



National Narcotics Intelligence Consumers Committee (NNICC)

The NNICC Report 1987

The Supply of Illicit Drugs to the United States

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U.S. Department of Justice
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TABLE OF CONTENTS

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ACQUISITIONS

	<u>Page</u>
Preface	i
List of Figures	iii
Executive Summary	1
Chapter One: Cannabis	5
Chapter Two: Cocaine	25
Chapter Three: Dangerous Drugs	38
Chapter Four: Opiates	52
Chapter Five: Drug Money	79

Preface

The National Narcotics Intelligence Consumers Committee (NNICC) Report is the product of a cooperative effort involving Federal agencies with drug-related law enforcement, foreign and domestic policy, treatment, research, and intelligence responsibilities. In April 1978, the NNICC was established to coordinate the collection, analysis, dissemination, and evaluation of strategic drug-related intelligence, both foreign and domestic, that is essential to effective policy development, resource deployment, and operational planning. Membership consists of the Central Intelligence Agency, U.S. Coast Guard, U.S. Customs Service, Department of Defense, Drug Enforcement Administration, Federal Bureau of Investigation, Immigration and Naturalization Service, Internal Revenue Service, National Institute on Drug Abuse, Department of State, Department of the Treasury, and the White House Drug Abuse Policy Office. The Deputy Assistant Administrator for Intelligence of the Drug Enforcement Administration serves as Chairman.

The NNICC Report for 1987 is the 10th estimate prepared by the NNICC. In recent years, the NNICC has reviewed and updated various estimation methodologies. This continuing effort has

resulted in a number of revised estimates for previous years. Since illicit production and distribution of controlled substances are, by definition, illegal, there are little reliable data upon which to base estimates of the quantities of drugs involved. This document, which is based on the best data currently available and on the combined available expertise of NNICC member agencies, is a comprehensive assessment prepared for the Federal Government on the worldwide illicit drug situation in 1987.

A primary source for production estimates and drug control efforts in foreign countries is the Department of State's International Narcotics Control Strategy Report. This report is prepared annually in accordance with the provisions of Section 481 of the Foreign Assistance Act of 1961, as amended (22 U.S.C. 2291).

List of Figures

	<u>Page</u>
Figure 1	7
Marijuana Abuse Indicator, 1984-1987	
Figure 2	9
Marijuana Trafficking Indicators, 1984-1987	
Figure 3	18
Estimated Sources and Quantities of Marijuana Available for Use in the United States, 1985-1987	
Figure 4	22
Hashish Production in Major Source Countries, 1984-1987	
Figure 5	26
Cocaine Trafficking Indicators, 1984-1987	
Figure 6	27
Cocaine Abuse Indicators, 1984-1987	
Figure 7	33
Estimated Maximum Cocaine HCl Production by Country, 1986-1987	
Figure 8	39
Selected Dangerous Drugs Trafficking Indicators, 1984-1987	

	<u>Page</u>
Figure 9	40
Selected Dangerous Drugs Use Indicators, 1984-1987	
Figure 10	41
Clandestine Laboratory Seizures in the United States, FY 1984-1987	
Figure 11	48
Narcotics/Analgesics and Heroin Substitutes/Supplements Use Indicators, 1984-1987	
Figure 12	49
Narcotics/Analgesics and Heroin Substitutes/Supplements Trafficking Indicators, 1984-1987	
Figure 13	55
Heroin and Morphine Use Indicators, 1984-1987	
Figure 14	56
Heroin-Related Hospital Emergencies, 1986-1987	
Figure 15	61
Opium Production -- Mexico, 1984-1987	
Figure 16	63
Opium Production -- Golden Triangle, 1983/84-1986/87	
Figure 17	70
Opium Production -- Southwest Asia, 1984-1987	

Executive Summary

Marijuana was readily available in the United States during 1987. The supply of marijuana available for consumption in the United States generally increased. Mexico and Colombia were the primary foreign sources; an increased supply of domestic (U.S.) marijuana also was available in spite of the eradication of about 2.7 million more cultivated cannabis plants in 1987 than in 1986. Successful eradication efforts in Jamaica and Belize decreased the supply of marijuana from those countries. Data for 1987 indicate a projected increase (based on nine-month figures) in hospital emergencies involving marijuana. A National Institute on Drug Abuse (NIDA)-sponsored survey, however, found that marijuana and hashish use by high school seniors fell to its lowest level.

Cocaine hydrochloride (HCl) also was readily available in the United States in 1987. Colombian trafficking groups remained the principal producers and distributors of cocaine hydrochloride sold in the United States. Wholesale prices during the year were the lowest ever reported, and the purity remained at high levels, reflecting widespread availability. Crack continued to be a problem in 1987. It can be sold in small quantities, and a dealer can sell it for a low unit price and still realize greater profits than from cocaine hydrochloride. Most manufacture and

distribution of crack was at the retail level, but some wholesale level ventures were reported. The number of cocaine-related hospital emergencies is projected to be almost four times more than the 1984 figure, based on data available for the first nine months of 1987.

It is estimated that all the phencyclidine (PCP) and most of the methamphetamine illicitly available came from clandestine laboratories in the United States. The abuse of PCP was a major concern in several metropolitan areas in 1987. An increase of approximately 30 percent in PCP-related hospital emergencies is forecast (based on nine-month figures) for the year. PCP abuse was particularly prevalent in the Washington, D.C. metropolitan area, which accounted for approximately one-third of the total number of PCP-related hospital emergencies reported in 1987.

The illicit manufacture and distribution of methamphetamine continued to increase. Based on nine-month figures, an increase of about 30 percent in methamphetamine-related hospital emergencies is projected for 1987. During fiscal year (FY) 1987, 561 clandestine methamphetamine laboratories were seized, compared to 372 in FY 1986. Clandestine laboratory seizures in the United States again rose to a record high of 682 (FY 1987). Methamphet-

amine laboratories accounted for over 80 percent of the seizures. During 1987, two analogues of MDA were temporarily placed into Schedule I of the Controlled Substances Act.

Heroin was generally available in most metropolitan areas of the United States. Based on the analysis of a limited number of Heroin Signature Program samples, Mexican heroin was the predominant variety in 1987. There are also indications that the availability of Southeast Asian heroin has increased since 1985. The U.S. retail purity averaged 5.9 percent in 1987, compared to 6.1 percent in 1986. An increase of approximately 7 percent in heroin- and morphine-related hospital emergencies is projected (based on nine-month figures) for 1987. The use of needles/syringes to administer heroin and the connection to Acquired Immune Deficiency Syndrome (AIDS) remained a serious health concern. Southeast Asia was the leading producer of opium with an increase in production in Burma, Thailand, and Laos. Production of opium in Mexico also increased in 1987.

Southern Florida, northern and southern California, New York, and the Southwest were the centers for the collection and laundering of monies associated with the importation and distribution of illegal drugs. The Republic of Panama continued to be the

Latin American country most frequently used for these activities. The Cayman Islands was also a prime locale for drug money activity. In Europe, Switzerland and Luxembourg were primary recipients of drug monies, while Hong Kong remained the preferred financial center in the Far East. In 1987, several major cases against money launderers resulted in numerous arrests and seizures of drugs and assets. Assets valued at more than \$500 million were seized from traffickers by the Drug Enforcement Administration (DEA) in FY 1987.

CANNABIS

Domestic Availability and Use

During 1987, marijuana availability reflected seasonal fluctuations in both domestic and imported supplies. Marijuana was available in wholesale quantities in most metropolitan areas throughout the year. However, seasonal shortages and high prices were noted in some locations. Generally, the wholesale prices of commercial grade marijuana declined from the 1986 levels. Although there was a decrease from 1986, most foreign marijuana (about 72 percent) intended for shipment to the United States was seized from noncommercial vessels. There was a significant increase, however, in the percentage of marijuana seized from land conveyances -- 6 percent in 1986 to 14 percent in 1987.

A 1987 NIDA-sponsored survey conducted by the University of Michigan's Institute for Social Research found a continuation of the long-term downward trend of marijuana use among high school seniors. The results of this 13th annual survey of drug abuse among some 16,000 high school seniors in about 130 public and private schools nationwide indicated that marijuana and

hashish use fell to its lowest level during 1987. The proportion of seniors who used marijuana daily declined by more than two-thirds, from 10.7 percent at its peak in 1978 to 3.3 percent in 1987. The proportion of seniors who reported marijuana usage during the past year declined by more than one-quarter, from 50.8 percent at its peak in 1979 to 36 percent in 1987. Additionally, the percentage of high school seniors who perceived "great risk" associated with trying marijuana once or twice increased from 8.1 percent in 1978 to 18.4 percent in 1987. Over the same period, the proportion perceiving "great risk" in regularly smoking marijuana increased from 34.9 percent to 73.5 percent.

The number of marijuana-related hospital emergencies reported through the Drug Abuse Warning Network (DAWN) increased by 11 percent from 1984 to 1985 and by 14 percent from 1985 to 1986. Data for 1987 indicated an increase of about 40 percent over the figure reported during the previous year (see Figure 1).

Figure 1

Marijuana Abuse Indicator, 1984-1987

	1984	1985	1986	1987
Hospital Emergencies Reported Through the DAWN System*	2,887	3,213	3,674	5,180

*Data represent the DAWN Consistent Panel which includes only those data reported by facilities on a consistent basis, i.e., at 90 percent or more during each year. Data representing the total DAWN system are no longer used because of reporting fluctuations. Although the Consistent Panel numbers are lower because fewer facilities report consistently, they are more accurate indicators of trends. Figures for 1987 are projected based on nine-month data.

Marijuana is generally used as a part of a poly-drug profile of abuse. In approximately four out of five of all marijuana-related hospital emergencies reported in 1987, marijuana was used in conjunction with other drugs, primarily alcohol, cocaine, or PCP. Alcohol use in combination with marijuana accounted for 34 percent of all marijuana-related hospital emergencies in 1986 and increased to 48 percent in 1987.* Cocaine use in combination with marijuana accounted for 34 percent of all marijuana-related hospital emergencies in 1986 and increased to 43 percent in 1987. Fifty-one percent of all marijuana-related hospital emergencies involved persons in the age category 20 to 29, while 23 percent involved persons under the age of 20.

*Some of the increase may be the result of changes to the report form which made it easier to report alcohol use.

Figure 2

Marijuana Trafficking Indicators, 1984-1987

Marijuana Prices	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
Commercial Grade				
Wholesale (pound)	\$400-\$600	\$300-\$600	\$350-\$700	\$350-\$1,450*
Retail (ounce)	\$45-\$75	\$50-\$100	\$45-\$120	\$60-\$130
Potency (THC**)	3.49%	3.12%	3.33%	3.39%
Sinsemilla				
Wholesale (pound)	\$1,200- \$2,500	\$1,200- \$2,000	\$ 800- \$2,000	\$1,400- \$2,100
Retail (ounce)	\$120-\$180	\$120-\$200	\$100-\$200	\$165-\$210
Potency (THC**)	6.73%	7.28%	8.43%	6.99%

*The wide range reflected temporary shortages.

