

U.S. DEPARTMENT OF JUSTICE

OFFICE OF THE ATTORNEY GENERAL

MEMORANDUM FOR THE ATTORNEY GENERAL

DATE: 10/10/00

155324



NCJRS

155324

JUL 19 1995

ACQUISITIONS

Cocaine and Federal Sentencing Policy

155324

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 ~~material~~ material has been granted by

~~United States Sentencing Commission~~

to the National Criminal Justice Reference Service (NCJRS).

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



Richard P. Conaboy
Chairman

Michael S. Gelacak
Vice Chairman

A. David Mazzone
Vice Chairman

Wayne A. Budd
Commissioner

Julie E. Carnes
Commissioner

Michael Goldsmith
Commissioner

Deanell R. Tacha
Commissioner

Jo Ann Harris
(ex-officio)

Edward F. Reilly, Jr.
(ex-officio)

CONTENTS

EXECUTIVE SUMMARY

Chapter 1

BACKGROUND AND METHODOLOGY

A. Introduction	1
B. Authority	2
C. The Issues	2
D. Methodology	3
E. A Note on Terminology and Drawing Conclusions	5

Chapter 2

COCAINE, ITS FORMS, METHODS OF USE, AND PHARMACOLOGY

A. Introduction	7
B. Origins of Cocaine Use and Abuse	7
C. Forms of Cocaine and Methods of Use	9
Forms of Cocaine	9
Administration of Cocaine	14
D. Effects of Cocaine	22
Physiological Effects of Cocaine	22
Psychotropic Effects of Cocaine	23
Drug Dependence	24
E. Summary	28

Chapter 3

COCAINE USE AND PUBLIC HEALTH ISSUES

A. Introduction	31
B. Trends in Cocaine Use in the United States	31
Drug Use Among the Household Population	32
Drug Use Among the Arrestee Population	41
Hospital Emergency Room Episodes	41
Medical Examiner Reports	45
Combined Results for NHSDA, DUF, AND DAWN	46
C. Cocaine Use and Health Effects	47
Cocaine and Disease Transmission	47
Cocaine-Exposed Infants and Children	50
D. Other Social Problems Affected by Cocaine Use	56
Cocaine and Domestic Violence	56
Cocaine in the Workplace	57
Social Isolation and Cocaine Abuse	58
E. Availability of Treatment for Cocaine Abusers	59
Treatment Strategy	59
New Concepts in Cocaine Treatment	60
Potential for Successful Treatment	60

Chapter 4

THE DISTRIBUTION AND MARKETING OF COCAINE

A.	Introduction	63
B.	The Development of Current Cocaine Markets	64
	The Development of Drug Markets Generally	64
	The Evolution of the Crack Cocaine Market	64
C.	International and Regional Distribution of Cocaine	66
D.	Wholesale and Retail Distribution of Cocaine	67
	Wholesale Distribution	67
	Retail Distribution	68
	Polydrug Distribution	69
E.	Forums of Retail Distribution	70
	Street-Corner or Open-Air Forum	70
	Beepermen, Touters, and Runners	71
	Crack and Shooting Houses	72
	Prevalence of Drug Distribution Forums	75
F.	Organizational Structure of Cocaine Distributors	76
	Freelance Individuals	76
	Small, Non-Gang Groups	78
	Urban Street Gangs	78
G.	Role of Youth and Women in Crack Cocaine Distribution	83
H.	Prices, Profits, Revenues	84
	Marketing Strategies	84
	Prices	85
	Profits and Revenue	87
	Compensation	90
	Drug-Cutting to Increase Profits	91

Chapter 5

COCAINE AND CRIME

A.	Introduction	93
B.	Drugs, Crime, and the Tripartite Framework	94
	Systemic Crime	95
	Psychopharmacologically Driven Crime	98
	Economically Compulsive Crime	100
	Crime Indirectly Related to Crack	102
C.	Cocaine in Context	104
	The Social Context of Cocaine Distribution	104
	Cocaine and Other Illicit Drug Markets	106
	Violence Associated with the Current Cocaine "Epidemic"	108
D.	The Drugs/Violence Task Force	108

