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NNICC

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NATIONAL NARCOTICS INTELLIGENCE CONSUMERS COMMITTEE (NNICC)

THE NNICC REPORT 1992

The Supply of Illicit Drugs to the United States

The NNICC Report is produced annually for the use of NNICC member agencies and other interested agencies of the Federal Government. The style, format, coverage, and content are designed to meet their specific requirements. Comments and queries are welcome and may be addressed to the:

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September 1993

PREFACE

The NNICC Report 1992 is a comprehensive assessment prepared for the Federal Government of the worldwide illicit drug situation. It is the product of a cooperative effort by those Federal agencies with drug-related law enforcement, foreign and domestic policy, treatment, research, and intelligence responsibilities. It is based on the best data currently available and on the combined expertise of those agencies. This document is the 15th assessment prepared by the National Narcotics Intelligence Consumers Committee (NNICC).

The NNICC was established in April 1978 to coordinate the collection, analysis, dissemination, and evaluation of strategic drug-related intelligence, both foreign and domestic, that is essential to effective drug policy development, resource deployment, and operational planning. The NNICC membership is comprised of representatives 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, and Department of the Treasury. The Office of National Drug Control Policy is an observer. The Assistant Administrator for Intelligence of the Drug Enforcement Administration serves as Chairman.

In recent years, the NNICC has reviewed and updated the methodologies it uses to estimate illicit drug production. This continuing effort has resulted in a number of revised cultivation and production estimates for previous years. Since illicit cultivation, production, and distribution of illicit drugs are hidden from view, all too often there are little reliable data upon which to base those estimates.

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

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David L. Westrate Chairman

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EXECUTIVE SUMMARY

The growing, processing, smuggling, and distribution of illicit drugs (controlled substances) were at unacceptably high levels during 1992. Yet, the focused efforts of law enforcement agengies, drug treatment centers, and drug educators resulted in the disruption of several key criminal organizations and a continued decline in the reported use of major illicit drugs such as cocaine and marijuana in the United States.

One notable event that occurred during the year was the U.S. trial and conviction of Panamanian General Manuel Noriega on drug traffickingcharges. Another incident to make the headlines was the July escape of Pablo Escobar, principalleader of the Medellín Cartel, from prison in Colombia. He remains at large and is engaged in a terror campaign against the Colombian Government.

COCAINE

Cocaine hydrochloride (commonly called cocaine) was readily available in all major, U.S. metropolitan areas. The number of reported past-month users of this drug in the United States dropped from 1.9 million in 1991 to 1.3 million in 1992. Intensified international enforcement activities late in 1991 led to a decrease in the availability of cocaine during the second quarter of 1992. Temporary changes in availability were reflected in both price and purity during the year. However, following a period of adjustment, cocaine traffickers resumed shipping multiton quantities of cocaine to the United States.

Overall, prices remained consistent with those seen in 1991 except for temporary rises in kilogram prices in some areas such as New York City during the second quarter. By midyear, prices fell at the lower end of the range, which is where most transactions among major distributors take place. The average purities of gram and ounce quantities increased slightly from those observed in 1991 while the purity of kilograms decreased slightly. Control over cocaine trafficking to the United States remained primarily in the hands of Colombian criminal organizations. These organizations used traditional routes through Mexico and across the U.S. Southwest border as well as across the Caribbean Sea into southern Florida.

In late 1991, the Colombian Government, in concert with the U.S. Government, brought increased law enforcement efforts to bear against the Cali Cartel. These efforts continued throughout 1992 and included a series of raids against cartel financial interests both in Colombia and abroad.

In September 1992, Operation GREEN ICE, a multilateral financial investigation by law enforcement agencies in eight nations, resulted in 192 arrests including the arrest of seven top cartel money launderers. In conjunction with those arrests, authorities seized more than 1 metric ton of cocaine and \$54 million in cash and other assets, all of which caused a temporary disruption of major cocaine money-laundering activity in the United States, Latin America, and Europe.

Estimated coca leaf production in Andean source countries reached 336,300 metric tons from cultivation of 211,700 hectares. Potential cocaine production from this harvest was approximately 955 to 1,165 metric tons, slightly higher than in 1991.

Cocaine traffickers made increased use during the year of commercial maritime cargo to conceal shipments of cocaine being sent from SouthAmerica to the United States. Authorities in Miami, for example, seized 6.7 metric tons of cocaine that were discovered hidden in a bulk shipment of vegetables from Guatemala.

Cocaine also was transported from South America in general aviation aircraft to staging areas in Mexico and Guatemala. Smugglers generally chose one of three routes: parallel to the coasts of Central America to Guatemala and Mexico, from South America across the Caribbean Sea to the U.S. mainland, or north over Bahamian territorial waters where they frequently airdropped their cargos to waiting vessels. Traffickers also made use of larger aircraft and even tried to purchase some cargo aircraft from former Soviet Bloc nations.

Some nations in northern Africa, such as Morocco and Tunisia, experienced increased violations of their territory or territorial waters by Colombian criminal organizations that were smuggling cocaine in multikilogram quantities to destinations in Europe. Several countries in western Africa also experienced an increase in cocaine trafficking to Europe, especially by Nigerian smugglers.

The trend toward greater division of labor within cocaine trafficking organizations and the development of a defined trafficking "service industry" observed in recent years continued unabated in 1992. Certain smuggling organizations, particularly Mexican groups, specialized in providing transportation and related services to Colombian cocaine organizations. The Mexican groups also engaged in smuggling heroin and other drugs in addition to cocaine. Independent Peruvian and Bolivian cocaine trafficking organizations also grew in capability during the year.

HEROIN

Colombian cocaine traffickers closely associated with Cali and Medellín Cartel interests asserted more control over the cultivation of opium poppies and the production of limited quantities of heroin in Colombia. They also oversaw the distribution of that heroin in the United States. Some of the heroin smuggled from Colombia may have been produced in Lebanon, exchanged by Middle Eastern heroin traffickers in kilogram amounts as payment for Colombian cocaine base that had been shipped to Lebanon.

Colombian heroin traffickers sought a specific market niche on the U.S. east coast, but did not directly challenge Southeast Asian heroin traffickers for dominance. It should be noted that the Colombians have yet to overcome certain heroin production problems. The few heroin laboratories that were seized in Colombia were unable to produce bulk quantities of the drug.

High-purity Southeast Asian heroin dominated the U.S. heroin market. Mexican heroin remained readily available in the West and Southwest. Middle Eastern traffickers shipped Southwest Asian heroin to both Europe and the United States. Although that heroin was available here—principally in the U.S. Northeast and Midwest—reporting suggested that most of the heroin produced in Southwest Asia and the Middle East was consumed in Europe.

Total worldwide seizures of heroin amounted to nearly 23 metric tons. Authorities in the United States seized 1.2 metric tons of heroin; however, there were no multihundred-kilogram seizures to rival those made in 1991.

There were metric ton seizures of opium and morphine base in Southwest Asia late in 1992 and early in 1993. Turkish authorities seized a shipment of more than 1.4 metric tons of morphine base late in December after it had transited by truck through Central Asia from Afghanistan. In another instance, a vessel, reported to be carrying large quantities of hashish and morphine base, was stopped on the high seas between Pakistan and Turkey but was scuttled by its crew before it could be boarded by Turkish authorities. Turkish officials did seize a ship in January 1993, which was found to be carrying 2.7 metric tons of morphine base and heroin.

Worldwide production of illicit opium, from which heroin is derived, has generally increased over the last several years. The NNICC estimates that 3,689 metric tons of opium were produced in traditional source areas. Opium poppy cultivation took place primarily in Southeast Asia (Burma, Laos, and Thailand), in Mexico and Colombia, and in Southwest Asia and the Middle East (Afghanistan, Pakistan, and Iran). In recent years, the potential for significant new areas of cultivation in China, Vietnam, and Central Asia has been reported. A limited amount of illicit cultivation of opium poppies in India as well as diversion of licit Indian opium also may have occurred.

Opium production in Burma, Laos, and Thailand fell slightly. This decline, however, was probably offset

by increases in opium poppy cultivation in China's Yunnan Province. In Southwest Asia, production dropped slightly in Pakistan but rose significantly in Afghanistan. In the Middle East, bad weather and some limited eradication efforts curtailed opium poppy cultivation in Lebanon; however, heroin production—using morphine imported from Southwest Asia—continued L Lebanon.

Opium production in Mexico remained steady at about 40 metric tons, and a negligible amount also was produced in Guatemala. Colombia's burgeoning crop of opium poppies, which can be harvested several times a year, could produce sizeable amounts of opium. Yet, low yields and the inability of Colombian laboratory operators to produce heroin in large quantities considerably lessened the impact of Colombian opium production on world heroin markets. The lack of any regional opium addict population also limited the impact in Colombia. Limited and unconfirmed reporting suggests that opium poppy cultivation also occurred in neighboring countries such as Peru.

Chemicals necessary for heroin production, such as acids and acetic anhydride, are produced in many areas of the globe for legitimate industrial purposes. In spite of international control mechanisms, some of these chemicals were diverted to illicit users. A critical need by some producing countries for hard currency, and corruption in some distribution channels complicated international efforts designed to limit the diversion of chemicals.

CANNABIS

Marijuana is a Schedule I controlled substance made from the *Cannabis sativa L*. plant. It was the most commonly used illicit drug in the United States during 1992. A survey of past-year users showed that 5.3 million people used marijuana once a week or more, and that 3.1 million used it daily. "Current use" of marijuana, defined as any use during the past month, has been steadily declining since 1979 when there were 22.5 million current users. In 1992, only 8.9 million people currently used marijuana orhashish.

Reported rates of use decreased among high school seniors from 36.7 percent of respondents in the 1991

National High School Senior Survey to 32.6 percent in 1992. Annual use continued to decline from 23.9 percent in 1991 to 21.9 percent in 1992, and current use decreased from 13.8 percent to 11.9 percent. Rates of use among eighth graders, however, increased with 11.2 percent admitting to use during their lifetime compared to 10.2 percent in 1991. Annual use increased from 6.2 percent to 7.2 percent.

A significant trend in domestic cannabis cultivation was an effort by growers to enhance the potency of marijuana through the employment of advanced agronomic techniques. The average THC (tetrahydrocannabinol) content of commercial grade marijuana in 1992 was 3.68 percent, and the average THC content of sinsemilla was 8.34 percent, down from 1991's 11.72 percent but still significantly higher than averages in the early 1980s of 3 to 6 percent. Marijuana from a seizure made in Alaska was found to contain a concentration of 29 percent THC, the highest level ever recorded in the United States.

Mexico accounted for most of the foreign marijuana available in the United States, but law enforcement authorities noted a dramatic increase in Colombian, Venezuelan, and, possibly, Jamaican marijuana being shipped to the United States during the year.

An estimated 6,000 to 6,500 metric tons of cannabis were cultivated in the United States last year, of which approximately 3,405 metric tons were eradicated. Total domestic seizures of cannabis and marijuana increased to 347 metric tons compared to 306.6 metric tons in 1991. An increase in the number of indoor, year-round cannabis growing operations was seen. These ranged from several plants to thousands of plants being grown in specially constructed underground sites. Growers also planted cannabis in remote areas out-of-doors.

DIVERSION

Diversion of controlled substances from the legitimate drug distribution system is an ongoing problem. Abuse of these drugs was a major cause of drug-related addictions, medical emergencies, and deaths during the year. Several controlled substances were routinely abused, including narcotic analgesics and

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benzodiazepines, which were the most commonly diverted licit drugs. Often, these drugs were used in combination with illicit drugs, especially cocaine. Methadone distributed to clients of narcotics treatment programs was sold on the street or exchanged for heroin, cocaine, or other drugs.

Diversion of controlled substances was accomplished through illegal prescribing and dispensing, "doctor shopping" and the use of fraudulent prescriptions, and outright theft from legitimate channels. Some drugs, such as Mandrax and steroids, were diverted from foreign sources. An overall increase in the smuggling of legitimately produced controlled substances into the United States can be attributed to the smuggling of anabolic steroids that were diverted from legitimate sources in Mexico and Europe.

DANGEROUS DRUGS

Clandestine laboratories produced most of the illicit dangerous drugs available in the United States. Seizures of clandestine laboratories continued a decline that began in 1990. A total of 332 clandestine laboratories were seized in 1992 compared to 375 in 1991 and 521 in 1990. This decrease was due primarily to the enactment and enforcement of the Chemical Diversion and Trafficking Act of 1988 and related State legislation.

Methamphetamine was the most prevalent clandestinely manufactured controlled substance in the United States. In 1992, most of the large-crystal methamphetamine or "ice" available in the United States was smuggled by ethnic Korean traffickers. Much of the ice methamphetamine—especially popular in Hawaii—was manufactured in clandestine laboratories in Taiwan, South Korea, and the Philippines. Large seizures made by mainland Chinese authorities in 1991 and 1992 confirmed that illicit ice manufacturing also was taking place in China. All samples of ice analyzed by DEA laboratories had purity levels of 90 to almost 100 percent.

LSD availability in retail quantities increased in virtually every State in the Union. Sources of supply were in northern California. The most recent National Household Survey available estimated that over 10 million people, most under the age of 35, have used LSD at least once in their life. Violators overwhelmingly were white males under the age of 30. LSD-related investigations and arrests rose dramatically during the year.

PCP production and trafficking were centered in the Los Angeles metropolitan area. Los Angeles street gangs, primarily the Crips, distributed PCP along with cocaine throughout the country. They posed a particular problem because of their propensity for violence. In the National Household Survey, reported lifetime, past-year, and past-month use of PCP increased.

The popularity of MDMA or "ecstasy" increased during the year and was used at all-night dance parties called "Raves," principally by middle-class youths. There were nine MDMA laboratory seizures in 1992, compared to one in 1991.

The term "controlled substances analogue" is a temporary designation given to drugs—usually, but not always clandestinely produced—that are chemically and pharmacologically similar to substances listed in the Controlled Substances Act, but are not themselves controlled. In terms of the number of users and the extent of distribution, the problem of controlled substances analogues was small when compared to that of heroin, cocaine, and cannabis.

Intensive DEA investigations resulted in three controlled substances analogues being placed into Schedule I of the Controlled Substances Act during 1992, viz.: methcathinone, aminorex, and alpha-ethyltryptamine.

ASSET SEIZURES

In 1992, DEA seized domestic assets worth approximately \$857.3 million. The sum total of assets forfeited to the U.S. Government during the year amounted to about \$442.1 million. Internationally, DEA assisted other nations in seizing about \$53.4 million in assets.

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COCAINE

AVAILABILITY AND ABUSE IN THE UNITED STATES

Availability, Price, and Purity

In 1992, cocaine hydrochloride (commonly known as cocaine) was readily available in all major, U.S. metropolitan areas. International law enforcement operations in 1991, however, led to some short-term price rises early in 1992, and temporary changes in supply and availability on the wholesale level were reflected in corresponding changes in price and purity on the retail level.

Following a short period of adjustment, however, cocaine traffickers once again were shipping multiton quantities of the drug to the United States. Cocaine prices ranged from \$11,000 to \$42,000 per kilogram, nationally. While these prices were consistent with those seen in 1991, there were temporary rises in kilogram prices at the high end of the range in some metropolitan areas such as New York City during early 1992. By midyear, prices had again fallen at the lower end of the range where most transactions among major distributors take place.

In an ironic twist, one effect of increasing law enforcement pressure was to force traffickers to adopt more efficient means of cocaine production. Additionally, estimated coca leaf production reached 336,300 metric tons from a total cultivation of 211,700 hectares. Potential cocaine production in source countries in Latin America was estimated to be from 955 to 1,165 metric tons, slightly higher than in 1991.

The purity of gram amounts in the United States increased to an average of 64 percent from an average of 59 percent in 1991. The average purity per kilogram was 83 percent compared to 86 percent in 1991. Purity averaged 74 percent per ounce compared to 72 percent in 1991.

Cocaine Abuse

The National Household Survey on Drug Abuse for 1992, the latest such survey, showed that the number of past-year and past-month users of cocaine decreased significantly since the peak year of 1985. Statistically speaking, nearly 5 million Americans (12 years of age and older) were reported to have used cocaine in the past year compared to 12.2 million in 1985. However, the number of past-year and pastmonth users remained relatively stable from 1991 to 1992. Among the 5 million past-year users, 642,000 used cocaine one or more times a week compared to 625,000 in 1991. Estimates of daily or almost daily use were not available for 1992; however, the number of such users was reported to be only 278,000 in 1991 compared to 336,000 in 1990.

According to the 1992 National High School Senior Survey on Drug Abuse, cocaine use continued to decline among high school seniors. Yet, among eighth-grade students responding to the survey, lifetime use of cocaine increased to 2.9 percent from 2.3 percent in 1991, and past-year use increased from 1.1 percent to 1.5 percent.

Drug Abuse Warning Network (DAWN) [see the Glossary] reports showed that the estimated number of cocaine-related emergency room incidents, which had increased fairly steadily for several years, declined during fiscal year 1990. That downward trend reversed itself, however, in FY 1991 and stabilized at fairly high levels in FY 1992.

Cocaine use among recently booked male arrestees, as reported by the National Institute of Justicesponsored Drug Use Forecasting System, was high in Philadelphia (63 percent), Manhattan (62 percent), Atlanta (58 percent), Chicago (56 percent), Miami (56 percent), Cleveland (53 percent), and Los Angeles (52 percent). Cocaine use among female

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COCAINE INDICATORS

Cocaine Prices per Kilogram					
Metropolitan Area	1989	1990	1991	1992	
National Range	\$11,000-\$35,000	\$11,000-\$40,000	\$11,000-\$40,000	\$11,000-\$42,000	
Chicago	\$19,000-\$25,000	\$18,000-\$35,000	\$18,000-\$30,000	\$17,500-\$37,000	
Los Angeles	\$14,000-\$20,000	\$14,000-\$32,000	\$12,000-\$28,000	\$11,000-\$20,000	
Miami	\$16,000-\$22,000	\$16,000-\$25,000	\$14,000-\$25,000	\$13,500-\$25,000	
New York	\$17,000-\$25,000	\$20,000-\$38,500	\$14,000-\$29,000	\$12,500-\$35,000	

Cocaine Purities (percent)				
Unit Size	1989	1990	1991	1992
Kilogram	87	. 80	86	83
Ounce	75	58	72	74
Gram	66	54	59	64

Cocaine Laboratory Seizures in the United States				
ME SA MANUNCI MENNYA MANJANA M	1989	1990	1991	1992
Number of Seizures	: 1	4	4	4

arrestees was high in Philadelphia (67 percent), Cleveland (66 percent), Washington (64 percent), Kansas City (62 percent), St. Louis (62 percent), and Detroit (62 percent).

TRAFFICKING

Routes

Colombian criminal organizations (cartels) maintained primary control over cocaine trafficking to the United States. These organizations transshipped their cocaine by way of traditional routes through Mexico to the U.S. Southwest border and across the Caribbean Sea to southern Florida. Primary cocaine importation points were to be found in Arizona, southern California, southern Florida, and Texas. Colombian cartels distributed multihundred- and multithousand-kilogram quantities of cocaine, primarily in Houston, Los Angeles, Miami, and New York City. The Cali Cartel controlled most of the cocaine brought into New York City, shipping it from staging sites in California, Florida, and Texas. Stockpiling occurred at staging sites in the Southwest, supplied by Mexican smugglers.

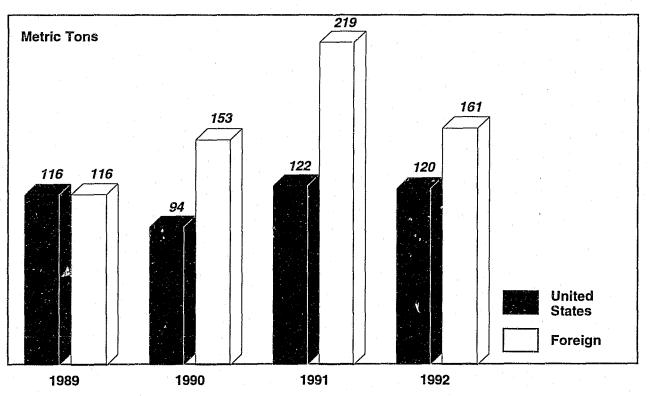
Proceeds from the sales of cocaine were collected from cities and towns all over the country and consolidated in several cities for pick-upandtransfer. The primary pick-up points were located in Houston, Los Angeles, Miami, and New York City.