**THC (Delta-9 tetrahydrocannabinol) is the principal psychoactive ingredient in cannabis. THC percentages for 1986 have been amended to reflect complete reporting. THC percentages for 1987 are not final due to lag time in reporting.

The primary sources of supply for marijuana available for consumption in the United States were Mexico, Colombia, and the United States. While domestically produced marijuana was believed to have constituted approximately 19 percent of the total available in the United States in 1985 and 18 percent in 1986, it was estimated that 3,000 to 3,500 metric tons of marijuana - about 25 percent of total availability - were harvested for use in the United States in 1987 (see Figure 3). Eradication figures for 1987 were indicative of the United States' increasing role in the production of commercial grade marijuana. In 1987, approximately 7.4 million cultivated cannabis plants were eradicated in the 46 states participating in the Domestic Cannabis Eradication/Suppression Program. These figures compare to 4.7 million cultivated cannabis plants eradicated during the 1986 campaign. Seven states, including Kansas, Hawaii, Tennessee, Louisiana, Kentucky, Missouri, and California, accounted for approximately 79 percent of the cultivated cannabis eradicated in the United States in 1987. In addition, 105 million low potency, fiber-type cannabis plants were destroyed, primarily in Indiana.

Arrests made in conjunction with the eradication effort increased 17 percent from 5,537 in 1986 to 6,502 in 1987, the highest figure to date.

Although the use of violence and booby traps, both to deter thievery and thwart law enforcement efforts, has reportedly decreased during the past several years, a majority of the states still noted the occurrence of such measures.

Since the early 1980s, the percentage of the U.S. crops reported as sinsemilla, the unpollinated female cannabis plant with its higher THC content, has continued to increase. During the 1987 Domestic Cannabis Eradication/Suppression Program, sinsemilla accounted for over 40 percent of the domestic cultivated cannabis eradicated as compared with 26 percent in 1983. Coinciding with increased sinsemilla production has been the evolution of innovative cannabis growing techniques, such as cloning, hydroponics, and indoor cultivation. Both the number of states in which greenhouses were seized (45 in 1987 compared with 39 in 1986) and the total number of greenhouses seized (1,077 in 1986 compared with 1,192 in 1987) continued to increase.

Foreign Sources

Mexico: Mexico is a major source country for marijuana supplied to the United States. An estimated 9,000 hectares of cannabis

were cultivated in Mexico during 1987. The large agribusiness-type fields in northern Mexico were not cultivated by small-scale farmers. Several large trafficking organizations, which have controlled the Mexican drug trade for years, directed most of the cannabis cultivation. These organizations have taught many farmers advanced growing techniques involving the use of irrigation and improved seed and fertilizer to increase yields, improve potency, and extend the crop growing season. In recent years, traffickers have encouraged the cultivation of illicit crops in nontraditional growing areas, so that cannabis is now grown in virtually every state in Mexico. The estimated quantity of Mexican marijuana available for use in the United States in 1987 remained about the same as in 1986. In 1987, 3,100 to 4,200 metric tons of marijuana were available for use in the United States (see Figure 3).

Figures provided by the Government of Mexico indicate that 3,580 hectares of cannabis were eradicated in 1987, an increase over the 2,970 eradicated in 1986. Narcotics traffickers attempted to thwart the efforts of the eradication campaign by planting smaller cannabis fields in remote, mountainous areas. Growers further responded to the aerial application of

herbicide by immediately harvesting mature plants and/or by washing the plants to remove the herbicide. When younger plants were sprayed, growers replanted their fields.

There is limited information concerning the extent of drug abuse in Mexico. Drug treatment centers in Mexico, however, reported that marijuana, which is inexpensive and widely available, was the most frequently abused drug.

Approximately 400 metric tons of marijuana were seized by the Mexican Government in 1987, an increase over the 190 metric tons seized in 1986. Seizures along the U.S./Mexico border indicated that the majority of Mexican marijuana was smuggled into the United States by vehicle. The use of private aircraft for smuggling Mexican marijuana into the United States was sporadic, accounting for only 5 percent of the total marijuana seizures along the U.S./Mexico border in 1987. Land seizures of marijuana along the border increased by 120 percent, from 66 metric tons in 1986 to 146 metric tons in 1987. This increase in amount seized is believed to be the result of improved law enforcement efforts along the border rather than the result of increased production.

Colombia: Colombian marijuana production rose in 1987 after two years of decline. The eradication program, using the herbicide glyphosate, proved highly effective in the traditional cannabis growing areas of the Sierra Nevada de Santa Marta and the Serrania de Perija. This Government of Colombia initiative, conducted throughout the year, sprayed 8,000 hectares of cannabis. As a result of the eradication program, cultivation in areas once considered secondary growing areas surpassed that of traditional areas and overall production. The San Lucas Mountains and Darien Mountains produced over half of the marijuana estimated to have been harvested in Colombia.

From the four cultivation areas surveyed in 1987 (noted above), marijuana harvested was estimated to range from 3,400 to 7,800 metric tons. Other reported secondary growing areas, e.g., southwestern Colombia, were not surveyed in 1987 and production estimates for these areas are not available. A 10-metric ton seizure of marijuana in the Department of Cauca in December 1987 indicated commercial cultivation in that area.

Bulk seizures of marijuana by Colombian authorities amounted to 1,032 metric tons and in-country consumption was estimated at 100 metric tons, leaving between 2,300 and 6,600 metric tons

available for export. Noncommercial vessels of all types travelling traditional maritime smuggling routes continued to be the most common mode of transporting marijuana from Colombia to the United States.

Jamaica: During the summer of 1987, the Jamaican Government continued to increase pressure on cannabis cultivators, not only through manual eradication, but by backpack spraying of glyphosate. The success of the program was evidenced in the western portion of the island where most of the cannabis crop was eradicated. An estimated 2,700 hectares of cannabis were cultivated in 1987 compared to 4,000 to 5,000 hectares in 1986. The amount of cannabis was less as a direct result of two previous eradication programs. Farmers avoided planting large areas of cannabis as in the past, resorting to large numbers of smaller plots in areas not accessible by road. An estimated 650 hectares of cannabis were eradicated in 1987 compared to about 2,200 hectares in 1986. In-country seizures of marijuana increased from 196 metric tons in 1986 to 215 metric tons in 1987. It was estimated that 145 to 285 metric tons of marijuana were available for export from Jamaica in 1987 (see Figure 3).

Traffickers continued to use vessels to transport multiton quantities of Jamaican marijuana to the United States. General aviation aircraft also were used to smuggle much of the marijuana; the smugglers used airdrops to waiting vessels or landed in the Bahamas as well as in the United States.

Belize: At the beginning of 1987, an estimated 1,100 hectares of cannabis were under cultivation in Belize. Most cultivation was in remote mountainous areas where ground access was difficult. In Belize, it was estimated that about 900 kilograms of marijuana can be harvested from a hectare of cannabis. A continuous aerial eradication effort proved effective in destroying approximately 80 percent of the cannabis by the end of 1987. The production of marijuana was cut from about 500 metric tons in 1986 to about 200 metric tons in 1987 (see Figure 3), a reduction attributed to sustained eradication operations in 1987 versus those conducted at intervals in 1986.

Small aircraft, often using airdrops and pickup vessels, transported marijuana to the United States from the many clandestine airstrips in remote areas of Belize where law enforcement presence was slight. Marijuana was also smuggled to the United States in private vessels.

Other Latin American Countries: Cannabis cultivation was extensive in Brazil and was located in at least half of Brazil's states and territories. The heaviest concentration was located in the northeastern part of Brazil. Although there were no reliable estimates of the number of hectares of cannabis under cultivation, 33,900 metric tons of cannabis were reportedly eradicated in 1987. It is believed that Brazil was the major consumer of Brazilian-grown cannabis.

Cannabis cultivation in Paraguay was estimated in 1987 at 3,000 hectares. Most of the 3,000 metric tons of marijuana produced was exported to Brazil and, to a lesser degree, Argentina.

Figure 3

Estimated Sources and Quantities of Marijuana Available
for Use in the United States, 1985-1987

<u>Country</u>	<u>Quantity*</u> <u>(metric tons)</u>	<u>Percentage</u> <u>of Total</u> <u>Imports**</u>	<u>Percentage</u> <u>of Total</u> <u>Supply**</u>
<u>1985</u>			
Mexico	3,000-4,000	40	32
Colombia	2,600-4,000	38	31
Jamaica	350- 850	7	6
Belize	550	6	5
Domestic	2,100	0	19
Other	800	9	7
Gross Marijuana Available:	9,400-12,300	100	100
Less U.S. Seizures, Seizures in Transit, and Losses:***	3,000-4,000		
Net Marijuana Available:	6,400-8,300		
<u>1986</u>			
Mexico	3,000-4,000	37	30
Colombia	2,200-3,900	32	27
Jamaica	1,100-1,700	15	12
Belize	500	5	4
Domestic	2,100	0	18
Other	800-1,200	11	8
Gross Marijuana Available:	9,700-13,400	100	100
Less U.S. Seizures, Seizures in Transit, and Losses:***	3,000-4,000		
Net Marijuana Available:	6,700-9,400		

Figure 3 (continued)

<u>Country</u>	<u>Quantity*</u> <u>(metric tons)</u>	<u>Percentage</u> <u>of Total</u> <u>Imports**</u>	<u>Percentage</u> <u>of Total</u> <u>Supply**</u>
<u>1987</u>			
Mexico	3,100-4,200	37.1	27.9
Colombia	2,300-6,600	43.3	32.5
Jamaica	145- 285	2.2	1.7
Belize	200	2.0	1.6
Domestic	3,000-3,500	0	24.9
Other			
Southeast Asia	500-1,000	7.7	5.7
Latin America	500-1,000	7.7	5.7
Gross Marijuana Available:	9,545-16,585	100.0	100.0
Less U.S. Seizures, Seizures in Transit, and Losses:***	3,000-4,000		
Net Marijuana Available:	6,545-12,585		

*Some NNICC Report figures differ from those in the International Narcotics Control Strategy Report (INCSR) because the NNICC subtracts in-country seizures and consumption from production totals. INCSR production estimates for 1987 are: Mexico 5,970-7,130; Colombia 3,435-7,760; Jamaica 325-535; Belize 200; Other 1,000-2,000.

**The percentages reflect the midpoints of the quantity ranges.

***U.S. seizures include coastal, border, and internal (not domestic eradicated sites); seizures in transit include those on the high seas, in transit countries, from aircraft, etc. The loss factor includes marijuana lost because of abandoned shipments, undistributed stockpiles, and inefficient handling and transport, etc.

Southeast Asian Countries: Thailand continued to be the leading producer and exporter of marijuana in Southeast Asia, although other countries, such as Laos and the Philippines, are becoming more significant as marijuana producers. In Thailand, the majority of cannabis cultivation takes place in the northeast provinces of the country. In the past several years, cultivation has spread to other parts of Thailand with cannabis now being grown in southern Thailand, southeastern Thailand, along the border with Kampuchea, and in the central part of the country, adjacent to the border with Burma.

Cannabis cultivators have been developing smaller plots in order to make detection more difficult. In some cases, cannabis is mixed with legitimate crops, such as corn, peppers, cassava, and potatoes. A number of Thai traffickers have shifted some of their cultivation into neighboring Laos and Kampuchea. In addition to providing financial support for these operations, traffickers also provide seeds, fertilizer, technical assistance, and equipment to the farmers.

