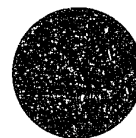


U.S. Department of Justice
Drug Enforcement Administration

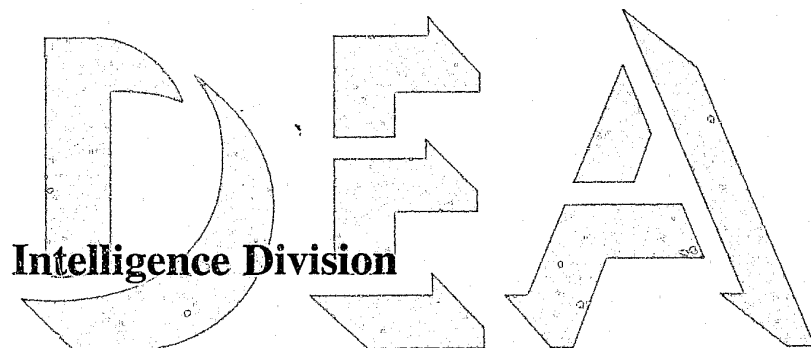


Domestic Monitor Program

October - December 1993

152985

Drug Intelligence Report



NCIRS

10/93

**ONDCP Drugs & Crime
Clearinghouse**

June 1994
DEA-94058

The Attorney General has determined that publication of this periodical is necessary in the transaction of the public business required by law of the Department of Justice.



Drug Enforcement Administration

Domestic Monitor Program

October -December 1993

Drug Intelligence Report

This report was prepared by the Domestic Unit, Strategic Intelligence Section. Comments and requests for copies are welcome and may be directed to the Publications Unit, Intelligence Division, DEA Headquarters on (202) 307-8726.

152985

U.S. Department of Justice
National Institute of Justice

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this ~~document~~ material has been granted by

Public Domain/DEA

U.S. Department of Justice

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the ~~document~~ owner.

June 1994

ADMINISTRATOR'S MESSAGE

The Drug Enforcement Administration's Domestic Monitor Program (DMP) provides intelligence regarding the source area, cost, and purity of heroin being sold at the retail or "street" level in 19 continental U.S. cities and San Juan, Puerto Rico. The data contained in this report are based on actual undercover heroin purchases made by the Drug Enforcement Administration (DEA) on the streets of these cities during the fourth quarter of 1993.

The national average purity of heroin for October - December 1993 was 38.1 percent. This continues the trend of unusually high national average purities that have been reported in the DMP over the past several years. The high average purity is due at least partially to the newly classified South American heroin, which averaged 49.9 percent pure during the October - December 1993 period. In addition, Mexican heroin purity averaged 39.8 percent during October - December 1993, representing the highest quarterly figure since April - June 1989 when Mexican heroin purity averaged 39.9 percent.



Thomas A. Constantine
Administrator

CONTENTS

iii	Administrator's Message
vii	Executive Summary
1	Overview: October - December 1993
2	South American Heroin
8	Adulterants and Diluents
10	Brand Names
12	Appendix A: Individual City Sampling
28	Appendix B: Exhibit Data by City
36	Appendix C: Definitions
39	Distribution

FIGURES

vi	DMP City Summary Data
1	DMP Average Heroin Purity by Source Area
3	DMP Average Heroin Purity by Source Area and City
4	DMP Heroin Dominance by Source Area
5	DMP Heroin Prices
6	DMP Average Heroin Cost by Source Area
7	DMP Average Heroin Prices and Purities by City
8	Adulterants by Source Area
9	Diluents by Source Area
10	Brand Names and Logos by DMP City

Figure 1

DMP CITY SUMMARY DATA		
City	Average Purity (percent)	Average Cost (dollar/milligram)
Atlanta	39.0	1.27
Boston	55.0	1.20
Chicago ¹	--	--
Dallas ¹	--	--
Denver	43.3	1.33
Detroit	25.9	1.31
Fort Lauderdale ¹	--	--
Houston	25.0	0.84
Los Angeles ¹	--	--
Miami	12.5	1.05
Newark	27.0	0.80
New Orleans	36.1	1.13
New York City	61.8	0.46
Philadelphia	56.3	0.64
Phoenix	57.6	0.95
San Diego	53.3	0.38
San Francisco ¹	--	--
San Juan	56.9	0.53
Seattle ¹	--	--
St. Louis	6.8	2.45
Washington, DC	19.9	1.31
DMP Average	38.1	1.02

¹ These cities did not participate in the DMP this quarter.

EXECUTIVE SUMMARY

The DMP is a quarterly Special Field Intelligence Program (SFIP) designed, funded, and administered by DEA. The objective of the DMP is to monitor the retail-level heroin situation. This objective is accomplished by making undercover heroin purchases that are analyzed for price, purity, adulterants, diluents, and geographic source area. The results are reported to Federal, State, and local authorities.

During the fourth quarter of Calendar Year 1993, the DMP collected samples in 15 metropolitan areas: Atlanta, Boston, Denver, Detroit, Houston, Miami, Newark, New Orleans, New York City, Philadelphia, Phoenix, San Diego, San Juan, St. Louis, and Washington, DC. (Chicago, Dallas, Los Angeles, San Francisco, and Seattle did not participate in the DMP during the October - December quarter.) The following are summaries of the collected samples.

- During this quarter, 94 exhibits were purchased, 88 (94%) of which contained heroin. Of these 88 exhibits, none were classified as outliers.
- The purity of these exhibits averaged 38.1 percent (for all exhibits containing heroin) with a low of 3.0 percent in St. Louis, and a high of 89.5 percent in New York City.
- A total of 18 exhibits were of Southeast Asian origin (SEA) with an average purity of 32.1 percent.
- A total of four exhibits were of Southwest Asian origin (SWA) with an average purity of 40.5 percent. This represents a substantial decrease in the number of SWA exhibits compared with the 1992 DMP results. This is due, in part, to the development of the South American (SA) heroin signature. Previously, the generally high purity SA heroin often was classified as SWA.
- A total of 19 exhibits were of Mexican origin (MEX) with an average purity of 39.8 percent. This represents the highest quarterly purity since April - June 1989 when Mexican heroin averaged 39.9 percent pure.
- A total of six exhibits were of SA origin with an average purity of 49.9 percent. During the October - December period, SA heroin was purchased only on the east coast of the United States.
- A total of 41 exhibits were of unclassifiable origin (UNC) with an average purity of 37.9 percent.