Chapter 6

THE NATIONAL LEGISLATIVE AND LAW ENFORCEMENT RESPONSE TO COCAINE

A.	Introduction	111
B.	The History of Legislative and Law Enforcement Efforts	111
	An Earlier Cocaine Era	111
	Other Drug Enforcement Efforts	112
C.	The Congressional Response to Cocaine since 1970	114
	The 1970s and the Repeal of Mandatory Minimum Penalties	114
	The 1980s and the Reemergence of Determinate Sentencing	115
	The Anti-Drug Abuse Act of 1986	116
	The Role of Media and Public Opinion	121
	The Anti-Drug Abuse Act of 1988	123
D.	Federal Sentencing Guidelines and Cocaine Penalties	125
E.	The Federal Enforcement Role Today	126
F.	State Legislative Action	129
	Statutory Distinctions Between Crack Cocaine and Powder Cocaine	130
	Sentencing Guidelines	134
	Mandatory Minimum Sentences	135
	Referral Policies	135
	Impact of Crack Cocaine on State Criminal Justice Systems	138
G.	The Impact of Prosecutorial and Investigatory Discretion on Cocaine Offenders and Sentences	138
	Prosecutorial Discretion	139
	Investigatory Discretion	143

Chapter 7

SENTENCING OF COCAINE OFFENDERS

A.	Introduction	145
B.	How Cocaine Traffickers Are Sentenced under the Guidelines and Mandatory Minimum Statutes	145
C.	Sentences Imposed for Crack and Powder Cocaine	149
	Sentencing Commission Data	149
	Sentences of Drug Traffickers	150
	Sentences for Offenders Convicted of Simple Possession	154
D.	Demographic Profile of Federal Cocaine Offenders	156
	Citizenship	156
	Gender, Age, and Education	156
	Race and Ethnicity	156
	The Effect of the 100-To-1 Quantity Ratio on Differences in Average Sentences Imposed on Various Racial Groups	162

E.	Identifying the More Dangerous Defendants	163
	Prior Record	163
	Weapons	166
	The Effectiveness of Current Policy in Targeting Dangerous Offenders	166
F.	Identifying the More Culpable Defendants	168
	The Guideline Role Adjustment	169
	Analyzing Defendants' Functions Within Drug Organizations	169
	Assessing the Real Offense in Crack Cocaine Possession Cases	171
	Flattening and Inversion of Penalties	174

Chapter 8

CONCLUSIONS AND RECOMMENDATIONS

A.	Introduction	179
B.	Findings	180
	Congressional Concerns Leading to the Powder Cocaine/Crack Cocaine Differential	180
C.	Summary	195
D.	Recommendations	198

Appendix A

SUMMARY OF PUBLIC HEARING ON COCAINE SENTENCING POLICY

Appendix B

**SUMMARY OF PUBLIC COMMENT ON CRACK/POWDER COCAINE
SENTENCING DIFFERENTIAL**

Appendix C

LEGAL CHALLENGES TO CRACK COCAINE PENALTIES

BIBLIOGRAPHY

EXECUTIVE SUMMARY

INTRODUCTION

In the Omnibus Violent Crime Control and Law Enforcement Act of 1994, Congress directed the United States Sentencing Commission to study federal sentencing policy as it relates to possession and distribution of all forms of cocaine. Specifically, Congress directed the Sentencing Commission to report on the current federal structure of differing penalties for powder cocaine and crack cocaine offenses and to provide recommendations for retention or modification of these differences.

The Commission balanced conflicting policy goals in developing its recommendations concerning powder and crack cocaine sentencing. In reviewing the evidence, the Commission found that, under some criteria, crack offenses deserve lengthier punishment than powder offenses, but on other criteria differential treatment could not be justified. The recommendations reflect our weighing of these competing considerations to yield a cautious and balanced judgment of the best federal sentencing policy for cocaine offenders. The major conclusions can be summarized as follows:

1. Drugs are a serious problem, and crack and powder cocaine are dangerous drugs.
2. While some aspects of crack cocaine use and distribution suggest that a higher penalty for crack offenses compared to powder cocaine offenses is appropriate, the present 100-to-1 quantity ratio is too great.
3. Among other problems, the 100-to-1 quantity ratio creates anomalous results by potentially punishing low-level (retail) crack dealers far more severely than their high-level (wholesale) suppliers of the powder cocaine that served as the product for conversion into crack.
4. Congress established the Sentencing Commission to develop sentencing policies and practices that address congressional concerns, to evaluate the effectiveness of these policies, and to refine the guidelines and recommend legislation as needed.
5. The sentencing guidelines provide a more precise mechanism than the mandatory minimum penalty statutes for tailoring appropriate sentences to individual defendants.
6. The quantity and form of cocaine involved in an offense are two factors for determining appropriate punishment, but in a given case other characteristics of the offense and the offender can be equally or more important. The guidelines should be refined to address better those harms that prompted Congress to establish the 100-to-1 quantity ratio.