DEA and U.S. Border Patrol seizures early in the year confirmed that the Southwest border was regularly crossed by traffickers who were transporting numerous, multihundred-kilogram cocaine shipments. Although the use of less congested entry points was common, traffickers also decreased the size of their shipments to 10 to 50 kilograms each, by midyear.

During the first four months of 1992, the U.S. Customs Service seized three multiton cocaine shipments near New Orleans. One of these, a February seizure of more than 1.5 metric tons of cocaine bound for New York City, was the second largest ever at the Port of New Orleans.

In late 1991, the Colombian Government, in concert with the United States Government, focused increased attention on the Cali Cartel. This targeting continued through 1992 with a series of raids against Cali financial interests worldwide. But, as in the past, cartel traffickers shifted their smuggling patterns following any major seizures. They were only temporarily affected by interdiction of their transportation pipelines, taking an average of only 10 to 14 days to displace, to reestablish, and once again, to meet wholesale demand for their products. This proven capability confirmed their continued use of imaginative concealment methods and their use of multiple delivery systems in order to thwart law enforcement efforts.

As noted above, the United States–Mexican land border was a principal area for the importation of cocaine; however, traffickers, who faced increased drug enforcement operations there and in the western Caribbean as well, shifted their smuggling routes. Those route shifts included greater use of the eastern Caribbean and the eastern Bahamas, as well as direct importation routes into the eastern United States, a trend highlighted by the July seizure of 5.2 metric tons of cocaine in Panama that was being shipped to Baltimore, Maryland. In addition to importing cocaine directly into the eastern and northeastern United States, traffickers also attempted to ship quantities of the drug, first to Canada and Europe, and from there to the United States.



WORLDWIDE COCAINE SEIZURES

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There also was a marked increase in the use of Central America as a staging or transshipment area for cocaine being smuggled to the United States. This was highlighted by the April seizure of 6.7 metric tons of cocaine in Miami that had been concealed in frozen broccoli, which was then transshipped through Guatemala, and by the July seizure in Panama noted above.

Shipments of cocaine were sent from South American source countries to Central American countries by land, air, and sea. From Central America, the cocaine was transported to the United States, either directly or through Mexico. In some instances, cocaine traffickers used Central America and the Caribbean as the only way points, intentionally bypassing Mexico due to their dissatisfaction with some Mexican polydrug smuggling groups.

Domestic cocaine seizures reported by the Federalwide Drug Seizure System (FDSS) amounted to 120 metric tons compared to 127.6 metric tons in 1991. Significant seizures also occurred overseas in Colombia, Guatemala, Mexico, the Caribbean, and elsewhere. Total foreign seizures of cocaine exceeded 160 metric tons.

Traffickers used the United States as a transit country for cocaine being sent to Europe and the Far East. It was reported that some Southwest Asian heroin organizations sent heroin to the United States where their associates used the proceeds from its sale to purchase cocaine for export to Europe.

Four cocaine conversion laboratories were seized in the United States during the year, two in New York City, one in California, and one in Florida. It is probable that South American traffickers, who were having difficulty obtaining chemicals, may have resorted to shipping cocaine base to the United States for final processing.

Methods

There was continued use of commercial containerized cargo vessels to smuggle bulk quantities of cocaine into the United States during the year. Cocaine was concealed in these vessels in a myriad of ways. It was hidden in the walls and support beams of cargo containers, within legitimate bulk cargo such as coffee, and within or attached to the vessels themselves.

Cocaine smuggling organizations also relied heavily on the use of non-commercial maritime vessels. For example, fishing vessels were used to carry cocaine directly to the United States as well as to transfer the cocaine to smaller boats off the U.S. coasts.

Traffickers who used air transport often changed their routes in an effort to evade deployed U.S. radar and military aircraft. Colombian traffickers increased their night flying operations and used airdrops to reduce their ground exposure time. Some smugglers, including those associated with the Cali Cartel, felt it less risky to airdrop shipments to ground or maritime crews in Central America and the Caribbean than to land in Mexico. The pref...ed air smuggling technique within The Bahamas was to make airdrops to waiting boats.

Decoy aircraft were flown in the Caribbean in order to divert government interdiction assets from the area of actual smuggling attempts. South American traffickers acquired large jet and other cargo aircraft, which have increased cargo capacity and could overcome the limited flight range of smaller aircraft. It also was reported that cocaine trafficking organizations were very concerned about aircraft losses and were seeking methods to acquire aircraft that could not be seized subsequent to purchase.

DEA and the U.S. Customs Service reported that they encountered traffickers who were smuggling liquid cocaine¹ into the United States concealed in water tanks of mobile homes and recreational vehicles. Some smugglers traveled in "family groups" in order to avoid suspicion. Mexican trafficking groups hired non-Mexicans to transport cocaine from the United States–Mexican border to Los Angeles. Some cocaine smuggling organizations recruited "Anglo" drivers and women. Traffickers also continued their attempts to bribe port officials to allow drug shipments into the United States from Mexico.

¹Liquid cocaine is cocaine hydrochloride dissolved in water or alcohol.

Law enforcement officers intercepted animal caravans and backpackers who were attempting to transport multihundred-kilogram quantities of cocaine across the United States–Mexican border. Trafficking organizations attempted to protect these smugglers by deploying scouts with radios to monitor law enforcement patrols.

In the United States, traffickers shipped cocaine via commercial and private vehicles, trains, buses, airlines, and the U.S. Postal Service. Concealed compartments within vehicles were commonly encountered. Some organizations used rental vehicles. Traffickers who used tractor-trailers employed several methods to circumvent law enforcement patrols. They made extensive use of fake gas tanks as well as elaborate hidden compartments. Their cocaine often was hidden within legitimate shipments of produce such as onions and watermelons.

Distribution

Hispanic organizations, particularly Colombian and Mexican groups, dominated wholesale cocaine distribution within the United States. The Medellín and Cali Cartels maintained operational cells in many U.S. cities in order to control their wholesale distribution networks. A great diversity of ethnic groups was involved in domestic trafficking at all levels. Organized groups of Cubans, Dominicans, Jamaicans, and Mexicans, as well as Afro-American gangs, provided retail distribution in major U.S. cities. Mexican groups were more active in the Midwest; Mexican organizations often cooperated with Colombians to transport cocaine to Chicago. Southeast Asian groups, including Chinese, Filipino, and Vietnamese gangs, distributed kilogram amounts of cocaine in the West.

The Cali Cartel's methods of operation in the United States were very sophisticated and completely compartmentalized. U.S. bases of operation were comprised of multiple cells. Cell managers received their orders directly from Colombia and each manager operated independently of other cells. They used the latest in communications technology, such as computers, pagers, and facsimile machines. Cellular telephones often were bought in bulk and then discarded after short periods of use.

TRANSIT REGIONS

Mexico and Central America

As noted above, drug-laden flights from Colombia to Mexico were common in 1992. The joint United States-Mexican Northern Border Response Force (NBRF) pushed traffickers out of staging areas in northern and central Mexico, forcing them to relocate in southern Mexico and northern Guatemala. The NBRF seized 28.7 metric tons of the 38.8 metric tons of cocaine seized countrywide during the year. Some 17 airplanes and 62 vehicles were confiscated, and 96 suspects were arrested. Intelligence provided by the NBRF led to the seizure of an additional 55 metric tons of cocaine and 38 aircraft, and the arrest of 50 suspects in Central American countries.

The Salinas administration continued its "Mexicanization" of counter-drug efforts, stressing its independence of American support. Although drug-related violence in Mexico increased during the year, Mexican officials nonetheless arrested the reputed heads of the Juárez Cartel. Three other major Mexican traffickers, Rafael CARO-Quintero, Miguel Angel FELIX-Gallardo, and Ernesto CARRILLO-Fonseca, were transferred to a maximum security Federal prison from smaller, less secure jails. Javier PARDO-Cardona, a high ranking member of the Medellín Cartel, also was arrested. In addition, the Mexican Army prosecuted several of its high-ranking officers for their collusion in a 1991 ambush in which seven Mexican police officers were killed.

Transshipments of cocaine through **Guatemala** increased compared to previous years. Interdiction of cocaine traffickers by Operation CADENCE² forces led to the seizure of 9.6 metric tons of cocaine and 11 aircraft. U.S. authorities seized another 6.7 metric tons of cocaine in Miami in April. The cocaine was concealed in a shipment of broccoli that had been sent from Guatemala. In July, another 3 metric tons of cocaine was seized in Guatemala City.

Many of the hundreds of uncontrolled landing strips in Guatemala were used to refuel smuggling aircraft from Colombia and to offload cocaine for later

 $^{^{2}}$ CADENCE is an acronym for Central American Drug Enforcement Center.

shipment to the United States. Guatemalan authorities extradited the former mayor of Zacapa and two of his associates to face drug charges in the United States.

Belize also was used as a cocaine transshipment point. Belize has a long coastline, numerous cays and waterways, and only limited law enforcement capability. There are over 100 unmonitored landing strips in the country. One indication of an increase in cocaine smuggling there was the number of seizures made during the year. Approximately 810 kilograms of cocaine were seized in Belize, triple that of 1991. In one of the joint operations conducted by the Belize Defense Forces and the police, over 200 kilograms of cocaine were seized, and the police arrested 13 people including four Colombians. DEA established a Country Office in Belize City during the year.

Costa Rica was another transit country for cocaine being shipped north through Mexico to the United States. Costa Rican Judicial Police are a very professional counter-drug force, but they were limited by a lack of resources, even with the assistance of air and maritime units of the Ministry of Public Security, which also were used to perform anti-drug missions. Both coasts of Costa Rica are readily accessible to small pleasure craft and fishing boats, and there are over 200 small, unattended landing strips in the country.

El Salvador's importance as a Colombian cocaine transit country grew in 1992. The government's Executive Anti-Narcotics Unit improved its capabilities, seizing 350 kilograms of cocaine and arresting over 175 suspects. Colombian cartel representatives in El Salvador supervised shipments from Colombia to the United States. Salvadoran criminals benefited from links with drug organizations in Guatemala, Honduras, Nicaragua, and Panama. They also had associations with criminals in the United States who were involved in smuggling illegal aliens, cars, and counterfeit U.S. currency. DEA established a country office in San Salvador in June.

Honduras lies midway between Colombia and the United States. It has a long, virtually unguarded Caribbean coastline. There are also a number of offshore islands that traditionally have been used by smugglers. Smuggling of illicit drugs by aircraft and small boats easily went undetected, and drug shipments were consolidated in Honduras for onward shipment. Nonetheless, the Honduran Air Force aggressively pursued suspect aircraft, downing one plane during the year. Authorities seized 1.95 metric tons of cocaine, nearly four times that of 1991, and the Honduran police seized over 230 ounces of "crack" cocaine. Local consumption of cocaine and crack cocaine in the country increased.

Nicaragua played a growing role in cocaine trafficking due to its proximity to traditional air and sea smuggling routes. Drug traffickers shipped cocaine from Colombia's San Andrés Island to Nicaragua's Corn Island and the ports of Bluefields and Puerto Cabezas. The National Police were authorized in October to create a dedicated anti-drug unit, which was scheduled to become operational in 1993. Police seized 72 kilograms of cocaine during the year.

Panama was a key transit country for cocaine being shipped to the United States and also served as a major money-laundering location for the drug cartels; the Colón Free Zone was an attractive location for South American money launderers. In spite of the large volume of trade conducted in Panama, there was no indication of any large-scale diversion of chemicals.

In July, Panama's Policía Técnica Judicial raided a front company, Celeste International, S.A., in the Colón Free Zone, which resulted in the arrest of the company owner and his daughter and the seizure of over 5 metric tons of cocaine that had been concealed in ceramic tiles.

Manuel Noriega, the former Panamanian strongman, was extradited to the United States in 1991 and placed on trial on drug trafficking charges. He was convicted and imprisoned in 1992. On appeal, he won the right to be treated as a prisoner of war, but remained incarcerated nonetheless.

The Caribbean

The eastern Caribbean was a major operational area for traffickers. **The Bahamas** and the United States continued their 10-year tradition of conducting joint patrols of Bahamian and surrounding waters, seizing over 4.8 metric tons of cocaine. Also, a Bahamian Joint Information Coordination Center exchanged data with the El Paso Intelligence Center. The Bahamian Government extradited Nigel Bowe, a lawyer for known drug traffickers, to the United States, and three police officers were arrested prior to their planned theft of drugs from a police evidence locker. Operation BAT or OPBAT, in which Royal Bahamian Police conduct joint operations with U.S. law enforcement agents, continued in conjunction with Operation OPBANDIT, a similar effort mounted from southern Florida.

Some regional cocaine traffickers shifted their smuggling operations to the eastern- and southern-most portions of the Caribbean in the direction of the Lesser Antilles. Traffickers established operations on **Sint Maarten** (Dutch part of the island of Saint Martin) in the Netherlands Antilles to support shipments to Dutch ports in Europe. In early January 1993, authorities seized over 1 metric ton of cocaine in **St. Vincent**.

Increased trafficking through the eastern Caribbean included greater use of **Puerto Rico**, which was often used for transshipping cocaine to the United States, Canada, and Europe. Puerto Rico's appeal was enhanced by two factors: its proximity to South America and the fact that it, along with the U.S. Virgin Islands, was one of the southernmost U.S. customs ports of entry. Once cocaine was successfully smuggled into Puerto Rico, it could be shipped to the United States with far less likelihood of additional customs screening or inspection.

Cocaine smuggling by general aviation aircraft to Puerto Rico was complemented by increased maritime smuggling as well. Traffickers continued to employ twin-engine aircraft in order to drop drugs to "go-fast" boats. Favored airdrop sites included the southern Bahamas near Acklins Island, Andros Island, Cay Sal Bank, Great Inagua, Long Island, Mayaguana, and Ragged Island.

Traffickers also employed sleek, high-capacity, lowprofile vessels to transport metric ton shipments of cocaine to Puerto Rico. Similar shipments were made to Aruba and the Dominican Republic. Several such vessels were seized by the U.S. Coast Guard. There was increased trafficking in the waters around Antigua and Barbuda, Barbados, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines. The Antiguan Coast Guard seized 500 kilograms of cocaine during the year.

In addition to cocaine airdrops near those island nations, fishing vessels and couriers on cruise ships were employed to transport cocaine from them to the United States. Traffickers also used those islands for transshipping cocaine to Europe. In June, Grenadan police seized 5 kilograms of cocaine from a Venezuelan fishing vessel, and approximately 17 kilograms were seized from a vessel in the territorial waters of St. Vincent and the Grenadines.

Extensive cocaine trafficking took place through the **Netherlands Antilles** and **Aruba**. Cocaine from Colombia, Venezuela, and Suriname was shipped there concealed in commercial maritime cargo being shipped to Europe. Curaçao and Netherlands police, who conducted a joint investigation during the year, arrested six people and seized a total of 59 kilograms of cocaine in the Netherlands and Curaçao.

Trafficking also continued in the western Caribbean. Traffickers increased their use of San Andrés Island as a major staging area for cocaine being shipped from Colombia. Once on the island, the cocaine was concealed in commercial maritime cargo or transferred to smaller vessels prior to its onward voyage through the Caribbean to the United States.

Cocaine traffickers often crossed Cuban air space by using international air corridors, and they also used Cuban waters in an attempt to avoid U.S. interdiction. In response, the Cuban government increased its cooperation with foreign drug enforcement organizations. The government attempted to deny the use of its territory and refueling facilities to traffickers; however, Cuba suffered from shortages of fuel and spare parts, which hampered its interdiction operations. Cuban government information reflected the seizure of some 313 kilograms of cocaine during 1992 plus an additional 724 kilograms, which had washed ashore. Thirty-seven defendants from two Cuban trafficking organizations were sentenced to prison for up to 11 years, but rumors of involvement in drug trafficking by senior officials in the Cuban government persisted.

Hispaniola was used by traffickers as a transit area for cocaine. The **Dominican Republic**'s proximity to the United States and its large numbers of airstrips and coastal areas made it vulnerable to drug trafficking, and local criminals, who had links to Dominican gangs in New York, participated in that trafficking in growing numbers.

Cocaine seizures by the National Drug Control Directorate (Dirección Nacional de Control de Drogas or DNCD) came to 2.36 metric tons. The DNCD also seized US \$186,298, 202 weapons, 211 vehicles, 197 motorcycles, and eight vessels. Over 4,480 Dominicans as well as 264 foreigners were arrested. The Dominican Republic's armed forces increased the number of their counter-drug missions during the year.

Haiti also served as a transshipment area for cocaine smuggling. Colombian traffickers have operated in Haiti with impunity since the 1991 coup d'etat in that country. The lack of effective indigenous law

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enforcement combined with the availability of many uncontrolled air strips, an unguarded coastline, and a remote interior made Haiti an attractive way station. Corruption was endemic. Several military officers and enlisted personnel were expelled from the armed forces for suspicion of drug trafficking, but they were not charged. There were only limited cocaine seizures, and intelligence suggests that larger shipments routinely passed through Haiti unimpeded. Haitians were arrested in large numbers in the United States on cocaine delivery and distribution charges.

Jamaica's long coastline and small security force made conditions ideal for drug smuggling. The nation's position near international sailing routes also enhanced its attractiveness. Couriers transited Jamaican airports while carrying small amounts of cocaine in their luggage or on their persons. Over 4,000 Jamaicans and 500 foreigners were arrested. Approximately 78 kilograms of cocaine were seized

COCAINE PROCESSING PROCEDURES

Cocaine is derived from alkaloids found in the leaves of the coca bush. Cocaine production is a multistage process that starts when the coca leaves are placed in a crude maceration pit known as a *pozo*. The *pozo* is usually an oblong hole dug in the ground and lined with plastic sheeting. Water and sulfuric acid (H_2SO_4) are added to the leaves, and workers work the mixture for several hours to extract the alkaloids by stomping on the leaves. Depending on the size of the *pozo*, two to five workers may be needed. The water is removed from the *pozo* with buckets and put in another pit. More water and acid may be added to the *pozo* and the process repeated.

Lime slurry (calcium oxide [CaO]), potassium carbonate (K_2CO_3), or sodium carbonate (N_2CO_3) is added to the water in the second pit to neutralize the acid. Kerosene is added to extract the alkaloids by mixing. The kerosene is removed and the alkaloids are then extracted with a smaller volume of dilute sulfuric acid. This results in a reduced volume of solution with a high concentration of alkaloids known as *agua rica*, which may be stored in containers.

Sodium carbonate or sodium bicarbonate (NaHCO₃) is added to the *agua rica*, which precipitates crude cocaine base known as *sulfata* or coca paste. [This is an optional step.] Dilute sulfuric acid and a solution of potassium permanganate (KMnO₄) is added to oxydize impurities in the *sulfata*. Manganese dioxide (MnO₂) is precipitated during this stage. The solution is filtered to remove the manganese dioxide, and ammonium hydroxide (NH₄OH) is added to precipate cocaine base, which is filtered and dried.

The cocaine base is dissolved in ether (ethyl ether, diethyl ether, ethyl oxide, diethyl oxide, sulfuric ether, $C_2H_5OC_2H_5$), acetone (2-Propanone, dimethyl ketone, β -ketopropane, pyroacetic ether, CH_3COCH_3), or other suitable solvent. This is usually done in plastic drums. Hydrochloric acid (HCI) dissolved in acetone or ethanol (ethyl alcohol, C_2H_5OH) is added to the cocaine base solution, which precipitates cocaine hydrochloride (cocaine HCI). The final product is then filtered and dried.

by local forces, and 412 kilograms were confiscated as a result of a DEA controlled delivery. A U.S. National Guard radar system was set up in Jamaica and used to track suspect aircraft, and a Jamaican Joint Information Coordination Center exchanged intelligence with U.S. and other law enforcement organizations. Jamaican authorities seized 709 "rocks" of crack cocaine.

Trinidad and Tobago was used by traffickers for the transit of maritime shipments of cocaine more in 1992 than in previous years. The police and customs services were hampered by endemic corruption and a lack of resources. U.S. and British police officials worked with local agencies to improve their antidrug capabilities; rumors persisted, however, of highlevel official corruption. Three cocaine seizures of 9 to 26 kilograms occurred there during the year.

Canada

Canada served as a final destination for small quantities of cocaine from Latin America as well as a transit location for cocaine being conveyed to the United States. Cocaine was shipped from Canada, primarily to New York City. Colombian traffickers took advantage of farge Colombian populations in Toronto and Montreal to mask their illicit trafficking and money-laundering operations.