- The average cost per milligram of pure heroin by source area was:

Southeast Asian	\$0.95
Southwest Asian	\$0.67
Mexican	\$1.03
South America	\$0.50
All classifiable sources combined	\$0.90
Unclassifiable	\$1.16
All heroin combined	\$1.02

In order to achieve maximum benefit from this report, it should be used in conjunction with other available intelligence indicators. The DMP represents a limited view of the heroin situation due to its concentration in only 20 cities. This report makes no quarter-to-quarter comparisons due to the limited number of samples purchased in each city during each quarter nor does it represent a comprehensive view of the overall national situation. A summary, which includes year-to-year DMP city comparisons, is issued when all individual quarterly data are complete. The number of DMP exhibits that originated in each geographic source area may differ somewhat from those that appear in the Heroin Signature Program (HSP). The HSP is an annual DEA program that analyzes random samples of domestic purchases and seizures as well as all seizures made at U.S. ports of entry and involves a much broader and more extensive data base.¹

¹ For more information on DEA's Heroin Signature Program and Heroin Signature Classification, see appendix C.

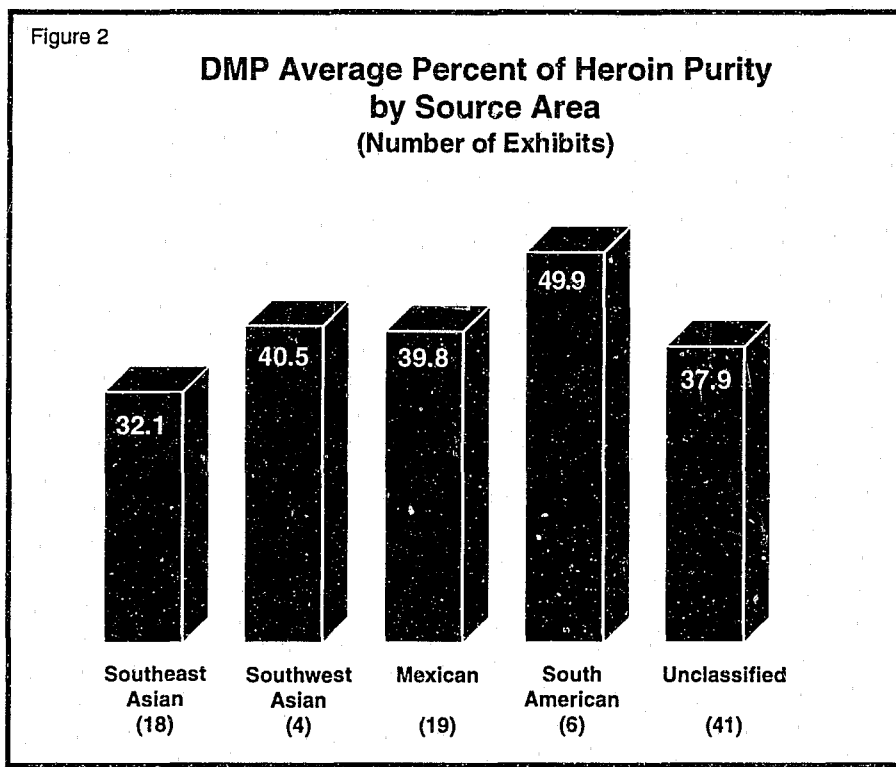
OVERVIEW: OCTOBER - DECEMBER 1993

The DMP is a retail-level heroin purchase program designed to provide Federal, State, and local authorities with intelligence relating to heroin purity, price, availability, adulterants, diluents, and geographic source areas (Signature analysis¹). The DMP collected samples in 15 metropolitan areas: Atlanta, Boston, Denver, Detroit, Houston, Miami, Newark, New Orleans, New York City, Philadelphia, Phoenix, San Diego, San Juan, St. Louis, and Washington, DC.

A total of 94 exhibits were submitted to DEA's Special Testing and Research Laboratory for Signature analysis. Of these exhibits, six (6%) did not contain heroin. Of the 88 exhibits that did contain heroin (figure 2), none were classified as "outliers." Outliers are those samples that have a purity of less than 0.5 percent or a price greater than \$16 per milligram pure. Outliers are not used in the calculation of DMP averages or trends.

The purity of the 88 heroin exhibits ranged from a low of 3.0 percent in St. Louis to a high of 89.5 percent in New York City. Of the 88 exhibits, 41 (47%) were unusable for source area identification. Submissions are unusable when there is insufficient weight to perform all the required tests or when test results are inconsistent. A test result is considered inconsistent when it matches more than one existing profile or when it does not match any of the profiles currently in use.

The data in figures 2 through 6 resulted from analysis of DMP exhibits for the fourth quarter of 1993.



¹ For an explanation of Signature analysis and other terms used in this report, see appendix C.

SOUTH AMERICAN HEROIN

Since April - June 1993, the DMP has included a new heroin signature classification which identifies heroin produced in South America, generally referred to as Colombian heroin. Before DEA's Special Testing and Research Laboratory developed the South American (SA) signature, heroin from this region was usually either unclassified or, because of chemical similarities, classified as Southwest Asian (SWA). This indicates that the extremely high average purity of SWA heroin reported in the DMP over the past year was inflated due to the inclusion of the suspected SA heroin samples under the SWA signature. In addition, SA heroin may be partially responsible for the high number and purity of unclassified heroin samples, although it is expected that refinements to the SA signature should make it possible to classify more heroin samples in future reports.

Figure 3

DMP AVERAGE HEROIN PURITY by Source Area and City								
City	Southeast Asian		Southwest Asian		Mexican		South American	
	Number of Exhibits	Average Purity (percent)	Number of Exhibits	Average Purity (percent)	Number of Exhibits	Average Purity (percent)	Number of exhibits	Average purity (percent)
Atlanta	4	42.0	--	--	--	--	--	--
Boston ¹	--	--	--	--	--	--	--	--
Chicago ²	--	--	--	--	--	--	--	--
Dallas ²	--	--	--	--	--	--	--	--
Denver	--	--	--	--	3	43.3	--	--
Detroit	4	24.8	2	33.9	--	--	--	--
Fort Lauderdale ²	--	--	--	--	--	--	--	--
Houston	1	66.4	--	--	4	14.7	--	--
Los Angeles ²	--	--	--	--	--	--	--	--
Miami	--	--	--	--	--	--	1	13.6
Newark	--	--	--	--	--	--	2	37.1
New Orleans ¹	--	--	--	--	--	--	--	--
New York City	1	74.2	1	29.3	--	--	2	76.2
Philadelphia	1	19.9	--	--	--	--	1	59.4
Phoenix	--	--	--	--	5	57.6	--	--
San Diego	--	--	--	--	5	53.3	--	--
San Francisco ²	--	--	--	--	--	--	--	--
San Juan	--	--	1	64.7	--	--	--	--
Seattle ²	--	--	--	--	--	--	--	--
St. Louis	--	--	--	--	2	6.4	--	--
Washington, DC	7	21.4	--	--	--	--	--	--
Totals	18	--	4	--	19	--	6	--
National Average	--	32.1	--	40.5	--	39.8	--	49.9

¹ This city's purchases were all Unclassified exhibits.