During 1987, the Royal Thai Government eradicated 250 hectares of cannabis and seized over 257 metric tons. In the United States,

over 47 metric tons of marijuana were seized which were identified as originating in Southeast Asia. Most of this marijuana was believed to have originated in Thailand.

After Thailand, both Laos and the Philippines were identified as being the next largest cultivators and suppliers of cannabis. Like Thailand, the extent of the cultivation, as well as the amount available for foreign consumption, is unknown.

Small amounts of cannabis are also grown in countries such as Indonesia, Kampuchea, and Burma. It is unknown how much of the cannabis cultivated in those countries is destined for export.

American, Canadian, and European nationals are reported to be heavily involved in the production and trafficking of marijuana in Southeast Asia. These individuals not only participate in the transportation of marijuana to consumer countries, but are also involved in supporting cultivation activities, especially in Thailand.

Hashish Production and Trafficking

Countries in the Middle East and Southwest Asia are the main sources of hashish (see Figure 4).

Figure 4

Hashish Production in Major Source Countries, 1984-1987
(metric tons)

	1984	1985	1986	1987
Lebanon	350-400	720	600	600
Afghanistan	200-400	200-400	200-400	200-400
Pakistan	200	200	200	200
Morocco	60-225	30-60	30-60	60
Total	810-1,225	1,150-1,380	1,030-1,260	1,060-1,260

Hashish is the resinous secretion of the cannabis plant, which is collected, dried, and then compressed into a variety of forms, such as balls, cakes, or sheets. Much of the hashish is consumed in the source countries and other countries in Southwest Asia and the Middle East. Lebanon continued its role as the major hashish producer; the area under cannabis cultivation probably remained at about 16,000 hectares from which about 600 metric tons of hashish were produced. In 1987, Lebanese hashish was exported primarily into Egypt, where approximately 350 metric tons were consumed. Lesser quantities were shipped, primarily by commercial

vessels, to other Middle Eastern countries, western Europe, and North America. The remainder of the hashish was consumed locally. Cyprus was used as a meeting place for the arrangement of international hashish transactions. Hashish produced in Afghanistan and Pakistan was consumed locally and large amounts were smuggled into India for both local consumption and transshipment to other countries. Indian, Pakistani, and Afghan nationals were most frequently associated with hashish smuggling out of India.

Southwest Asian source country smugglers utilized commercial vessels sailing from Karachi, Bombay, or other ports to ship large quantities of hashish to Europe and North America. Afghan and Pakistani hashish was smuggled overland to Iran and by sea from Pakistan's Makran coast in launches to various destinations in the Persian Gulf. Smaller amounts of Southwest Asian hashish were secreted in commercial air freight shipments.

Morocco, with an estimated output of 60 metric tons of hashish in 1987, remained a relatively minor producer. Most of the hashish was smuggled to Europe via all modes of transportation.

Jamaica remained the only known producer of hashish oil (a dark, viscous liquid) in the Western Hemisphere. Limited amounts were

consumed locally. Hashish oil from Jamaica was smuggled into the United States in small amounts via couriers on commercial flights; however, most hashish oil seized at U.S. airports was en route to Canada. Hashish oil also was smuggled in boats through traditional maritime routes.

COCAINE

Domestic Availability and Use

Cocaine hydrochloride (HCl) was readily available in multi-kilogram quantities in virtually all of the larger metropolitan areas and in no less than multiounce quantities in less populated ones during 1987. The primary domestic entry point for much of the nation's cocaine supply continued to be the south Florida area. Other domestic areas of significance included New York City and those states adjacent to the Mexican border. Cocaine continued to be trafficked by individual entrepreneurs and a variety of groups varying in ethnic composition and size. Colombian nationals continued to be the predominant ethnic group involved in cocaine processing and distribution.

Nationally, wholesale cocaine hydrochloride prices ranged from \$12,000 to \$40,000 per kilogram and \$800 to \$2,100 per ounce at end-of-year 1987. These represent the lowest wholesale prices reported to date. The price at the retail level continued to range from \$80 to \$120 per gram in most areas. Based on analyses performed by Drug Enforcement Administration laboratories, the

purity of cocaine hydrochloride remained relatively constant at high levels, averaging 85 to 90 percent per kilogram, 75 to 80 percent per ounce, and 50 plus percent per gram (see Figure 5).

Figure 5
Cocaine Trafficking Indicators, 1984-1987

	1984	1985	1986	1987
Cocaine Retail Purity (%)	35	50-60	55-65	50+
Cocaine Prices				
Wholesale (kg.) (thousands)	\$40-\$50	\$30-\$30	\$22-\$45	\$12-\$40
Retail (gm.)	\$100-\$120	\$100	\$80-\$120	\$80-\$120
Laboratories Seized (U.S.)	21	33	23	17

The number of DAWN cocaine-related hospital emergencies reported nationwide during 1987 was the highest yet recorded, increasing by more than 60 percent over the previous year's record total. During 1987, 26,186 cocaine-related hospital emergencies are projected through DAWN, as compared to 15,952 emergencies reported during 1986 (see Figure 6). Since 1980, there has been a near tenfold increase in the number of cocaine-related hospital emergencies reported through DAWN nationwide.

Figure 6

Cocaine Abuse Indicators, 1984-1987

	1984	1985	1986	1987
Hospital Emergencies Reported Through the DAWN System*	7,054	8,864	15,952	26,186
Cocaine-Related Deaths (less New York City)**	666	748	1,253	909 (Jan-Sept)

*Data represent the DAWN Consistent Panel which includes only those data reported by facilities on a consistent basis, i.e., at 90 percent or more during each year. Data representing the total DAWN system are no longer used because of reporting fluctuations. Although the Consistent Panel numbers are lower because fewer facilities report consistently, they are more accurate indicators of trends. Figures for 1987 are projected based on nine-month data.

**Data represent the total DAWN system. DAWN medical examiner data are not subject to the same reporting inconsistencies as DAWN emergency room data. Medical examiner data for New York City are incomplete and not included. Data for the first nine months of 1987 are incomplete due to lag time in reporting.

Hospital emergencies involving the use of cocaine in the more dangerous modalities such as smoking, injection, and combining cocaine with heroin in speedballs continued the rise which had been noted during the last decade or so. The number of hospital emergencies involving smoking rose from 3,382 in 1986 to 7,254 in 1987, an increase of 114 percent, while those involving injection rose from 4,722 in 1986 to 7,568 in 1987, an increase of 60 percent. Hospital emergencies involving the use of speedballs rose from 2,474 in 1986 to 3,776 in 1987, an increase of 53 percent. Hospital emergencies involving snorting also increased but at a considerably lower rate. From 1986 to 1987, the number of hospital emergencies involving snorting as the route of administration rose from 3,844 to 4,321, an increase of 12 percent.

One positive development pertaining to cocaine use concerns the results of the 13th annual survey of drug use among some 16,000 seniors in approximately 130 public and private high schools nationwide. Conducted by the University of Michigan's Institute for Social Research and sponsored by the National Institute on Drug Abuse, the survey found a decrease of about one-third (from 6.2 percent in 1986 to 4.3 percent in 1987) in the proportion of seniors who had used cocaine at least once in the past month, and

a decline of about one-fifth (from 12.7 percent in 1986 to 10.3 percent in 1987) in the proportion who had used the drug at least once in the past year. Furthermore, the proportion of seniors who had used cocaine at least once in their lifetime decreased by about one-tenth (from 16.9 percent in 1986 to 15.2 percent in 1987). In each of the previous high school senior classes since 1979, cocaine use had either increased or remained relatively stable. Additionally, the percentage of high school seniors who perceived "great risk" associated with ingesting cocaine even once or twice increased from 34 percent in 1986 to 48 percent in 1987.

Reports indicated that overall crack availability, although relatively widespread in a limited number of metropolitan areas, did not appear to increase appreciably from 1986 to 1987. The majority of crack available in most areas was in retail amounts only, manufactured and distributed by numerous, street-level distributors. Although these decentralized, retail-level suppliers continued to dominate the traffic, crack cocaine distribution was no longer solely confined to street-level sales and crack houses within a particular city neighborhood, as was the case during the latter half of 1985 and early 1986. Since that time, a number of large, centralized organizations operating

in one or more cities and capable of manufacturing, trafficking, and distributing wholesale quantities of crack have come into existence. Strong law enforcement responses have eliminated some of these organizations, while others continue to operate.

Domestic conversion of cocaine base to cocaine HCl appeared to decrease for the second consecutive fiscal year in 1987 when 17 such laboratories were confiscated. Eight of the laboratories seized were located in Florida and nine were located in New York State. This continuing decrease in seizures was perhaps due to traffickers moving their operations back to South America where they are less likely to be detected rather than risk seizure by United States law enforcement officials. This is reflected in the rather significant drop-off in seizures since 1985 when a record total of 33 cocaine conversion laboratories were seized.

Seizure data available at the El Paso Intelligence Center indicated that the use of general aviation aircraft was the primary mode of cocaine smuggling in 1987. There was, however, a decrease in the percentage of cocaine seized from this type of transportation. In 1987, 36 percent of the cocaine seized was from general aviation aircraft, compared to 48 percent in

1986. Also in 1987, about 22 percent (23 percent in 1986) of the cocaine seized was taken from noncommercial vessels and another 22 percent (11 percent in 1986) was removed from commercial vessels.

Foreign Sources

Peru: Peru continued to be the world's foremost producer of coca leaves and a major source country for coca paste and cocaine base. In 1987, an estimated 98,000 to 121,000 hectares of coca were cultivated in Peru (see Figure 7). Over 90 percent of the coca cultivations were illegal, since the national legal limit was 10,000 hectares. The Huallaga Valley was the principal illicit coca growing area.

Drug control efforts in the Upper Huallaga Valley included the seizure of coca paste and cocaine base processing laboratories, disruption of distribution activities, and eradication of coca fields. Total drug-related arrests increased to 7,212 in 1987 compared with 5,817 in 1986. Seizures of coca paste and cocaine base, however, declined. Security of personnel involved in drug

enforcement operations was seriously threatened by terrorist/insurgent attacks and the violent resistance of coca growers. Coca eradication was not effective and coca cultivation continued to expand. Owing to personnel security problems, only 355 hectares of coca were eradicated in 1987; about 2,600 hectares were eradicated in 1986.