United States Sentencing Commission

The Commission's recommendations are twofold:

1. That the Commission establish methods within the guidelines structure to deal with the crimes of possession and distribution of both crack cocaine and powder cocaine; such Commission action to take place by the normal 1995-1996 amendment cycle.
2. That, in light of the Commission's guideline amendments, Congress revisit the 100-to-1 quantity ratio as well as the penalty structure for simple possession that provides a mandatory five-year penalty for simple possession of crack cocaine but a statutory maximum penalty of one year for simple possession of any other drug.

BACKGROUND

Examination of these issues necessarily requires an understanding of the role of the Sentencing Commission in the context of federal sentencing policy, mandatory minimum penalties for drug offenses generally, and cocaine penalties specifically. In 1984, after more than two decades of debate and study, a strongly bipartisan Congress enacted the most far-reaching reform of federal sentencing in this nation's history, the Sentencing Reform Act. The central features of that historic legislation included a comprehensive statement of federal sentencing laws; appellate review of sentences; abolition of parole; and the creation of the United States Sentencing Commission to develop a detailed system of guidelines that would structure and direct the previously unfettered sentencing discretion of federal district court judges.

Congress established the Sentencing Commission as an independent, permanent agency in the judicial branch of government. Composed of seven voting and two non-voting, *ex officio* members, the Sentencing Commission's mandate was to develop guidelines for federal criminal offenses that would bring greater certainty, honesty, and uniformity to sentencing, ensure just punishment, and promote crime control. While the legislative history describes a number of motivating concerns in establishing a guideline system, none was more important to Congress than the reduction of unwarranted sentence disparity.

The initial set of guidelines became law in November 1987. In January 1989, the Supreme Court upheld the constitutionality of the Sentencing Commission and the guidelines in Mistretta v. United States, 488 U.S. 361 (1989), and full nationwide implementation of the federal sentencing guidelines followed. The Sentencing Commission, consistent with its mandate, continues to promulgate guidelines and amendments that reflect changes in statutory offenses and their penalties, directives from Congress, empirical research, emerging case law, the changing nature of crime, and developments in knowledge about effective crime control.

At the same time that the Sentencing Commission was developing, promulgating, and amending guidelines, Congress enacted a number of mandatory minimum penalty statutes, largely for drug and weapons offenses and for recidivist offenders. Among the mandatory minimum penalties were those enacted in 1986 and 1988 for sentencing federal cocaine offenses. In establishing these mandatory minimum penalties, Congress differentiated between two forms of cocaine – powder and crack (the commonly consumed form of cocaine base) – and singled out crack cocaine for much harsher punishment. Congress implemented this differential by requiring substantially lesser quantities of cocaine base than powder cocaine to trigger the five- and ten-year mandatory minimum penalties applicable to both forms of cocaine.

As a result of Congress's legislative action, the federal criminal code today provides the following penalties for first-offense cocaine trafficking:

5 grams or more of crack cocaine
or
500 grams or more of powder cocaine = five-year mandatory minimum penalty

50 grams or more of crack cocaine
or
5,000 grams or more of powder cocaine = ten-year mandatory minimum penalty

This statutory 100-to-1 quantity ratio of powder cocaine to crack cocaine (*i.e.*, it takes 100 times as much powder cocaine compared to crack to trigger the mandatory minimum penalties) in turn is incorporated into the federal sentencing guidelines, thereby maintaining a similar quantity ratio for offenders involved with drug quantities above and below the specified mandatory minimum penalty amounts. These statutory/guideline differentiations mean that, for any given quantity of cocaine, sentences for offenses involving crack cocaine are much more severe than those for like offenses involving powder cocaine.

In the Anti-Drug Abuse Act of 1988, Congress further distinguished crack cocaine from both powder cocaine and other drugs by creating a mandatory minimum penalty for simple possession of crack cocaine, the only such federal penalty for a first offense of simple possession of a controlled substance. Under this law, possession of more than five grams of crack cocaine triggers a minimum sentence of five years in prison; simple possession of any quantity of any other substance by a first-time offender – including powder cocaine – is a misdemeanor offense punishable by a maximum of one year in prison.