² These cities did not participate in the DMP this quarter.

Figure 4

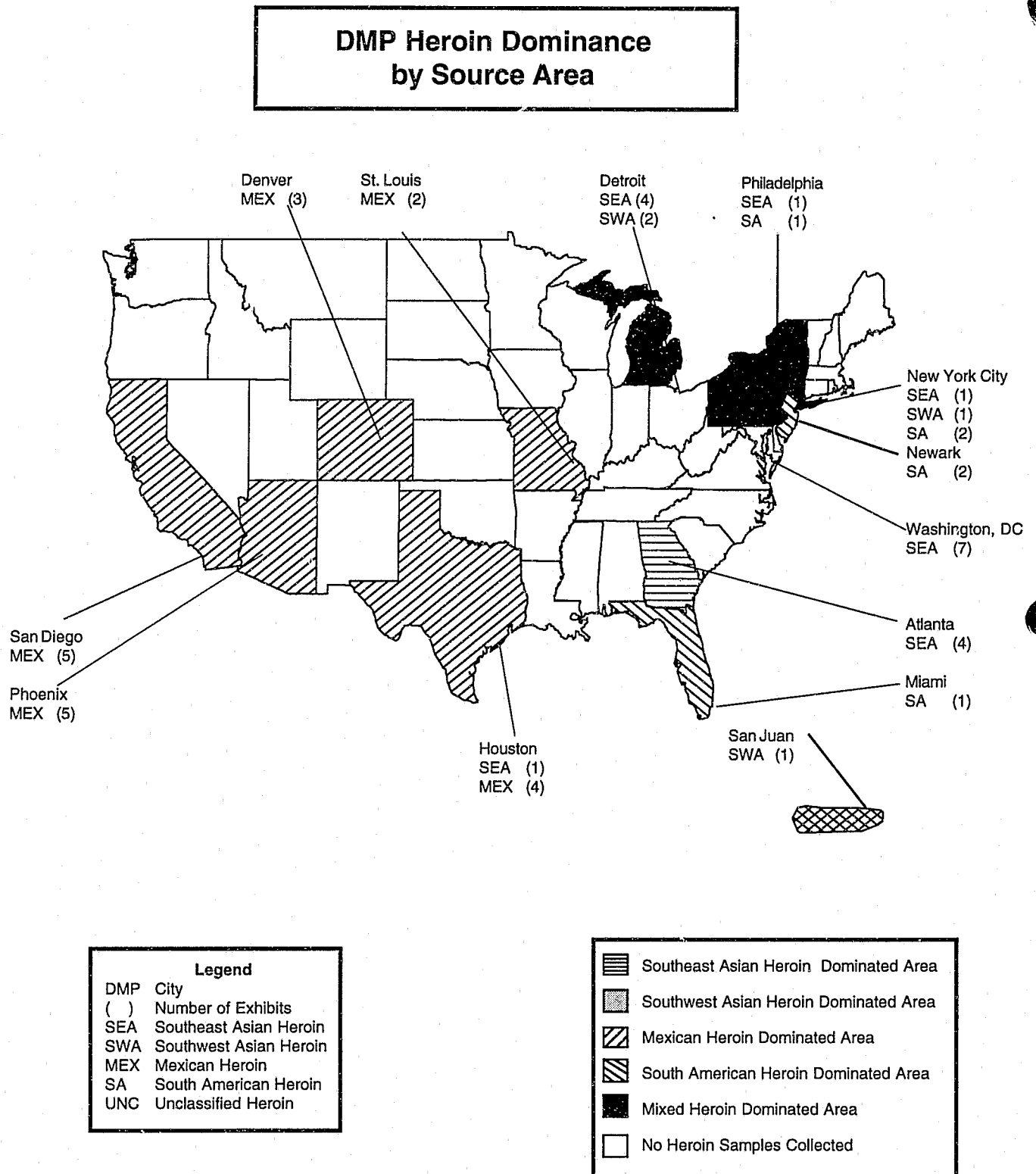


Figure 5

DMP HEROIN PRICES
(U.S. dollars/milligram pure)

City	Southeast Asian	Southwest Asian	Mexican	South American	Average (all types of heroin)
Atlanta	0.95	--	--	--	1.27
Boston	--	--	--	--	1.20
Chicago	--	--	--	--	--
Dallas	--	--	--	--	--
Denver	--	--	1.33	--	1.33
Detroit	1.01	0.62	--	--	1.31
Fort Lauderdale	--	--	--	--	--
Houston	0.49	--	0.93	--	0.84
Los Angeles	--	--	--	--	--
Miami	--	--	--	0.98	1.05
Newark	--	--	--	0.40	0.80
New Orleans	--	--	--	--	1.13
New York City	0.44	0.85	--	0.29	0.46
Philadelphia	0.84	--	--	0.65	0.64
Phoenix	--	--	0.95	--	0.95
San Diego	--	--	0.38	--	0.38
San Francisco	--	--	--	--	--
San Juan	--	0.59	--	--	0.53
Seattle	--	--	--	--	--
St. Louis	--	--	2.59	--	2.45
Washington, DC	1.08	--	--	--	1.31
DMP Average	0.95	0.67	1.03	0.50	1.02