In November, Quebec Provincial Police officers seized more than 4 metric tons of cocaine from an aircraft that had flown directly from Colombia; a portion of that cocaine was to have been delivered to New York City. Also that month, it was reported that 3 metric tons of cocaine went down with a vessel that may have been scuttled by its crew off the coast of Newfoundland after it was confronted by the U.S. Coast Guard.

SIGNIFICANT DEVELOPMENTS IN SOURCE REGIONS

Peru

Cultivation: Most of the world's coca is grown in Peru. In 1992, 129,100 hectares were estimated to be under cultivation compared to 120,800 hectares in 1991. Estimated 1992 coca leaf production was 223,900 metric tons with a potential yield of 650 to 695 metric tons. Although most of the illicit cultivation occurred in the Upper Huallaga Valley, farmers expanded their cultivation to the Central Huallaga region and the Aguaytía River Valley. Other illicit growth was seen in Cuzco, Huanta, and La Mar Provinces. There were smaller areas of growthin Pasco and Puno Departments and in Ucayali.

Processing: Peru was a major processor of illicit coca paste and purified cocaine base. Most of this processing occurred in the Upper Huallaga Valley. Coca leaves were processed into coca paste in crude maceration pits (*pozos*), which were prepared near cultivation sites. The coca paste was then processed into cocaine base at clandestine laboratories. These laboratories ranges from small structures to large complexes. The average laboratory produced 200 kilograms of cocaine base per day.

Cocaine hydrochloride production in Peru rose in 1992; available data suggested that some of that cocaine was exported directly from Peru. Essential chemicals required by clandestine laboratories in Peru were diverted from legitimate chemical shipments that had entered Peru's seaports. Chemicals also entered Peru from Brazil, Chile, and Ecuador.

Trafficking: Most of Peru's cocaine base was transported by air from the Upper Huallaga Valley to Colombia for conversion to cocaine although some cocaine base was carried first by river boat to staging sites prior to its being transported by air. Additional quantities were shipped by air, river, or overland to Brazil and Ecuador.

Enforcement: Traditionally, eradication in Peru has not been politically feasible. Although coca leaf production in the Upper Huallaga Valley overshadowed all other cash crops, Sendero Luminoso insurgent activity caused some growers to leave the valley in search of land in less tumultuous areas. Continued conflict between the insurgents and government forces may have contributed to increases in the price of coca paste. Prices for a kilogram of coca paste were reported to have risen over the summer.

U.S. and Peruvian joint interdiction operations were limited as a result of Peruvian President Fujimori's

suspension of democracy in April. Shortly thereafter, a U.S. C-130 aircraft, which was flying a counter-drug mission previously approved by the government, was fired on by Pernvian fighter aircraft. One U.S. airman was killed and two others on board were wounded. As a result, most U.S. assistance to Peru was suspended.

The Peruvians did move during the year to increase cooperation between their military and police forces. In November, the police, assisted by air and ground forces, seized 1.4 metric tons of cocaine, and government forces destroyed 89 cocaine base laboratories. The Peruvian Air Force destroyed or prevented access to several clandestine landing strips and took control of seven municipal airfields that were being used by traffickers. Traffickers responded by increasing the number of their own night flight operations.

Bolivia

Cultivation: Bolivia is the world's second largest cultivator of coca, with an estimated 50,649 hectares under cultivation in 1992, down from an estimated 53,386 hectares in 1991. The 1992 crop could have produced 80,300 metric tons of coca leaf, for a potential yield of 245 to 410 metric tons of cocaine. This compared to 78,400 metric tons of coca leaf estimated to have been produced in 1991.

Growing areas were located in the Apolo, the Chaparé, and the Yungas de La Paz regions. About 75 percent of illicit cultivation occurred in the Arani, Carrasco, and Chaparé Provinces in Cochabamba Department. There was increased illicit cultivation in the Yungas. The Bolivian Government failed to meet their eradication goals, destroying only 5,149 hectares in 1992 and 5,486 hectares in 1991, in both years falling short of their goal of 7,000 hectares.

Processing: Coca growers in the Chaparé, continued a trend first noted in late 1991, i.e., converting coca leaf directly to cocaine base in small-scale, *pozo* pit operations. Often, cocaine alkaloids were dissolved in a sulfuric acid solution known as *agua rica* for storage and transportation. *Agua rica* is a convenient medium for storing cocaine alkaloids in aqueous solution for extended periods. Cocaine base produced in the Chaparé was consolidated by buyers for transportation to larger laboratory operations in Pando, Beni, and rural Santa Cruz Departments. Some of the cocaine base was purified or processed into cocaine prior to its shipment out of the country.

Essential chemicals used in cocaine base and cocaine hydrochloride production were smuggled across Bolivia's borders with Argentina, Brazil, Chile, and Paraguay, primarily by road, railroad, and river networks, but also occasionally by air. Equipment used to synthesize and recycle the solvents necessary for cocaine production was commonly found at clandestine laboratories that had been seized in Beni and Santa Cruz Departments.

Trafficking: Traffickers transported cocaine base from the Chaparé, usually in small aircraft. Cocaine base usually was transported on twin-engine aircraft from outlying laboratories and transshipment sites in Beni, Pando, and rural Santa Cruz Departments to Colombia and Brazil for conversion into cocaine. Increasing amounts of cocaine base, however, were converted to cocaine in Bolivia prior to its shipment to Colombia. Colombian groups controlled or directly influenced the production and trafficking of cocaine in Bolivia, but some Bolivian groups were independently involved in the transport of cocaine to Europe by way of Brazil, Chile, Paraguay, and Argentina.

Enforcement: The Bolivian Government conducted large-scale operations against traffickers throughout the country during the year. In January, Operation GHOST ZONE was initiated by DEA and the Bolivian Government, which resulted in a disruption of trafficking in the Chaparé, significant seizures, and the arrest of 13 buyers and laboratory operators.

Operation GHOST ZONE was followed by Operation GOLDEN BEAR, which used quick-response teams against laboratory and transshipment sites in Beni and Santa Cruz Departments. The government arrested 1,226 violators and destroyed 17 cocaine laboratories and more than 1,300 coca paste and cocaine base production sites. Several ranches and residences, aircraft hangars, 64 vehicles, and 26 aircraft also were seized. Bolivian drug enforcement agencies seized a total of nearly 51,000 liters of *agua rica*. DEA and Bolivian police seized 188.9 metric tons of coca leaf, 0.33 metric tons of coca paste, 7.7 metric tons of cocaine base and 0.7 metric tons of cocaine. They also extradited one major trafficker to the United States. The Bolivian Government also continued its campaign to promote the legitimate use of licit coca products.

Colombia

Cultivation: Colombia ranked third in worldwide coca cultivation, all of it illicit. There was some cultivation in the eastern plains and heavy growth in Caquetá Department, Guaviare and Vaupés Commissariats, and Putumayo Intendency. There also was cultivation in Bolívar Department and in southwestern Colombia. Net cultivation in 1992 was about 37,100 hectares, down from 1991's 37,500 hectares. Coca leaf production was about 32,000 metric tons, which had a potential yield of 60 metric tons of cocaine.

Processing: Most of the world's cocaine is produced in Colombia. Laboratories there used some domestic cocaine base but relied mainly on Bolivian and Peruvian cocaine base. Colombian laboratories ranged from small, simple operations to large laboratory complexes, most of which were located in remote areas. Large laboratories were uncovered in Amazonas, Guainía, Guaviare, Vaupes, and Vichada Commissariats, Putumayo Intendency, and Caqueta, Tolima, and Valle de Cauca Departments. Government initiatives to control essential chemicals prompted some traffickers to adopt new processing techniques and new technologies designed to reduce the amount of chemicals needed.

Trafficking: Over 150 Colombian groups were engaged in cocaine trafficking; control of these groups rested with "cartels" centered in Medellín and Cali. Coca paste and cocaine base were smuggled into Colombia, and finished cocaine was smuggled out of the country by private aircraft and, increasingly, by concealment in commercial maritime cargo. Aircraft made use of numerous unimproved private airstrips and, on occasion, municipal airports to smuggle multihundred-kilogram shipments of cocaine to the Caribbean, Central America (particularly Guatemala), or Mexico for transshipment to the United States. Colombian traffickers also expanded their operations in neighboring nations, making greater use of Venezuela, Suriname, and Brazil as transit locations for cocaine being shipped to the United States and, increasingly, to Europe.

Colombian insurgent groups such as the Revolutionary Armed Forces of Colombia (Fuerzas Armadas Revolucionarias de Colombia or FARC) and the National Liberation Army (Ejército de Liberación Nacional or ELN) benefited from the cocaine trade. They "taxed" drug profits and protected crops, laboratories, storage facilities, and airfields.

Insurgents also carried out kidnappings of drug trafficker family members. In 1992, a feud erupted between the Cali Cartel and the FARC. FARC members kidnapped the sister of Cali Cartel kingpin Jose SANTACRUZ-Londoño, holding her for a several million-dollar ransom. The Cali Cartel organized a murder campaign against the FARC and its political front organizations. Following a dozen killings, the kidnapped sister was released unharmed with no ransom paid.

Enforcement: The Colombian National Police (CNP) and the armed forces targeted high levels of the drug trafficking infrastructure in Colombia, concentrating on the Cali Cartel's financial structure and redirecting their efforts towards the Medellín Cartel after the escape of convicted *narcotraficante* Pablo Emilio ESCOBAR-Gaviria from Envigado Prison in July. Subsequently, the government censured or retired officials believed to be culpable in his escape.

The Prosecutor Generai's Office charged ESCOBAR with the 1989 murder of Luis Carlos Galan, a presidential candidate. In early 1993, ESCOBAR created an armed group called the "Antioquian Rebellion" in an attempt to characterize his differences with the Colombian Government as political. In the last 6 months of 1992, ESCOBAR assassins murdered more than 50 police officers.

ESCOBAR intensified his terror campaign in early 1993. Another group, organized by ESCOBAR's enemies, and known as Los Pepes or "Those persecuted by Pablo ESCOBAR," mounted a campaign of revenge and retaliated against known Medellín Cartel interests. In August, the CNP and the Army formed a task force to locate Pablo ESCOBAR. The task force offered rewards for information, which led to the arrest or death (during drug raids) of several high-level assassins in the Medellín Cartel. On December 30, one of ESCOBAR's longtime assassins was captured. In early January 1993, Leonidas VARGAS, a known associate, also was arrested.

In 1991, the CNP conducted two raids against Cali financial interests. Two additional series of raids were conducted in 1992. In April, the CNP struck at Ivan URDINOLA-Grajales, a major trafficker. In August, raids were undertaken against Humberto GONZALEZ-Piedrahita, a major money launderer. The "Cali raids," as they have become known, severely disrupted Cali Cartel financial operations. Drug enforcement forces also seized or destroyed approximately 39 metric tons of cocaine and cocaine base, significantly less than the nearly 83 metric tons seized in 1991. This decline was attributed to the diversion of police resources to the manhunt for Pablo ESCOBAR and added attention to opium poppy eradication.

Coca eradication in Colombia was done manually in conjunction with laboratory raids. Some 959 hectares were eradicated during the year. In addition, the government destroyed 218 cocaine processing laboratories and made some 2,422 drug-related arrests. The police also seized more than 6,000 55-gallon drums of chemicals and more than 30 aircraft. The Prosecutor Generals' office initiated over 12,500 criminal drug and terrorism prosecutions

COCAINE PRODUCTION ESTIMATES Estimated Coca Cultivation and Potential Cocaine Production 1991-1992

Country	Year	Net Coca Cultivation (hectares)	Estimated Coca Leaf Yield (metric tons)	Potential Cocaine Hydrochloride Production (metric tons)
Bolivia	1991	47,900	78,400	235 - 400
DUIIVIA	1992	45,500	80,300	245 - 410
Colombia	1991	37,500	30,000	60
Colombia	Colombia 1992 37,100		32,000	60
Peru	1991	120,800	222,700	645 - 690
Pelu	1992	129,100	223,900	650 - 690
Total Potential	1991			940 -1,165
Production	1992			955 - 1,165

Source: International Narcotics Control Strategy Report 1993

and revived 70 percent of their dormant cases, including cases against Pablo ESCOBAR as well as against the OCHOAS, Ivan URDINOLA, and other members of the Cali Cartel.

Fabio OCHOA, Jorge Luis OCHOA, and Juan David OCHOA remained imprisoned although there was continued speculation about the degree to which they oversaw their drug operations from prison.

The success of U.S. domestic and international operations, such as Operation GREEN ICE, made Colombian traffickers painfully aware of the fact that many of their traditional overseas money havens were vulnerable. Accordingly, they began to transfer large amounts of bulk cash directly back to Colombia.

DEVELOPMENTS IN OTHER AREAS

Argentina

Small quantities of Bolivian cocaine base were processed into cocaine hydrochloride in laboratories that were being operated in Argentina, and then shipped to Europe and the United States. Six such laboratories were destroyed by government forces during the year. Cocaine was smuggled from Bolivia, Chile, and Paraguay by courier to Argentina on commercial aircraft and by overland vehicles.

Shipment was then made to Europe and the United States by air courier or by concealment in maritime cargo. In 1992, the Argentine Government seized 80.2 metric tons of coca leaf as well as about 1.21 metric tons of cocaine compared to 1.3 metric tons of cocaine the year before. Over 4,700 drug-related arrests were made in 1992 compared to approximately 6,000 the previous year.

Argentina is a large-scale producer of essential chemicals, which are legally purchased and then diverted and illegally shipped to front companies for use in clandestine laboratories in Bolivia. Money laundering in Argentina showed an increase during the year.

Brazil

Brazil is a major legal producer of ether, acetone, and other essential chemicals used in cocaine processing.

Despite efforts at control, substantial amounts of these chemicals were diverted to illicit cocaine processing laboratories in Bolivia, Colombia, and Peru. The Brazilian Federal Police conducted joint operations with DEA—targeting both Brazilian and foreign firms in order to interdict the flow of diverted chemicals.

Cocaine trafficking increased in Rondonia Province in northwest Brazil. Most trafficking through Brazil was of coca products that had been refined in neighboring countries and were being transshipped to the United States and Europe. Maritime smuggling occurred from the ports of São Paulo, Belém, and Manaus. Corumbá, Recife, Rio de Janeiro, and São Paulo are known land and air transshipment points. Virtually all major smuggling operations in Brazil were controlled by Colombians, Bolivians, or Peruvians.

Effective drug enforcement was hampered by the impeachment and resignation of President Fernando Collor de Mello. The new government appointed a series of Justice Ministers and reorganized the police. In addition, there were modest gains in the control of chemicals, changes in seizure laws (which allowed the government to seize land under illicit cultivation), and new reporting requirements for institutional deposits over \$10,000. Brazilian authorities seized 2.87 metric tons of coca products, including a 600-kilogram seizure in July.

Chile

Compared to the previous year, increasing amounts of cocaine transited Chile to the United States and Europe in 1992, conveyed by traffickers from Bolivia. Chile's northern ports were exploited by traffickers to ship cocaine in commercial cargo ships to Europe and the United States. Bolivian products transited Chile without inspection under a bilateral arrangement that prohibits the inspection of goods on their way to a third country. Some cocaine was shipped to Santiago for export.

In January, 5 metric tons of cocaine were seized from a Panamanian-registered, but Chilean-owned, vessel in the Caribbean which had come from Valparaiso. In October, 15 kilograms of cocaine were seized on a vessel in Punta Arenas, confirming suspicions that drug traffickers occasionally make use of vessels that transit the Strait of Magellan in order to ship cocaine to European markets.

Chile was a source of essential chemicals for traffickers in Peru and Bolivia. Also, the country's financial institutions were used increasingly to launder drug proceeds.

The Government of Chile proposed tougher legislation allowing for the prosecution of money-laundering and chemical diversion offenses. The government also signed agreements with Bolivia and Peru on anti-drug cooperation and increased the number of police personnel assigned to drug investigations.

The Chilean Supreme Court refused to allow the extradition to the United States of a high-ranking police investigations official. The government did, however, discipline several lower-ranking enforcement personnel who had been suborned by drug traffickers.

Ecuador

Ecuador was an important transit country for chemicals used by clandestine laboratory operators in Colombia. Chemicals were often trucked from Guayaquil into the eastern jungles, after which they were trucked into Colombia or taken there by river boat.

Ecuador also was a major transit country for finished Colombian coca products bound for the United States and Europe. Colombian trafficker aircraft routinely violated Ecuadorian air space in order to transport coca products from Peru to Colombia. In April 1993, the U.S. Coast Guard seized 5 metric tons of cocaine from a vessel which had embarked from Ecuador.

Aggressive eradication by the government led to a virtual absence of coca cultivation, and there was little evidence of any large-scale coca processing in the country. A small number of cocaine laboratories were reported to be operating near the border with Colombia and Peru.

Authorities seized an estimated 4 metric tons of cocaine, including about 3.4 metric tons in one raid near the Colombian border in February. Over 1,800 Ecuadorian nationals and 165 foreigners were

arrested on drug-related charges, including more than 50 members of the Jorge REYES-Torres cocaine trafficking organization. Information derived from these arrests led to the additional arrests of several officials who were involved with a moneylaundering bank owned by members of the armed forces. Another highlight was the indictment, trial, and sentencing to 5 years in prison of the judge who was responsible for releasing REYES-Torres from jail in the late 1980's.

The government continued its enforcement activities at Quito and Guayaquil international airports, and used roadblocks, border checkpoints, and port checks to excellent effect. The Ecuadorian drug law enforcement agency operated a riverine unit in the Provinces of Esmeraldas and El Oro. The Army stepped up its patrols along the northern border with Colombia and created an Army riverine unit to operate in El Oriente. Also, there was greater cooperation between the police and the armed forces, resulting in several successful actions in remote areas near the Colombian border.

Paraguay

Paraguay has long unpatrolled borders with Bolivia, Brazil, and Argentina, which facilitate smuggling, particularly by small aircraft that use the many unregulated and clandestine landing strips in Paraguay near its border with Brazil. One of the transit routes from Bolivia to Brazil and Argentina runs through Paraguay. Paraguay also may have been used to transfer chemicals to Bolivia.

Although some members of the Paraguayan armed forces were involved in overseeing drug trafficking operations in their areas of responsibility, overall, the government maintained a positive anti-drug stance. It integrated its 35-man combined military and police strike force with the Interior Ministry's antinarcotics police (Dirección Nacional de Narcóticos or DINAR) during the year and undertook 30 drug suppression operations. The unit established roadblocks near the Brazilian border and checked airstrips. Police action resulted in the seizure of 67 kilograms of cocaine, including a 19-kilogram seizure in Pedro Juan Caballero, a border town. Over 330 individuals were arrested on drug charges during the year.

Suriname

There was widespread reporting that suggested that illicit drug traffickers enjoyed a wide degree of latitude in Suriname, and that they often received protection from government officials. Although the Police Narcotics Brigade did attempt to overcome this problem, corruption extended from lower-echelon government employees in the police and customs service through semi-official organizations to the private sector. Anti-drug operations were further complicated by a continued lack of control over the country's interior. In August, a political accommodation was reached with rebel forces, the leaders of which had close ties to the Surinamese military command—who, in turn, have been accused of condoning drug trafficking in insurgent-controlled regions.

Over 200,000 Surinamese reside in the Netherlands. Cocaine traffickers took advantage of this and of historical and ethnic links among Suriname, the Netherlands Antilles, and the Netherlands to ship cocaine through Dutch seaports to other countries in Western Europe. Suriname also may have been used to smuggle precursor and essential chemicals from Europe to Latin America.

Uruguay

Uruguay is a minor but growing transit location for cocaine. One DEA investigation alone revealed that some 200 kilograms of cocaine per month were transiting from Argentina through Uruguay to Brazil and onward. Strict bank secrecy laws made Uruguay attractive to Colombian money launderers. In one investigation, the Government of Uruguay froze \$630,000 in assets that belonged to a suspected money launderer who was facing trial in the United States. Three kilograms of cocaine were seized incountry during the year, and authorities implemented controls over essential chemicals.

Venezuela

Venezuela is a significant cocaine transit country. Both Colombian and Venezuelan traffickers maintained staging facilities in the country, and multiton quantities of cocaine were shipped to the United States from Venezuelan ports. Venezuela also was used as a transit country for essential chemicals that were being diverted to clandestine use in Colombia. In February, acting on information provided by the Venezuelan Coast Guard, DEA and Venezuelan authorities seized approximately 68 metric tons of methyl ethyl ketone, a solvent used in cocaine processing.