Figure 7

Estimated Maximum Cocaine HCl Production by Country, 1986-1987
(based on coca leaf origin)

		Gross Coca Cultivation (hectares)	Estimated Coca Leaf Yield* (metric tons)	Maximum Cocaine HCl Capacity** (metric tons)	
				<u>1986</u>	<u>1987</u>
Peru	1986	95,000- 120,000	95,000- 120,000	190-240	
	1987	98,000- 121,000	98,000- 121,000	196-242	
Bolivia	1986	32,000- 38,000	44,800- 53,200	90-106	
	1987	33,000- 48,000	46,200- 67,200	92-134	
Colombia	1986	15,000- 17,000	12,000- 13,600	24-27	
	1987	20,000- 25,000	16,000- 20,000	32-40	
Ecuador	1986	1,000- 2,000	1,000- 2,000	2-4	
	1987	510	840	2	
Maximum Cocaine HCl Production:				306-377 metric tons	322-418 metric tons

*Annual dry leaf yield per hectare of cultivation:

Peru/Ecuador (1986)	1 hectare = 1 metric ton
Colombia	1 hectare = .8 metric ton
Bolivia	1 hectare = 1.4 metric tons
Ecuador (1987)	1 hectare = 1.65 metric tons

**Based on an average conversion rate of 500 kilograms of dry leaf = one kilogram of cocaine HCl.

Coca leaves were processed into coca paste and, to some extent, cocaine base in the coca growing areas of Peru. Chemicals essential to the two conversion stages are not controlled and were easily obtained in-country. For the most part, Peruvian-produced coca paste and cocaine base were exported to Colombia for conversion to cocaine HCl; some conversion to cocaine HCl also took place in Peru and Brazil.

Bolivia: In 1987, it was estimated that approximately 33,000 to 48,000 hectares were devoted to coca cultivation in Bolivia. This was an increase in coca cultivation in Bolivia over the previous two years. Coca cultivation in Bolivia was estimated at 30,000 to 38,000 hectares in 1985 and 32,000 to 38,000 in 1986 (see Figure 7).

The primary coca cultivation area in Bolivia was in an area known as the Chapare in the Department of Cochabamba. It accounted for about 65 percent of Bolivia's coca cultivation. The second most prominent area of cultivation was in the Yungas area of the Department of La Paz. Coca was also cultivated in the Apolo sector of the La Paz Department and portions of Santa Cruz and Tarija Departments.

Most Bolivian coca was earmarked for conversion into cocaine hydrochloride in laboratories in Bolivia and Colombia. Bolivian grown coca was smuggled into Colombia in the form of coca paste or cocaine base for final processing into cocaine hydrochloride. Argentina is also becoming increasingly active in the processing of Bolivian cocaine base into hydrochloride. An estimated 3.2 metric tons of cocaine hydrochloride were produced in Argentina in 1987 utilizing Bolivian coca paste or cocaine base.

There were eight cocaine hydrochloride laboratories destroyed in Bolivia in 1987. There were also 18 cocaine base and 1,112 coca paste laboratories seized in 1987. Most of the precursor chemicals used in clandestine laboratory activity in Bolivia were obtained from Brazil. Small quantities of chemicals were also smuggled from Argentina, Chile, Peru, and Paraguay into Bolivia.

Much of the cocaine produced in Bolivia exited South America through Brazil or Colombia. Chile and Argentina were also conduits for the export of cocaine to the United States, Europe, and other areas. It is estimated that 5.6 metric tons of cocaine HCl were processed in Argentina for shipment to the United States and Europe.

Bolivian narcotics control was hampered by inadequate legal restrictions on the control of coca cultivation and ineffective enforcement of existing narcotics laws. Coca eradication efforts in Bolivia achieved limited success in 1987; approximately 1,000 hectares of coca were voluntarily eradicated. Bolivian authorities, however, were successful in seizing 6,424 kilograms of coca products. A new narcotics law has been proposed in Bolivia which may help to restrict coca cultivation and other narcotics-related activities in Bolivia.

Colombia: Surveys conducted in Colombia estimated that 20,000 to 25,000 hectares of coca were cultivated in Colombia in 1987, up from 15,000 to 17,000 in 1986. Production of dry coca leaves was estimated at 16,000 to 20,000 metric tons (see Figure 7). Cultivation was primarily located in the Departments of Caqueta, Guaviare, Vaupes, and Putumayo. Manual eradication operations removed only 457 hectares of coca in 1987. Until a safe, effective herbicide is approved for use in Colombia, eradication efforts will continue to be limited.

In 1987, Colombians controlled most of the production of cocaine HCl, and the distribution of cocaine HCl by large Colombian trafficking organizations continued unabated. Despite expanded coca cultivation in Colombia, laboratory operators remained

heavily dependent on coca paste and cocaine base from Peru and Bolivia for conversion to cocaine HCl. In 1987, the Colombian National Police seized 1,357 laboratories, of which only 30 were cocaine HCl finishing laboratories. The vast majority of the laboratories were small leaf-to-paste-to-base laboratories whose production was a small percentage of the total cocaine base refined into cocaine HCl in Colombia.

Other Countries: An estimated 840 metric tons of coca leaves were produced in Ecuador in 1987, down from an estimated 1,000 to 2,000 metric tons in 1986 (see Figure 7). Coca cultivation in Ecuador was located primarily along Ecuador's border with Colombia, with cultivation also reported in the Pichincha Province in the Sierra region. Coca was also cultivated in Brazil and Venezuela; there was no estimate of the number of hectares under cultivation. In 1987, 2,665 metric tons of coca leaves were eradicated in Brazil and 180 metric tons in Ecuador.

DANGEROUS DRUGS

The term dangerous drugs refers to broad categories of abusable substances, both licit and illicit, which include the following: stimulants other than cocaine; narcotics/analgesics other than opiates; psychotomimetics/hallucinogens other than cannabis products; and all depressants and sedatives other than alcohol. Each class of substance is generally unlike other classes in its primary action and effect on the user.

In 1987, trafficking and availability of methamphetamine continued at levels above those of previous years (see Figures 8 and 9). The use of depressant substances, including diazepam and methaqualone, has declined since the early 1980s. Hospital emergencies involving phencyclidine (PCP) and lysergic acid diethylamide (LSD) rose in 1987.

Figure 8

Selected Dangerous Drugs Trafficking Indicators, 1984-1987

	1984	1985	1986	1987
Prices				
Wholesale				
Amphetamine (d.u.*)	\$1.50	\$1.50	\$1.50	\$1.50
Methamphetamine (oz.)	\$1,100- \$2,000	\$800- \$2,000	\$1,000- \$1,800	\$1,000- \$1,500
Methaqualone (d.u.)	\$1.75- \$2.50	\$0.50- \$2.00	\$0.50- \$2.00	\$0.50- \$2.00
PCP (oz.)	\$1,200	\$1,200	\$1,000	\$1,000
LSD (d.u.)	\$1.50	\$1.50	\$1.00- \$2.30	\$0.75- \$3.00
Retail				
Amphetamine (d.u.)	\$3.00	\$3.00	\$3.00	\$3.00
Methamphetamine (gm.)	\$60- \$100	\$60- \$100	\$60- \$120	\$60- \$120
Methaqualone (d.u.)	\$4.00- \$15.00	\$3.00- \$10.00	\$3.00- \$10.00	\$3.00- \$10.50
Methaqualone (counterfeit) (d.u.)	\$3.00- \$5.00	\$3.00- \$10.00	\$3.00- \$10.00	\$3.00- \$10.00
PCP (d.u. 100 mg., 5% pure)	\$10.00- \$15.00	\$10.00- \$15.00	\$10.00- \$15.00	\$10.00- \$15.00
LSD (d.u.)	\$2.00- \$5.00	\$2.00- \$5.00	\$3.00- \$6.00	\$2.00- \$8.00

*dosage units

Figure 9

Selected Dangerous Drugs Use Indicators, 1984-1987

	1984	1985	1986	1987
Hospital Emergencies (DAWN*)				
Amphetamine	912	787	787	866
Methamphetamine	1,093	972	874	1,017
Methaqualone	658	397	228	215
PCP	4,705	4,089	4,367	5,641
LSD	622	750	722	1,053
Drug-Related Deaths** (Less New York City)				
				(Jan-Sept)
Amphetamine	60	79	66	32
Methamphetamine	82	65	116	91
Methaqualone	11	12	5	5
PCP	239	201	263	133
LSD	1	2	1	3

*Data represent the DAWN Consistent Panel which includes only those data reported by facilities on a consistent basis, i.e., at 90 percent or more during each year. Data representing the total DAWN system are no longer used because of reporting fluctuations. Although the Consistent Panel numbers are lower because fewer facilities report consistently, they are more accurate indicators of trends. Figures for 1987 are projected based on nine-month data.

**Data represent the total DAWN system. DAWN medical examiner data are not subject to the same reporting inconsistencies as DAWN emergency room data. Medical examiner data for New York City are incomplete and not included. Data for the first nine months of 1987 are incomplete due to lag time in reporting.

Clandestine Laboratories

In fiscal year (FY) 1987, clandestine laboratories continued to produce much of the supply of illicit dangerous drugs in the United States. All of the PCP and the majority of the methamphetamine and amphetamine illicitly available in the United States during the year are believed to have been produced in clandestine laboratories. During FY 1987, a total of 682 clandestine laboratories were reported seized, a 34 percent increase over FY 1986 seizures (see Figure 10).

Figure 10

Clandestine Laboratory Seizures in the United States, 1984-1987

	FY 1984	FY 1985	FY 1986	FY 1987
PCP	26	23	8	13
Methamphetamine	184	257	372	561
P2P	0	25	21	15
Amphetamine	31	67	66	68
Methaqualone	4	5	4	1
Cocaine	24	29	23	17
Other Drugs	21	13	15	7
	—	—	—	—
Total	290	419	509	682

Stimulants

Methamphetamine: The illicit manufacture and trafficking of methamphetamine continued to increase during 1987. The number of methamphetamine-related hospital emergencies reported through DAWN increased by about 30 percent from 1986 to 1987 and currently is at the highest level since at least 1980. Domestic clandestine laboratories remained the principal source of methamphetamine. Eastern Texas, southern and northern California, and the North-western United States, primarily Oregon, constituted the principal areas of illicit methamphetamine production during 1987. Outlaw motorcycle gangs and their associates were a factor in the manufacture and distribution of methamphetamine during the year.

Amphetamine: The number of amphetamine-related hospital emergencies has remained relatively stable during the last four years but is well below the number reported during the early 1980s.

'Look-alikes': The term 'look-alikes' refers to capsules or tablets containing noncontrolled ingredients and manufactured to closely resemble controlled substances. 'Look-alikes' are now

limited by Federal regulation to contain only one active ingredient, such as caffeine, rather than a potentially synergistic and dangerous combination of active ingredients.

Legislation enacted in 47 states further requires that 'look-alikes' can no longer physically resemble controlled substances. As a result, manufacturers produce tablets and capsules which often do not resemble controlled substances. These 'act-alikes' are advertised as stimulants, diet aids, sleep aids, and decongestants. They contain the same active ingredients as 'look-alikes.' These substances continue to be sold through the mail to individuals who desire the mild stimulant effect of these caffeine-, ephedrine-, or phenylpropanolamine-containing products. The excessive use of any of these substances, alone or in combination, however, poses the very real danger of severe health consequences to users.

Depressants

Methaqualone: The availability and use of methaqualone (Quaalude) has substantially decreased each year since 1980

and it is expected that this downward trend will continue because of domestic actions and significant international initiatives. The number of reported methaqualone-related emergencies has decreased from 658 in 1984 to a projected 215 in 1987, representing the lowest number reported to date (see Figure 9).