In 1990, Congress directed the Sentencing Commission to respond to a series of questions concerning the compatibility between sentencing guidelines and mandatory minimum penalties, the effect of mandatory minimums, and options for Congress to direct sentencing policy through

United States Sentencing Commission

mechanisms other than mandatory minimums.¹ The Sentencing Commission's response concluded that the most efficient and effective way for Congress to direct sentencing policy is through the established process of sentencing guidelines, rather than through mandatory minimum penalties.² The Commission reasoned that Congress could thereby achieve the objectives of mandatory minimum penalties (*i.e.*, certain, lengthy sentences for specific categories of offenses and offenders) without compromising other important legislative goals.³

Within this context, the Sentencing Commission makes the following general observations based on its review of available relevant data:

- 1) Congress addressed an indisputably deep public concern regarding the societal impact of cocaine, particularly in its derivative form of crack, when it established mandatory minimum penalties for trafficking and possession of cocaine in 1986 and 1988. Cocaine, including its relatively new form of crack, was viewed as dramatically increasing the national crime rate, significantly threatening public health, leading to an increasingly violent drug trade, and spreading in an "epidemic" manner. These concerns remain very much a part of the public debate today.
- 2) The general observations regarding the incompatibility of mandatory minimum penalties and sentencing guidelines made by the Sentencing Commission in its August 1991 report to Congress remain valid when applied to the specific issue of mandatory minimum penalties for cocaine offenses.⁴
- 3) Of particular note, when Congress established the mandatory minimum penalties for most drug offenses in 1986 and 1988, the federal sentencing guidelines had not been fully implemented. Consequently, when Congress established the 100-to-1 quantity ratio in 1986, no vehicle other than mandatory minimums existed to ensure that specified types of offenses and offenders received certain punishment. Since nationwide implementation of the guidelines in 1989, Congress has had the ability to set national sentencing policy through the more sophisticated guidelines system.

¹ See Pub. L. No. 101-647, 104 Stat. 4846 (1990).

² See U.S. Sentencing Commission, Special Report to Congress: Mandatory Minimum Penalties in the Federal Criminal Justice System (Aug. 1991).

³ The Commission's 1991 report did not specifically focus on the mandatory minimum penalties applicable to sentencing for federal cocaine offenses.

⁴ U.S. Sentencing Commission, *supra* note 2 at ii-iv.

- 4) Despite the unprecedented level of public attention focused on crack cocaine, a substantial gap continues to exist between the anecdotal experiences that often prompt a call for action and empirical knowledge upon which to base sound policy. Three factors account for this gap. First, although powder cocaine and crack cocaine are two forms of the same drug that are consumed in different ways, much of the data collected on cocaine and its effects does not distinguish between its different forms. Second, because drug users constitute a primary source of information, conclusions are difficult to draw with any degree of confidence. Third, as crack cocaine has only been on the market a relatively short period of time, research that might more fully address outstanding concerns has not yet occurred. Accordingly, given the current information gap, policymakers must draw conclusions cautiously.

FINDINGS

The extant research and empirical data support the following findings:

- **Pharmacology** (*see* Chapter 2): Cocaine is a naturally occurring substance, derived from the leaves of the erythroxylon plant, that has two prominent actions: 1) it is a potent anesthetic; and 2) it is a powerful stimulant.
- **Forms of Cocaine** (*see* Chapter 2): Powder cocaine and crack cocaine are two forms of the same drug, containing the same active ingredient – the cocaine alkaloid. Powder cocaine (cocaine hydrochloride), the most commonly used form of cocaine, is produced by reacting coca paste, derived from leaves of the coca plant, with hydrochloric acid. Crack cocaine, in turn, is made from powder cocaine in a simple process that requires baking soda, water, and a stove or microwave. Approximately ten percent of the drug is lost during the conversion process; hence, one gram of powder cocaine will yield .89 grams of crack cocaine. Less frequently consumed forms of cocaine include coca leaves, coca paste, and freebase cocaine.
- **Routes of Administration** (*see* Chapter 2): Cocaine in any form – paste, powder, freebase, or crack – produces the same physiological and psychotropic effects. The onset, intensity, and duration of effects, however, differ according to the route of the drug's administration which, in turn, is dictated in part by the form of cocaine. Powder cocaine can be snorted, injected, or ingested; crack cocaine can only be smoked.
- **Time to Maximum Effect** (*see* Chapter 2): Reactions to cocaine use differ; the faster cocaine reaches the brain, the greater the intensity of the psychotropic effects. Research shows that maximum psychotropic effects can be realized as quickly as one

minute after smoking crack cocaine; these effects dissipate after approximately 30 minutes. Some four minutes or more are required to achieve maximum effects after injecting powder cocaine, with the effects lasting for a similar 30 minutes. Powder cocaine that is snorted, on the other hand, takes up to 20 minutes or more to reach maximum psychotropic effect, but the "high" lasts as much as 60 minutes – twice as long as injecting or smoking.

