cannabinoids 1987

Kleven, M. et al. "Behavioral and Neurochemical Effects of Repeated or Continuous Exposure to Cocaine." National Institute on Drug Abuse Research Monograph Series 81: Problems of Drug Dependence 1987

Lamar, Jr., Jacob V. "Crack." Time 2 June 1986

Life. "The Trouble With Ecstasy." August 1985

Maranto, Gina. "Coke: The Random Killer." Discover March 1985

McLaughlin, Dennis G. et al. "Drug Use Among Asian Americans in Hawaii." Journal of Psychoactive Drugs January-March 1987

Mendelson, Jack H. and Nancy K. Mello. "Clinical Investigations of Drug Effects in Women." National Institute on Drug Abuse Research Monograph Series 65: Women and Drugs: A New ERA for Research

Mendelson, M.D., Jack H. and Nancy K. Mello Ph.D. "Effects of Marijuana on Neuroendocrine Hormones in Human Males and Females." National Institute on Drug Abuse Research Monograph Series 44: Marijuana Effects on the Endocrine and Reproductive Systems

Mikuriya, M.D., Tod H. and Michael R. Aldrich Ph.D. "Cannabis 1988 Old Drug, New Dangers: The Potency Questions." Journal of Psychoactive Drugs January-March 1988

Morgan, M.D., John P. et al. "Duplicitous Drugs: The History and Recent Status of Look-Alike Drugs." Journal of Psychoactive Drugs January-March 1987

Morgan, M.D., John P. "Marijuana Metabolism in the Context of Urine Testing for Cannabinoid Metabolite." Journal of Psychoactive Drugs January-March 1988

Morishima, M.D., Ph.D., Akira. "Effects of Cannabis and Natural Cannabinoids on Chromosomes and Ova." National Institute on Drug Abuse Research Monograph Series 44: Marijuana Effects on the Endocrine and Reproductive Systems

Nadelmann, Ethan A. "U.S. Drug Policy: A Bad Export." Foreign Policy Spring 1988

Ohlms, MD, David L. "Cocaine." Publisher: Gary Whiteaker Company, Belleville, Illinois, Copyright 1987

Razdan, Ph.D., Raj K. "Structure-Activity Relationships in Cannabinoids: An Overview." National Institute on Drug Abuse Research Monograph Series 79: Structure-Activity Relationships of the Cannabinoids 1987

Rosenberg, Charles E. "What It Was Like to be Sick in 1884." American Heritage October/ November 1984

Shafer, Jack. "Designer Drugs." Science 85 March 1985

Siegel, Ronald K. "Changing Patterns of Cocaine Use: Longitudinal Observations, Consequences, and Treatment." National Institute on Drug Abuse Research Monograph Series 50: Cocaine: Pharmacology, Effects, and Treatment of Abuse 1984

Siegel, Shepard. "Drug Anticipation and the Treatment of Dependence." National Institute of Drug Abuse Research Monograph Series 84: Learning Factors in Substance Abuse 1987

Siemens, Ph.D., Albert J. "Effects of Cannabis in Combination with Ethanol and Other Drugs." National Institute on Drug Abuse Research Monograph Series 31: Marijuana Research and Findings 1980

Sommer, Robert. "Two Decades of Marijuana Attitudes: The More It Changes, the More It Is the Same." Journal of Psychoactive Drugs January-March 1988

Straus, Hal. "From Crack to Ecstasy." American Health May-June 1987

Tashkin, M.D., Donald P. et al. "Acute and Chronic Effects of Marijuana Smoking Compared with Tobacco Smoking on Blood Carboxyhemoglobin Levels." Journal of Psychoactive Drugs January-March 1988

Tashkin, M.D., Donald P. et al. "Effect of Habitual Smoking of Marijuana Alone and with Tobacco on Nonspecific Airways Hyperreactivity." Journal of Psychoactive Drugs January-March 1988

Tennes, M.A., Katherine. "Effects of Marijuana on Pregnancy and Fetal Development in the Human." National Institute on Drug Abuse Research Monograph Series 44: Marijuana Effects on the Endocrine and Reproductive Systems

Turner, Ph.D., Carlton E. "Chemistry and Metabolism." National Institute on Drug Abuse Research Monograph Series 31: Marijuana Research and Findings 1980

Tzu-Chin, M.D., Wu et al. "Influence of Marijuana Potency and Amount of Cigarette Consumed on Marijuana Smoking Pattern."