Figure 6

**DMP Average Heroin Cost in Dollars
by Source Area
(Number of Exhibits)**

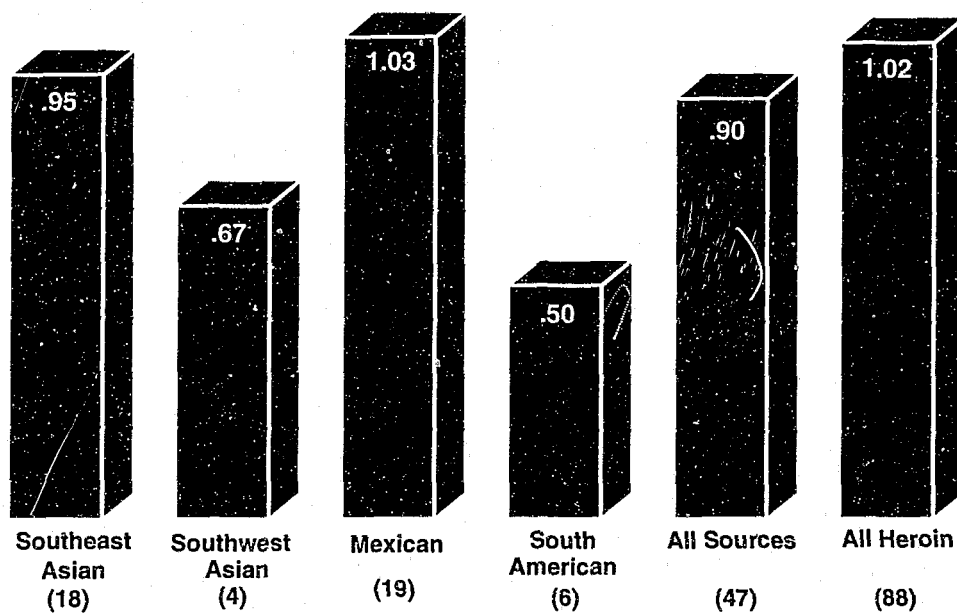
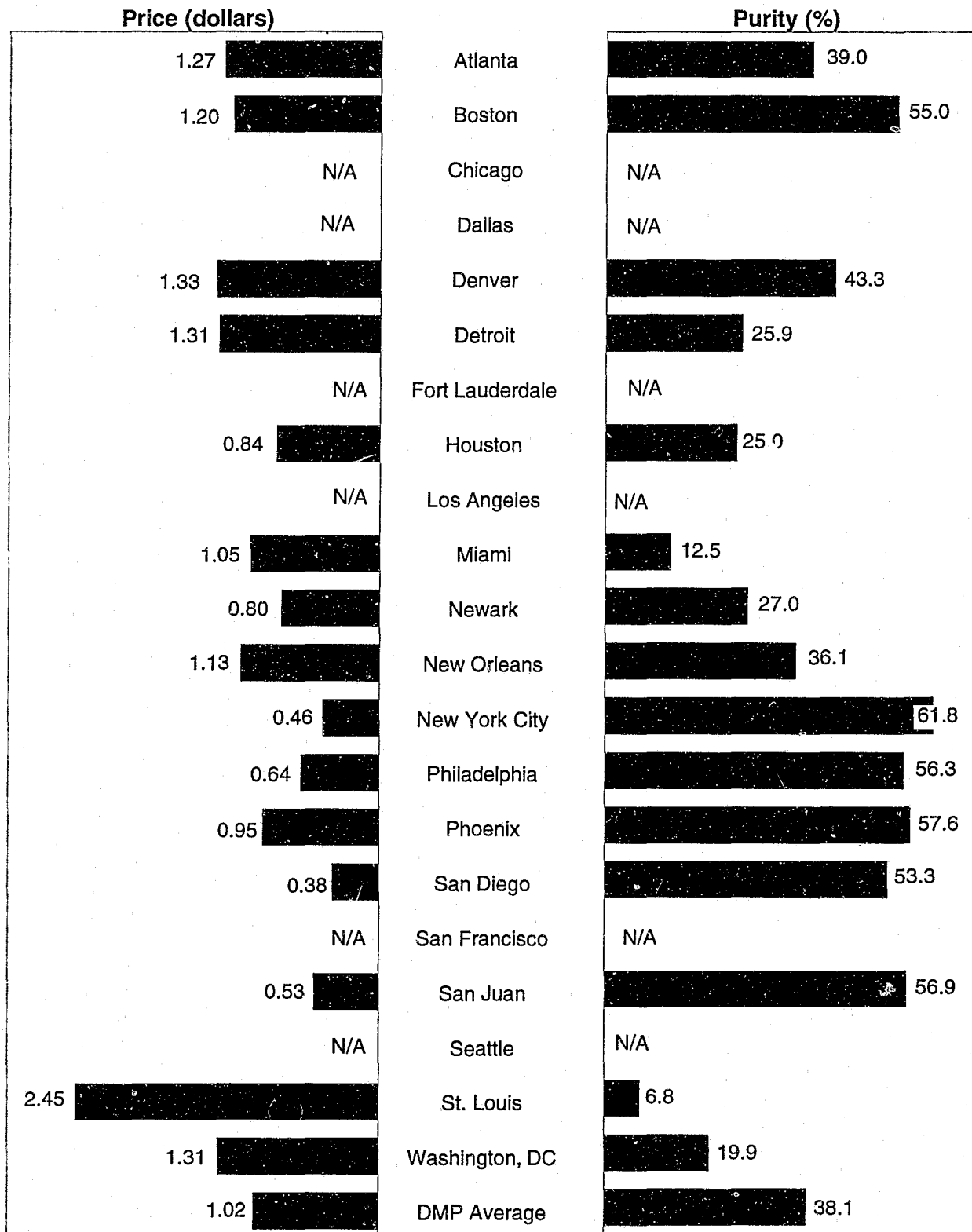


Figure 7

DMP Average Heroin Prices and Purities by City¹



¹ Based on 88 exhibits.

ADULTERANTS AND DILUENTS

Heroin (diacetylmorphine) is produced from morphine by a chemical process known as acetylation. The morphine is extracted from opium, which comes from the opium poppy plant (*Papaver somniferum L.*). Adulterants are organic substances that are added to controlled substance mixtures—in this case, heroin—and have physiological consequences. Diluents are organic or inorganic substances which are added to the drug to serve as fillers.

Figures 7 and 8 show data on adulterants and diluents found in fourth quarter 1993 DMP exhibits.

Figure 7

ADULTERANTS BY SOURCE AREA
Number of Occurrences and Percent of Source Area's Exhibits

Adulterant	Southeast Asian ¹		Southwest Asian ²		Mexican ³		South American ⁴		Total ⁵	
	#	%	#	%	#	%	#	%	#	%
Quinine	7	39	1	25	1	5	3	50	12	26
Acetaminophen	3	17	1	25	--	--	1	17	5	11
Diphenhydramine	2	11	1	25	2	11	--	--	5	11
Caffeine	3	17	1	25	--	--	--	--	4	9
Procaine	1	6	1	25	--	--	1	17	3	6
Cocaine	--	--	--	--	--	--	1	17	1	2
Lidocaine	--	--	--	--	--	--		17	1	2
Methaqualone	--	--	1	25	--	--	--	--	1	2
Phenylpropanolamine	--	--	1	25	--	--	--	--	1	2

¹ Based on 18 exhibits.

² Based on 4 exhibits.

³ Based on 19 exhibits.

⁴ Based on 6 exhibits.

Figure 8

DILUENTS BY SOURCE AREA**Number of Occurrences and Percent of Source Area's Exhibits**

Diluent	Southeast Asian ¹		Southwest Asian ²		Mexican ³		South American ⁴		Total ⁵	
	#	%	#	%	#	%	#	%	#	%
Mannitol	12	67	3	75	2	11	3	50	20	43
Lactose	8	44	3	75	5	26	2	33	18	38
Starch	3	17	1	25	2	11	5	83	11	23
Dextrose	1	6	1	25	--	--	1	17	3	6
Sucrose	1	6	--	--	1	5	--	--	2	4
Calcium Carbonate	--	--	1	25	--	--	--	--	1	2
Inositol	1	6	--	--	--	--	--	--	1	2

¹ Based on 18 exhibits.² Based on 4 exhibits.³ Based on 19 exhibits.⁴ Based on 6 exhibits.⁵ Based on 47 exhibits.