- **Physiological and Psychotropic Effects** (*see* Chapter 2): Cocaine use produces alertness and heightens energy, increases the user's heart rate, elevates blood pressure, and produces symptoms similar to hypertension. Additionally, cocaine acts on the pleasure centers of the brain, causing a sense of euphoria, decreased anxiety and social inhibitions, and heightened sexuality. Increased doses of cocaine, together with the most rapid drug administration routes (*i.e.*, smoking or injecting), produce euphoric experiences that create vivid, long-term psychological memories that, in turn, form the basis for subsequent craving for the drug.
- **Addiction** (*see* Chapter 2): Neither powder cocaine nor crack cocaine are physiologically addictive; however, both are psychologically addictive. Moreover, psychological dependence usually is as devastating as physiological addiction. The greater the intensity of cocaine's psychotropic effects and the shorter their duration, the greater the likelihood cocaine use will lead to dependence and abuse. As discussed above and in Chapter 2, the route of administration determines the intensity and duration of these effects. For a given quantity of cocaine, smoking crack cocaine or injecting powder cocaine produces the most intense physiological and psychotropic effects. However, the ease of smoking, compared to the greater difficulty and unpleasantness involved in injecting any substance, suggests that smoking is more tempting for the first time user and more appealing for the repeat user than is injection. This observation is borne out by the limited available data (*see* Chapter 3), which suggest that almost three times more people smoke cocaine than inject it.
- **Usage Trends** (*see* Chapter 3) Determining patterns and trends of powder and crack cocaine use is difficult. Usage data suggest that casual use of cocaine has diminished while heavy use of cocaine has remained constant.⁵ Data on current cocaine usage from the National Household Survey on Drug Abuse show that 75

⁵ Determining patterns in the effects of powder and crack cocaine use is equally difficult. DAWN data report, however, that smoking crack accounts for twice as many hospital emergency room admissions than powder cocaine use.

percent of users snort powder cocaine, 28 percent smoke crack, and 10 percent of cocaine users inject powder cocaine.⁶

- **Importation** (*see* Chapter 4): Crack cocaine is not cultivated or imported independently of powder cocaine. Rather, cocaine is cultivated, processed, imported, and distributed almost exclusively in the powder form at the higher levels of the drug distribution chain. Some of this powder cocaine is later processed into crack cocaine at the wholesale and retail levels. Wholesale distributors generally smuggle large quantities of powder cocaine into the United States from Colombia, Mexico, and the Caribbean nations through Arizona, southern California, southern Florida, and Texas. The powder cocaine is channeled to what Drug Enforcement Administration (DEA) refers to as "source" cities – Houston, Los Angeles, Miami, and New York City – for distribution throughout the country.
- **Evolution of the Crack Market** (*see* Chapter 4): The types of organizations dominating crack cocaine distribution have undergone an evolution, at least in big-city markets like Los Angeles and New York City. In the early days of crack cocaine sales (1984-1985), freelance distributors operated in a growing, non-competitive market. By 1986, well-organized gangs used violence to consolidate individual dealers and eliminate uncooperative distributors, and, together with small-group distributors, took control of the crack cocaine market. This is a pattern typical of the introduction of new illicit drugs. However, today, researchers and law enforcement officials believe the market is again dominated by a "cottage industry" of small-group and freelance distributors, a deviation from the "normal" pattern. Because these smaller volume distributors now are competing in a market that no longer is expanding, this may indicate that a higher level of violence will continue to be associated with crack cocaine distribution.
- **Forums for Distribution** (*see* Chapter 4): Powder and crack cocaine are distributed at the retail level by similar means, primarily in urban and suburban dwellings and on innercity street corners. Street-corner or open air sales typically involve small retail quantities sold to walk-up or drive-up buyers. This distribution forum particularly is prone to violence, as security of street-corner transactions often is maintained by lookouts or enforcers who carry firearms. A second cocaine distribution system involves "beepermen" who exchange drugs with a user after having been contacted by telephone or beeper. Crack houses and shooting houses for powder cocaine provide a third forum for distribution and involve the use of a fixed location from which drugs are sold to visiting consumers.

⁶ The sum of the percentages exceeds 100 percent because some respondents report multiple routes of administration.