U.S. Department of Health and Human Services (DHHS), Public Health Services, Alcohol, Drug Abuse, and Mental Health Administration. "Cocaine." DHHS Publication Number (ADM) 88-1559 Copyright 1987

U.S. Department of Health and Human Services (DHHS) "Drug Abuse and Drug Abuse Research." DHHS Publication Number (ADM) 87-1486 Printed 1987

U.S. Department of Health and Human Services (DHHS) "National Institute on Drug Abuse Statistical Series Annual Data 1986, Data from the Drug Abuse Warning Network, (DAWN)." Series 1 Number 6, printed 1987

U.S. Department of Health and Human Services (DHHS), Office for Substance Abuse Prevention. "When Cocaine Affects Someone You Love." Printed 1987

Wynhausen, Elizabeth. "Cracked Out." Ms. Magazine September 1988

APPENDIX B
Hawaii Revised Statutes
Schedule of Controlled Substances

HRS Chapter 329-11 Authority to schedule controlled substances. (a) Annually, upon the convening of each annual session of the state legislature, the department shall report to the legislature additions, deletions or revisions in the schedules of substance, enumerated in sections 329-14, 329-16, 329-18, 329-20 and 329-22, and any other recommendations which it deems necessary. The department shall not recommend additions, deletions or revisions in such schedules until after notice and an opportunity for a hearing is afforded all interested parties, except such hearing shall not be required if official notice has been received that the substance has been added, deleted or rescheduled as a controlled substance under federal law. In making a determination regarding a substance, the department shall assess the degree of danger or probable danger of the substance by considering the following:

(1)The actual or probable abuse of the substance including:
(A)Its history and current pattern of abuse;
(B)The scope, duration and significance of abuse; and
(C)A judgment of the degree of actual or probable detriment which may result from the abuse of the substance.
(2)The biomedical hazard of the substance including:
(A)Its pharmacology: the effects and modifiers of effects of the substance;
(B)Its toxicology: the acute and chronic toxicity, interaction with other substances whether controlled or not and liability to psychic or physiological dependence;
(C)Risk to public health and particular susceptibility of segments of the population; and
(D)Existence of therapeutic alternatives for substances which are or may be used for medical purposes.
(3)A judgment of the probable physical and social impact of widespread abuse of the substance.
(4)Whether the substance is an immediate precursor of a substance already controlled under this part; and
(5)The current state of scientific knowledge regarding the substance.

(b) After considering the factors enumerated above, the department shall make a recommendation to the legislature, specifying to what schedule the substance should be added, deleted, or rescheduled if it finds that the substance has a degree of danger or probable danger. The department may make such recommendation to the legislature prior to the submission of its annual report in which case the department shall publish and give notice to the public of such recommendation.

(c) If the legislature designates a substance as an immediate precursor, substances which are precursors of the controlled precursor shall not be subject to control solely because they are precursors of the controlled precursor.

(d) If a substance is added, deleted, or rescheduled as a controlled substance under federal law and notice of the designation is given to the department, the department shall recommend that a corresponding change in Hawaii law be made. The department shall similarly designate the substance as added, deleted, or rescheduled under this chapter after the expiration of thirty days from publication in the Federal Register of a final order and such change shall have the effect of law. If a substance is added, deleted, or rescheduled under this subsection, the control shall be temporary and, if the next regular session of the state legislature has not made the corresponding changes in this chapter, the temporary designation of the added, deleted, or rescheduled substance shall be nullified.

HRS Chapter 329-14 SCHEDULE I. (a) The controlled substances listed in this section are included in Schedule I.