BRAND NAMES

Retail packages bearing brand names are encountered frequently in DMP samples. A brand name denotes the trafficking organization or the cutting house where the drug was diluted and repackaged. Within the heroin trade, the use of brand names has become so extensive that some organizations conduct business using counterfeit brand names. When the counterfeit products begin to erode the business of a group, it will change the name of their product, conduct an extensive advertising campaign, and begin again.

During fourth quarter 1993, brand names were encountered on DMP exhibits obtained in Boston, Detroit, Newark, New York City, and Philadelphia; in addition, street names were reported in Washington, DC.

Figure 9

BRAND NAMES AND LOGOS by DMP City

City	Source	Purity (%)	Brand Name/Logo (Description)
Boston	UNC	81.8	Gunfire on Baggie containing 10 packets; symbol of rifle on each packet
	UNC	60.5	Outlaw
	UNC	54.1	Homicide and Skull and Cross Bones with logo of a needle
	UNC	52.5	Good Thang
	UNC	31.4	Logo of a bull
	UNC	25.2	Logo of rows of stars
Detroit	SEA	31.7	Apache under circled P
	SWA	25.0	\$10.00 stamped on packets
	UNC	39.1	Opp (3 envelopes); 6 unmarked envelopes
	UNC	33.9	Opp (3 envelopes); 6 unmarked envelopes
Newark	SA	44.0	Overdose
	SA	30.2	Tiffany with logo of vintage car
	UNC	26.2	DOA
	UNC	20.5	RIP with logo of headstone
	UNC	14.3	Logo of black cat

**BRAND NAMES AND LOGOS
by DMP City**

City	Source	Purity (%)	Brand Name/Logo (Description)
New York City	SEA	74.2	Overtime over logo of a clock
	SWA	29.3	Red Devil next to logo of a devil
	SA	86.8	Scorpion under logo of a scorpion
	SA	65.6	Excessive Force
	UNC	89.5	Red Tape (4 envelopes); Life (1 envelope); Extra Strength (5 envelopes)
	UNC	82.7	Red Job under logo of a man with horns
	UNC	80.2	Red Tape (4 envelopes); Life (1 envelope); Extra Strength (5 envelopes)
	UNC	76.2	Uptown
	UNC	52.4	All Out
	UNC	52.4	Knockout
	UNC	48.5	Red Tape (4 envelopes); Life (1 envelope); Extra Strength (5 envelopes)
	UNC	39.0	911
Philadelphia	SA	59.4	Top Gun
	UNC	73.1	Prime
	UNC	72.6	Prime Time with logo of three stars
Washington DC	SEA	10.7	Street name is Sledgehammer
	UNC	20.4	Street name is South East Special

APPENDIX A: INDIVIDUAL CITY SAMPLING Atlanta

Heroin Purities			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	6	16.2 - 63.4	39.0
Southeast Asian	4	31.2 - 63.4	42.0
Unclassified	2	16.2 - 49.4	32.8

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Caffeine	1	--	--	--	--	1
Cocaine	--	--	--	--	1	1
Quinine	--	--	--	--	1	1

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Mannitol	3	--	--	--	2	5
Lactose	2	--	--	--	--	2
Dextrose	1	--	--	--	--	1
Starch	--	--	--	--	1	1

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	0.95	--	--	--	1.91	1.27

Note: All samples are heroin hydrochloride unless otherwise noted. The purities of all DMP samples determined to be heroin base were recalculated as heroin hydrochloride for purposes of comparison. Samples that were bought on the same day and have nearly identical compositions are treated as one exhibit in this part of the report. Appendix B contains details on each separate exhibit.

Boston

Heroin Purities			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	7	25.2 - 81.8	55.0
Unclassified	7	25.2 - 81.8	55.0

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Lidocaine	--	--	--	--	3	3
Procaine	--	--	--	--	3	3
Caffeine	--	--	--	--	1	1

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Mannitol	--	--	--	--	3	3
Lactose	--	--	--	--	2	2
Starch	--	--	--	--	2	2

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	--	--	--	--	1.20	1.20

Denver

Heroin Purities			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	3	40.5 - 45.3	43.3
Mexican	3	40.5 - 45.3	43.3

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
None	N/A	N/A	N/A	N/A	N/A	N/A

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
None	N/A	N/A	N/A	N/A	N/A	N/A

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	--	--	1.33	--	--	1.33

Detroit

Heroin Purities			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	10	7.7 - 42.8	25.9
Southeast Asian	4	11.8 - 31.7	24.8
Southwest Asian	2	25.0 - 42.8	33.9
Unclassified	4	7.7 - 39.1	23.0

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Caffeine	1	1	--	--	3	5
Diphenhydramine	2	--	--	--	1	3
Procaine	1	--	--	--	2	3
Methaqualone	--	1	--	--	--	1
Quinine	--	--	--	--	1	1

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Mannitol	3	1	--	--	4	8
Lactose	2	2	--	--	2	6
Starch	--	1	--	--	--	1

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	1.01	0.62	--	--	1.96	1.31

Houston

Heroin Purities			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	5	7.4 - 66.4	25.0
Mexican	4	7.4 - 35.3	14.7
Southeast Asian	1	--	66.4

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
None	N/A	N/A	N/A	N/A	N/A	N/A

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Lactose	1	--	3	--	--	4
Sucrose	1	--	1	--	--	2
Mannitol	--	--	1	--	--	1

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	0.49	--	0.93	--	--	0.84

Miami

Heroin Purities			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	7	4.6 - 20.3	12.5
South American	1	--	13.6
Unclassified	6	4.6 - 20.3	12.3

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Quinine	--	--	--	1	3	4
Cocaine	--	--	--	--	1	1

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Lactose	--	--	--	1	3	4
Inositol	--	--	--	--	2	2
Mannitol	--	--	--	--	2	2
Starch	--	--	--	--	2	2

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	--	--	--	0.98	1.06	1.05

Newark

Heroin Purity			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	5	14.3 - 44.0	27.0
South American	2	30.2 - 44.0	37.1
Unclassified	3	14.3 - 26.2	20.3

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Quinine	--	--	--	1	3	4
Cocaine	--	--	--	--	3	3
Lidocaine	--	--	--	1	--	1
Procaine	--	--	--	1	--	1