- **Marketability** (*see* Chapter 4): Crack cocaine's ease of manufacture and relatively low cost-per-dose have made it more readily marketable than powder cocaine to large numbers of lower income people. For example, crack can be packaged efficiently and marketed in single-dosage units weighing 0.1 to 0.5 gram and priced from \$5 to \$20. In contrast, powder cocaine generally is sold by the gram (*i.e.*, five to ten doses) for between \$65 and \$100 per gram.
- **Cost/Dosage Comparisons** (*see* Chapter 4): Five hundred grams of powder cocaine (the quantity necessary to trigger the five-year mandatory minimum penalty) generally produces 2,500 to 5,000 doses. In contrast, five grams of crack cocaine (the five-year mandatory minimum penalty amount) produces 10 to 50 doses. According to DEA estimates, 500 grams of powder cocaine costs between \$32,500 and \$50,000. In contrast, five grams of crack cocaine costs between \$225 and \$750.
- **Role of Juveniles and Women** (*see* Chapter 4): Research indicates that both powder cocaine and crack cocaine distributors are young, but those distributing crack are younger. For example, in New York City, 38 percent of offenders arrested for distributing crack cocaine were under 21 years of age, compared to 29 percent for powder cocaine. Older crack cocaine dealers tend to use juveniles in visible roles such as lookouts, steerers, and drug runners in the belief that juveniles are more likely to escape detection and prosecution. The DEA suggests that women also have greater roles in crack cocaine distribution relative to distribution of other drugs. As with juveniles, women are used in more visible roles (such as, making straw purchases of firearms and renting residences to use as crack stash houses) because of the perceived decreased likelihood of detection and prosecution perception.
- **Violence** (*see* Chapter 5): Crack cocaine is associated with systemic crime – crime related to its marketing and distribution – to a greater degree than powder cocaine. Researchers and law enforcement officials report that much of the violence associated with crack cocaine stems from attempts by competing factions to consolidate control of drug distribution in urban areas. Some portion of the distribution of powder cocaine, and the majority of the distribution of crack cocaine, is done on street-corners or in open-air markets, crack houses, or powder shooting galleries between anonymous buyers and sellers. These distribution environments, by their very nature, are highly susceptible to conflict and intense competition. As a result, individuals operating in these surroundings are prone to be involved in, as well as victimized by, increased levels of violence. Consistent with its distribution forums, crack offenders are more likely to carry weapons than individuals trafficking in other drugs (27.9% of crack offenders possess dangerous weapons compared to 15.1% of powder cocaine offenders – *see* Chapter 7) and are more likely to have more extensive criminal records (10.4% of crack cocaine defendants have the highest

criminal history category compared to 4.8% for powder cocaine defendants – see Chapter 7).

Many cocaine users, both crack and powder, sell drugs to raise money to support their drug habits. There is little empirical evidence, though, to suggest that either crack or powder cocaine users commit large numbers of violent acts to raise money to buy drugs. However, some research reports a significant percentage of petty property offenses and trading sex for drugs associated with crack cocaine use. Furthermore, one study reports that 98 percent of crack users sell drugs to help support their habits. The Commission finds no research to suggest, however, that powder cocaine users are any less likely to commit crimes to support their habits.

Studies report that neither powder nor crack cocaine excite or agitate users to commit criminal acts and that the stereotype of a drug-crazed addict committing heinous crimes is not true for either form of cocaine.

- **HIV/STD Transmission** (see Chapter 3): Crack cocaine smokers and powder cocaine injectors exhibit more high-HIV-risk behavior than powder cocaine snorters, but for different reasons. Intravenous powder cocaine use presents a higher risk of HIV infection than heroin and other IV-injected drugs because of the relatively short-lived euphoria of cocaine (*i.e.*, cocaine injectors are likely to reinject more frequently to sustain the high, thereby presenting a greater risk of acquiring the HIV virus through contaminated needles). Research also shows that, compared to powder cocaine injectors, crack smokers exhibit more high-risk sexual behaviors, including multiple sexual partners, sex without condoms, and sexual activity during or following drug use. Given such behaviors, crack cocaine users also are more likely to contract other sexually transmitted diseases like syphilis and gonorrhea. Additionally, sex-for-drugs – while not unique to crack cocaine – thrives in venues like crack houses. Consequently, the rates of HIV infection are nearly equal between crack smokers and powder cocaine injectors.
- **Effects on Fetus** (see Chapter 3): Cocaine use by pregnant women can produce detrimental effects on the fetus that include premature delivery, brain lesions, and malformed limbs. In general, however, reliable information comparing babies born to mothers using crack versus those born to mothers using powder is not available, because medical tests cannot distinguish between the presence of crack as opposed to powder in mother or newborn child. Unless the mother self-reported crack cocaine use, blood tests would simply reveal the presence of cocaine. Nevertheless, because crack cocaine produces more intense "highs" and quicker "lows" than powder cocaine, crack users are more likely to use increased quantities of the drug or to engage in binging. Such practices by pregnant women expose their babies to

greater quantities of the drug and, thus, greater potential for harm. Furthermore, babies exposed to crack may experience greater problems because crack smokers achieve a higher concentration of the drug in their bloodstreams than do cocaine snorters. While data are sketchy at best, one researcher estimates that 7.5 percent to 17 percent of all pregnant women use illicit drugs during their pregnancy, resulting in 100,000 to 740,000 drug-exposed babies each year. The estimate of cocaine-exposed babies ranges from 30,000 to 160,000.