In 1984, the U.S. Government placed methaqualone in Schedule I of the Controlled Substances Act. This action prohibited the legal manufacture, distribution, or possession of methaqualone in the United States and its territories except for research purposes. In addition, the availability of methaqualone continued to decline due to worldwide shortages of bulk methaqualone powder in international commerce, a consequence of controls on its production and distribution which have been adopted by virtually all producing nations. Some countries (including Austria, Hungary, West Germany, India, and Czechoslovakia) still maintain large inventories of methaqualone powder. In many countries, methaqualone has legitimate medical uses as an antianxiety, anticonvulsant sedative and hypnotic agent. Therefore, inventories may be used to satisfy medical requirements. Unsuccessful attempts have been made by traffickers to purchase large quantities of the remaining stockpiles.

Faced with a shortage of bulk methaqualone powder, traffickers have manufactured counterfeit Quaalude and Mandrax using alternative depressant or sedative-hypnotic substances as the active ingredient. In 1987, most of the purported Quaaludes available in the United States were counterfeit, and generally contained diazepam, phenobarbital, secobarbital, or diphenhydramine. Diazepam remained the primary active ingredient in counterfeit Quaaludes smuggled into the United States from Canada; counterfeit Mandrax tablets smuggled from Mexico contained secobarbital, methaqualone, phenobarbital, propoxyphene, caffeine, and ephedrine hydrochloride.

Hallucinogens

PCP: The illicit manufacture and distribution of PCP in 1987 continued to be dominated by inner-city traffickers reflecting the demographic characteristics of the primary PCP-using population. Sources of supply for much of the PCP available throughout the nation are believed to be located in the Los Angeles/southern

California area. The principal areas of PCP use in the United States were Los Angeles, Chicago, St. Louis, San Francisco, New York, New Orleans, Baltimore, and, in particular, Washington, D.C.

Since 1983, PCP has been one of the most prevalent illicit drugs of abuse in the Washington, D.C. metropolitan area. All available indicators show that abuse of this substance continues to escalate. During 1987, Washington, D.C. led the nation in the number of PCP-related hospital emergencies with nearly double the number of the next highest city, Los Angeles. In fact, Washington, D.C. accounted for approximately one-third of the total number of PCP-related hospital emergencies reported through DAWN nationwide during that year. Furthermore, the number of PCP-related hospital emergencies reported in this area increased from 992 in 1986 to a projected 1,959 in 1987. Additionally, drug-screening urinalysis conducted on all criminal defendants arrested in the District of Columbia during end-of-year 1987 showed that 43 percent tested positive for PCP.

LSD: LSD availability was generally described by law enforcement officials as either moderate or limited throughout most areas of the United States in 1987. Principal sources of

LSD for much of the nation continued to be clandestine laboratories located on the west coast, primarily northern California and the Pacific Northwest. LSD sold for \$0.75-\$3.00 per wholesale dosage unit and \$2.00-\$8.00 per retail dosage unit. Blotter acid and microdots were the primary forms encountered and continued to range in potency from 20 to 60 micrograms per dosage unit which is considerably below the range of 100 to 200 micrograms per dosage unit encountered during the late 1960s. Despite this, LSD-related hospital emergencies increased by more than 40 percent during 1987, as compared to the previous four years when abuse levels were essentially stable.

Narcotics/Analgesics and Heroin Substitutes/Supplements

Pharmaceutical products containing narcotics remained a significant part of the overall illicit drug trafficking and abuse situation in the United States during 1987. These products were used alone or in combination, both as substitutes for and as supplements to heroin, and were primary drugs of choice for a substantial portion of the narcotics addict population of the United States (see Figures 11 and 12).

Figure 11

Narcotics/Analgesics and Heroin Substitutes/Supplements
Use Indicators, 1984-1987

	1984	1985	1986	1987
Hospital Emergencies (DAWN*)				
Pentazocine	490	411	318	397
Hydromorphone	517	382	339	420
Oxycodone	836	836	825	884
Glutethimide	337	238	211	219

*Data represent the DAWN Consistent Panel which includes only those data reported by facilities on a consistent basis, i.e., at 90 percent or more during each year. Data representing the total DAWN system are no longer used because of reporting fluctuations. Although the Consistent Panel numbers are lower because fewer facilities report consistently, they are more accurate indicators of trends. Figures for 1987 are projected based on nine-month data.

Figure 12

Narcotics/Analgesics and Heroin Substitutes/Supplements
 Trafficking Indicators, 1984-1987

	1984	1985	1986	1987
Prices				
Pentazocine/ Tripeleennamine ('set')	\$15.00	\$10.00- \$20.00	\$10.00- \$20.00	\$10.00- \$20.00
Codeine/ Glutethimide ('set')	\$7.00- \$14.00	\$7.00- \$14.00	\$7.00- \$14.00	\$7.00- \$14.00
Hydromorphone (per 4 mg.) (Dilaudid)	\$40.00	\$50.00	\$30.00- \$65.00	\$20.00- \$60.00

Oxycodone (Percodan) and, to a lesser extent, hydromorphone (Dilaudid) continue to be widely abused narcotic/analgesic heroin substitutes. Abuse of oxycodone has remained relatively stable during the last decade or so; abuse of hydromorphone has declined somewhat during the last three to four years. The trafficking and use of pentazocine (Talwin) in combination with the anti-histamine tripeleennamine, commonly referred to as T's and B's or T's and Blues, continues to be well below levels reported prior to the addition of the narcotic antagonist naloxone to the pentazocine tablets in 1983. Users are reportedly not using the

reformulated product, Talwin Nx, as frequently due to the adverse effects brought about by the antagonist. Abuse of codeine/glutethimide combinations, commonly known as Fours and Doors, has remained essentially stable at comparatively low levels during the last four years.

Controlled Substance Analogues

The term 'controlled substance analogues' refers to clandestinely-produced substances which are chemically and pharmacologically similar to substances listed in the Controlled Substances Act but which are not themselves controlled. In terms of the number of users and extent of distribution, the problem of controlled substance analogues appeared relatively small when compared to that of other abused substances such as heroin, cocaine, and marijuana. Nevertheless, in those areas of the United States where controlled substance analogues were available, substantial numbers of people used them and many suffered severe adverse reactions, including death.

A serious aspect of the current wave of controlled substance analogues is the production of narcotic analogues. These

substances consist of variations of the parent compounds fentanyl and meperidine (pethidine). Some of the clandestinely-produced analogues of fentanyl are more than 1,000 times more potent than morphine; they have been associated with more than 100 overdose deaths.

During 1987, two analogues of MDA, N-Hydroxy MDA, and N-Ethyl MDA, were temporarily placed into Schedule I of the Controlled Substances Act, using the emergency scheduling provision of the Comprehensive Crime Control Act of 1984. In addition to these, other amphetamine-related analogues were found in the illicit traffic during 1987. These substances currently are under review for possible scheduling action as well.

OPIATES

Domestic Availability and Use

Data used to measure heroin availability and use trends as well as intelligence field reporting indicated that heroin was generally available in most metropolitan areas of the United States. In general, indicators pointed to an increase in availability in the last several years. Street-level purity rose from 4.7 percent in 1984 to almost 6 percent in 1987. Heroin-related emergency room admissions continued to rise.

Heroin used in the United States originated from three areas: Southwest Asia, Southeast Asia, and Mexico. Southwest Asian heroin is made from Southwest Asian opium and converted into heroin primarily in Afghanistan, Pakistan, and Iran. Southeast Asian heroin is usually made from morphine derived from Southeast Asian opium and processed in Burma, Laos, and Thailand (the Golden Triangle). Mexican heroin refers to heroin usually made from morphine derived from Mexican opium and processed in that source country.

Data from the Heroin Signature Program (HSP)* indicated that about 47 percent of the samples analyzed in 1985 were from Southwest Asia. Southeast Asian heroin accounted for 14 percent of the HSP samples analyzed in 1985, and 39 percent of the samples were identified as Mexican.

While HSP data were limited for 1986, the general trend showed a slight increase in the proportion of Mexican heroin in the United States and a more significant increase in the proportion of Southeast Asian heroin. HSP data are generally lacking for 1987, but preliminary data indicated that Mexican heroin was the predominant variety.

In 1987, Southwest Asian heroin was trafficked by numerous ethnic groups, the most dominant of which were Pakistanis, Indians, and Nigerians. It was trafficked to the United States directly from producing countries and was also shipped through Europe and Africa en route to the United States. New York City was the primary point of entry, although other cities were also used.

*Heroin Signature chemical analysis identifies and quantifies selected heroin characteristics and secondary constituents. From the resultant data, heroin exhibits are classified according to the process by which they were manufactured, which in turn enables the association of exhibits with geographic regions. These exhibits include random samples of purchases and seizures as well as seizures made at U.S. ports of entry. Based on the exhibits analyzed, percentages of the total U.S. supply are assigned to each source region.

Southwest Asian heroin entered the United States in small shipments usually via couriers travelling on commercial air flights. Primary areas of availability were the northeastern and southeastern areas of the United States.

Southeast Asian heroin was trafficked mainly by ethnic Chinese traffickers at the wholesale level. It was shipped primarily from producing countries - Burma, Laos, and Thailand - directly to New York, San Francisco, or Los Angeles, or indirectly to New York through the west coast. It was also transshipped to the United States primarily through Thailand, and also through Japan, Hong Kong, or Taiwan. Southeast Asian heroin was usually transported by steamships in commercial cargo, although some was shipped by commercial air. Primary areas of availability were the northeast and the west coast.

Mexican heroin was usually trafficked directly over the U.S./Mexico border in small amounts by couriers using either motor vehicles or body carry. It was trafficked primarily in the West. Mexican heroin was also available in certain midwestern cities, namely Chicago and Detroit. Mexican heroin has become more prominent in recent years partly because of the availability of black tar heroin, a crudely processed, high purity form of heroin which spread to virtually all western cities by end of 1985.

Figure 13

Heroin and Morphine Use Indicators, 1984-1987

	1984	1985	1986	1987
Hospital Emergencies Reported Through the DAWN System*	8,723	10,013	10,670	11,390
Heroin/Morphine-Related Deaths (less New York City)**	1,114	1,442	1,699	(Jan-Sept) 918

*Data represent the DAWN Consistent Panel which includes only those data reported by facilities on a consistent basis, i.e., at 90 percent or more during each year. Data representing the total DAWN system are no longer used because of reporting fluctuations. Although the Consistent Panel numbers are lower because fewer facilities report consistently, they are more accurate indicators of trends. Figures for 1987 are projected based on nine-month data.

**Data represent the total DAWN system. DAWN medical examiner data are not subject to the same reporting inconsistencies as DAWN emergency room data. Medical examiner data for New York City are incomplete and not included. Data for the first nine months of 1987 are incomplete due to lag time in reporting.

Heroin-related hospital emergencies reported from the Drug Abuse Warning Network (DAWN) have increased each year from 1980 through 1987. Projected emergencies for 1987 were 11,390, a 7 percent increase over the 10,670 figure reported for 1986 (see Figure 13). Emergencies from 1984 through 1987 rose approximately 30 percent.

The rise in heroin DAWN figures for 1987 reflected either moderate or substantial increases in a number of cities, most of which are located on the east coast. This can be seen in Figure 14.