(b) Any of the following opiates, including their isomers, esters, ethers, salts, and salts of isomers, esters, and ethers, unless specifically excepted, whenever the existence of these isomers, esters, ethers, and salts is possible within the specific chemical designation:

(1)Acetylmethadol;
(2)Allylprodine;
(3)Alphacetylmethadol;
(4)Alphameprodine;
(5)Alphamethadol;
(6)Alpha-Methylfentanyl;
(7)Benzethidine;
(8)Betacetylmethadol;
(9)Betameprodine;
(10)Betamethadol;
(11)Betaprodine;
(12)Clonitazene;
(13)Dextromoramide;
(14)Diampromide;
(15)Diethylthiambutene;
(16)Difenoxin;
(17)Dimenoxadol;
(18)Dimepheptanol;
(19)Dimethylthiambutene;
(20)Dioxaphetyl butyrate;
(21)Dipipanone;
(22)Ethylmethylthiambutene;
(23)Etonitazene;
(24)Etoxeridine;
(25)Furethidine;
(26)Hydroxypethidine;
(27)Ketobemidone;
(28)Levomoramide;
(29)Levophenacylmorphan;
(30)Morpheridine;
(31)Noracymethadol;
(32)Norlevorphanol;
(33)Normethadone;
(34)Norpipanone;
(35)Parahexyl;
(36)Phenadoxone;
(37)Phenampromide;
(38)Phenomorphan;
(39)Phenoperidine;
(40)Piritramide;
(41)Proheptazine;
(42)Properidine;
(43)Propiram;
(44)Racemoramide;
(45)Tilidine;
(46)Trimerperidine;
(47)N-[1-(1 -methyl-2-phenyl)ethyl-4-piperidyl]-N-phenylacetamide(acetyl-alpha-methylfentanyl);
(48)N-[1-(1 methyl-2-(2-thienyl)ethyl-4-piperidyl]-N-phenylpropanamide(alpha-methylthiofentanyl);

(49)N-[1-benzyl-4-piperidyl]-N-phenylpropanamide (benzylfenatnyl);
(50)N-[1-(2-hydroxy-2-phenyl)ethyl-4-piperidyl]-N-phenylpropanamide (beta-hydroxyfentanyl);
(51)N-[3-methyl-1-(2-hydroxy-2-phenyl)-ethyl-4-piperidy]-N-phenylpropanamide (beta-hydroxy-3-methylfentanyl);
(52)N-[3-methyl-1-(2-(2-thienyl)ethyl-4-piperidyl]-N-phenylpropanamide (3-methylthiofentanyl);
(53)N-[1-(2-thienyl)methyl-4-piperidyl]-N-phenylpropanamide(thenylfentanyl);
(54)N-[1-(2-(2-thienyl)ethyl-4-piperidyl]-N-phenylpropanamide(thiofentanyl).

(c) Any of the following opium derivatives, their salts, isomers, and salts of isomers, unless specifically excepted, whenever the existence of these salts, isomers, and salts of isomers is possible within the specific chemical designation:
(1)Acetorphine;
(2)Acetyldihydrocodeine;
(3)Benzylmorphine;
(4)Codeine methylbromide;
(5)Codeine-N-Oxide;
(6)Cyprenorphine;
(7)Desomorphine;
(8)Dihydromorphine;
(9)Drotebanol;
(10)Etorphine;
(11)Heroin;
(12)Hydromorphinol;
(13)Methyldesorphine;
(14)Methyldihydromorphine;
(15)Morphine methylbromide;
(16)Morphine methylsulfonate;
(17)Morphine-N-Oxide;
(18)Myrophine;
(19)Nicocodeine;
(20)Nicomorphine;
(21)Normorphine;
(22)Phoclodine;
(23)Thebacon.

(d) Any material, compound, mixture, or preparation which contains any quantity of the following hallucinogenic substances, their salts, isomers, and salts of isomers, unless specifically excepted, whenever the existence of these salts, isomers, and salts of isomers is possible within the specific chemical designation:
(1)2,5-dimethoxyamphetamine (2,5-DMA);
(2)3,4-methylenedioxy amphetamine;
(3)3,4-methylenedioxymethamphetamine (MDMA);
(4)1-methyl-4-phenyl-4-propionoxypiperidine (MPPP);
(5)5-methoxy-3,4-methylenedioxy-amphetamine;
(6)4-bromo-2,5-dimethoxy-amphetamine(4-bromo-2,5-DMA);
(7)1-(2 phenylethyl)-4-phenyl-4-acetyloxypiperdine (PEPAP);
(8)3,4,5-trimethoxy amphetamine;
(9)Bufotenine;
(10)4-methoxyamphetamine (PMA);
(11)Fenethylline;
(12)Diethyltryptamine;
(13)Dimethyltryptamine;
(14)4-methyl-2,5-dimethoxy-amphetamine;