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Mannitol	--	--	--	2	3	5
Starch	--	--	--	2	3	5
Lactose	--	--	--	1	--	1

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	--	--	--	0.40	1.07	0.80

New Orleans

Heroin Purities			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	2	34.8 - 37.4	36.1
Unclassified	2	34.8 - 37.4	36.1
Non-heroin	2	--	--

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Cocaine	--	--	--	--	2	2

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Mannitol	--	--	--	--	2	2
Dextrose	--	--	--	--	2	2

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	--	--	--	--	1.13	1.13

New York City

Heroin Purity			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	13	26.1 - 89.5	61.8
Southeast Asian	1	--	74.2
Southwest Asian	1	--	29.3
South American	2	65.6 - 86.8	76.2
Unclassified ¹	9	26.1 - 89.5	60.8
Non-heroin	1	--	--

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Cocaine	--	--	--	--	3	3
Procaine	--	1	--	--	2	3
Acetaminophen	--	1	--	1	--	2
Quinine	--	1	--	--	1	2
Propylparaben	--	--	--	--	2	2
Caffeine	--	--	--	--	1	1
Diphenhydramine	--	1	--	--	--	1
Ephedrine	--	--	--	--	1	1
Phenylpropanolamine	--	1	--	--	--	1

¹ Composition of one of the Unclassified exhibits was mixed heroin base and heroin hydrochloride.

New York City (continued)

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Mannitol	1	1	--	1	6	9
Starch	--	--	--	2	5	7
Lactose	--	1	--	--	4	5
Dextrose	--	1	--	1	--	2

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	0.44	0.85	--	0.29	0.46	0.46

Philadelphia

Heroin Purities			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	4	19.9 - 73.1	56.3
Southeast Asian	1	--	19.9
South American	1	--	59.4
Unclassified	2	72.6 - 73.1	72.9

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Caffeine	--	--	--	--	2	2
Quinine	1	--	--	1	--	2
Cocaine	--	--	--	1	--	1

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Starch	1	--	--	1	2	4
Lactose	1	--	--	--	1	2

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	0.84	--	--	0.65	0.53	0.64

Phoenix

Heroin Purities			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	5	54.3 - 61.6	57.6
Mexican	5	54.3 - 61.6	57.6
Non-heroin	3	--	--

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
None	N/A	N/A	N/A	N/A	N/A	N/A

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Mannitol	--	--	1	--	--	1

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	--	--	0.95	--	--	0.95

San Diego

Heroin Purities			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	5	14.1 - 75.4	53.3
Mexican	5	14.1 - 75.4	53.3

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
None	N/A	N/A	N/A	N/A	N/A	N/A

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
None	N/A	N/A	N/A	N/A	N/A	N/A

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	--	--	0.38	--	--	0.38

San Juan

Heroin Purities			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	2	49.1 - 64.7	56.9
Southwest Asian	1	--	64.7
Unclassified	1	--	49.1

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Benzactyzine	--	--	--	--	1	1
Chlorpromazine	--	--	--	--	1	1
Cocaine	--	--	--	--	1	1
Quinine	--	--	--	--	1	1

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Mannitol	--	1	--	--	1	2
Calcium Carbonate	--	1	--	--	--	1
Lactose	--	--	--	--	1	1

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	--	0.59	--	--	0.48	0.53

St. Louis

Heroin Purities			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	4	3.0 - 10.6	6.8
Mexican	2	3.0 - 9.8	6.4
Unclassified	2	3.6 - 10.6	7.1

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Diphenhydramine	--	--	2	--	2	4
Quinine	--	--	1	--	1	2
Cocaine	--	--	--	--	1	1

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Lactose	--	--	2	--	2	4
Starch	--	--	2	--	1	3

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	--	--	2.59	--	2.31	2.45

Washington, DC

Heroin Purity			
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)
Heroin	10	10.7 - 38.4	19.9
Southeast Asian	7	10.7 - 38.4	21.4
Unclassified	3	11.4 - 20.4	16.3

Adulterants (Number of Occurrences)						
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Quinine	6	--	--	--	3	9
Acetaminophen	3	--	--	--	--	3
Caffeine	1	--	--	--	--	1
Procaine	--	--	--	--	1	1

Diluents (Number of Occurrences)						
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Mannitol	5	--	--	--	2	7
Starch	2	--	--	--	1	3
Lactose	2	--	--	--	--	2
Inositol	1	--	--	--	--	1
Quinine	--	--	--	--	1	1

Heroin Price per Milligram Pure (Dollars)						
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
	1.08	--	--	--	1.84	1.31

APPENDIX B: EXHIBIT DATA BY CITY

Atlanta

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1	Kennedy St.	41.2	SEA	100.00	1.471	12-07	
2	Kennedy St.	63.4	SEA	100.00	0.741	12-07	
3	Smith St.	31.2	SEA	100.00	0.833	12-08	
4	Garabaldi St.	16.2	UNC	100.00	2.326	12-08	
5	Kennedy St.	49.4	UNC	100.00	1.493	12-13	
6	McDaniel & Smith Sts.	32.3	SEA	100.00	0.735	12-13	

Note: All samples are heroin hydrochloride unless otherwise noted. All samples marked N/A are not heroin unless otherwise noted. In addition, exhibits whose numbers have decimal points (for example, 3.1, 3.2, 3.3) are each one sample that was analyzed in several parts due to differences in composition.

Boston

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1	Ruggles & Washington Sts., Roxbury	81.8	UNC	100.00	0.500	12-08	Gunfire on Baggie of 10 packets; symbol of rifle on each packet
2	Harrison Ave. & Zeigler St.	52.5	UNC	100.00	1.087	12-08	Good Thang
3	Ramsdell Ave., Roslindale	31.4	UNC	160.00	1.416	12-14	Logo of a bull
4	Norwell St., Dorchester	54.1	UNC	100.00	1.724	12-14	Homicide and Skull and Cross Bones with logo of a needle
5	Washington St.	60.5	UNC	100.00	1.053	12-14	Outlaw
6	Broadway St., Chelsea	25.2	UNC	60.00	1.667	12-14	Logo of rows of stars
7	Harrison Ave., Chinatown	79.3	UNC	120.00	0.960	12-15	

Denver

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1	44th & Tejon St.	44.6	MEX	100.00	1.587	12-08	
2	31st & Lawrence St.	43.6	MEX	100.00	1.190	12-08	
3	32nd & Curtis St.	45.3	MEX	100.00	0.943	12-13	
4	37th & Tejon St.	40.5	MEX	100.00	1.667	12-13	