Figure 14

Heroin-Related Hospital Emergencies*, 1986-1987

	<u>1986</u>	<u>1987</u>	<u>% Change</u>
Baltimore	507	634	+25%
Boston	197	235	+19%
Buffalo	21	133	+533%
Chicago	494	769	+56%
New York	2,435	2,758	+13%
Philadelphia	309	443	+43%
Washington, D.C.	722	838	+16%

*Data represent the DAWN Consistent Panel which includes only those data reported by facilities on a consistent basis, i.e., at 90 percent or more during each year. Data representing the total DAWN system are no longer used because of reporting fluctuations. Although the Consistent Panel numbers are lower because fewer facilities report consistently, they are more accurate indicators of trends. Figures for 1987 are projected based on nine-month data.

It is believed that the rise in emergencies in the Eastern States has been influenced to a great extent by the availability of high purity heroin sold at retail-level in some areas. Several cities, most notably New York, reported this trend. In New York, a sampling of retail heroin purchases made in DEA's Domestic Monitor Program (DMP)* in 1987 showed that heroin packages with purities between 28 and 67 percent were available on the street in several areas of the city.

The pure milligram cost of this heroin ranged from \$.40 to \$.97 in the high purity exhibits, compared to a national cost of \$2.00 per milligram in the first nine months of 1987.

Intelligence information from New York City indicates that ethnic Chinese traffickers are emerging as significant wholesalers of heroin in the city and that much of the high purity heroin on the street is from Southeast Asian sources. Since New York is also a major distribution point for heroin into other east coast cities, the rise in hospital emergencies and reports of high purity heroin in satellite areas is believed to be influenced by the trafficking situation in New York.

*The Domestic Monitor Program is an intelligence program in which retail purchases are made to gather information on price, purity, and origin.

While the number of hospital emergencies remained well above pre-1984 levels in the western United States, when black tar heroin was less prominent, it appeared that emergency levels may have peaked in 1986, particularly in San Francisco and Los Angeles. In San Francisco, emergencies declined from 1,013 in 1986 to 585 projected in 1987, representing a decrease of 42 percent. In Los Angeles, emergencies declined from 1,684 in 1986 to 1,080 projected in 1987, representing a decrease of 36 percent. While the reasons for this decline in emergencies are not known (there is no evidence pointing to major decreases in availability), there are several possible explanations. First of all, the presence of black tar heroin is no longer a recent development. It is possible that dealers are selling black tar in smaller quantities and at prices comparable to traditional heroin. Similarly, heroin users may be ingesting smaller amounts per dose as knowledge of black tar's high purity becomes wider spread.

Data from DAWN and from epidemiologists and treatment officials in the United States show the average age of the heroin user admitted for treatment to be rising. In 1978, 34 percent of those admitted to hospital emergency rooms in the DAWN system were 30 years or older. This compares to 42 percent in 1980, 64 percent in 1986, and 67 percent in the first half of 1987.

Also, the use of heroin in combination with other drugs has continued to increase. In 1978, 30 percent of heroin emergencies involved another substance. This figure rose to 41 percent in 1986, and through half of 1987, rose to 54 percent. About 63 percent of these 1987 combinations involved cocaine.

The connection between AIDS and intravenous (IV) use is the most serious health issue associated with heroin. In 1987, almost one-fourth of all AIDS cases involved IV drug abusers who transmitted the disease through blood by the sharing of needles/syringes. In New York City, evidence has surfaced to suggest that over half of all AIDS victims are IV drug users. Fear of contracting AIDS has caused some addicts to curtail needle sharing. Also, although injection was still the most common method of heroin administration, there were indications from DAWN as well as drug treatment sources that it was slightly less prevalent than in previous years compared with other forms of administration. Currently, some treatment outreach programs are now more actively involved in teaching AIDS prevention, to include distribution of bleach to addicts to be used to sterilize needles.

In 1987, about 64 percent of the heroin seized at U.S. ports of entry was from commercial air passengers, down from about 87

percent in 1986. The quantity seized from land transportation, mainly along the U.S./Mexico border, increased from 8 percent in 1986 to 18 percent in 1987. The amount seized from commercial vessels increased from 5 percent in 1986 to 15 percent in 1987.

Developments in Source Countries - Mexico

Opium Production: An estimated 7,300 hectares of opium poppy were cultivated in Mexico in 1987. While the tri-state area of Sinaloa, Chihuahua, and Durango continued to be the primary growing area for opium poppy, cultivation was increasingly found in the states of Guerrero, Oaxaca, Chiapas, Nayarit, and Jalisco. Figures provided by the Government of Mexico indicated that about 2,530 hectares of opium poppy were eradicated in Mexico in 1987, an increase over the 2,380 hectares eradicated in 1986. The net opium production in Mexico for 1987 was estimated at 45 to 55 metric tons (see Figure 15) which were converted into about 4.5 to 5.5 metric tons of heroin.

Figure 15

Opium Production -- Mexico, 1984-1987
(metric tons)

1984	1985	1986	1987
21	28.4	20-40	45-55

Consumption: No accurate information was available on the extent of drug abuse in Mexico. The use of heroin did not appear to be a problem; its high price discouraged use by the average Mexican.

Laboratories/Refineries: The Government of Mexico reported the destruction of four heroin laboratories in Mexico in 1987; six were seized in 1986. The characteristics of illicit laboratories in Mexico make their discovery difficult; the laboratories are small, portable, and usually located in remote areas. Two types of heroin continued to be produced in Mexico in 1987, the traditional brown heroin and the less-refined, more potent black tar heroin.

Trafficking Trends: Heroin was smuggled to and across the U.S./Mexico border primarily by vehicles and pedestrians. Seizures of Mexican heroin along the U.S./Mexico border in 1987 indicated that it continued to be smuggled into the United States in small quantities; the average size of a heroin seizure along the U.S./Mexico border in 1987 was 367 grams. Total heroin seizures along

the border increased from 26 kilograms in 1986 to 70 kilograms in 1987, an increase of 170 percent. This increase in amount seized is believed to reflect increased law enforcement efforts along the border rather than increased production.

Drug Control Efforts: Mexico had a broad-based antinarcotics program which included opium poppy eradication, interdiction of shipments, and suppression of refining laboratories. Mexican authorities eradicated slightly more opium poppy in 1987 than in 1986, and the Government reported the seizure of 73.5 kilograms of heroin, an increase over the 46 kilograms seized in 1986.

Developments in Source Countries - Southeast Asia

Opium Production: Favorable weather conditions combined with increased opium poppy plantings and improved cultivation techniques contributed to an overall increase in the amount of opium produced in the Golden Triangle. For the 1986/1987 growing season, an estimated 1,095 to 1,575 metric tons of opium were produced (see Figure 16). This was a slight increase over the amount of opium produced during the 1985/1986 season, which was 820 to 1,415 metric tons.

Figure 16

Opium Production -- Golden Triangle, 1983/84-1986/87
(metric tons)

	1983/84	1984/85	1985/86	1986/87
Burma	740	490	700-1,100	925-1,230
Thailand	45	35	20-25	20-45
Laos	30	100	100-290	150-300
Total	815	625	820-1,415	1,095-1,575

Burma is the location for the majority of opium poppy cultivation in Southeast Asia. During the 1985/1986 growing season, the estimated amount of opium production for Burma was 700 to 1,100 metric tons. In the 1986/1987 season, production increased to an estimated 925 to 1,230 metric tons.

Most of the increased cultivation/production took place in the Shan State, located in northeastern Burma. This area is primarily controlled by various insurgent groups. Aerial eradication conducted by the Burmese Government had an impact on cultivation in those areas which were under government control. As a result of this eradication, more cultivation shifted to insurgent-controlled areas of the Shan State which increased the overall production for that area. This increase, combined with favorable weather conditions, resulted in another large opium crop for Burma.

The estimated opium production in Laos during the 1986/1987 season showed an increase over the previous season. The range for opium production in Laos changed from 100 to 290 metric tons for the 1985/1986 season to 150 to 300 metric tons for the 1986/1987 season.

In Thailand, despite opium poppy eradication efforts, opium production increased from the estimated 20 to 25 metric tons for the 1985/1986 season to between 20 to 45 metric tons for the 1986/1987 season.

Consumption: The majority of opium which was produced in the Golden Triangle was consumed in either the source countries or in other Southeast Asian countries. Opium smoking is still a part of everyday life for many of the hill tribe peoples of Southeast Asia. Opium smoking also takes place in various parts of Asia by groups of elderly Chinese users. In Thailand, there are an estimated 35,000 opium addicts; most are hill tribesmen. Of Burma's 47,000 registered addicts, an estimated 33,000 are opium addicts. Hong Kong and Singapore have small opium user populations of about 2,000 addicts each.

Heroin use is a much larger problem. Most of the heroin used in Southeast Asia is number 3 heroin*, which is most commonly used by smoking, although it can also be injected. Number 4 heroin**, which is almost always injected, is used on a much smaller scale.

In Hong Kong, Burma, Malaysia, and Singapore, number 3 heroin is the preferred form. In Thailand, number 4 heroin is most popular. Thailand has the largest heroin addict population with an estimated range of 100,000 to 500,000 addicts. Thailand is followed by Malaysia with an estimated 250,000 addicts. Hong Kong has an estimated 40,000 heroin addicts, and in Burma there are approximately 9,000 heroin users.

*Number 3 heroin, also known as smoking heroin, varies in color from tan to grey to red and is granular or lumpish in composition like fish tank gravel or pet litter. The heroin is not produced with a purity higher than 50 percent and it usually ranges between 20 and 40 percent pure. In the manufacturing process of number 3 heroin, large amounts of caffeine are added. Caffeine is the one common chemical characteristic in number 3 heroin, and is readily found in the chemical analysis despite any attempts to dilute the heroin. The normal usage for number 3 heroin is smoking, but it can also be dissolved in lemon and/or lime juice and be injected.

**Number 4 heroin is injectable, highly soluble in water, and normally sold as a fluffy white powder which may vary in color to creamy yellow. The consistency has been likened to that of laundry detergent. The wholesale purity of number 4 heroin usually ranges from 80 to 100 percent.

Laboratories: Although the majority of heroin refineries are still located along the Thailand/Burma border, with increased enforcement pressure from both the Thai and Burmese Governments this situation has become more fluid and some refineries are being relocated or established in areas away from the border, such as in northern Thailand and Laos. The Shan United Army (SUA), the Burmese Communist Party (BCP), and the 3rd Chinese Irregular Force (CIF) continue to dominate heroin refining in the Golden Triangle. Other groups such as the Kachin Independence Army (KIA), which is aligned with the BCP, and the Wa National Army (WNA) are also actively involved in heroin refining activities. Although the SUA still remains the dominant refining group along the Thailand/Burma border, its position is being threatened by the BCP/3rd CIF/WNA coalition whose share in the narcotics business has continually expanded at the expense of the SUA.

In the British colony of Hong Kong, Malaysia, and some other Southeast Asian countries, heroin base and, to a lesser degree, morphine are converted into number 3 heroin in local laboratories. In some instances, small amounts of number 4 heroin are being converted to number 3 heroin in Hong Kong.