(15)Ibogaine;
(16)Lysergic acid diethylamide;
(17)Marijuana;
(18)Mescaline;
(19)Peyote;
(20)N-ethyl-3-piperidyl benzilate;
(21)N-methyl-3-piperidyl benzilate;
(22)Psilocybin;
(23)Psilocyn;
(24)Tetrahydrocannabinols;
(25)Ethylamine analog of phencyclidine (PCE);
(26)Pyrrolidine analog of phencyclidine (PCPy, PHP);
(27)Thiophene analog of phencyclidine (TPCP; TCP).

(e) Unless specifically excepted, the schedule shall include any material, compound, mixture, or preparation which contains any quantity, of the substance methaqualone.

HRS Chapter 329-16 Schedule II. (a) The controlled substances listed in this section are included in Schedule II.

(b) Any of the following substances, except those narcotic drugs listed in other schedules, whether produced directly or indirectly by extraction from substances of vegetable origin, or independently by means of chemical synthesis, or by combination of extraction and chemical synthesis:

(1)Opium and opiate, and any salt, compound, derivative, or preparation of opium or opiate.
(2)Any salt, compound, isomer, derivative, or preparation thereof which is chemically equivalent or identical with any of the substances referred to in paragraph (1), but not including the isoquinoline alkaloids of opium.
(3)Opium poppy and poppy straw.
(4)Coca leaves and any salt, compound, derivative, or preparation of coca leaves, and any salt, compound, derivative, or preparation thereof which is chemically equivalent or identical with any of these substances, but not including decocainized coca leaves or extractions which do not contain cocaine or ecgonine; cocaine or any salt or isomer thereof.

(c) Any of the following opiates, including their isomers, esters, ethers, salts, and salts of isomers, whenever the existence of these isomers, esters, ethers, and salts is possible within the specific chemical designation:

(1)Alfentanil;
(2)Alphaprodine;
(3)Anileridine;
(4)Bezitramide;
(5)Bulk Dextropropoxyphene (nondosage form);
(6)Dihydrocodeine;
(7)Diphenoxylate;
(8)Fentanyl;
(9)Isomethadone;
(10)Levomethorphan;
(11)Levorphanol;
(12)Metazocine;
(13)Methadone;
(14)Methadone-Intermediate, 4-cyano-2-dimethylamino-4, 4-diphenyl butane;
(15)Moramide-Intermediate, 2-methyl-3-morpholino-1, 1-diphenyl-propane-carboxylic acid;
(16)Pethidine;
(17)Pethidine-Intermediate-A, 4-cyano-1-methyl-4-phenylpiperidine;
(18)Pethidine-Intermediate-B, ethyl-4-phenylpiperidine-4-carboxylate;
(19)Pethidine-Intermediate-C, 1-methyl-4-phenylpiperidine-4-carboxylic acid;

(20)Phenazocine;
(21)Piminodine;
(22)Racemethorphan;
(23)Racemorphan;
(24)Sufentanil.

(d) Depressants. Unless specifically excepted or unless listed in another schedule, any material, compound, mixture, or preparation which contains any quantity of the following substances having a depressant effect on the central nervous system:

(1)Amobarbital;
(2)Pentobarbital;
(3)Phencyclidine;
(4)Phencyclidine immediate precursors:
(A)1-phenycyclohexylamine;
(B)1-piperidinocyclohexanecarbonitrile (PCC);
(5)Secobarbital.

(e) Stimulants. Any material, compound, mixture, or preparation which contains any quantity of the following substances having a danger or probable danger associated with a stimulant effect on the central nervous system;

(1)Amphetamine, its salts, optical isomers, and salts of its optical isomers;
(2)Any substance which contains any quantity of methamphetamine, including its salts, isomers, and salts of isomers.

(f) Any material, compound, mixture, or preparation which contains any quantity of the following substances having a degree of danger or probable danger associated with a stimulant effect on the central nervous system:

(1)Phenmetrazine and its salts;
(2)Phenylacetone (P2P);
(3)Methylphenidate.