Detroit

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1	Nebraska	25.9	SEA	120.00	0.674	12-03	
2	McGraw	29.8	SEA	115.00	0.676	12-03	
3	Wabash & Antonette Sts.	42.8	SWA	115.00	0.520	12-06	
4	Finkel & Auburn Sts.	7.7	UNC	110.00	4.231	12-09	
5	Ossego St. & Joy St.	25.0	SWA	115.00	0.728	12-09	\$10.00 was stamped on packets
6	Wabash St.	31.7	SEA	120.00	0.750	12-09	Apache under circled P
7	Pasadena	11.8	SEA	110.00	1.930	12-16	
8	Davison & 14th St.	11.1	UNC	120.00	2.105	12-16	
9.1	14th St. & Clemons	33.9	UNC	32.00	0.821	12-16	3 red packets stamped Opp; 6 yellow packets
9.2	14th St. & Clemons	39.1	UNC	68.00	0.694	12-16	3 red packets stamped Opp; 6 yellow packets

Houston

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Mark or Brand Name
1	Hatley & Dowling St.	66.4	SEA	600.00	0.486	12-08	
2	Brandon & Reed Rd.	35.3	MEX	400.00	0.766	12-09	
3	Dryfuss	8.2	MEX	150.00	1.128	12-09	
4	Scott St. & Reed Rd.	8.0	MEX	250.00	0.839	12-10	
5	Cullen St.	7.4	MEX	250.00	0.929	12-10	
6	Yellowstone St. & Scott St.	7.9	MEX	150.00	1.056	12-10	

Miami

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1	SW 104 Ave.	12.5	UNC	100.00	1.064	11-16	
2	SW 178 St.	4.6	UNC	100.00	2.174	11-16	
3	SW 115 Ave.	10.4	UNC	100.00	0.704	11-16	
4	Grand Ave.	7.9	UNC	100.00	1.149	12-07	
5	Douglas Rd. & Frow Ave.	19.5	UNC	100.00	0.439	12-07	
6	Douglas Rd.	21.1	UNC	100.00	0.426	12-07	
7	NW 61 St.	13.6	SA	100.00	0.980	12-08	
8	NW 69th Terrace & NW 15th Ave.	18.3	UNC	100.00	0.420	12-08	

Newark

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1	Spruce St.	30.2	SA	100.00	0.420	12-16	Tiffany with logo of a vintage car
2	18th & Springfield Aves.	26.2	UNC	100.00	0.769	12-16	DOA
3	West Kinney	44.0	SA	100.00	0.377	12-16	Overdose
4	Seth Boyden Ave.	20.5	UNC	100.00	0.943	12-16	RIP with logo of a headstone
5	Ludlow St.	14.3	UNC	130.00	1.494	12-16	Logo of a black cat

New Orleans

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1.1	Unspecified	37.4	UNC	56.00	1.750	12-13	
1.2	Unspecified	N/A	N/A	144.00	N/A	12-13	
2.1	Unspecified	34.8	UNC	15.00	0.500	12-13	
2.2	Unspecified	N/A	N/A	185.00	N/A	12-13	

New York City

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1	Bronx	65.6	SA	100.00	0.311	12-02	Excessive Force
2	Bronx	39.0	UNC	90.00	0.552	12-02	911
3	Bronx	26.1	UNC	100.00	1.020	12-02	
4.1	East Harlem	80.2	UNC	29.00	0.302	12-02	Red Tape (4 packets);Life (1 packet);Extra Strength (5 packets)
4.2	East Harlem	89.5	UNC	9.00	0.273	12-02	Red Tape (4 packets);Life (1 packet);Extra Strength (5 packets)
4.3	East Harlem	48.5	UNC	62.00	0.492	12-02	Red Tape (4 packets);Life (1 packet);Extra Strength (5 packets)
5	Bronx	86.8	SA	100.00	0.259	12-07	Scorpion under logo of a scorpion
6	East Harlem	82.7 ¹	UNC	100.00	0.459	12-07	Red Job under logo of man with horns
7	East Harlem	52.4	UNC	100.00	0.362	12-07	All Out
8	Ave. D & 9th St.	74.2	SEA	60.00	0.441	12-07	Overtime over the logo of a clock
9	East Harlem	52.4	UNC	100.00	0.356	12-09	Knockout
10	East Harlem	76.2	UNC	100.00	0.327	12-09	Uptown
11	Brooklyn	N/A	N/A	100.00	N/A	12-09	Logo of clown
12	Brooklyn	29.3	SWA	100.00	0.847	12-09	Red Devil next to logo of a devil

¹ Heroin composition was mixed heroin base and heroin hydrochloride.

Philadelphia

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1	Darien St.	73.1	UNC	100.00	0.559	12-22	Prime
2	Orkney St.	59.4	SA	100.00	0.649	12-22	Top Gun
3	Market St.	19.9	SEA	100.00	0.840	12-22	
4	Darien St.	72.6	UNC	100.00	0.503	12-22	Prime Time with logo of three stars

Phoenix

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1	8th St. & Montecito Ave.	60.2	MEX	60.00	1.622	12-10	
2	9th St. & Portland St.	60.7	MEX	50.00	1.316	12-10	
3	16th St. & Fillmore Ave.	61.6	MEX	40.00	0.976	12-10	
4	31st Ave. & Buckeye Rd.	N/A	N/A	50.00	N/A	12-14	
5	17th Ave. & Buckeye Rd.	N/A	N/A	40.00	N/A	12-14	
6	7th Ave. & Pima Rd.	N/A	N/A	60.00	N/A	12-14	
7	2nd Ave. & Baseline Rd.	55.4	MEX	50.00	0.833	12-16	
8	Central Ave. & South Mountain Rd.	56.0	MEX	50.00	0.862	12-16	
9	8th St. & Baseline Rd.	54.3	MEX	60.00	0.508	12-16	
10	Central Ave. & Roeser Rd.	56.0	MEX	60.00	1.034	12-16	

San Diego

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1	33rd St. & Imperial Ave.	75.4	MEX	120.00	0.174	12-07	
2	J & Market Sts.	72.6	MEX	115.00	0.163	12-07	
3	Harrison & 26th Sts.	48.7	MEX	115.00	0.308	12-07	
4	26th & Broadway	55.8	MEX	140.00	0.246	12-15	
5	32nd & Commercial	14.1	MEX	140.00	1.029	12-16	

San Juan

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1	Brisas del Turabo PHP, Caguas	49.1	UNC	115.00	0.475	12-29	
2	Virgilio Davila PHP, Bayamon	64.7	SWA	110.00	0.588	12-29	

St. Louis

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1.1	Whittier & Dr. Martin L. King Dr.	3.0	MEX	71.00	3.944	12-15	
1.2	Whittier & Dr. Martin L. King Dr.	9.8	MEX	79.00	1.234	12-15	
2	Evans	9.7	UNC	150.00	1.376	12-15	
3	Euclid	10.6	UNC	150.00	1.485	12-15	
4	Cass	4.5	UNC	150.00	3.191	12-16	
5	Page & Anderson	3.6	UNC	150.00	3.191	12-16	