Trafficking Trends: During 1987, the BCP and its allied insurgent groups continued to strengthen their hold on all phases of drug production and trafficking along the Burma/Thailand border. At the same time, the BCP's main rival, the SUA, has come under increased pressure from not only the BCP and its allies, but also from both Burmese and Thai Government operations. Although the SUA is still the dominant trafficking group along the Burma/Thailand border, its position is rapidly becoming less tenable.

Although Thailand remains the major conduit for opiate products destined for international markets, enforcement pressures on trafficking organizations in Thailand have resulted in an increase in the use of alternate routes. One route, which has been used for a number of years and is becoming increasingly popular, is through India. India also continues to be a major supplier of precursor chemicals used in the heroin refining process. In the opposite direction, China is emerging as a route for opiates destined for Hong Kong and other countries.

From Thailand, opiate products are frequently smuggled directly out of Bangkok via couriers or air and vessel cargo shipments.

A large portion of these opiates are also transported across the Thailand/Malaysia border via both sea and land routes. Although Malaysia consumes a large portion of these products in the form of number 3 heroin, some drugs are transshipped to other countries.

Hong Kong, and to a lesser extent, Singapore and Japan are used as transshipment points for Southeast Asian heroin destined for the United States and other consumer nations.

Although Hong Kong is not a consumer of number 4 heroin, seizures of number 4 heroin have increased. There is evidence that small amounts of number 4 heroin are being converted back to number 3 heroin for local consumption, but most of this form of heroin is for export. Unconfirmed estimates indicate that much of this exported number 4 heroin is destined for the United States.

Southeast Asian heroin seizures in the United States dramatically increased in 1987. About 240 kilograms of Southeast Asian heroin were seized in 1987 compared with 117 kilograms seized in 1986. Most of these seizures were made in New York, in which an estimated 40 percent of the available heroin is believed to be from Southeast Asia. Some of the larger seizures involved cargo

shipments. Small amounts of opium are still being seized, primarily from mail parcels sent by Lao refugees in Thailand to friends and relatives in the United States.

Drug Control Efforts: During 1987, a total of approximately 16,300 hectares of opium poppy were eradicated in Burma. Of this amount, approximately 9,200 hectares were destroyed through aerial spraying. In addition to conducting an opium poppy eradication campaign, the Burmese Army launched a number of significant operations against refining sites, narcotics caravans, and insurgent bases.

In Thailand, an estimated 1,600 hectares of opium poppy were destroyed through manual eradication. In conjunction with eradication, the Thai Government has maintained an active enforcement program against narcotics traffickers. A large part of their enforcement activities involves the interdiction of precursor chemicals destined for refineries located along the Burma/Thailand border, and the destruction of a number of these refineries. During the first nine months of 1987, a total of nine heroin refineries were destroyed in Thailand.

In other countries, such as Malaysia and Singapore, tough antinarcotics laws are actively enforced. Mandatory death sentences are frequently handed down for drug offenses.

Developments in Source Countries - Southwest Asia

Opium Production: Southwest Asia continued to be one of three reservoirs of opium in the world. In 1987, between 735 and 1,360 metric tons of opium were produced in Afghanistan, Iran, and Pakistan (see Figure 17). Much of the opium was consumed in those countries, but a large quantity was refined into heroin for illicit use worldwide.

Figure 17

Opium Production -- Southwest Asia, 1984-1987
(metric tons)

	1984	1985	1986	1987
Afghanistan	140-180	400-500	500-800	400-800
Iran	400-600	200-400	200-400	200-400
Pakistan	40-50	40-70	140-160	135-160*
Total	580-830	640-970	840-1,360	735-1,360

*This estimate uses yield factor of 14.82 kilograms per hectare, down from a factor of 19.76 used in previous years' estimates. The reduced value reflects Pakistani assessments of the impact of poor weather in the 1986/1987 season. Other U.S. officials believe yields may have been in the 20 kilogram range, which would result in a higher estimate of production.

The 1987 opium poppy harvest in Afghanistan yielded approximately the same quantity of opium as in 1986 (see Figure 17). Afghanistan has no narcotics control program and does not ban opium poppy cultivation.

Iran has antinarcotics laws, but no narcotics control program; the Iranian media, however, repeatedly reported narcotics interdictions by Iranian authorities. In early December 1987, it was reported that about one ton of opium was confiscated. Despite Iranian Government statements to the contrary, U.S. officials believe that 200 to 400 metric tons of opium were produced in 1987.

In 1987, Pakistan continued its efforts to reduce the illicit opium harvest by introducing aerial spraying. Despite increased enforcement effort and adverse weather conditions in the growing areas, the 1987 opium production figure remained at about the 1986 level (see Figure 17). This result may be due to an increased domestic demand which probably caused an increase in the cultivation area. The Government of Pakistan, however, announced that it intends to achieve zero opium production by 1990.

The Indian Government reemphasized its commitment to controlling the legitimate opium industry. There is believed to be disagreement, however, among government officials about the amount of diversion which admittedly is occurring. Diversion figures range from 5 to 10 percent of the total production. In order to remain a licensed opium producer, a farmer must meet a minimum yield requirement set by the Indian Government. The lower the yield requirement the greater the chance that a farmer can overproduce and sell some opium illicitly. Significantly reduced yield requirements in 1987 due to unfavorable weather conditions in the licensed growing areas, together with reports of opium poppy cultivation in nontraditional growing areas, might indicate an overall increase in the availability of illicit opium.

Opium poppy cultivation in Lebanon's Bekaa Valley continued on an estimated 4,000 hectares or more in 1987.

Consumption: The number of heroin addicts in Pakistan grew from virtually zero in 1980 to at least 300,000 in 1985, according to the Pakistan Narcotics Control Board. The heroin addict population continued to increase in 1986, reaching an estimated 660,000. The number of opium addicts seems to have decreased slightly to

about 260,000. Awareness of and attention to the heroin problem by the public, the media, and the Government of Pakistan continued to increase in 1987 and demand reduction efforts were broadened. Treatment facilities, however, remained inadequate. Efforts continued to train private physicians and social workers in drug abuse treatment, and a drug orientation curriculum for use in schools has been developed.

Although India has a large opium-using population, estimated at 3 to 5 million, heroin addiction, nearly unheard of only a few years ago, has been increasing. Authorities reportedly estimate a heroin user population of approximately 250,000 to 700,000.

Drug use data for Iran and Afghanistan are difficult to obtain. In the past, Iran had an estimated 100,000 heroin addicts, and about 500,000 opium users. In Afghanistan, there were believed to be 100,000 to 125,000 chronic opium users and a small but growing number of heroin smokers.

While opium use in Egypt was significant in 1985 and 1986, heroin use, considered insignificant before 1984, increased sharply in 1985 and remained at high levels in 1987.

Laboratories/Refineries: Heroin laboratories in Pakistan remained concentrated in the tribal areas of the North-West Frontier Province (NWFP), primarily the Khyber Agency. In 1985, six functioning refineries were seized by law enforcement officials; another 23 laboratories in the Khyber Agency, NWFP, were surrendered under governmental pressure. While the 1985 removals were significant, the number of laboratories probably increased in 1986 because the Governor of the NWFP and the Political Agent of the Khyber Agency were unwilling to use force against the laboratory operators. In 1987, preliminary figures indicated that 21 heroin laboratories were surrendered to government officials. No change in the surrender policy, which is not considered to be as effective as it could be, is expected in the near future.

Heroin laboratories also were located in Afghanistan and Iran. The principal area of laboratory activity in Afghanistan was located in Nangarhar Province, which adjoins Pakistan's NWFP. In the past, lesser concentrations were found in Helmand Province in the south and near the Iranian border in the southwest. Heroin refined in these laboratories was usually exported. Iranian

opiate refineries reportedly were active in Kurdestan near the Turkish border, as well as in or around the cities of Tabriz and Zahedan.

During 1987, clandestine heroin conversion continued on a moderate scale within India, although no heroin laboratories were seized. There was, however, the reported seizure of a morphine laboratory. Most of the refineries used raw opium gum or morphine base obtained in India for production into finished heroin. Heroin base for other Indian laboratories came from Pakistan and Afghanistan.

It is likely that refineries in the Bekaa Valley and in northwestern Lebanon processed locally produced opium as well as opiates from Southwest Asia. A large portion of this heroin was destined for the United States.

In 1987, three laboratories were detected and destroyed in Turkey by police officials, revealing heroin refining activities in that country. Generally, Turkish heroin laboratories, so-called kitchen laboratories, are primitive and portable and often are set up to produce no more heroin than is required for a single transaction.

Trafficking Trends: Most of the opium and heroin produced in Afghanistan was exported to or through Pakistan or Iran. Iran continued to be a net importer of opiates. Heroin seizures in Pakistan for the first nine months of 1987 were reported to be an estimated 2.3 metric tons. This points to a possible decrease in the yearly seizure figure, as in 1986, a reported 4.5 metric tons were seized. In comparison, opium seizures significantly increased from 2.7 metric tons in 1986 to 3.4 metric tons for the first nine months of 1987. Major Pakistani traffickers were active in Southwest Asia, the Persian Gulf, Europe, and North America.

Large amounts of heroin produced in Pakistan, Afghanistan, and, to a lesser extent, the Golden Triangle continue to enter India. Preliminary figures for 1987 reflect that more than 2.6 metric tons of heroin were seized. Heroin is imported into India via the Rajasthan and Punjab borders with Pakistan. Individual seizures effected at this border frequently are in the multi-hundred kilogram range. Large seizures also occurred in Bombay and the surrounding area in 1987. The heroin seized was frequently destined for onward smuggling to western countries.

Turkey was used as a major transshipment center for opiates, primarily from Southwest Asia. These opiate products were then smuggled through Bulgaria and Yugoslavia to western Europe and/or the United States. Reportedly, some of these opiates transited southern Turkish seaports or were reportedly smuggled along traditional land routes to Syria and Lebanon with the ultimate destination of the United States and Europe.

The 1987 total heroin seizures for Egypt are expected to have decreased as compared to 1986 figures. Based on Egyptian seizure statistics, less heroin appears to have been transshipped through Egypt, while heroin destined for Egypt seems to have increased.

Drug Control Efforts: During 1987, the Government of Pakistan amended the Dangerous Drug Act of 1930 and included a provision for asset seizure. These assets include real estate, stock, or money derived from drug trafficking. A Pakistani court ruled that a Pakistani national who conspires to commit a narcotic offense in the United States may be extradited to the United States. Parliament passed a so-called speedy trial law which was designed to eliminate delays in the prosecution of narcotics cases. The Government of Pakistan is also actively pursuing programs to eliminate opium poppy cultivation. During 1987, opium poppy fields were sprayed with the herbicide 2,4-D.

In 1987, the Indian Government continued to implement the asset seizure provisions of the 1985 Narcotic Drugs and Psychotropic Substances Act. The Government also established a reward system as encouragement for enforcement officials to continue to make seizures of illicit drugs. Finally, the Indian Narcotics Control Bureau plans to enlarge its staff in the near future by over 300 percent to aid enforcement efforts.