An aerial survey conducted during the year verified coca cultivation along the border with Colombia. Total coca cultivation was estimated to be 100 hectares.

More than 3 metric tons of cocaine were seized in Venezuela, and information provided by Venezuelan authorities led to the seizure abroad of more than 30 metric tons that had transited that Latin American country. Colombian traffickers used Venezuelan front companies to arrange for the shipment of cocaine to the United States and Europe.

Venezuelan authorities acknowledged the expanded use of their territory by Colombian traffickers. President Carlos Andres Perez declared a "war on drugs" and created a unified drug command under the Minister of the Interior. Major players were the National Guard (Guardia Nacional), the Directorate for Intelligence and Prevention, and the Judicial Technical Police (Policía Técnica Judicial or PTJ). In a joint effort, DEA and the PTJ dismantled the CUNTRERA-CARUANA cocaine trafficking organization. A similar investigation of the Jairo ECHEVERRIA organization led to seizures overseas.

Although the government vigorously investigated allegations of official corruption, drug investigations were hampered by diversion of resources to internal security missions following coup attempts in Venezuela in February and November. In a unilateral action, DEA arrested a Venezuelan Army general in Miami following his attempt to sell 70 kilograms of cocaine.

Europe

Overall, the cost of cocaine remained high in Europe, and larger quantities of the drug were shipped there than in any previous year. Cocaine availability was high in **France**, especially in Paris and the cities of eastern and southern France near its borders with Italy, Spain, and Switzerland. French authorities seized more than 1.6 metric tons of cocaine during the year.

South American traffickers stepped up their drug smuggling efforts to and through **Italy**. They sought links with organized crime families through cultural and ethnic bridges to Argentina, Brazil, and Venezuela.

Colombian cocaine traffickers took advantage of cultural, ethnic, and historical links with the peoples of Latin America to ship significant amounts of cocaine through ports of entry in **Portugal** and **Spain**. There were fewer Spanish cocaine seizures in 1992 than in 1991, but Spain remained a principal gateway to other European countries. A particularly significant seizure occurred during the year when Spanish and Portuguese law enforcement officers seized 1.8 metric tons from a vessel lying off the coast of Portugal.

Germany has become a major consumer of cocaine, and money launderers who worked for the Cali Cartel made extensive use of the German banking system. A small number of seizures of crack cocaine also were made in some German cities.

Switzerland was used as a transit country by some Colombian traffickers who were smuggling cocaine to major markets in other European countries. Swiss police seized 168 kilograms of cocaine at Zurich and Geneva airports.

South American violators took advantage of historical and cultural links between Suriname, the Netherlands Antilles, and the **Netherlands** to ship cocaine there for European distribution. Cocaine was shipped in bulk quantities to the Netherlands in both commercial air and sea cargo. Schiphol International Airport as well as port facilities in Amsterdam and Rotter dam served as key transit points for South American cocaine.

Colombian traffickers shipped cocaine through Belgium to markets in the Netherlands and Germany. Belgian authorities arrested several Cali Cartel operatives and seized nearly 1 metric ton of cocaine. **Denmark** was occasionally used by traffickers as an intermediate stop for cocaine being shipped to other Scandinavian countries.

The United Kingdom was a consumer country for both cocaine and crack cocaine. Crack was available in London and other metropolitan areas. British police and customs officers seized more than 2.5 metric tons of cocaine, including a single seizure of 1 metric ton.

Cocaine transited **Iceland** and authorities there were concerned about the growing purity of the drug being sold at the street level.

Austria was also used as a transit country for cocaine. Austrian authorities monitored suspicious bank accounts during the year, and Austrian police seized 84.4 kilograms of cocaine, double that of 1991.

Routes through the emerging Eastern European democracies as well as some countries of the former Soviet Union were used throughout the year by Latin American and other traffickers who were seeking new ways to ship their drugs to Western Europe. Colombian criminals, members of Italian organized crime families, and some Russian criminal groups reportedly contacted one another to arrange for increased cocaine trafficking to or through some of the newly independent states.

In early 1993, Russian police seized over 1 metric ton of cocaine which had been sent through **Finland**. That shipment, which had been orchestrated by Israeli criminals, was to have been sent through **Russia** to more lucrative markets in Western Europe.

Intelligence suggested that some Colombians had established contacts with local criminal elements in **Bulgaria** in order to move cocaine to Western Europe.

Poland served as another cocaine transit country, and may have served as a transit country for essential chemicals as well. German chemical firms have shipped large quantities of acetone through the Polish port of Gdańsk to Venezuela. Authorities seized 12 kilograms of cocaine in **Armenia**, which suggests that international traffickers are already capable of exploiting the present precarious political situation in Transcaucasia.

Africa

Colombian criminal organizations made use of countries in northern Africa, such as Algeria, Morocco, and **Tunisia** to smuggle cocaine to Western Europe. In February, 6.4 kilograms of cocaine were seized by Tunisian authorities at Tunis-Carthage Airport. Moroccan smugglers may have picked up shipments of cocaine in the Canary Islands, and a number of Senegalese were arrested in Morocco as they attempted to carry cocaine to Europe.

Several countries in western Africa also experienced a surge in cocaine trafficking. Cocaine seizures in **Nigeria** doubled from the previous year to 538 kilograms in 1992, and increasing amounts of the drug were available locally.

Ghana was used as a transshipment country for cocaine that was being sent to Europe and, on occasion, to the United States. Ghanaian couriers, often backed by Nigerian syndicates, traveled to Brazil to pick up cocaine. Ghanian authorities seized 6.6 kilograms of cocaine at Accra International Airport during the year. Crack cocaine also began to appear on the streets of Accra.

Although not yet a major transit or destination point for cocaine, **South Africa** has the potential to become a cocaine transshipment location.

The Middle East

Lebanon was a principal processing area for cocaine base being shipped from South America, principally from Colombia. Cocaine was refined in several cocaine conversion laboratories in the Bekaa Valley, packaged and then shipped—sometimes through Jordan or Syria—to markets in the Persian Gulf or Europe where it commanded high prices. Drug enforcement in Lebanon is limited or sporadic, at best; however, a cocaine processing laboratory and a small amount of cocaine were seized by Lebanese authorities in December in conjunction with a 7.5 metric-ton hashish seizure in the Bekaa Valley.

The Far East

Both Colombian and American traffickers shipped cocaine to the Australian Continent, and Australia was threatened by the illicit trafficking and abuse of cocaine more than any other country in the Far East. Colombian cocaine organizations selected Australia as both a potential market and a transit country for cocaine being shipped to Japan. Australian authorities made record seizures of the drug in each of the past few years, from 45 kilograms in 1989 to 447 kilograms in 1992.

There were small cocaine seizures in New Zealand as well; 6.3 kilograms were seized there during the year.

Since 1988, South American traffickers have been attempting to cultivate a demand for cocaine in **Japan**, but have met with only limited success. The number of Colombians with links to the cocaine cartels who have visited Japan has grown each year since 1988. Yet, there still has been no significant penetration of Japan nor does there appear to be any sizeable cocaine abuser population there. Although there have been no large cocaine seizures in Japan in recent years, Japanese authorities are concerned that the cocaine problem may be increasing in that island nation.

OPIATES

AVAILABILITY AND ABUSE IN THE UNITED STATES

Availability, Price, and Purity

Heroin was readily available in all those U.S. metropolitan areas that had heroin abuser populations. High retail purities in those areas indicated increased availability, a development consistent with national trends over the past few years.

Ethnic Chinese and West African criminals smuggled large amounts of high-purity heroin from Southeast Asia (Burma, Laos, and Thailand) for distribution in the U.S. Northeast and along the East Coast. Southwest Asian heroin from Pakistan, Afghanistan, Lebanon, and Iran was available in the Northeast and Midwest and, to a lesser extent, on the West Coast, and its purity and availability increased during the year. Mexican black tar heroin was prevalent in the West, Southwest, and Midwest; its purity also was up. DEA and U.S. Customs Service officials made many small seizures of alleged Colombian heroin, primarily in Miami and New York City. Availability of this heroin increased, but was still limited.

DEA's Heroin Signature Program (HSP) [see the Glossary] analyzed more than 900 heroin samples during the year. Forty-four percent of the identified samples were from Southeast Asia, 39 percent from Southwest Asia or Colombia, and 17 percent from Mexico.

According to the HSP, Southeast Asia was the prevalent source area for heroin in the United States during 1991, accounting for 58 percent of the samples examined that year. Mexican heroin and Southwest Asian heroin each accounted for 21 percent of the samples. In 1992, HSP results were skewed by the numbers of heroin samples purporting to be Colombian heroin. Initial analysis of Colombian heroin samples showed them to be similar to samples from Southwest Asia.

[A signature for Colombian heroin was announced in July 1993. As a consequence, HSP data for 1992 is subject to revision following reevaluation of previously unidentified samples.]

Analysis of heroin seizures by comparative net weights suggests that Southeast Asian heroin continued to dominate the U.S. heroin market in 1992 as it did in 1991. In 1991, 88 percent and, in 1992, almost 60 percent (by net weight) of U.S. heroin seizures were from Southeast Asia. Southwest Asian seizures constituted 32 percent by weight, and Mexican seizures made up 10 percent.

At the street or retail level, purity is directly related to availability. Heroin purity is tracked by DEA's Domestic Monitor Program (DMP), a street-level heroin purchase program. One city from each of DEA's 19 field divisions and San Juan, Puerto Rico, are included in the DMP. Analysis of DMP data shows that the nationwide average purity for retaillevel heroin was 37 percent, much higher than the average 7.0 percent purity of a decade ago and higher even than the 26.6 percent purity recorded in 1991. This rise in average purity corresponded directly to an increased availability of high-purity Southeast and Southwest Asian heroin and, to a lesser extent, increases in the purity of Mexican heroin.

Overall, the purity of heroin samples from Southwest Asia (including samples of alleged Colombian heroin) obtained through the DMP was higher than that from any other source, averaging 55.8 percent. Southeast Asian heroin samples had an average purity of 34.4 percent. Mexican heroin purity, which averaged 25.6 percent (almost double that of 1991), was third highest.

Retail heroin purity was found to be highest in the Northeast, where most heroin abusers live. In New York City, Southeast Asian and Southwest Asian heroin purities were 54.3 and 69.7 percent, respectively. Boston recorded the highest average purity for the year at 73.7 percent. On the national level, wholesale heroin prices ranged from \$90,000 to \$250,000 per kilogram for Southeast Asian heroin. Southwest Asian heroin prices ranged from \$80,000 to \$200,000 per kilogram, and wholesale prices for Mexican heroin were the lowest, ranging from \$50,000 to \$180,000. The wide range in kilogram prices reflected several variables, including buyer-seller relationships, quantities purchased, frequency of purchase, purity, and transportation costs.

Abuse

The National Household Survey estimated past-year heroin abusers to number about 323,000, down from 381,000 in 1991 and 471,000 in 1990. Statistically speaking, respondents who reported that they had used heroin at least once during their lifetime (lifetime use) numbered about 1.84 million in 1992 as compared to 2.7 million in 1991 and 1.7 million in 1990. The number of respondents who reported lifetime use in 1992 suggests that the 1991 figure may have been an anomaly. However, heroin-related emergency room incidents, as reported by the Drug Abuse Warning Network (DAWN), increased from 9,626 in the first quarter of 1992 to 13,301 in the third quarter.

In the Drug Use Forcasting Program (DUF) [see the Glossary], recently booked male arrestees tested positive for heroin use at high rates in Chicago, Los Angeles, Manhattan, San Antonio, San Diego, and Washington. Females tested positive at high rates in Phoenix, San Antonio, San Diego, Manhattan, Los Angeles, and Washington.

Non-statistical drug abuse indicators rose during the first 6 months of 1992 in a number of East Coast cities, including New York, Atlanta, and, especially Newark and Miami. In Washington, the data suggested the presence of an aging addict population. There was evidence of increased heroin use in the Midwest and on the West Coast. Epidemiologists suggested that crack cocaine users also were using or switching to heroin in order to mitigate the dysphoric "crash" of crack withdrawal. There was a growing perception among some abusers that heroin was safer than cocaine, while others considered its use to be "cool," a departure from previous attitudes. There was an overall increase in intranasal use (snorting) of heroin along the East Coast. Increases in snorting were believed to have been encouraged, in part, by the fear of contracting infectious diseases (particularly AIDS) and by the availability of highpurity heroin. Nevertheless, intravenous injection remained the primary route of administration in virtually all cities. As a result of growing tolerances and increased purity, established addict populations probably injected larger quantities of heroin than in previous years. Individuals who snorted the drug also used larger quantities.

Large quantities of heroin and other opiates were consumed in source countries as well as in Australia, Canada, and countries of Europe, making it very difficult to estimate the total quantity of heroin reaching the United States. Notwithstanding this difficulty, it appears that, based on seizures and observations by enforcement and treatment specialists, heroin demand increased in the United States.

Trafficking

Southeast Asian criminal organizations, often under the control of **Sino-Thai** and ethnic **Chinese** bosses, controlled the smuggling of Southeast Asian heroin to the United States. Ethnic Chinese criminals in this country, who were associated with these international groups, were the principal importers of heroin from Southeast Asia. Those highly structured, clandestine organizations were responsible for a significant increase in the number of multikilogram heroin shipments to the United States. Ethnic Chinese or Thai nationals were often used to transport the drug and were, for the most part, responsible for the larger shipments smuggled into the United States.

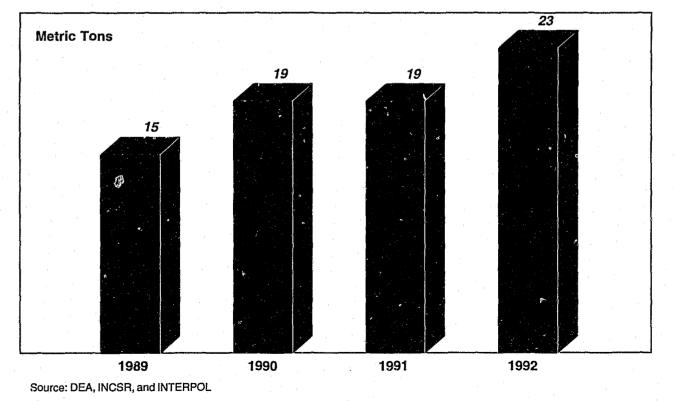
Traffickers used several transportation modes and concealment methods to smuggle their heroin from Southeast Asia. One major route originated in Bangkok and terminated in New York City. Other East Coast cities, such as Boston, and West Coast cities, such as San Francisco, Seattle, and Los Angeles, also were used as points of entry. Moreover, as Southeast Asian heroin traffickers developed new routes in order to avoid law enforcement interdiction, and enlarged their areas of distribution, they used new points of entry, such as Anchorage, Alaska, and Houston, Texas. Among the wide variety of heroin smuggling techniques seen, those encountered most often were the use of containerized sea and air freight, international mail parcels, and couriers on commercial airlines. The largest heroin shipments were smuggled in maritime cargo containers. Traffickers who used commercial cargo that originated in source countries frequently attempted to disguise the origin of their shipments by transshipping containers through several countries or by falsifying documents.

Although no multihundred-kilogram shipments were seized in the United States in 1992, large seizures did occur overseas during the year and in early 1993. The largest heroin seizure in U.S. history occurred in May 1991 near Oakland, California, when 494 kilograms of Southeast Asian heroin was seized aboard a merchant vessel. The shipment had originated in Thailand and had been transshipped through Taiwan. [Although Southeast Asian heroin is often packaged in 700-gram "units," for reasons of consistency, quantities are given in kilograms in this report.]

Nigerian traffickers also were deeply implicated in international heroin smuggling. Large, sophisticated

Nigerian trafficking organizations smuggled Southeast Asian heroin into the United States and controlled distribution rings in several major U.S. cities. Unlike the ethnic Chinese, Nigerian traffickers avoided bulk shipments and, instead, used couriers to smuggle numerous, smaller amounts of heroin aboard commercial airlines. The couriers either carried the drug on their persons or ingested it in compact form in balloons or condoms. However, intelligence suggests that some Nigerians also attempted to smuggle larger quantities concealed in commercial maritime cargo.

Most Nigerian organizations were based in Lagos and were closely formed along tribal lines. Drug barons who ran the Nigerian groups were well insulated from the police, directing subordinates to recruit large numbers of couriers and to organize them for travel to the United States. Nigerian criminals accounted for upwards of 50 percent of the heroin seized in the United States during the year. Approximately 1.2 metric tons of heroin were seized domestically and reported to the Federal-wide Drug Seizure System (FDSS) [see the Glossary], and over 20 metric tons were seized internationally. Nigerians



WORLDWIDE HEROIN SEIZURES

returned almost all profits generated in the United States to Europe for laundering or directly to Lagos.

Nigerians recruited people of other ethnic groups, including West Africans, Europeans, and Americans to work for them as heroin couriers. Nigerian and other couriers rarely carried more than 2 kilograms of heroin at any one time; their strategy was to overwhelm points of entry, sometimes with dozens of couriers on one flight. New York's JFK International Airport was used most frequently by Nigerian traffickers; however, they were known to diversify both their smuggling routes and their points of entry into the country. Nigerians also trafficked in Southwest Asian heroin, but were more active in smuggling Southeast Asian heroin.

Pakistani traffickers, who smuggled Southwest Asian heroin, controlled importation routes to and distribution networks within New York City and parts of the eastern and midwestern United States. They also transshipped heroin through California. The Pakistani traffickers obtained their heroin from Afghan and Indian traffickers, Turkish criminals, and other Southwest Asian ethnic groups.

Several groups from the **Middle East** also were active in smuggling and distributing Southwest Asian heroin including Iranians, Israelis, and Lebanese. Moreover, large, multikilogram seizures were made in New York City from both Greek and Turkish traffickers during the year. Significant quantities of the drug, bound for the United States, entered Canada through Montreal, Toronto, and Vancouver.

Mexican trafficking groups, commonly composed of family members, relatives, and trusted associates, smuggled black tar heroin into the country. Some of these organizations controlled opium production and heroin processing areas in Mexico as well as transportation and distribution networks in the United States. Mexican organizations were in control of wholesale distribution but generally were not involved in street sales, which often were handled by local gangs.

Smuggling methods included the use of private and commercial motor vehicles, public transportation, internal and external body carries, and commercial

HEROIN: AN ENTRENCHED TRADE

Only significant political change or concerted, successful Burmese Government military action in the heroin source areas of Burma is likely to have any major impact on insurgent groups. These organizations operate in the absence of any consistently strong central government pressure.

DEA has targeted several high-level Burmese brokers and financiers. LIN Chienpang, a close associate of the SUA's warlord, KHUN SA, was arrested and brought to the United States during the year, which temporarily disrupted SUA heroin smuggling. Yet, even when such major leaders in these organizations are arrested, the organizations continue to operate. Because of their location and political influence, all of these insurgent trafficking groups remained well entrenched in the heroin trade.

package express services. Once the heroin reached the United States, transportation was arranged throughout the West and Southwest, and to the Denver, Chicago, and St. Louis areas, primary markets for Mexican heroin.

High-purity heroin produced in Colombia was available on an increasing, but still limited, basis. According to intelligence reports, **Colombian** traffickers improved on their opium processing and heroin production techniques and began to establish larger distribution outlets for their heroin in the United States. Seizures of heroin from Colombian couriers, who arrived on commercial airlines, increased in late 1991 and continued to grow in 1992, especially at Miami International Airport. Most of these smugglers confessed to being en route to or had tickets in their possession for follow-on travel to New York City.

Heroin couriers usually ingested or body carried the drug, and most seizures ranged from 0.5 to 1.7 kilograms. The El Paso Intelligence Center reported that the number of seizures of suspected Colombian heroin increased from two in 1990 to 41 in 1991 and more than 260 in 1992.

GLOBAL DEVELOPMENTS

Southeast Asia

Cultivation: According to U.S. Government estimates, illicit opium production in Burma, Laos, and Thailand fell slightly in 1992. This decline might have been offset by possible production from illicit opium poppies grown in China's Yunnan Province. Expansion of cultivation in Yunnan Province and in other parts of China during the last few years has made China a major producer of opium. Some estimates suggest that potential opium production in China could rival that of Laos. Although the Chinese Government maintained that there was no opium poppy cultivation in Yunnan, they did acknowledge that there was sizeable heroin trafficking there. Yunnan authorities were reported to have seized over 4 metric tons of the drug. An unknown amount of opium poppy cultivation also took place in Vietnam.