Washington, DC

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
1	K St.	19.1	SEA	90.00	1.154	12-06	
2	L St. & New Jersey, SE	38.4	SEA	80.00	0.457	12-07	
3	23rd & Alabama Ave., SE	15.8	SEA	80.00	1.633	12-08	
4	Wiltberg & S St., NW	21.1	SEA	70.00	0.729	12-10	
5	Alabama Ave. & 22nd St., SE	21.6	SEA	80.00	1.429	12-14	
6	22nd St., SE	20.4	UNC	30.00	0.909	12-17	Street name=South East Special
7	Wheeler Rd.	11.4	UNC	70.00	2.121	12-15	
8	2nd St., SE	23.1	SEA	55.00	0.873	12-17	
9	23rd & Alabama Ave.	17.2	UNC	80.00	2.500	12-22	
10	Division Ave., NE	10.7	SEA	80.00	1.270	12-30	Street name=Sledge-hammer

APPENDIX C: DEFINITIONS

Adulterants: Pharmacologically active substances—such as caffeine, monoacetylmorphine, procaine, and quinine—that remain in or are added to the final heroin product at the completion of the heroin conversion process.

Alkaloids: Naturally occurring constituents of opium such as codeine, morphine, noscapine, and thebaine.

Black Tar Heroin: A relatively high-purity heroin made from opium poppies grown in Mexico using techniques classified as Mexican in origin. It may be brown to black in color and sticky like roofing tar or hard like coal. Typically, black tar heroin is a hydrochloride salt and is taken by injection.

Diluents: Pharmacologically inactive substances added to increase bulk—such as lactose, mannitol, starch, and sucrose.

Drug Abuse Warning Network (DAWN): A program—sponsored jointly by DEA and the National Institute on Drug Abuse (NIDA)—to gather, interpret, and disseminate data on drug abuse and overdose deaths. The data are obtained primarily from hospitals and medical examiners in 26 cities.

Gross Weight: The total weight of an exhibit including its packaging material.

Heroin Hydrochloride: A salt of heroin that is water soluble and suitable for injection. This is the type most commonly available to abusers.

Heroin Color: The actual color of the heroin after it has been separated from its adulterants and diluents.

Heroin Signature Classification: The result of Heroin Signature Program analysis. Classifications currently defined include South American (SA), Southeast Asian (SEA), Southwest Asian (SWA), and Mexican (MEX). Also known as Heroin Signature Profiles. When the results of a Signature analysis are inconclusive, the sample may be listed as “unknown” or “insufficient weight.” For the purposes of this report, the latter two classifications are grouped together under the heading of Unclassified (UNC).

Heroin Signature Program: A program developed by DEA to identify the geographic source area of a heroin sample through the detection of specific chemical characteristics in the sample peculiar to its source area. This program employs special chemical analyses to identify and quantitate selected chemical characteristics and secondary constituents of an exhibit, which ideally is at least 1.5 grams net weight and which has a purity of at least 3.0 percent.

Impurities: Naturally occurring constituents of opium or processing chemicals that remain in heroin after the conversion process is completed.

Insufficient Weight: A sample of heroin that is too small for Signature analysis. Ideally, each sample should be at least 1.5 grams net weight (including adulterants and diluents) and should have a purity of at least 3.0 percent. A sample of this minimum weight and purity has a pure heroin weight of at least 45 milligrams. A smaller sample is not classifiable by means of Signature analysis and is labeled as "insufficient weight."

Mexican Heroin: A type of heroin made from opium poppies grown in Mexico using techniques developed by Mexican chemists. This type of heroin is typically the hydrochloride salt form. The purity is usually low and suitable for injection. Mexican heroin appears in several shades of brown and is powdery in consistency. Black tar heroin is also Mexican in origin and typically much higher in purity.

Net Weight: The total weight of the heroin excluding its packaging.

Outlier: Generally speaking, a number or value that is so far removed from others in its category that it is considered to be invalid for inclusion in the calculation of averages. DMP exhibits that are classified as outliers are those exhibits that have a purity of less than 0.5 percent or a price greater than \$16 per milligram pure. DMP averages do not include outliers.

Pure Weight: The weight of the heroin as determined by multiplying the purity of an exhibit by its net weight.

Purity: The amount of heroin present compared to all other substances in the sample. Purity is expressed as a percent. Purity and salt type are listed in the DMP report when available.

Southeast Asian no. 3 (SEA #3): Heroin made in Southeast Asia that is not as highly refined as SEA #4 heroin; its color ranges from tan to off-white. Although considered a smoking heroin, it also may be injected intravenously. Caffeine and strychnine usually are added to SEA #3 before the heroin manufacturing process is completed.

Southeast Asian no. 4 (SEA #4): Heroin that is made from Southeast Asian opium and produced in the "Golden Triangle" (Burma, Laos, and Thailand). Usually, it is encountered as a fine, white powder.

Southwest Asian Heroin (SWA): Heroin made from opium grown in Afghanistan, Iran, or Pakistan. The quality of this heroin ranges from a highly refined white heroin produced in the European-Mediterranean area to a less refined tan heroin produced in Afghanistan, Iran, Pakistan, and Turkey. Pakistani traffickers also produce a highly refined, white heroin for the North American market.

System to Retrieve Information from Drug Evidence (STRIDE): A computerized data base program to record, collate, and display the results of qualitative and quantitative chemical analyses as well as the physical circumstances surrounding the acquisition of all drug evidence submitted to the DEA laboratory system. STRIDE data are used to monitor drug prices and potencies, to enumerate the number of exhibits examined, and to provide a comprehensive accounting of drug removals.

DISTRIBUTION

The White House
National Security Council
Office of National Drug Control Policy

Department of Justice
Federal Bureau of Investigation/DIU
Federal Bureau of Prisons
Immigration and Naturalization Service
INTERPOL/USNCB
Organized Crime Drug Enforcement Task Forces
U.S. Marshals Service

Department of the Treasury
Bureau of Alcohol, Tobacco and Firearms
Internal Revenue Service
U.S. Customs Service
U.S. Secret Service

Department of Defense
Defense Intelligence Agency
National Security Agency

Central Intelligence Agency/CNC

Department of State

U.S. Coast Guard

DEA Headquarters
DEA Field Offices
DEA Laboratories

El Paso Intelligence Center
Financial Crimes Enforcement Network
National Drug Intelligence Center

International Association of Chiefs of Police (Narcotics Committee)
National Alliance of State Drug Enforcement Agencies
National Sheriffs' Association