Vigilant Turkish law enforcement efforts resulted in the seizure of more than 1.5 metric tons of heroin and morphine base. As a result of increased cooperation with other European law enforcement agencies, several cases were pursued jointly. The licit opium poppy cultivation in seven provinces and the concentrate of poppy straw production at the Bolvadin factory in Turkey remained under the control of the Turkish Government; no diversion was reported.

In the spring of 1987, the Syrians who control the Bekaa Valley conducted an operation to eradicate opium poppies; however, the results were negligible.

DRUG MONEY

The illicit drug trade is a multibillion dollar criminal enterprise fueled by the international demand for illicit drugs. Cash is the breath and life blood of drug distribution networks. Traffickers and their financial advisors are well aware of both domestic and international efforts of law enforcement authorities and legislators to identify and seize illegally obtained assets generated by their criminal activities. Consequently, they employ a myriad of techniques to covertly transfer large amounts of cash, both domestically and internationally. They must also disguise the origin and ownership of profits and assets.

While the varied cash transfer techniques are primarily utilized to frustrate detection by law enforcement agencies, secondary reasons would include the protection of assets from rival organizations or other criminal groups as well as to project an image of legitimacy to those profiting from the drug trade.

Southern Florida, specifically Miami, has been the U.S. focal point for the importation and distribution of cocaine and marijuana. California, New York, and the Southwest have principally been associated with heroin and marijuana importation.

These areas were also the centers for the collection and laundering of monies associated with these activities.

While southern Florida remained the center for drug money laundering activities in the United States in 1987, the importation and distribution of cocaine expanded to the Southwest. As importation and distribution points change, so does the flow of money as evidenced by the increase in the number of cash seizures in the Los Angeles area. Likewise, traditional metropolitan drug distribution areas, such as New York, and emerging areas, such as Houston, produced monies which also needed to be moved.

There are virtually millions of dollars in illicit revenue in the United States at any given time which require laundering. This process can be accomplished anywhere, but because of previous success, it is routinely accomplished in major metropolitan areas. The domestic movement of funds is handled via air or land routes. Several years ago, State police organizations, concerned about the impunity with which drug traffickers transported bulk quantities of drugs and cash, initiated an aggressive and ingenious program of vehicle stops. Vehicles were stopped by virtue of probable cause and searched through passenger/driver consent. Many drug and cash seizures resulted. As a general

rule, multikilogram drug seizures were effected from traffic going in one direction, and cash seizures from traffic going in the opposite direction. Money and drugs continued to be seized via this method in 1987.

Money was also transported domestically via commercial airlines, as evidenced by the millions of dollars in cash seizures made at domestic airports. The greatest number of seizures was made at the Los Angeles International Airport, with seizures also effected at JFK Airport, the Atlanta International Airport, and others.

Although against company policy, commercial transport companies such as DHL and Federal Express experienced an increase in attempted currency transfers, originating primarily from New York, Miami, and Los Angeles. Information also indicated that in addition to U.S. currency, monetary instruments such as checks and money orders were also shipped via these companies. In one instance, \$76,000 in cashier's checks and money orders were shipped from California to Florida via Emory Express. In addition, the U.S. Postal Service reported an apparent increase in attempts by traffickers to ship money via Express Mail.

Drug monies were also moved through legitimate financial institutions in the form of cashier's checks, money orders, wire transfers, and checks drawn on corporate or personal accounts. These transactions were often disguised to resemble legitimate business transactions or were carried out by the use of fictitious names. Smurfing remained popular in 1987. Smurfing involves money couriers traveling to specific areas to pick up drug profits and then purchasing cashier's checks in denominations of less than \$10,000, frequently in nominee names, from several different banks. Thus, traffickers avoided the U.S. Treasury Department reporting requirements.* These checks were then physically conveyed or mailed to an individual who deposited them into bank accounts. Once deposited, the money was easily transferred to another domestic or foreign financial institution. Smurfing not only involves cashier's checks, but money orders as well. However, because of the relatively low maximum denomination limits on money orders, large numbers must be purchased. Avoiding the cash transaction reporting requirement was also synonymous with structuring. Structuring involves couriers arriving in banks with cash and depositing the cash in increments of less than \$10,000 into the same bank account.

*Provisions of the U.S. Bank Secrecy Act require that financial institutions report currency transactions in excess of \$10,000. This act also requires the reporting of the movement of over \$10,000 in currency or negotiable instruments by individuals into or out of the United States.

Although some of the capital generated by drug trafficking remained in the United States, a large percentage of the profits were laundered and transmitted to countries with strict bank secrecy laws. Wire transfer was just one of the methods used to move these profits to a safe haven.* Drug profits in the form of currency or negotiable instruments were sent through the international mail or, as mentioned previously, unwittingly by professional courier services. Private aircraft, vessels, and couriers utilizing commercial carriers physically transported money from one location to another. Commercial air cargo is also a familiar method employed to smuggle the currency out of the United States. The safe haven location receiving the profits is, for the most part, related to the geographic location of the activity and the home of the trafficker.

Substantial amounts of the funds remaining in the United States must be immediately available for a variety of recurring expenses (attorney fees, salaries, travel, hired guns). Cash must also be available to support the expensive standard of living of many drug traffickers. Race horses, cars, jewelry, real estate, and legitimate businesses are only some of the assets purchased by these traffickers.

*Safe haven - a country perceived by the drug trafficker to be a secure location to invest or launder proceeds.

The banking systems in the Caribbean and Central America continued to be primary recipients of proceeds associated with Latin American cocaine and marijuana trafficking and, to some extent, Mexican heroin trafficking. The Republic of Panama continued to be the Latin American country most frequently used for these activities. Panama's appeal is attributed to its ideal location, banking and commercial secrecy laws, relative economic stability, and its use of the U.S. dollar as paper currency. The banking industries in the Bahamas and Netherlands Antilles also continued to be utilized to some extent by Colombian drug traffickers.

Antigua, Anguilla, Montserrat, and other Caribbean territories are also locales for drug money activity. The Cayman Islands continued to play a major role in the laundering of drug profits despite the 1984 U.S.- U.K. Agreement for Cayman Islands Narcotics Assistance. Due in part to this agreement, members of several Latin American trafficking organizations were reportedly reluctant to deposit currency in Caymanian banks. However, 1987 investigative activity reflects a continued flow of illicit cash to Caymanian banks. In general, some of the capital from drug trafficking remains in these Caribbean safe havens; however, some of the funds are transferred to secondary holding sites,

such as Switzerland and Luxembourg. Since the enactment of the agreement relative to the Cayman Islands, records have been received pursuant to approximately 90 requests. With very few exceptions, the records reflected the accounts were strictly laundering accounts, and the money was transferred out of the accounts quickly.

Financial centers in Europe and the Middle East were the primary recipients of drug proceeds associated with Southwest Asian heroin and hashish trafficking. In Europe, Switzerland and Luxembourg were probably the most significant recipients of drug monies; Liechtenstein and the Channel Islands also were important depositories. Other locales, such as Gibraltar and Andorra, surfaced as potential laundering sites. Information surfaced suggesting that Luxembourg gained ground in 1986-87 in terms of foreign deposits (estimated \$160 billion), sharing second place with Switzerland behind the Cayman Islands. How much of this money is illicit is unknown. In the Middle East, banks in Dubai, United Arab Emirates have become the financial institutions of choice for Pakistani and Indian heroin and hashish traffickers.

Hong Kong remained the preferred financial center in the Far East. When Hong Kong reverts to the control of the People's

Republic of China in 1997, it is speculated that billions of dollars, both legitimate and illicit, will move from Hong Kong to Singapore banks. Singapore has strict bank secrecy laws and houses over 200 foreign banks. This, coupled with its geographic location and political stability, makes Singapore one of the most attractive financial centers of the world.

The Far East and the Middle East are also the centers for underground money transfer systems, which rely on a chit* or some variation thereof for payment. These systems remained popular vehicles for the international movement of funds. These ancient systems predate modern banking and are integral parts of most well-established Far Eastern and Middle Eastern smuggling organizations. A network is often made up of members of a single family, and the trust inherent in the system precludes the necessity of keeping a complete set of records. In this way, proceeds are concealed until the money finally reaches legitimate financial institutions where it is protected by bank secrecy laws.

Since the enactment of effective asset seizure/forfeiture legislation, and most recently, the Money Laundering Control Act of 1986, U.S. agencies have trained hundreds of investigators and prosecutors. The results speak for themselves. For example, in

*A voucher or promissory note given by a money changer to the customer for receipt of payment.

May 1987, the Drug Enforcement Administration concluded a multi-agency undercover money laundering investigation, Operation Pisces. This two-plus year investigation resulted in the arrest of over 400 defendants, the seizure of over 20,000 pounds of cocaine, and the seizure of \$80 million in assets. This was the second consecutive year that DEA seized trafficker assets valued above its operating budget; over \$504 million in assets were seized. Also noteworthy is that during FY 87, over \$50 million in trafficker assets were transferred to those State and local law enforcement agencies which assisted DEA in its investigations. The successes realized by DEA, the FBI, U.S. Customs Service, and the Department of State and local law enforcement agencies are receiving positive international response with respect to drug-related asset forfeiture initiatives.

Concern over the magnitude of the money generated by the illicit drug trade has led to the negotiation or signing of numerous treaties and informal agreements allowing for the exchange of financial records. This information is crucial for the successful prosecution of drug traffickers. The United States has Mutual Legal Assistance Treaties, or is in the process of negotiating treaties with several countries, including Switzerland, Italy, the Netherlands, the Bahamas,

and Turkey. These treaties provide a vehicle for obtaining testimonial and documentary evidence concerning banking information in investigations of certain criminal offenses.

The treaty between the United States and Switzerland has proven to be an effective tool for seizing and forfeiting drug proceeds. New legislative initiatives, such as those enacted in the Republic of Panama and the United Kingdom, are also effective. The Republic of Panama enacted new antidrug legislation in 1986 which was utilized for the first time in May 1987. The law basically allows the government to seize bank accounts based on information from a foreign country and provide banking records to that country.

As a result of the law, and a request by DEA, the Panamanians froze over \$14 million in drug profits from numerous bank accounts based on information provided through Operation Pisces. The government is in the process of forfeiting approximately \$12 million. Copies of the bank records have been provided to DEA for review. The law has since been utilized in several other instances.

In 1986, the United Kingdom also passed a new drug bill which allowed the government to provide copies of bank records to foreign countries, based on criminal charges against the account holder. The law also allows the government to assess criminal fines against a drug trafficker in the amount of his assets. The United States has received financial records on at least three occasions from the United Kingdom. The United Kingdom, the Republic of Panama, and other countries have recognized asset removal and money laundering legislation as both a deterrent to drug trafficking and also as a source of revenue.

In addition to the United Kingdom and Panama, Finland, Ecuador, Egypt, Costa Rica, Venezuela, Malaysia, and Thailand are just a few countries which have adopted some form of asset removal or money laundering legislation. Other countries are in the process of studying the asset seizure possibilities.

It is significant to note that the international community is becoming increasingly aware of the extent of the illicit drug trade and its potential for dramatic adverse impact on the world community, our people, our governments, and our economies. As previously stated, cash is the breath and life blood of the drug

trafficker. A strong international commitment to remove the profits from the trafficker and render the organization impotent exists and that commitment was strengthened in 1987.