In **Burma**, after eradication, 153,710 hectares of opium poppy were cultivated in 1992 compared to 160,000 hectares in 1991. The crop could have produced 2,280 metric tons of opium, a slight decline from 1991. Approximately 2,000 hectares were cultivated in **Thailand**, producing an estimated 24 metric tons. Cultivation in **Laos** exceeded 25,000 hectares with a potential production of 230 metric tons of opium. Some analysts believe that the total production potential in China was similar to that of Laos.

Processing and Trafficking: Most of the heroin in Southeast Asia was produced along the Burmese– Thai and Burmese–Chinese borders in areas controlled by the United Wa State Army, the Kokang Chinese, or the Shan United Army (SUA). (The SUA also is known as the Mong Tai Army.) Some analysts believe that the Wa eclipsed the Shan in terms of total production and market dominance in 1992. CHANG Chi-fu aka KHUN SA, leader of the Shan United Army, was reported to be having cash flow problems. Ethnic Chinese and Sino–Thai traffickers dominated the manufacture, export, and wholesale distribution of Southeast Asian heroin worldwide.

Ethnic Chinese organizations were comprised of individuals who joined forces and combined resources to smuggle heroin from Thailand to New York City or the West Coast, sometimes by way of Europe or even Australia. Much of the heroin that transited China was carried overland to Hong Kong. From there, the heroin was transported to the United States, occasionally by way of Canada. Heroin also was hauled by courier or concealed in commercial cargo that was shipped through many other Asian nations including Malaysia, Taiwan, and Japan.

Ethnic Chinese criminal organizations that traffic in heroin are best viewed as syndicates or joint ventures. Participation in those organizations is based upon experience, expertise, contacts, and wealth; however, close cultural, familial, or criminal affiliation (membership in a tong, triad, or gang, for example) are important bona fides, which facilitate that participation. Due to the serial nature of heroin trafficking, fluidity and flexibility abound.

Other nationalities from Southeast Asia, such as the **Vietnamese**, may have become more involved in heroin trafficking as a result of poor economic conditions in their countries and increased access to the outside world.

Enforcement: There was little sustained eradication of opium poppies in **Burma** or **Laos**. Burma lacked the resources to effectively move against major traffickers. Only fighting among rival insurgent groups had any significant effect on opium poppy cultivation, opium production, and heroin refining.

Southwest Asia

Cultivation: Opium poppy cultivation dropped slightly in **Pakistan** from 8,205 hectares in 1991 to 8,170 hectares in 1992, but rose significantly in **Afghanistan**. DEA believes that opium production in Afghanistan increased to about 900 metric tons although official U.S. Government estimates place production there at only 640 metric tons. DEA's estimate is based on analysis of human source reporting as well as on foreign observations. Pakistan produced an estimated 175 metric tons of opium.

In the Middle East, opium poppy cultivation in **Lebanon** was significantly reduced due, principally, to bad weather but also due to some eradication undertaken by Lebanese and Syrian forces. However,

heroin production from opium and morphine imported through Turkish brokers from Afghanistan and Pakistan continued apace.

There also was opium poppy cultivation and opium production in the **Central Asian Republics**. Most, if not all, of this production was consumed locally.

DEA remains concerned about continued illicit opium production in **Iran**, which was reported in the *International Narcotics Control Strategy Report* to be 300 metric tons. There is limited information regarding the narcotics situation in Iran, and some U.S. estimates place potential opium production there at only 35 to 70 metric tons, a significant decrease compared to the current official estimate.

Processing: Overall, illicit opium poppy cultivation, opium production, and, by extension, heroin production in Southwest Asia continued to increase over previous years due to the lack of central government control and poor economic conditions. Production could increase further if good weather conditions prevail.

By contrast, opium production fell in **Pakistan** by 5 metric tons to 175 metric tons in 1992. However, abundant rainfall may lead to higher yields in 1993. Processing continued in the Northwest Frontier Province of Pakistan where hundreds of laboratories produced morphine base and, occasionally (by special order), heroin. Pakistani traffickers shipped metric ton quantities of morphine base to Turkey for further processing into heroin via ships that passed shrough the Suez Canal. An increase in morphine base conversion also was seen in **Afghanistan**.

Trafficking: There were metric ton seizures of opium and morphine base in some of the Southwest Asian countries in late 1992 and early 1993. One ship reported to be carrying large quantities of hashish and morphine base was interdicted in the Mediterranean Sea on its way from **Pakistan** to Turkey, but it was scuttled by its crew to prevent seizure by the Turkish Police. A shipment of 1.4 metric tons of morphine base was seized in late December 1992 in Turkey after it had transited by truck through Tajikistan, Azerbaijan, and Georgia from **Afghanistan**. In January 1993, a ship containing 2.7 metric tons of morphine base and heroin was seized by Turkish authorities. The shipment had originated in Pakistan. In recent years, bulk shipments of heroin from Turkey have usually been headed toward European markets via the Balkan route (which runs from Turkey through Greece and Bulgaria to Western Europe) rather than to the United States.

In the **Central Asian Republics** as well as in the Ukraine and Russia, increased organized criminal activities and open borders led to contact between smuggling organizations there and in the West. There was limited traffic in opiates between the newly independent states that border Eastern Europe and the emerging democracies in Central Asia. The rise of ethnic nationalist movements in the Balkans and Central Asia has led to political turmoil. Intelligence suggests that some of these nationalist movements, such as ethnic Albanians in the former Yugoslavia, have taken advantage of the turmoil to become involved in drug trafficking with traditional smuggling groups.

Morphine base and heroin smuggling from Southwest Asia across Iranian territory continued to occur. Heavily armed traffickers posed a significant challenge to law enforcement authorities in that region.

Enforcement: There were no concerted efforts in **Iran** to eradicate opium poppies. Pakistani officials reported that 977 hectares of opium poppies were eradicated and that the area under the opium poppy ban had been extended to 140,000 hectares; however, practical limits on cultivation were enforced more by bad weather than by human intervention. The return of many Afghan refugees to their homes in **Afghanistan** led to an increase in opium poppy cultivation and higher morphine base production in that country. Little effort was made by the government to engage in any counter-drug action.

	Country	Year	Net Cultivation (hectares)
	Duirma	1991	160,000
sia	Burma	1992	153,710
Southeast Asia Faos		1991	29,625
uthea	Laos	1992	25,610
Sol	Thailand	1991	3,000
	mananu	1992	2,050
	Colombia	1991	1,160
'n	Colombia	1992	20,000
Latin America	Guatemala	1991	1,145
tin A	Guatemala	1992	730
Lati	Mexico	1991	3,765
	MEXICO	1992	3,310
		1991	17,190
	Afghanistan	1992	19,470
sia	Iran	1991	Unknown
Southwest Asia	(idi)	1992	Unknown
uthwe	Lohonon	1991	3,400
Sol	Lebanon	1992	Negligible
	Pakistan	1991	8,205
	ranisian	1992	8,170
	Total Estimated	1991	At least 227,490
	Cultivation	1992	At least 233,050

ILLICIT OPIUM POPPY CULTIVATION ESTIMATES in Major Source Countries

Source: International Narcotics Control Strategy Report 1993

	Country	Year	Metric Tons
	Burma	1991	2,350
sia		1992	2,280
Southeast Asia	Laos	1991	265
uthe	Laos	1992	230
Sol	Thailand	1991	35
	Thananu	1992	24
	Colombia	1991	27
Ø	Colombia	1992	Unknown ¹
Latin America	Guatemala	1991	17
n An	Guatemala	1992	Negligible
Lati		1991	41
	Mexico	1992	40
	Afghanistan	1991	570
	Afghanistan	1992	640²
sia	lue e	1991	300
est A	Iran	1992	300³
Southwest Asia		1991	3,400
Sou	Lebanon	1992	34
		1991	180
,	Pakistan	1992	175
	Total Potential	1991	At least 3,819
	Production	1992	At least 3,689

ILLICIT OPIUM PRODUCTION ESTIMATES in Major Source Countries

¹ Opium production in Colombia, although potentially high, probably did not exceed 1991's estimate of 27 metric tons. ² DEA believes that total production in Afghanistan may have exceeded 900 metric tons. ³ Some estimates now place Iranian production between 35 and 70 metric tons.

Source: International Narcotics Control Strategy Report 1993

LATIN AMERICA

Although considered as a single geographic source area, there are two different types of heroin produced in Latin America. Traffickers in Mexico convert opium principally to black tar heroin. Colombian traffickers convert opium into white powder heroin.

Mexico and Guatemala

Cultivation: Net cultivation of opium poppies in Mexico was only 3,310 hectares, and a little over 700 hectares were cultivated in Guatemala. Effective government eradication operations continued to push opium poppy growers further south in Mexico. In Mexico, where opium is harvested three times a year, opium production remained steady at about 40 metric tons. Opium production in Guatemala was negligible.

Processing: Processing activity in Mexico was centered on the production of black tar heroin, which is quick and easy to make and readily accepted by users in the western United States. Although the opium produced in Mexico and Guatemala represents only a small portion of total worldwide production, all of the heroin produced there is for U.S. consumption.

Trafficking: A number of well-established polydrug organizations smuggle heroin from Mexico. These organizations also smuggle marijuana and, sometimes, cocaine to the United States for Colombian traffickers. Recent intelligence suggests that other organizations, independent of traditional family groups, have become more active in smuggling heroin out of Mexico. Mexican traffickers also smuggled opium from Guatemala to processing points in Mexico.

Enforcement: The Mexican Government was very aggressive in its eradication program. Over 6,800 hectares of opium poppies were eradicated in Mexico during the year, especially in the northern States. As a result, traffickers transferred much of their opium poppy cultivation and heroin processing further south in the country. Guatemalan authorities eradicated 470 hectares of poppies.

Colombia

Cultivation: Opium poppy cultivation in Colombia increased in 1992; upwards of 20,000 hectares may have been cleared for cultivation. There is a potential for production of large quantities of opium from this burgeoning cultivation; opium can be collected several times a year. Yet, low yields and the inability of Colombian laboratories to produce heroin in large quantities have, so far, considerably lessened the impact of that country's heroin production. A few, unconfirmed reports suggested that opium poppy cultivation had been extended into Peru and Ecuador, and, in fact, Ecuadorian authorities eradicated a few hectares of opium poppies near the border with Colombia in November.

Processing: So far, the heroin laboratories seized in Colombia have been unable to produce the drug in large quantities. It is estimated that Colombian laboratories can produce between 2 and 14 kilograms a week. Although Colombia's major cocaine cartels gained greater control of the country's heroin production during the year, in undercover negotiations, Colombian dealers were unable to supply multikilogram quantities on a regular basis in the United States. We anticipate that, as lingering processing problems in Colombia are overcome, wholesale distribution in the United States will be attempted.

There also was evidence that some Colombian organizations had received heroin from Southwest Asia perhaps from Lebanese traffickers—in exchange for cocaine base. Some of this heroin may have been transported to the United States.

Trafficking: Colombian heroin is produced and shipped to the United States, principally by independent criminal groups. However, in 1992, some cocaine cartels exerted greater control over the major smuggling routes as well as the markets for Colombian heroin in the United States, carving a small, but distinct niche for their product on the U.S. East Coast. Colombian heroin traffickers increased the number of couriers that they sent through Miami with kilogram quantities of heroin ingested or concealed in luggage. Arrests of such couriers in the United States exceeded 260, and more than 59 kilograms of suspected Colombian heroin were analyzed in DEA laboratories. A 15-kilogram airdrop of heroin onto a Puerto Rican beach was interdicted by the U.S. Customs Service, suggesting cartels have become more deeply involved and capable of smuggling multikilogram shipments.

Colombian traffickers may have avoided using cocaine air routes into Mexico on a routine basis. But, from time to time, there were reports that heroin was being included with cocaine shipments. The U.S. Customs Service also noted an increase in the number of times that heroin was concealed in commercial cargo shipments from Colombia to the United States.

OTHER REGIONS

Western Europe

Historically, Italian organized crime families have been participants in heroin trafficking in Europe and, to a limited degree, have overseen some smuggling of the drug to the United States. In 1992, these criminal organizations were responsible for smuggling Southwest Asian heroin to the United States. Italian organized crime families also trafficked in Turkish-produced heroin from Albania across the Adriatic Sea into Italy.

Heroin was transported from Southwest Asia along the "Balkan route," but ongoing civil war in the former Yugoslavia forced traffickers to reroute their heroin shipments northward through Romania and Hungary.Seventy-five percent of the heroin seized in Europe in recent years was transported via the Balkan route.

CIS: LICIT OPIUM

Kazakhstan announced in January that it intended to reinstate legal opium poppy cultivation, but reconsidered its position toward the end of the year. Other republics, however, may consider producing opium in order to obtain hard currency. DEA is concerned that a significant percentage of this opium may end up in the illicit narcotics market. Turkish traffickers dominated smuggling via the Balkan route. Nigerian trafficking organizations, however, were responsible for a growing amount of heroin smuggled into Europe via commercial air connections, and, as noted above, morphine base was smuggled to Turkey in ton quantities through the Suez Canal from Pakistan as well as overland from Central Asia.

Eastern Europe and the Commonwealth of Independent States

Narcotics interdiction efforts in Eastern Europe and Central Asia were weak and mostly ineffectual. The difficult political and economic transitions that occupied Russia and the Central Asian Republics were exploited by heroin traffickers. The transition by these nations toward a market economy may also promote opportunities for money laundering.

Afghan traffickers have been looking northward as a result of growing economic and cultural ties with Central Asia and a tightening of security along the border with Pakistan. In recent years, hundred-kilogram quantities of heroin have been smuggled via Russian rail from Afghanistan to Western Europe and occasionally on to the United States.

Kilogram quantities of heroin, shipped from Thailand and India for European consumers, also have been seized at Moscow's international airport. Although Russian authorities attributed trafficking in their country to foreign criminals, evidence emerged to suggest that a growing role was being played by Russian and Central Asian organized crime groups, which have the potential for smuggling significant quantities of drugs from Afghanistan and Iran.

The major opium poppy growing regions in the Commonwealth of Independent States (CIS) were the Central Asian States of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. Kyrgyzstan, Kazakhstan, and Uzbekistan authorities cooperated on drug law enforcement, making over 800 arrests, destroying 276 illicit opium poppy fields, and seizing over 2 metric tons of drugs according to press reports. This occurred despite the fact that CIS authorities remained understaffed and resource poor, which limited their well-intentioned efforts. In October, Russia signed an agreement with 12 other former Soviet republics to combat drug trafficking. Participants agreed to exchange intelligence and to develop common data bases. The Russian Ministry of the Interior also increased its liaison with foreign law enforcement agencies and, according to the State Department, nearly doubled—to 1,500 the number of its drug investigators.

The Middle East

Syria was not a significant producer of illicit drugs, but was a known transit country for heroin. Syrian troops controlled the northern Bekaa Valley in Lebanon where opium poppies were cultivated and heroin was produced. Some Syrian military officials tolerated and even facilitated the smuggling of narcotics in Labanon. Effective drug enforcement in Lebanon was complicated further by the political turmoil in that country.

There also was opium poppy cultivation in Lebanon's Bekaa Valley in areas controlled by Hezbollah, a radical Islamic political movement with ties to Iran. Lebanese heroin producers also relied on stockpiled and imported opium and morphine base because poor weather limited the local crop. Opium and morphine base from Pakistan, Afghanistan, and Iran were smuggled through Syria via Turkey en route to laboratories in the Bekaa Valley. The finished heroin was transported back through Syria for final destinations in the Arabian Peninsula, Europe, and the United States. Israeli organized crime elements transported heroin through the Israeli security zone in southern Lebanon; the heroin was eventually smuggled to New York City.

Africa

Although not a new group in terms of Southwest Asian heroin trafficking, West Africans have emerged as major traffickers of Southeast Asian heroin in recent years. U.S. arrests of West Africans who were trafficking in Southeast Asian heroin exceeded 660 in 1991 and remained high in 1992. In response to increased law enforcement pressure, particularly at international points of entry, Nigerian smuggling organizations employed other West Africans, U.S. citizens, and nationals of Eastern European countries as drug couriers. Nigeria was a major heroin trafficking and transit country. Enforcement there was hampered by endemic corruption. Nigerian organizations also were quick to capitalize on a lack of law enforcement resources in neighboring nations to transport heroin into Nigeria and subsequently on to major U.S. and European markets.

In 1992, the United States requested that Nigeria extradite four individuals to face charges in this country. Chris Okpala and Greg Odilibe, two Nigerian traffickers, were arrested, but both were released by a Nigerian Magistrate's court following initial denial of the U.S. extradition request. Okpala was subsequently rearrested following an appeal by Nigerian Government attorneys. He was extradited and was placed on trial in Baltimore, Maryland, charged with conspiracy to traffic in heroin. Greg Odilibe as well as the other two traffickers, Sonny Odilibe and John Okpala, remain at large, presumably in Nigeria.

Other transit countries in **Sub-Saharan Africa** included Chad, Cote d'Ivoire, Ethiopia, Ghana, Kenya, and Senegal. Traffickers carried heroin from the Middle East, Southwest Asia, and Southeast Asia through these African nations, where interdiction and enforcement efforts were hampered by scarce resources, competing priorities, and increasing sophistication in smuggling techniques employed by the traffickers. In many instances, police and military resources were diverted from drug enforcement to internal security missions. The drug enforcement situation was exacerbated further by endemic corruption.

In Liberia, despite civil war and the interruption of international air service, Nigerian traffickers took advantage of historical connections between Liberia and the United States to obtain documentation for their couriers as dual citizens, permanent resident aliens, or Liberians visiting relatives in the United States.

Ethiopia was increasingly used by Nigerian groups because of its excellent international air connections with the Far East and Europe. Seizures there came to almost 100 kilograms. Egypt also remained a significant transit location because of its strategic location and its integration in the global trading community. Nigerian traffickers are believed to have entered **South Africa** in order to obtain false documents and to position themselves to take advantage of increased international transportation connections following the lifting of international economic sanctions. Of further concern was the existence of smuggling routes for the illicit importation of Mandrax (a sedative) from India to South Africa. With increased diversion of licit Indian opium and a possible increase in illicit refining of heroin on the Indian Subcontinent, Indian traffickers may attempt to use the Mandrax routes to smuggle heroin.

Over 50 kilograms of heroin were seized in Zambia, a significant increase from the 3.8 kilograms seized in 1991. West African traffickers also have used Zambian travel documents in the past. Several Tanzanian nationals were arrested in Scandinavia during the year and charged with drug trafficking following their attempts to smuggle heroin.

The Subcontinent

DEA is concerned about the potential for diversion of licitly produced opium in **India**. In 1992, India was the world's largest supplier of licit opium with the crop producing nearly 500 metric tons. There was also illicit opium poppy cultivation in the northeastern States of India near the Indo–Pakistani border. Official estimates by the Indian Government show that some diversion has taken place; other estimates suggest that upwards of 30 percent or more of the crop could have been diverted to the illicit market although, to date, there has been no direct evidence of any substantial exports of Indian-produced heroin to validate these estimates.

Sri Lanka was, increasingly, a final destination and perhaps a transit country for small amounts of Indian-produced brown sugar heroin.

CANNABIS

AVAILABILITY AND ABUSE IN THE UNITED STATES

Availability, Price, and Purity

Marijuana, a Schedule I controlled substance and product of the *Cannabis sativa I*. plant, remained the most commonly used illicit drug in the United States. Both the cannabis plant and delta-9 tetrahydrocannabinol (THC), the plant's primary psychoactive chemical, are controlled substances. Marijuana is made from the flowering tops and leaves of the plant, which are collected, trimmed, dried, and then smoked in a pipe or as a cigarette. The flowering tops, also known as colas or buds, are highly valued because of their higher THC content. Some users stuffed marijuana into hollowed out commercial cigars. On the street, such marijuana cigars are known as "blunts."

Abuse

Approximately 67.5 million Americans are reported to have tried marijuana at least once in their lifetime, and 17.4 million used marijuana at least once in the past year according to the 1992 National Household Survey on Drug Abuse. Of past-year users, 5.16 million used marijuana once a week or more. Current use of marijuana, defined as any use during the past month, has been steadily declining since 1979 when there were 22.5 million current users. In 1992, there were 8.6 million current users, the lowest level since 1972.