(g) Hallucinogenic substances, including but not limited to Dronabinol (synthetic), in sesame oil and encapsulated in a soft gelatin capsule in a United States Food and Drug Administration approved drug product.

HRS Chapter 329-18 Schedule III. (a) The controlled substances listed in this section are included in Schedule III.

(b) Stimulants. Unless listed in another schedule, any material, compound, mixture, or preparation which contains any quantity of the following substances having a stimulant effect on the central nervous system, including its salts, isomers, and salts of isomers is possible within the specific chemical designations:

(1)Those compounds, mixtures, or preparation in dosage unit form containing any stimulant substance listed in Schedule II, and any other drug of the quantitative composition or which is the same except that it contains a lesser quantity of controlled substances;
(2)Benzphetamine;
(3)Chlorphentermine;
(4)Clortermine;
(5)Mazindol;
(6)Phendimetrazine.

(c) Depressants. Unless listed in another schedule, any material, compound, mixture, or preparation which contains any quantity of the following substances having a depressant effect on the central nervous system:

(1)Any compound, mixture, or preparation containg amobarbital, secobarbital, pentobarbital, or any salt thereof and one or more other active medicinal ingredients which are not listed in any schedule;
(2)Any suppository dosage form containing amobarbital, secobarbital, pentobarbital, or any salt of these drugs and approved by the Food and Drug Administration for marketing only as a suppository;
(3)Any substance which contains any quantity of a derivative of barbituric acid or any salt thereof;
(4)Chlorexadol;
(5)Glutethimide;
(6)Lysergic acid;
(7)Lysergic acid amide;
(8)Methyprylon;
(9)Sulfondiethylmethane;
(10)Sulfonethylmethane;
(11)Sulfonmethane;
(12)Tiletamine/Zolazepam (Telazol).

(d)Nalorphine.

(e) Any material, compound, mixture, or preparation containing limited quantitities or any of the following narcotic drugs, or any salts therof:
(1)Not more than 1.8 grams of codeine, or any of its salts, per 100 milliliters or not more than 90 milligrams per dosage unit, with an equal or greater quantity of an isoquinoline alkaloid of opium;
(2)Not more than 1.8 grams of codeine, or any of its salts, per 100 milliliters or not more than 90 milligrams per dosage unit, with one or more active, nonnarcotic ingredients in recognized therapeutic amounts;
(3)Not more than 300 milligrams of dihydrocodeinone, or any of its salts, per 100 milliliters or not more than 15 milligrams per dosage unit, with a fourfold or greater quantity of an isoquinoline alkaloid of opium;
(4)Not more than 300 milligrams of dihydrocodeinone, or any of its salts per 100 milliliters or not more than 15 milligrams per dosage unit, with one or more active, nonnarcotic ingredients in recognized therapeutic amounts;
(5)Not more than 1.8 grams of dihydrocodeine, or any of its salts, per 100 milliliters or not more than 90 milligrams per dosage unit, with one or more active, nonnarcotic ingredients in recognized therapeutic amounts;
(6)Not more than 300 milligrams of ethylmorphine, or any of its salts, per 100 milliliters or not more than 15 milligrams per dosage unit, with one or more ingredients in recognized therapeutic amounts;
(7)Not more than 500 milligrams of opium per 100 milliliters or per 100 grams, or not more than 25 milligrams per dosage unit, with one or more active nonnarcotic ingredients in recognized therapeutic amounts;
(8)Not more than 50 milligrams of morphine or any of its salts, per 100 milliliters or per 100 grams with one or more active, nonnarcotic ingredients in recognized therapeutic amounts.
(f) The department may except by rule any compound, mixture, or preparation containing any stimulant or depressant substance listed in subsections (b) and (c) from the application of all or any part of this chapter if the compound, mixture, or preparation contains one or more active medicinal ingredients not having a stimulant or depressant effect on the central nervous system, and if the admixtures are included therein in combinations, quantity, proportion, or concentration that vitiate the potential for abuse of the substances which have a stimulant or depressant effect on the central nervous system.

HRS Chapter 329-20 Schedule IV. (a) The controlled substances listed in this section are included in Schedule IV.