- **"Boarder Babies" and Maternal Neglect** (see Chapter 3): The Commission's research reveals virtually no studies that address concerns related specifically to crack cocaine use and maternal neglect, teenage pregnancy, and the phenomenon of "boarder babies." That these societal problems exist seems quite clear, but research has focused on the association of these problems to substance abuse in general as opposed to their association with powder or crack cocaine. Furthermore, that these phenomena coincide with a rise in crack cocaine use leads many to believe that the two are related. Research necessary to support or refute that relationship has not been done.

Many states consider the birth of drug-exposed infants to be evidence of maternal neglect. Several states have enacted laws that allow child abuse charges to be brought against any woman with illegal drugs in her bloodstream who gives birth to a child. Other states simply remove drug-exposed babies from their mothers, making them wards of the state. Some states have tried these methods and rejected them in favor of mandatory treatment programs in which mothers must enter treatment or lose their children.

- **State Distinctions** (see Chapter 6): Thirty-six states do not distinguish between powder cocaine and crack cocaine in their statutory penalty structures. No state has elected to follow, in its entirety, the federal penalty scheme for powder and crack cocaine offenses and none provides a differential between powder and crack cocaine that approaches the federal system's 100-to-1 quantity ratio at the five- and ten-year mandatory minimum levels.⁷
- **Prosecutorial Discretion** (see Chapter 6): Federal cocaine prosecutions vary widely by district. For example, four defendants were sentenced for trafficking in less than 50 grams of crack cocaine in the Central District of California (which includes Los Angeles) in 1993. By comparison, 111 defendants were sentenced for the same offense during the same period in Washington, D.C. In 1993, the Southern District

⁷ North Dakota provides a 100-to-1 distinction between powder and crack cocaine but limits it to the five-year mandatory minimum amounts.

of West Virginia sentenced 113 offenders for trafficking in any amount of crack cocaine; the Eastern District of New York – which includes Brooklyn – sentenced 24. During the same period, the Southern District of West Virginia sentenced 41 offenders for trafficking in powder cocaine compared to Eastern New York's 175.⁸

- **Demographic/Offender Information** (see Chapter 7): The data show that federal crack cocaine offenders, on average, are younger than federal powder cocaine offenders, have somewhat less education, and have more extensive prior criminal records. Crack cocaine defendants also are more likely to possess a weapon.
- **Race** (see Chapter 7): Blacks accounted for 88.3 percent of federal crack cocaine distribution convictions in 1993, Hispanics 7.1 percent, Whites 4.1 percent, and others 0.5 percent. The racial breakdown for powder cocaine distribution offenses sentenced in 1993 shows 32.0 percent White, 27.4 percent Black, 39.3 percent Hispanic, and 1.3 percent other. On the other hand, the 1991 Household Survey shows that 52 percent of those reporting crack use in the past year, as opposed to distribution, were White, 38 percent were Black, and 10 percent Hispanic; 75 percent of those reporting powder use in the past year were White, 15 percent were Black, and 10 percent Hispanic (see Chapter 3).⁹

Based on this limited information, the Sentencing Commission identifies the following concerns:

- 1) **Racial Disparity**: Federal sentencing data leads to the inescapable conclusion that Blacks comprise the largest percentage of those affected by the penalties associated with crack cocaine. This does not mean, however, that the penalties are racially motivated. Clearly the penalties (both statutory and guideline-based) apply equally to similar defendants regardless of race. Many individual criminal statutes, when enforced, produce a pool of defendants who are not representative of the racial make-up of criminal law violators generally or of society. However, as all appellate courts have found, there is no evidence that Congress or the Sentencing Commission acted with any discriminatory intent in setting different statutory and guideline penalties for different forms of cocaine.

⁸The Commission does not mean to suggest that any apparent disparities are unwarranted. As a general matter, the Commission has not analyzed various factors that might explain these and other differences, including the strength of the state and local law enforcement efforts directed at the crack cocaine trade, the relative punishment available through state statutes, differing needs and problems facing each district, and resource allocation issues.

⁹ The National Household Survey potentially underrepresents lower-income populations and overrepresents middle or upper-income populations or those who reside in households.