Rates of use decreased among high school seniors from 36.7 percent of respondents as reflected in the 1991 National Senior Survey to 32.6 percent in 1992. Annual use continued to decline from 23.9 percent in 1991 to 21.9 percent and current use decreased from 13.8 percent to 11.9 percent. Rates of use among eighth graders, however, increased with 11.2 percent admitting to lifetime use compared to 10.2 percent in 1991, and annual use increased from 6.2 percent to 7.2 percent. The downward trend noted in marijuana use among 10th and 12th graders was encouraging, though the increase of reported use among eighth graders was especially troubling when placed in the context of greater availability and the fact that the drug was perceived by them to be of minimal harm.

In part, substantially increased cost is believed to have contributed to the overall downward trend in marijuana use in recent years. Prices for a pound of commercial grade marijuana during the early 1980's ranged from \$350 to \$600, while in 1992, the cost ranged from \$300 to \$3,000 although most sales did not occur for less than \$600 per pound. The cost of sinsemilla, the unpollinated female plant with its inherently higher THC content, ranged from \$1,000 to \$2,000 per pound twelve years ago. In 1992, the price ranged from \$650 to \$9,600 per pound although most sales did not fall below \$2,500 per pound.

CURRENT MARIJUANA USERS (Millions of Users)						
1979	1985	1988	1990	1991	1992	
22.5	18.2	12	10.2	9.7	9	

Source: NIDA National Household Survey

Cultivation

Domestic cultivation trends of significance in 1992 included efforts to enhance the potency of marijuana through the employment of advanced agronomic practices including hydroponics and cloning. Such techniques included the use of special fertilizers, plant hormones, steroids, and carbon dioxide. During the late 1970's and early 1980's, the THC content of commercial grade marijuana averaged

U.S. DOMESTIC MARIJUANA PRICES

Commercial Grade						
1989 1990 1991 1992						
Wholesale (pound)	\$350-\$2,000	\$250-\$3,000	\$400-\$3,000	\$300-\$3,000		
Retail (ounce)	\$30-\$250	\$25-\$300	\$40-\$550	\$40-\$450		

Sinsemilla							
	1989	1990	1991	1992			
Wholesale (pound)	\$700-\$3,000	\$400-\$4,100	\$500-\$6,000	\$650-\$9,600			
Retail (ounce)	\$100-\$300	\$80-\$350	\$100-\$450	\$125-\$650			

Source: Drug Enforcement Administration

under 2 percent. By comparison, the average in 1992 was 3.68 percent. The average THC content of sinsemilla in 1992 was 8.34 percent, down from 1991's 11.72 percent but still significantly higher than averages in the late 1970's and early 1980's of 3 to 6 percent. Moreover, during 1992, some marijuana seized in Alaska was found to contain a concentration of 29 percent THC, the highest level recorded in the United States to date. High-potency marijuana referred to as skunk, skunkweed, or nederweed also appeared in the Netherlands and in Latin America with a THC content of 27 percent or higher.

THC CONTENT (Percent)

	1980	1985	1990	1991	1992
Hashish ¹	2.58	6.49	6.86	3.75	7.55
Sinsemilla	6.40	7.28	10.15	11.72	8.34
Commercial Grade	0.82	3.12	3.63	3.13	3.68

¹ Hashish users represent a very small percentage of the cannabis user population in the United States. This is due to general preference omestically produced marijuana with a high THC content as well as a general unfamiliarity with hashish. When encountered in the United States, retail prices for hashish averaged \$3,000 per kilogram, \$1,500 to \$6000 per pound, \$100 to \$600 per ounce, and \$10 to \$15 per gram. THC content of hashish averaged 7.55 percent. Hashish oil sold for \$35 to \$55 per gram and \$2,500 to \$4,000 per pound.

Source: Drug Enforcement Administration

MARIJUANA PRODUCTION ESTIMATES in Major Source Countries

Country	Year	Net Cultivation (hectares)	Net Production (metric tons)
	1991	17,915	7,775
Mexico	1992	16,420	7,795
Colombia	1991	2,000	1,500
Golombia	1992	2,000	1,500
Jamaica	1991	950	641
Jamaica	1992	389	Not Available
Belize	1991	54	49
Belize	1992	54	50
Othere	1991	Not Available	4,500
Others	1992	Not Available	3,500
Lipited Cloter	1991	Not Available	3,615-4,615
United States	1992	Not Available	2,595-3,095
Total Marijuana	1991		18,080-19,080
Production	1992		15,440-15,940
Seizures and	1991		3,500-4,500
Other Losses ¹	1992		3,500-4,500
Net Amount of	1991		13,580-15,580
Marijuana Available	1992		10,940-12,440

¹ 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.

Source: DEA and International Narcotics Control Strategy Report 1993

TRAFFICKING

Mexico accounted for most of the foreign marijuana available in the United States during 1992. However, law enforcement officers noted a continued increase in Colombian, Venezuelan, and possibly Jamaican marijuana shipments to the United States.

An estimated 6,000 to 6,500 metric tons of cannabis were cultivated in the United States. This compares to an estimated gross 6,000 to 7,000 metric tons cultivated (does not include ditchweed) during 1991. Approximately 3,405 metric tons representing 7.49 million plants were eradicated. Total domestic seizures of cannabis and marijuana rose to 347 metric tons compared to 306.6 metric tons in 1991. Many of the cannabis plants eradicated during 1992 were sinsemilla plants.

The 13th annual DEA-sponsored Domestic Cannabis Eradication and Suppression Program (DCE/ SP) was conducted in conjunction with other Federal, State, and local law enforcement authorities in 50 States during 1992. The National Guard and Civil Air Patrol also participated. The DCE/SP resulted in the eradication of 7.49 million cultivated cannabis plants, 264 million low-potency ditchweed plants, the arrest of some 12,000 violators, and the seizure of 5,500 weapons. Moreover, the number of indoor growing operations seized in 1992 reached an all-time high of 3,849, up from 1,398 seized in 1989. The continued trend toward indoor production is believed to have been driven primarily by previous, successful law enforcement efforts to curtail outdoor cultivation.

In recent years, the DCE/SP has placed increasing emphasis on the investigation and prosecution of major domestic cannabis cultivators and marijuana trafficking organizations. The net result during 1992 was the forfeiture of assets valued at over \$69.3 million, more than seven times the amount seized in 1988 (\$9.8 million) and 31 percent above the value of assets seized in 1991. The U.S. Fish and Wildlife Service, National Park Service, and Bureau of Indian Affairs conducted programs to combat cannabis cultivation on public lands.

Major cannabis cultivation took place in Illinois, Hawaii, Tennessee, Indiana, and Kentucky. The five top States for indoor growing activity included Washington, California, Colorado, Florida, and Oregon. Washington alone accounted for 561 of the seized sites. The average indoor growing operation had approximately 100 plants.

One of the major accomplishments of the DCE/SP continued to be the success of Hawaii's Operation WIPEOUT. During 1990, it was estimated that the program eradicated about 85 percent of Hawaii's summer cannabis crop. In 1991, Operation WIPEOUT's continuing success was evidenced by reports that mainland smugglers had to haul marijuana to Hawaii in order to fill the vacuum there. Prices for sinsemilla in Hawaii reached \$9,600 per pound as a result of the shortage and the need to import marijuana from the mainland.

In 1992, Operation WIPEOUT was conducted as a maintenance program, and it eradicated 85 to 90 percent of the crop. Every 90 days, Operation WIPEOUT teams conducted aerial surveillance and eradicated what few cannabis plants can be found.

Over the past few years, cannabis increasingly has been grown indoors year-round in the United States in elaborately supported operations, which have ranged from several plants grown in closets to thousands of plants grown in specially constructed underground sites capable of producing a product worth millions of dollars. According to DEA reporting, a healthy indoor-grown cannabis plant can produce up to a pound of high-THC-content sinsemilla. Growers also planted cannabis, as in the past, in remote areas, often concealed or camouflaged by surrounding vegetation.

GLOBAL DEVELOPMENTS

Latin America

Colombia was once the primary source country for marijuana sold in the United States, and intelligence indicated a reemergence of Colombian marijuana in the U.S. market during the year. There were several significant seizures of marijuana in Colombia, where the police reported seizing some 197 metric tons. They also seized 328 metric tons during the first 4 months of 1993, including a single seizure of 200 metric tons. There were some 82.6 metric tons of marijuana seized in the Caribbean in 1992 and almost 12 metric tons of Colombian marijuana seized there in the first quarter of 1993. In one 1993 case, Colombian traffickers attempted to ship 17.9 metric tons of marijuana to the Netherlands. Additionally, data revealed new cannabis fields along the southeast slopes of the Sierra Nevada Mountains and along the Colombian side of the Serranía de Perijá Mountains, which border Venezuela. Colombian traffickers also processed and distributed Venezuelan-grown marijuana.

Cannabis cultivation in Colombia was estimated at 2,000 hectares, and net production came to 1,500 metric tons. There was no reported eradication during the year. DEA reporting suggests that total cultivation was significantly more extensive and could have reached 14,000 hectares. Other growing areas included the Departments of Narino, Valle del Cauca, and Cauca, and the Intendancy of Putumayo, along the Pacific coast.

Mexico was the major foreign source of marijuana imported to the United States. Net cultivation, estimated to be approximately 16,420 hectares, was a significant decrease from 1990 when 35,050 hectares were cultivated. This decrease was attributed to unfavorable weather conditions and continued intensive eradication efforts by Mexican authorities. The Mexican Government eradicated almost 12,100 hectares of cannabis and seized 405 metric tons of marijuana in 1992.

Cannabis is grown throughout Mexico; major growing areas are found principally in the States of Chihuahua, Jalisco, San Luis Potosi, Sinaloa, Sonora, and Zacatecas. There was some cultivation of sinsemilla in Mexico, but most of the cannabis produced was of the commercial variety. Small amounts of cannabis probably were grown in Veracruz and Oaxaca. Cultivation also was seen in the States of Chiapas, Guerrero, and Michoacan. While two harvests a year have been common, the practice was not rigid. In many areas of Mexico, cannabis was grown continuously and harvested throughout the year.

Cannabis was cultivated primarily by subsistence farmers who relied on it as their only cash crop. The

cannabis plants were often intermingled with legitimate crops such as corn and beans. Some traffickers introduced more advanced agricultural technology and taught farmers how to avoid or nullify the effects of aerial eradication. It was these same traffickers who controlled the processing of the cannabis and transportation of the marijuana.

Marijuana was smuggled into the United States, predominantly by vehicle and, to a far lesser extent, by private aircraft. U.S. detection and monitoring of air traffic and air interdiction efforts along the Southwest border as well as the relative ease of overland smuggling accounted for the dramatic reduction in the use of private smuggling aircraft that has occurred over the past several years.

An aggressive aerial eradication program resulted in stabilizing the amount of marijuana produced in **Belize** at 50 metric tons compared to 49 metric tons in 1991 but down from 60 metric tons in 1990. An estimated 320 hectares of cannabis were cultivated during the year, of which 266 hectares were eradicated for a net cultivation of 54 hectares. As a consequence of the eradication program, growers planted their cannabis under vegetation and intermingled with food crops to conceal it. Police interdiction efforts resulted in the seizure of 0.58 metric tons of marijuana.

Brazil is a major producer of marijuana; however, most Brazilian marijuana is consumed locally. Illegal cultivation of cannabis was confirmed in most of its 26 States and in the Federal District of Brasilia. The greatest amount of production took place in the northeastern States of Bahia and Pernambuco. Marijuana production and trafficking were usually controlled by Brazilian nationals, but unconfirmed reports suggested the involvement of foreign nationals in support activities associated with the trafficking.

The Brazilian Federal Police (Departamento Policía Federal or DPF) seized 19.6 metric tons of marijuana and eradicated 763 metric tons of cannabis. Reliable estimates of total cannabis cultivation were not available. Most cannabis cultivated in northeastern Brazil was for domestic consumption. Marijuana not intended for domestic consumption was usually trucked from the interior to port cities on the northeast coast and to the northern region, principally to the city of Belém. DPF officials believe that large quantities of marijuana were exported from Belém to Suriname and I³rench Guiana and, occasionally, on to the Netherlands for distribution there and in the rest of Europe. Belém serves as a natural link for marijuana traffickers because of its large Surinamese community and the considerable commercial activity, both legal and illegal, conducted there between Brazil and Suriname.

An estimated 1,200 hectares were cultivated during the year in **Jamaica**, which was a decrease over the 1991 estimate of 1,783 hectares of cultivation. The Government of Jamaica eradicated 811 hectares of cannabis; the Jamaican Defense Force and the Jamaican Constabulary seized 35 metric tons of dried marijuana. Under an annual eradication program called Operation BUCCANEER, the police also destroyed 378,760 seedlings.

As a result of successful eradication campaigns since 1987, cannabis farmers virtually ceased large-scale cultivation (5 to 50 acre plots). Most cannabis was grown in plots of 1 acre or less. Moreover, in recent years, cultivation has shifted from the more accessible wetlands of western and central Jamaica to remote sites in the highlands, including the Blue Mountains of ecstern Jamaica. In an attempt to conceal cultivation and evade helicopter-borne eradication operations, plots of cannabis were cultivated along the base of steep, narrow ravines and canyons.

Couriers, who concealed 2 to 4 kilograms of marijuana in their luggage or in body packs, were routinely stopped at Jamaica's international airport. Traffickers also made use of containerized ocean freight to conceal marijuana being shipped to the United States.

In Jamaica, maritime traffickers used pleasure boats with concealed storage areas to transport relatively small quantities of marijuana. Commercial fishing and cargo vessels were used to transport larger shipments. Traffickers also concealed marijuana in containerized cargo shipments, intermingled with legitimate exports. Hashish oil available in the United States came principally from Jamaica and was normally sold in gram quantities in order to maximize profits.

Cannabis was grown in small plots, primarily in the northeastern, thickly forested region of **Paraguay** along the Brazilian border. The marijuana was consumed domestically and exported to Brazil. Little of it reached the United States. Up to an estimated 4,734 metric tons of marijuana were produced, of which the government seized 634 metric tons.

Southeast Asia

In the late 1980's, Southeast Asia became a major exporter of marijuana to the United States. Most of the marijuana for the U.S. market came from Thailand and Laos, and, to a lesser extent, Cambodia. Other nations such as Australia, Burma, Indonesia, Malaysia, some of the Pacific island countries, and Vietnam also produced marijuana; however, the extent of cultivation and ultimate export totals are not known for these countries. As a result, specific figures were unavailable. Evidence did suggest, however, that the Philippines has become a major source of marijuana for the U.S. market. Cultivation there increased during the year, and intelligence suggested that country also was used as a storage and staging area for an increasing number of marijuana shipments being sent to the United States.

In the past several years, there has been a shift in trafficking patterns accompanied by changes in cultivation, processing, storage, transportation, and routing. Trafficking began in cultivation areas in northern Southeast Asia to staging points along Thailand's southern coast, western Cambodia, and the coast of Vietnam. Marijuana was transported in trucks to ports of embarkation. At these export points, the marijuana was loaded onto trawlers and transported to oceangoing vessels in the Gulf of Thailand for shipment to the United States. This latter portion of the trafficking was dominated by Americans. Other nationalities engaged in the trafficking included Australians, British, Canadians, Chinese from Hong Kong and Taiwan, Germans, and Thais. To date, well over \$100 million in assets have been seized from American marijuana smugglers alone.

Farmers in Southeast Asia generally harvest two cannabis crops per year, but cannabis can be grown on a year-round basis. The first crop is harvested in December and January. A second crop is planted in October or November for harvest in April.

Filipino farmers generally plant two crops per year as well. The first is planted in March and harvested in June. The second crop is planted in November for harvest in January. Weather can adversely affect the crop; however, farmers store their marijuana, if necessary, and will package it during the rainy season.

Packaging methods used by traffickers in Southeast Asia range from the crude to the sophisticated. The first step usually is to press the marijuana into 1 kilogram blocks with the use of a hydraulic press. The blocks are placed into aluminum foil or plastic bags and then vacuum packed. The packets are hermetically sealed with a heat sealing device and wrapped with nylon reinforced plastic tape. The brick-like packages are then placed in boxes, tin canisters, burlap sacks, or nylon or canvas gym bags. The entire process maintains composition, eliminates odor, and prevents mildew.

Accurate eradication figures for 1992 were not available. Seizures and intelligence reflect continued availability of Southeast Asian marijuana in the United States. Thailand reported large seizures, but seizures elsewhere in the region were minimal with the exception of the Philippines. Authorities there seized 3 metric tons of marijuana and eradicated over 7.2 million plants. Prices for Southeast Asian marijuana varied depending upon the form, the market, and the quality. In addition to marijuana, growers produced commercial quantities of hashish for export to other countries.

Middle East and North Africa

The United States does not constitute a large market for hashish, which is produced principally in the Middle East and North Africa. Canada, however, is a major market. It is unlikely that hashish will secure a large share of the U.S. drug market in the near term.

Cannabis was grown primarily in the northern Bekaa Valley of Lebanon where cultivation was conducted

on a large scale, using mechanized equipment, irrigation, and fertilizers. The land is level across the floor of the valley, approximately 10 miles from east to west, and cannabis was planted like any licit crop next to roads and near homes and villages. Almost all of the cannabis grown in Lebanon was converted to hashish at processing plants located within the local area.

About 5 percent of the hashish produced there was converted further to hashish oil, which had a THC content of 20 percent. In 1991, some 545 metric tons of hashish was produced in Lebanon, a significant increase from 1990's production of 100 metric tons. There were no official estimates for hashish produced in 1992. However, in one operation, Lebanese security officials seized 7.5 metric tons of the drug. Lebanese-produced hashish was shipped through Syria for final destinations in the Arabian Peninsula, Europe, and Canada. There was some limited evidence to suggest that criminals based in the northeastern U.S. were purchasing large quantities of hashish. There was no firm evidence to suggest, however, that the hashish purchased was specifically for U.S. consumption.

Syrian military forces controlled the Bekaa Valley in Lebanon, and some members within the military leadership may have profited from the illicit drug trade. Syrian forces did continue a modest eradication operation, targeting cannabis fields in the Bekaa Valley, which was reported to have resulted in the destruction of several hundred hectares.

Farmers in **Morocco** process cannabis into a kind of hashish called *chira*, which is derived from the flowering tops of the plants. Generally, 100 kilograms of dry plant material will produce 1 kilogram of hashish. Farmers used handpresses to make hashish pieces weighing between 0.25 and 1 kilogram. Only the highest quality hashish is exported. The cannabis leaves are dried to produce a kind of marijuana, called *kif*.

In 1991, Morocco produced an estimated 85 metric tons of hashish. Most of this hashish was shipped to Spain, the Netherlands, and elsewhere in Europe to satisfy the large market there. Hashish from Morocco was exported to Italy, Gibraltar, and Spain and, from those locations, to the rest of the Continent or, in the case of Gibraltar, to the United Kingdom. Some of it may have been exported to Canada. In the past, large-scale, well-organized trafficking ventures have been common in the region.

Cannabis grows wild in parts of Afghanistan and Pakistan and is also deliberately cultivated. Hashish produced from local cannabis is consumed locally and also is exported to other countries. Shipments consisting of multihundred pounds were smuggled to North America, primarily to Canada, and to Europe in maritime cargo. There were large hashish seizures in Pakistan, totaling about 138 metric tons. Large seizures—in some instances, 40 to 50 metric tons in 1992 and 1993—reflected the volume of hashish trafficking in the area. There was cannabis cultivation in Central Asia as well. Most of the marijuana or hashish produced in the region is consumed locally, but some may have been exported to Europe.

CHEMICALS, DIVERSION, AND DANGEROUS DRUGS

THE CHEMICAL DIVERSION AND TRAFFICKING ACT OF 1988

The Chemical Diversion and Trafficking Act of 1988 (CDTA) was signed into law in November 1988. It placed the distribution of 12 precursor and 8 essential chemicals used in the production of illicit drugs, as well as the distribution of tableting and encapsulating machines, under Federal control. In recent years, additional chemicals have been added to the CDTA, bringing the total number of listed essential and precursor chemicals to 33.

The CDTA requires that all firms that handle these "regulated chemicals" maintain readily retrievable receipt and distribution records and makes the reporting of suspicious orders mandatory. The firms also must notify DEA 15 days prior to importing or exporting regulated chemicals that exceed a threshold amount. The law grants DEA the authority to detain or seize—in the United States—any chemical shipment that it suspects is meant for illicit use.

Government actions pursuant to the CDTA have included an extensive effort to identify and to educate U.S. chemical firms on all aspects of the law. The U.S. Government has elicited industry cooperation to ensure that all domestic transactions involving listed chemicals are for legitimate business or industrial purposes. The U.S. Government also has taken appropriate legal action against firms that have continued to act as suppliers to the illicit drug trade.