(b) Depressants. Any material, compound, mixture, or preparation which contains any quantity of the following substances having a degree of danger or probable danger associated with a depressant effect on the central nervous system:
(1)Alprazolam;
(2)Barbital;
(3)Bromazepam;
(4)Camazepam;
(5)Chloral betaine;
(6)Chloral hydrate;
(7)Chloradiazepoxide;
(8)Clobazam;
(9)Clonazepam;
(10)Clorazepate;
(11)Clotiazepam;
(12)Cloxazolam;
(13)Delorazepam;
(14)Diazepam;
(15)Estazolam;
(16)Ethchlorvynol;
(17)Ethinamate;
(18)Ethyl loflazepate;
(19)Fludiazepam;
(20)Flunitrazepam;
(21)Flurazepam;
(22)Halazepam;
(23)Haloxazolam;
(24)Ketazolam;
(25)Loprazolam;
(26)Lorazepam;
(27)Lormetazepam;
(28)Mebutamate;
(29)Medazepam;
(30)Meprobamate;
(31)Methohexital;
(32)Methylphenobarbital (mephorbarbital);
(33)Midazolam;
(34)Nimetazepam;
(35)Nitrazepam;
(36)Nordiazepam;
(37)Oxazepam;
(38)Oxazolam;
(39)Paraldehyde;
(40)Petrichloral;
(41)Phenobarbital;
(42)Pinazepam;
(43)Prazepam;
(44)Quazepam;
(45)Temazepam;
(46)Tetrazepam;
(47)Triazolam.

(c) Fenfluramine. Any material, compound, mixture, or preparation which contains any quantity of the following substances, including its salts, isomers, and salts of isomers, whenever the existence of such salts, isomers, and salts of isomers is possible:
(1)Fenfluramine.

(d) Stimulants. Unless listed in another schedule, any material, compound, mixture, or preparation which contains any quantity of the following substances having a stimulant effect on the central nervous system, including its salts, isomers, and salts of such isomers whenever the existence of such salts, isomers, and salts of isomers is possible within the specific chemical designation:
(1)Diethylpropion;
(2)Phentermine;
(3)Pemoline (including organometallic complexes and chelates thereof).

(e) Other substances. Unless specifically excepted or unless listed in another schedule, any material, compound, mixture, or preparation which contains any quantity of the following substances, including its salts:
(1)Dextropropoxyphene;
(2)Pentazocine.

(f) The department may except by rule any compound, mixture, or preparation containing any depressant substance listed in subsection (b) or any stimulant listed in subsection (d) from the application of all or any part of this chapter if the compound, mixture, or preparation contains one or more active medicinal ingredients not having a depressant or stimulant effect on the central nervous system, and if the admixtures are included therein in combinations, quantity, proportion, or concentration that vitiate the degree of danger or probable danger of the substances which have a depressant or stimulant effect on the central nervous system.

HRS Chapter 329-22 Schedule V. (a) The controlled substances listed in this section are included in Schedule V.

(b) Any compound, mixture, or preparation containing limited quantities of any of the following narcotic drugs, which also contains one or more nonnarcotic active medicinal ingredients in sufficient proportion to confer upon the compound, mixture, or preparation, valuable medicinal qualities other than those possessed by the narcotic drug alone:
(1)Not more than 200 milligrams of codeine, or any of its salts, per 100 milliliters or per 100 grams;
(2)Not more than 100 milligrams of dihydrocodeine, or any of its salts; per 100 milliliters or per 100 grams;
(3)Not more than 100 milligrams of ethylmorphine, or any of its salts, per 100 milliliters or per 100 grams;
(4)Not more than 2.5 milligrams of diphenoxylate and not less than 25 micrograms of atropine sulfate per dosage unit;
(5)Not more than 100 milligrams of opium per 100 milliliters or per 100 grams.
(c) Buprenorphine.

HRS Chapter 329-23 Republishing and distribution of schedules. (a) The department shall republish the schedules annually or more often, as may be necessary to update the schedules.

(b) The department shall publicly announce and, in addition, shall make available to the public copies of any changes to the schedules as such changes are made.

APPENDIX C
Offense Severity Codes

The offense severity codes are explained below, in descending order of severity.

FA = Class A Felony
FB = Class B Felony
FC = Class C Felony
MD = Misdemeanor
PM = Petty Misdemeanor