The CDTA and related initiatives have made the diversion of chemicals more difficult and have led directly to a decrease in the number of clandestine drug producing laboratories operating in the United States. Since the inception of the CDTA, the number of clandestine laboratory seizures in the United States has decreased from a high of 807 in 1989 to 332 in 1992, a drop of almost 60 percent.

The major impetus of the CDTA on the international level has been to ensure that the United States imports only those quantities of chemicals required for legitimate needs, and that the United States does not export chemicals used in foreign countries for illicit drug production. Exports of chemicals to cocaine producing countries by U.S. firms have been reduced by a substantial margin. This has been accomplished, in part, by DEA investigations, which have led to the denial of "regular customer status" to a significant number of Latin American companies.

Unfortunately, it appears that the European chemical industry is filling the void created by the decline in U.S. exports, and U.S. clandestine laboratory operators have turned to foreign sources of supply for chemicals. European exports of essential chemicals rose between 1988 and 1992, outpacing U.S. exports by three to one. European firms supplied 84 percent of the Colombian chemical market during the year. U.S. market share stood at 11 percent.

DEA provided support to the International Narcotics Control Board for the development of an international clearinghouse on chemical shipments and worked with the Organization of American States to adopt the Model Regulations.¹ DEA also supported the addition (in April 1992) of 10 chemicals to the list of regulated chemicals under Article 12 of the 1988 Convention.²

The U.S. Government pursued extensive diplomatic initiatives with user and supplier nations to enact stringent chemical control legislation where none was in place, and to encourage more vigorous enforcement of the import restrictions in effect in several Latin American countries. Training programs and on-site assistance for the establishment of chemical monitoring units were provided by DEA to a number of foreign governments.

¹ Model Regulations to Control Precursors and Chemical Substances, Machines, and Materials, which was approved in April 1990.

² 1988 United Nations Convention Against Illicit Traffic of Nercotic Drugs and Psychotropic Substances.

DIVERSION OF LEGITIMATE CONTROLLED SUBSTANCES

Diversion and abuse of legitimately manufactured controlled substances was a major source of drugrelated addictions or dependencies, medical emergencies, and deaths. Several controlled substances were abused. Drugs were diverted through illegal prescribing and dispensing, "doctor shopping," fraudulent prescriptions, and theft from legitimate channels. Some were diverted from foreign sources.

DEA REGISTRANTS

There were 875,000 firms and individuals (registrants) in the United States authorized by DEA to handle controlled substances. Registrant numbers grow by 3 percent annually. Some 9,000 new registrants will be added in 1993. If new chemical control laws are passed, chemical companies also will be registered.

Drug Abuse Warning Network (DAWN) statistics on emergency room incidents (in 1991) for the top 20 controlled substances suggest that 1 in 3 was for a licitly manufactured substance. Abuse occurs in three ways: as the primary drug of choice, as a supplement to illicit drugs, and as a substitute for illicit drugs. Most diversion of legitimately produced drugs now occurs at the retail rather than at the wholesale level.

Steroids

U.S. Federal law enforcement agencies enforced the Anabolic Steroids Control Act of 1990, the provisions of which became effective on February 27, 1991. DEA implemented major initiatives including regulatory, enforcement, and demand reduction programs as well as liaison with appropriate State and industry representatives to ensure that the pharmaceutical industry developed appropriate control procedures to eliminate the diversion of steroids. Suppliers who engaged in questionable activities were subject to regulatory action or criminal actions when illegal activities were documented. Legitimate imports of anabolic steroids were strictly controlled and monitored. Suppliers who did not meet stringent security and record-keeping requirements were denied DEA registration.

DEA also supported State and local regulatory and enforcement agencies in their efforts to curtail diversion and trafficking of steroids at the local level through assistance with legislative initiatives, technical expertise, and policy interpretation and direction. An increase in the smuggling of anabolic steroids into the United States was due to foreign diversion from Mexico and Europe, major sources for steroids.

Benzodiazepines

In addition to steroids, depressants were often diverted to illicit use. Depressants include sedatives/ hypnotics, tranquilizers, and anti-anxiety drugs. These substances depress the central nervous system, producing a calming effect or sleep, and are often prescribed as tranquilizers. Effects are similar to those of alcohol: relaxation, lack of concentration, loss of inhibitions, drowsiness, slurred speech, confusion, staggering, and sleep.

All DEA field divisions mentioned the diversion of benzodiazepines, particularly alprazolam (Xanax^{\$}) and diazepam (Valium[®]), as a significant problem. The most frequently abused benzodiazepines were diazepam, alprazolam, lorazepam (Ativan[®]), triazolam (Halcion[®]), chlordiazepoxide (Librium[®]), flurazepam (Dalmane[®]), and temazepam (Restoril[®]). During the year, benzodiazepines were readily available through traditional medical avenues due to the prevalence with which they were prescribed for "anxiety" and "panic disorders." They also were sought frequently by crack cocaine users to mitigate the effects of cocaine dependence such as paranoia, panic, and anxiety.

Narcotics/Analgesics and Heroin Substitutes/ Supplements

Pharmaceutical products containing narcotics are a significant part of the illicit drug trafficking environment in the United States. These drugs are used alone or in combination, both as substitutes for and as supplements to heroin. They were primary drugs of choice during the year for a substantial portion of the

Street Prices							
Drug	1989	1990	1991	1992			
Codeine/ Glutethimide (Doriden) (Set)	\$7-\$14	\$7-\$14	\$6.50-\$14	\$6.50-\$14			
Hydromorphone (Dilaudid) (4 mg)	\$20-\$80	\$20-\$60	\$15-\$68	\$15-\$80			
Pentazocine (Talwin)/ Tripelennamine (PBZ, Pyribenzamine) (Set)	\$10-\$20	\$8-\$20	\$7.50-\$20	\$7.50-\$20			

COMMERCIAL PHARMACEUTICAL NARCOTICS

narcotic addict population in the United States. Frequently used pharmaceutical opiates included oxycodone (Percocet[®] and Percodan[®]), hydromorphone (Dilaudid[®]), hydrocodone (Tussionex[®] and Vicodin[®]), pentazocine (Talwin[®]), and codeine combinations such as Tylenol[®] with Codeine and Empirin[®] with Codeine. Methadone, which is issued to clients of narcotic treatment programs, was sold on the street or exchanged for heroin, cocaine, or other controlled substances.

DANGEROUS DRUGS

DEA uses the term, "dangerous drugs," to refer to broad categories or classes of controlled substances other than cocaine, opiates, and cannabis products. The list of dangerous drugs includes illicitly manufactured as well as legitimate pharmaceutical stimulants, depressants, hallucinogens, and narcotics. Each class of substance is generally unlike other classes in its primary action and effect on the user.

Clandestine Laboratories

Domestic clandestine laboratories produce most of the illicit dangerous drugs available in the United States. Clandestine laboratories come in all sizes and are found in a variety of locations, from sophisticated underground hideaways to motel rooms or kitchens, bathrooms, and garages. The most productive laboratories are often located in secluded, rural areas at a safe distance from the metropolitan areas that they serve. Laboratory operators run the gamut from high school dropouts to chemists with doctoral degrees. Clandestine laboratories are commonly operated on an irregular basis. Operators often produce a "batch" of a drug, then disassemble, store, or move their laboratories while they acquire additional chemicals. They sometimes travel great distances to obtain chemicals and equipment in an attempt to evade local law enforcement scrutiny. Clandestine laboratory operators are frequently well-armed; weapons, including explosives, are routinely confiscated in raids on clandestine laboratories. Operators usually dispose of their hazardous chemical wastes unsafely and illegally, often dumping the wastes on the ground or in nearby streams and lakes, or pouring them into the local sewage system.

A total of 332 clandestine laboratories were seized in 1992, compared to 375 in 1991 and 521 in 1990. As noted above, this decrease was due primarily to the enactment and enforcement of the Federal Chemical Diversion and Trafficking Act and related State legislation. As in previous years, methamphetamine was the most prevalent clandestinely manufactured drug in the United States.

Stimulants

Stimulants encompass drugs that stimulate the central nervous system. They have an effect similar to the body's own adrenaline or epinephrine. They are used in the treatment of narcolepsy, hyperkinetic disorders, and obesity. Stimulants cause agitation, argumentativeness, decreased appetite, excessive activity, euphoria, increased wakefulness, raised pulse rate and blood pressure, and hallucinations.

1989-1992							
	1989	1990	1991	1992			
Phencyclidine (PCP)	11	11	3	4			
Methamphetamine	652	429	315	288			
Phenyl-2-propanone (P2P)	33	17	7	3			
Amphetamine	93	51	20	12			
Methaqualone	5	1	1	1			
Cocaine	1	4	4	4			
All other drugs	12	8	25	20			
Total	807	521	375	332			

CLANDESTINE LABORATORY SEIZURES IN THE UNITED STATES

Methamphetamine: Methamphetamine has been the most prevalent clandestinely produced controlled substance in the United States since 1979, though the number of methamphetamine laboratory seizures has declined each year since 1988. There were 629 seizures of methamphetamine laboratories in 1988, 652 reported in 1989, 429 in 1990, 315 in 1991, and 288 in 1992. Nonetheless, methamphetamine laboratories accounted for more than 86 percent of all clandestine laboratory seizures during the year.

As in previous years, the clandestine manufacture of methamphetamine was based primarily in the West and Southwest. DEA Denver, Los Angeles, Phoenix, San Diego, San Francisco, and Seattle Field Divisions accounted for about 78 percent of the methamphetamine laboratory seizures in 1992.

The relatively simple method of producing methamphetamine, known as ephedrine reduction, was the primary means employed for manufacturing methamphetamine. This process, once noted almost exclusively in southern California, was widespread throughout much of the United States. The ephedrine reduction process results in a final product with the chemical name of d-methamphetamine hydrochloride. Prior to the popularity of the ephedrine reduction method, the most common method for making methamphetamine was the phenyl-2-propanone (P2P) process. This method produces a racemic mixture known as *dl*-methamphetamine hydrochloride. Some laboratory operators continued to use the P2P method during the year.

Numerous individuals, groups, and organizations, including independent entrepreneurs, outlaw motorcycle gangs, and Hispanic polydrug trafficking organizations, manufactured and distributed methamphetamine. Nationally, entrepreneurs constituted the largest identifiable group involved in methamphetamine investigations. To a lesser degree, outlaw motorcycle gangs influenced production in certain areas. Mexican traffickers dominated the large-scale production and distribution of methamphetamine in the San Diego, Riverside, San Bernardino, and Fresno areas of California.

Since the mid-1980's, ice methamphetamine has been smuggled from Taiwan and South Korea into Hawaii. However, it was not until the summer of 1988 that its use became relatively widespread in that State. By 1990, distribution of ice had spread to the U.S. mainland, although distribution remained limited to retail amounts.

Wholesale Prices							
Drug	1989	1990	1991	1992			
Methamphetamine (cunce)	\$450-\$2,000	\$500-\$2,400	\$500-\$2,500	\$300-\$2,500			
Phencyclidine (PCP) (fluid ounce)	\$100-\$1,000	\$100-\$1,000	\$150-\$1,000	\$150-\$1,000			
LSD (dosage unit)	\$0.35-\$1.50	\$0.30-\$3.50	\$0.25-\$4.00	\$0.30-\$5.00			
MDMA (dosage unit)	Not Available \$2.00-\$20.00		\$2.00-\$20.00	\$5.00-\$20.00			
	Retail (Street)	Prices					
Unit Size	1989	1990	1991	1992			
Methamphetamine (gram)	\$50-\$125	\$50-\$150	\$50-\$150	\$30-\$200			
Phencyclidine (PCP) (1 cigarette) ¹	\$30-\$70	\$30-\$70	\$30-\$70	\$30-\$70			
LSD (dosage unit)	\$1.00-\$8.00	\$1.00-\$10.00	\$1.00-\$15.00	\$1.00-\$10.00			
MDMA (dosage unit)	Not Available	\$5.00-\$30.00	\$7.50-\$45.00	\$10.00-\$10.00			

ILLICIT DANGEROUS DRUGS PRICES

¹ A full-length cigarette saturated with PCP and sold in Los Angeles.

Most of the ice methamphetamine, which continues to be a drug of choice in Hawaii, is manufactured in clandestine laboratories located in South Korea, the Philippines, and Taiwan. Mainland China also was a source country for ice that was smuggled into Japan, the Philippines, Hawaii, and the mainland United States. Large seizures of the drug made by Chinese authorities in 1991 and 1992 confirmed that illicit ice manufacturing took place in China. Analyses of all samples of ice seized to date in the United States have shown purity levels of 90 to almost 100 percent.

ICE METHAMPHETAMINE

"Ice" is a large crystal form of high-purity d-methamphetamine hydrochloride. Ice derives its name from its appearance: large, clear, crystals that resemble chunks of ice, shards of broken glass or rock candy. Other terms for ice include quartz, glass, crystal meth, shabu, kaksonjae, hanyak, hiropon, batu, and crack meth. Ice sold for \$100 to \$200 per tenth of a gram, \$600 to \$1,000 per gram, and from \$9,000 to \$16,000 per ounce. Although the traffic was dominated by Korean businessmen, other individuals also shipped ice to Hawaii. Abusers in the United States ingest ice almost exclusively by smoking the drug in glass pipes.

Amphetamine: A total of 12 clandestine amphetamine laboratories were seized during the year compared to 20 in 1991, 51 in 1990, 93 in 1989 and 90 in 1988. Eight (66 percent) of the laboratories seized in 1992 were located in Texas.

Hallucinogens

Hallucinogens are psychedelic or mind-altering drugs that interfere with normal perception, sensations, comprehension, self-awareness, and emotions. Hallucinogens have no accepted medical use in the United States. These drugs induce visual hallucinations, disorientation, confusion, paranoid delusions, euphoria, anxiety, panic, and increased pulse rate. LSD: LSD,³ a Schedule I controlled substance, a popular drug of the "psychedelic generation" of the 1960's, was available in many areas throughout the United States. The drug is commonly produced from lysergic acid, which is made from ergotamine tartrate, a substance derived from an ergot fungus on rye; or from lysergic acid amide, a chemical found in morning glory seeds.⁴

The majority of LSD abusers are in their late teens and early twenties and usu ally are white males. The 1991 National Household Survey estimated that over 10 million people, mostly under the age of 35, had used LSD at least once in their lifetimes. Similar data was not available for 1992; however, other indicators show that LSD availability in retail quantities increased in virtually every State.

According to the most recent National High School Schior Survey, current use of LSD remained around 2 percent among 10th and 12th graders. Lifetime use among 8th graders, however, increased from 2.7 percent in 1991 to 3.2 percent in 1992.

In fiscal year 1992, DEA arrested 343 defendants for LSD violations, compared to 244 in FY 1991. The following table shows the number of DEA LSD investigations and arrests for a 5-year period.

The drug's relatively inexpensive cost (from \$2.00 to \$5.00 per hit or dosage unit, and often selling for as little as \$1.00 or less in wholesale lots), ready availability, and intriguing blotter acid designs make LSD especially attractive to junior high school and high school populations, which use it primarily as a recreational drug. LSD is sold under more than 80 street names including acid, blotter, cid, doses, and trips, as well as names that reflect the designs on s'sceis of blotter acid.

LSD is made in clandestine laboratories, the locations of which are unknown. Initial distribution

LSD ARRESTS AND INVESTIGATIONS						
	1988	1989	1990	1991	1992	
Arrests	129	102	103	247	402	
Investigations	71	46	86	133	260	

sources for the drug are virtually always located in the San Francisco Bay area in northern California. Pure, high-potency LSD⁵ is produced in crystalline form and then mixed with excipients or diluted as a liquid for production as ingestible forms. LSD has been sold in tablet form,⁶ as thin squares of gelatin commonly referred to as window pane, and even on sugar cubes. The most popular form to date is sold as sheets of paper (often with printed designs) that have been soaked with LSD. This is known as blotter acid.

Since 1978, the potency of this hallucinogen generally has varied in strength from 20 to 80 micrograms per dosage unit, considerably below that encountered during the late 1960's. At that time, users were ingesting LSD that ranged in concentration from 100 to 300 micrograms or higher, which often resulted in harmful reactions known as "bad trips." Lower potency doses probably have accounted for the relatively few LSD-related emergency room incidents noted during the past several years.

Traditionally, retail-level LSD distribution networks in the United States have been comprised of young adults who have known each other through long association and common interests. This has facilitated not only hand-to-hand sales of the drug, but a proliferation of mail order sales. At the wholesale production and distribution level, LSD is tightly controlled by California-based "syndicates," which have operated with relative impunity for almost 20 years. The last known seizure by DEA of an operating LSD manufacturing laboratory in the United States occurred in 1981 in Bellevue, Washington. That laboratory also made LSD tablets known as "Orange Sunshine."

³ LSD is an abbreviation of Lysergie acid Diethylamide. The United States Adopted Name (USAN) for this drug, established by the US Pharmacopoeia and the USAN Council, is Lysergide.

⁴ Although theoretically possible, manufacture of LSD from morning glory seeds is not economically viable and they have never been found as a successful starting material. Lysergic acid and lysergic acid amide are both in Schedule III of the Controlled Substances Act. Ergotamine tartrate is a regulated chemical under the Chemical Diversion and Trafficking Act.

⁵ The purity of LSD from a clandestine laboratory is typically 95 to 100 percent.

⁶ Very small tablets (3/32 inch or smaller) are called microdots.

PCP: Phencyclidine, commonly referred to as PCP (from the 1960's term, PeaCe Pill), was developed in 1957 as a human anesthetic. Its use for humans was discontinued in 1965, however, because of its adverse side effects of confusion and delirium. It continued to be used in veterinary medicine as a large primate anesthetic for a few more years, but that use also has been virtually discontinued.

In 1978, commercial manufacture of PCP was discontinued (though small amounts are still legally manufactured as a drug standard and for research purposes) and the drug was transferred from Schedule III to Schedule II of the Controlled Substances Act, thus classifying it as a drug with a high potential for abuse. Since that time, clandestine laboratories have been virtually the sole street source of phencyclidine available in the United States.

PCP has been sold under numerous street names including angel dust, crystal, hog, supergrass, killer joints, ozone, wack, embalming fluid, and rocket fuel, all of which reflect the range of its bizarre and volatile effects. In its pure form, PCP is a white crystalline powder that readily dissolves in water. Most PCP contains contaminants resulting from its makeshift manufacture, causing its color to range from tan to brown and its consistency to range from a powder to a gummy mass.

Liquid PCP⁷ remained the most commonly encountered form of the drug although it also was sold as a powder. PCP was typically sprayed onto leafy material such as mint, parsley, oregano, or marijuana, and smoked. PCP also has been used to adulterate commercially manufactured cigarettes, usually by dipping the cigarette in liquid PCP. The most popular commercial types are dark paper wrapper cigarettes such as Shermans or Tijuana Smalls. PCP can also be injected into cigarettes with a syringe.

Four PCP laboratories were seized in 1992 compared to three in 1991 and 11 in 1990. Authorities seized PCP laboratories in San Francisco, Chicago, and Philadelphia during 1992. Although the level of PCP abuse has diminished in recent years—supplanted by an increased use of crack cocaine—cities that have experienced significant PCP abuse in recent years include Baltimore, Chicago, Los Angeles, New Orleans, New York City, San Francisco, St. Louis, and Washington.

PCP trafficking was centered in the greater Los Angeles metropolitan area in 1992. Los Angeles street gangs, primarily the Crips, distributed PCP throughout the country—as a "supplement" to their cocaine trafficking operations. These gangs posed a particular problem because of their propensity for violence. While buses and trains were used to transport PCP from California sources of supply, private automobiles were believed to have been the principal means used for transporting PCP to major U.S. metropolitan areas during the year.

3,4-Methylenedioxymethamphetamine (MDMA): MDMA is also known by several street names such as ecstasy, XTC, Adam, E, clarity, essence, and doctor. MDMA is an analogue of amphetamine; it is structurally and pharmacologically related to methamphetamine and to 3,4-methylenedioxyamphetamine (MDA), a hallucinogen. It has been described by users, most of whom are college students and recent graduates, as a fast-acting drug which produces feelings of alertness, euphoria, relaxation, and emotional warmth without the resulting hyperactivity produced by stimulant substances.

MDMA became increasingly popular among college students and also was used at all-night dance parties called "Raves," primarily by middle-class youths. Dosage units of MDMA, often sold in tablets, varied from 55 to 150 milligrams. There were nine MDMA laboratory seizures in 1992, compared to one in 1991. DEA Houston and Dallas were responsible for five of these, with one each reported by DEA Detroit, New York City, San Francisco, and St. Louis. A large amount of the MDMA imported from foreign sources was smuggled through Mexico.

The abuse potential for MDMA remains high, since it is viewed by users as neither injurious nor addictive. In reality, tests in animal models show that the animals will self-administer the drug, and the drug has been shown to be neurotoxic, strongly suggesting that it is anything but benign.

⁷ "Liquid PCP" is actually phencyclidine base, usually dissolved in ether, a highly flammable, extremely dangerous solvent.

Retail prices ranged from \$10.00 to \$30.00 per dosage unit; wholesale prices ranged from \$5.00 to \$20.00 per dosage unit.

Fentanyl and fentanyl analogues: Some of the earliest "designer drugs" to hit the street in the early 1980's were synthetic narcotics. These substances consisted of variations of the parent compounds, fentanyl (Sublimaze®) and meperidine (Demerol®). Renamed controlled substances analogues [see the next section], some of the clandestinely produced analogues of fentanyl, a Schedule II synthetic analgesic, are a thousand times more potent than morphine. Because of their high potency, fentanyl analogues can be produced in relatively small quantities and still reap large profits. Because they were usually sold on the street as heroin or "China White," their initial identification was not easily accomplished. Several analogues of fentanyl were subsequently controlled under Schedule I of the Controlled Substances Act.

Clandestinely produced fentanyl and fentanyl analogues also have been sold under such names as Tango and Cash, Goodfellas, tombstone, killer, Apache, friend, and great bear. Respiratory depression is the most serious acute toxic effect resulting from ingestion of the fentanyl compounds. Because of their extreme potency in minute amounts and their ready absorption through the skin as well as the eyes, nose, eardrums, mouth, and mucous membranes, fentanyl and its analogues constitute a great hazard to human health and can easily cause death.

Between 1991 and 1992, there were at least 126 fentanyl-related deaths in the Northeast. During early 1992, there were 24 overdose deaths in the Baltimore, Maryland, area. An intensive DEA multidivisional investigation of those deaths resulted in the seizure in early 1993 of two clandestine fentanyl laboratories in Kansas and the arrest of several people responsible for the drug's manufacture and distribution.

Controlled Substances Analogues

In terms of the number of users and the extent of distribution, the problem of controlled substances analogues was small when compared to that of heroin, cocaine, and cannabis. Nevertheless, in those areas of the United States where controlled substances analogues were available, substantial numbers of people used them with some suffering severe adverse reactions, including death.

"ANALOGUES"

The name, "Designer Drugs," first given by the media to a rash of new, clandestinely produced drugs that appeared on the streets in the early 1980's, gave way to the term "controlled substances analogues." This awkward, but temporary designation is given to drugs-usually, but not always, clandestinely produced-that are chemically and pharmacologically similar to substances already listed in the Controlled Substances Act, but which are not themselves controlled. These drugs are usually produced in an attempt to circumvent the provisions of the Controlled Substances Act. The term is no longer applicable once a drug is scheduled.

Intensive DEA investigations resulted in three controlled substances analogues being placed into Schedule I of the Controlled Substances Act during 1992, viz.: a methamphetamine-like analogue called **methcathinone**, which was being produced in clandestine laboratories in northern Michigan; **aminorex**, an analogue of the Schedule I stimulant, $\pm cis$ -4-methylaminorex; and **alpha-ethyltryptamine**, an analogue of the Schedule I hallucinogens, N,N-dimethyltryptamine (DMT) and N,N-diethyltryptamine (DET).

Methcathinone is known on U.S. streets as "cat" and also is reported to be a drug of abuse in the former Soviet Union where it is known as "Jeff" or ephedrone. Clandestine manufacture of methcathinone in the United States was first encountered in 1991 when DEA investigations of trafficking in this drug resulted in the seizure of five cat laboratories; another six laboratories were seized by DEA's Detroit and Chicago Divisions in 1992. Additional manufacturing sites were seized in 1993 in Wisconsin and Washington State. Methcathinone is distributed as a powder and administered via nasal inhalation in dosage units of less than a gram, as well as by injection. The DEA Detroit Division reported that methcathinone sold for \$100 per gram. Due to its high abuse potential, methcathinone was placed on Schedule I of the Controlled Substances Act on May 1, 1992, pursuant to emergency scheduling provisions.

Methcathinone is the methyl analogue of cathinone, the psychoactive component of the khat plant, *Cathis edulis*, which is chewed by the inhabitants of the countries of eastern Africa for its stimulant properties. Khat became familiar to most Americans due to press reports about the drug following the U.S. humanitarian action in Somalia. Khat is chewed routinely by large segments of the Somali population, including followers of Somali warlords.

DRUG MONEY

Drug money-laundering operations consist of three stages: **placement**, **layering**, and **integration**. Placement (which is the most difficult stage to accomplish) comprises all of the various methods used to get drug money into the commercial financial system. Case evidence and intelligence suggested that the Colombian cocaine cartels were concealing bulk amounts of money in commercial cargo shipments being sent directly to Colombia itself and to other countries where the money could be placed into bank accounts.

Funds were often **placed** in the banking systems of other countries, where manipulation of the funds was much easier to accomplish than if they had been placed in U.S. banks. Money was transferred to the Orient, for example, by using individual couriers, who carried cash, money orders, or cashier checks.

FINANCIAL VULNERABILITIES

In the usual drug trafficking organization, there are certain weaknesses, which if exploited successfully by law enforcement agencies, could be used to immobilize that organization. For example, in a "typical" cocaine cartel trafficking operation, the international transportation of the cocaine and the laundering of the profits are usually contracted out to organizations that specialize in these services. These outside organizations do not belong to the cartels, lack loyalty to the cartels, are less subject to cartel intimidation, and thus are more vulnerable to law enforcement penetration.

Due to changes in Colombian law made in 1991, more money was sent directly to Colombia during 1992 than in previous years. In addition, successful international law enforcement operations made cartel financiers realize that their monies were no longer safe in other nations, including traditional safe-havens, such as Hong Kong, Luxembourg, and Switzerland. In both the Orient and Latin America, money launderers used businesses—both legitimate companies and shell companies—to transfer drug money. Gold shops, jewelry stores, and travel agencies as well as import and export companies were employed as part of an underground banking system. Drug dollars were brought to such a business and, within hours, an equivalent sum in U.S. dollars or in a local currency was available for pickup at a corresponding business in another country.

Some money launderers used commodity trading schemes to transfer their money. Precious metals businesses imported gold and, after making fraudulent or scam purchases with drug money, the payments were sent overseas or were deposited into U.S. accounts as sale proceeds. The gold was then smuggled out of the country to be reimported. Other commodities, such as appliances, were bought with drug money and smuggled into Colombia, then resold for pesos.

Smuggling of contraband into countries where high customs duties exist is another method used, both to launder money and to make money. This method allows the drug trafficker to effectively double or triple his profits. In the United States, businesses that are exempt from the U.S. Bank Secrecy Act also were used as a way to deposit cash into the banking system.

Small non-bank financial institutions were employed to transfer money. Money exchange houses or *casas de cambio*—which commingled drug monies with legitimate bank deposits—along the U.S. southern border were the most popular. The U.S. Customs Service targeted some of these *casas* in areas along the Southwest border and were able to take advantage of the failure of the *casas* to report transactions as a way to develop substantial drug cases. Checkcashing shops were used in reverse as well, issuing checks for cash. Cash transmittal businesses, popular with illegal immigrants, transmitted monies internationally for inflated commissions. Most charged between 5 and 7 percent.

Money launderers arranged for "structuring" or "smurfing" of deposits into U.S. bank accounts in the form of cash, money orders, and cashier checks. They probably surmised that structuring, which also is illegal, cannot be detected that easily. Foreign banks that were operating in the United States were used more frequently in money laundering schemes than were U.S. banks because less regulatory attention is paid to them by U.S. authorities as well as by authorities in their native country. Such banks included Credit Suisse, Banco Cafetero, Bank Leumi, Hong Kong Bank, and many others.

Recently, there have been reports that Colombian cartel and kingpin organizations are using a "discounting" system to get their profits back to Colombia. They simply contract with a money broker in Colombia who finds a legitimate corporation that will buy U.S. dollars in the United States at a discount of up to 20 percent, no questions asked. The legitimate corporation, whether it be based inside or outside of Colombia, arranges to have a quantity of pesos delivered to the kingpin's organization in Colombia equivalent to 80 percent of the sum of the U.S. dollars purchased. Should U.S. authorities seize the dollars in the United States, they will be seizing an "innocent" third party's money.

In the second stage of money laundering, **layering**, the money that is already in the banking system is wire transferred from bank to bank or from one business to another in order to obscure any paper trail. In many previous money-laundering cases, Panamanian banks were the first offshore banks to receive laundered drug funds, which were either stored there or further transferred to European or other Latin American banks. In the last few years, funds that were wired to Panama were first wired to Europe or South America.

Integration is the final stage of money laundering in which drug money is put back into the legitimate economy. This is accomplished by investing the money in businesses, real estate, and other property. One of the most effective tools in the field of moneylaundering control is legislation that requires reporting of cash transactions for sums over U.S. \$10,000 or its equivalent in foreign currency. For example, during fiscal year 1992, the U.S. Customs Service made 3,507 seizures of monetary instruments that were in violation of this legislation. More than \$220 million in cash was seized pursuant to Customs enforcement action against the smuggling of currency alone.

Australia passed very comprehensive laws detailing cash transaction reporting, and it established a cash reporting agency, the Australian Transactions, Reports, and Analysis Center or AUSTRAC, which collects and analyzes these reports, in order to supply investigative leads to law enforcement authorities. In Latin America, Venezuela also passed cash transaction reporting legislation.

Some countries have been reluctant to levy reporting regulations on the banking systems of their countries because they believe that any attempt to enforce such regulations may drive the transfer of illegal funds into international "underground banking systems." Other countries, which may have reporting regulations, do not enforce these regulations very effectively, if at all. Many countries, such as India, Brazil, Paraguay, and others, are realizing, however, that just having laws on the books is not going to diminish money laundering and other illegal activity without effective enforcement. Nonetheless, there continues to be a paucity in the number of investigators who are adequately trained and deployed to monitor adherence with the legal requirements in those countries.

Ethnic Chinese, Sino–Thai, and West African traffickers smuggled large amounts of Southeast Asian heroin into the United States and those traffickers used simple but effective money-laundering techniques to retrieve their profits. Most of the proceeds for Asian traffickers either were carried back to the Orient by couriers (by body carry or concealed in luggage), were converted to cashier's checks and mailed, or were wired from bank to bank. The Chinese underground banking system also may have been used between the United States and the Orient, but there is no reliable intelligence to support this supposition. The Indian and Pakistani underground banking systems (known as the *hawala* and *hundi* systems, respectively) were used to transfer drug profits from the Western world back to those countries.

New money-laundering, asset forfeiture, and conspiracy legislation in the major Asian countries is beginning to have a positive effect. In 1987, Australia became the first Asian country to enact this kind of legislation. Similar measures subsequently were adopted in Hong Kong, Japan, Malaysia, and Thailand. Singapore and Korea also drafted such legislation.

China could impose financial restrictions should it choose to do so. Money launderers, however, tend to shy away from countries, such as China, which do not have a reputation for having a stable financial system.

Even though financial laws vary from country to country and are dependent on the will of their governments to enforce them, the overall situation has improved tremendously in the past few years, and traffickers now face considerable risks in attempting to transfer proceeds through the legitimate banking systems of Asia.

Some very effective financial investigations have taken place in Hong Kong. Prior to August of 1992, the Hong Kong Government had frozen \$33 million in suspect accounts and had confiscated some \$21 million of those monies. However, Hong Kong's law that criminalized third-party money laundering and that called for suspicious transaction reporting from banks was overturned in August because it was considered contrary to Hong Kong's Bill of Rights. This ruling, however, was subsequently overturned by the Privy Council in England, and it is expected that bank reporting and consequent freezing of accounts will resume at an even faster pace than before. Hong Kong has worked very closely with the United States and has honored U.S. civil forfeiture orders.

Several recent joint and multilateral financial investigations have had noteworthy success in disrupting the money-laundering activities of major cocaine and other drug smuggling organizations. Operation GREEN ICE was a multilateral financial investigation led by DEA, which included law enforcement agencies from Canada, the Cayman Islands, Colombia, Costa Rica, Italy, Spain, and the United Kingdom. This investigation was concluded in September and resulted in more than 160 arrests (including the arrest of seven top cartel money launderers), the seizure of \$54 million in cash and assets, and the temporary disruption of major cocaine money laundering activity in the United States, Latin America, and Europe.

Operation CORNERSTONE is a joint U.S. Customs Service and DEA drug smuggling investigation in southern Florida. Operation CORNERSTONE has resulted in the seizure of more than 25.3 metric tons of cocaine, U.S. currency seizures of \$763,000 (money that had been on its way out of the country), and the dismantling of a major Cali Cartel cell in this country. One of the notable drug seizures made during the year was a seizure of cocaine from within a shipment of broccoli (noted above). Additional assets seized during the course of the operation through the end of the year included \$3.5 million in bank accounts and investments, a residence valued at \$470,000, \$425,000 in cash, \$325,000 in jewelry, and five luxury vehicles.

Operation CHOZA RICA was a joint, long-term, money-laundering investigation, which focused on southern Texas and northern Mexico. Participants in this effort included the Internal Revenue Service, DEA, the U.S. Customs Service, and the Immigration and Naturalization Service. One consequence of this operation was the indictment of three persons in 1991 on 63 counts of money laundering involving some \$2.6 million. The indictment included three businesses, two residences, and additional assets valued at \$4 million. This indictment was followed in March 1992 with indictments against some U.S. banking officials and several Mexican *casa de cambio* or money exchange house owners and operators.

The U.S. Customs Service Attaché in London participated in Operation CENTREPOINT, a multilateral program with British law enforcement agencies. A Treasury Enforcement Communications System (TECS) computer terminal was placed on-line at New Scotland Yard in support of this operation, and a U.S. Customs Service special agent was seconded to the Financial Intelligence Unit of the United Kingdom's National Criminal Intelligence System (NCIS), a center for exchange of financial information and records between the United States and the United Kingdom.

Since the inception of Operation CENTREPOINT in July 1991, British authorities have made more than 2,400 requests for information on targeted money launderers. Approximately 40 percent of those requests resulted in direct ties to U.S.-targeted money launderers and domestic U.S. investigations being made. This resulted—in one investigation—in the seizure of the equivalent of \$1.5 million in Great Britain.

The United Kingdom moved to tighten its currency restrictions in order to reduce the use of offshore financial institutions in the Channel Islands and the Isle of Man by drug money launderers. Almost \$12 million was frozen or forfeited. In addition, 24 prosecutions for drug money laundering were undertaken by the Crown.

Dutch authorities estimate that between \$600 million and \$2 billion in drug-related proceeds are laundered in that Low Country each year. The Dutch signed an asset sharing agreement with the United States in November.

Many Latin American authorities have taken a very serious attitude toward their countries' new financial legislation. In June, the Ecuadorian National Police conducted a series of raids against the financial interests of the Jorge REYES-Torres cocaine trafficking and money-laundering organization. As a result of these raids, authorities moved to seize over \$30 million in drug-related assets held in Europe (\$17 million in Liechtenstein and over \$11 million in Switzerland), over \$800,00 in the United States, and additional funds in Latin America. Sixty individuals, including Jorge REYES-Torres, were arrested, and, even though most have been released, the principal figures in the organization remain incarcerated awaiting trial. The raids also resulted in the arrest of several military and police officials, which showed the extent to which the organization had penetrated Ecuadorian institutions.

In December, the Attorney General of Panama, Rogelio Cruz, was suspended following his release of previously frozen drug-related bank accounts. Ariel Alvarado, the Panamanian anti-drug chief, also was suspended.

DEA seized domestic assets worth about \$857.3 million during 1992. With a number of cases adjudicated to date, the sum total of assets forfeited to the U.S. Government amounts to \$442.1 million. In the international arena, DEA assisted other nations in seizing approximately \$53.4 million in assets.

GLOSSARY

Agua rica: Cocaine alkaloids in a sulfuric acid solution.

Coca paste: Crude cocaine base, also known as sulfata.

Crack: Cocaine base that has been converted from cocaine hydrochloride. Crack cocaine is ingested by smoking.

Domestic Monitor Program (DMP): The DMP is a retail- or street-level heroin purchase program designed to provide Federal, State, and local authorities with intelligence relating to heroin purity, price, availability, adulterants, and geographic source areas through DEA's Signature analysis (see **HSP** below).

Drug Abuse Warning Network (DAWN): DAWN is a Federally funded program formerly co-sponsored by the Drug Enforcement Administration and the National Institute on Drug Abuse but now controlled by the Substance Abuse and Mental Health Services Administration. The program collects information on drug-related medical emergencies and deaths. This information is collected from participating hospital emergency rooms and medical examiner offices nationwide.

Drug Use Forecasting (DUF) Program: The National Institute of Justice began the Drug Use Forecasting Program in 1987. DUF data are collected in police station booking facilities throughout the United States. Trained staff personnel collect voluntary and anonymous urine specimens and interview selected, booked arrestees for 14 consecutive evenings each quarter. DUF personnel interview and collect samples from approximately 225 men at each booking site. Women and juveniles also are sampled at some sites.

Federal-wide Drug Seizure System (FDSS): FDSS statistics reflect the combined Federal drug seizure effort. The FDSS contains information about drug seizures made— within the jurisdiction of the United States—by the Drug Enforcement Administration, the Federal Bureau of Investigation, and the U.S. Customs Service as well as about maritime drug seizures made by the U.S. Coast Guard. Drug seizures made by other Federal agencies are included in the FDSS data base when custody of the drug evidence is transferred to one of the four agencies identified above.

Heroin, Black Tar: Black Tar heroin is a relatively high-purity heroin hydrochloride made from opium poppies grown in Mexico using techniques classified as Mexican in origin. Colors may range from brown to black with a consistency as sticky as roofing tar or hard like coal. Typically, black tar heroin is injected.

Heroin, Southeast Asian No. 3: No. 3 heroin, also known as smoking heroin, varies in color from tan to grey to red and is granular or lumpish in composition, somewhat like fish tank gravel or pet litter. It usually ranges from 20 to 40 percent purity.

Large amounts of caffeine are added during the manufacturing process of No. 3 heroin. Caffeine is the one common chemical characteristic in No. 3 heroin. It is readily found in analysis despite any attempt to dilute the heroin. The usual route of administration of No. 3 heroin is by smoking, but it can also be dissolved in lemon or lime juice for injection.

Heroin, Southeast Asian No. 4: No. 4 heroin is highly soluble in water, injectable, and normally is sold as a fluffy white powder which may vary in color from white to creamy yellow. The consistency has been likened to that of laundry detergent. The wholesale purity of No. 4 heroin usually ranges from 80 to 100 percent.

Heroin Signature Program (HSP): The HSP is a DEA program to identify the geographic source area of a heroin sample through the detection of specific chemical characteristics in the sample peculiar to the source area. The program employs special chemical analyses to identify and quantitate selected chemical characteristics and secondary constituents of an exhibit. Ideally, an exhibit should be at least 1.5 grams net weight, and have a purity of at least 3.0 percent. HSP data for 1992 was based upon examination of over 900 exhibits, which included almost 500 exhibits obtained through the Domestic Monitor Program, random samples of domestic purchases and seizures, and seizures made at U.S. ports of entry.

National High School Senior Survey: The National High School Senior Survey is a program designed to determine the extent of drug use by the youth of our nation. It is sponsored by the National Institute on Drug Abuse and the University of Michigan's Institute for Social Research. Researchers surveyed 16,251 seniors, 14,997 tenth graders, and 19,015 eighth grade students in over 100 public and private schools in 1992.

National Household Survey: The National Household Survey is a multistage, area probability sample of 28,832 people, representative of the U.S. household population of age 12 and over. Persons living on military installations, in nursing homes, dormitories, hospitals, jails, and prisons, as well as homeless people are not included. The surveys are conducted by the Substance Abuse and Mental Health Services Administration of the U.S. Department of Health and Human Services. The results of the 1992 survey that are included in this publication are preliminary and are subject to change.

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