Nevertheless, the high percentage of Blacks convicted of crack cocaine offenses is a matter of great concern to the Sentencing Commission. Penalties clearly must be racially neutral on their face and by design. The Sentencing Commission is committed to these goals. When one form of a drug can be rather easily converted to another form of the same drug and when that second form is punished at a quantity ratio 100 times greater than the original form, it would appear reasonable to require the existence of sufficient policy bases to support such a sentencing scheme regardless of racial impact. Moreover, when such an enhanced ratio for a particular form of a drug has a disproportionate effect on one segment of the population, it is particularly important that sufficient policy bases exist in support of the enhanced ratio.

Further, it is instructive that – although appellate courts have not found the 100-to-1 quantity ratio constitutionally deficient – some have commented upon the problematic nature of the sentencing scheme from a policy standpoint¹⁰ and further indicated that the resolution of such questions is better left to those with the proper authority and institutional capacity.¹¹

2) **Quantifying Harm:** Some argue that a sentencing system must punish different forms of the same drug equally. The Sentencing Commission disagrees. If a particular form of a drug results in greater harms than a different form of that drug, then logically a harsher penalty for the more harmful drug can be justified. In assessing the relative harms posed by the two forms, the aim is to arrive at a penalty differential that approximates the increased dangers posed by the more harmful drug.

The Sentencing Commission maintains, however, that there are better ways to achieve the desired result. Recognizing that Congress has ultimate authority over sentencing policy, the question becomes how Congress can best translate its judgment as to appropriate levels of punishment severity into sentences imposed. To a degree, Congress has already spoken on this issue. Because of its ability to accommodate the vast array of relevant offense/offender characteristics, the guidelines system established by Congress is superior to an approach based solely on automatic ratios and mandatory minimums, including mandatory minimums for powder and crack cocaine offenses. Congress has effectively communicated its policies on sentencing through the Sentencing Reform Act and subsequent legislation. It has continuing oversight of the work of the Sentencing Commission through the statutory requirement that proposed guidelines and amendments to guidelines be submitted to Congress for 180-day review before they become effective.

3) **Level Within the Drug Chain:** The substantial difference in the ratio between crack and powder cocaine punishes the retail dealer of crack far more severely than the powder cocaine

¹⁰ See United States v. Singleterry, 29 F.3d 733, 741 (1st Cir.), *cert. denied*, 115 S.Ct. 647 (1994).

¹¹ See United States v. Frazier, 981 F.2d 92, 96 (3rd Cir. 1992); *see generally* Appendix C.

supplier who may have sold the powder cocaine from which multiple street dealers made crack. This issue, however, cannot be viewed in the abstract, because concerns over street violence and other harms affect the determination of an appropriate quantity ratio. Nevertheless, five grams of crack cocaine – the quantity that triggers a five-year mandatory minimum penalty – appears to be much more a retail quantity than 500 grams of powder cocaine – the quantity of powder cocaine necessary to trigger the five-year mandatory penalty. Consequently, retail-level crack cocaine dealers are being punished like wholesaler- and importer-level powder cocaine dealers.

For example, under the 100-to-1 quantity ratio, a wholesaler convicted of moving five kilograms of powder cocaine may receive a lesser sentence than a distributor who buys one of the five kilograms but is caught after having converted the powder into crack cocaine. This anomalous result highlights the fact that individuals higher in the cocaine distribution chain can be punished less severely than certain lower-level traffickers because of the intervening change in the form of cocaine, *i.e.*, the change to crack.

4) **Societal Concerns:** Congress and the public are troubled by the apparent relationship between crack and societal problems, particularly in American cities. The Sentencing Commission shares these concerns.

Many Americans do not feel safe walking the streets, driving in their automobiles, or even sitting in their homes for fear of stray bullets from drive-by shootings or disputes between rival drug traffickers. The medical community sees increased incidence of gunshot victims, infants born exposed to drugs, boarder babies, HIV/AIDS and other sexually transmitted diseases, and increasingly younger victims and perpetrators of violent crime. The use of women and youth to facilitate the drug trade seems higher at this point in the country's history than ever before, with no clear answer as to why this may be true.

There has been significant growth in the rate of drug-exposed infants in this country, with nine percent or 350,000 babies each year exposed to drugs in the womb. Certainly, the rate of cocaine-exposed babies continues to rise. And while medical science cannot distinguish between the two forms of cocaine, certain factors put crack-exposed babies at greater peril; because the highs and lows associated with drug use are quicker when using crack cocaine, crack users are more likely to use increased quantities of the drug or engage in bingeing, exposing the infant to greater quantities of the drug and, thus, to more harm.

With the growth in drug-exposed babies has come an increase in maternal neglect and the phenomenon of boarder babies. In general, studies have not focused on a particular drug type when studying these issues, instead looking broadly at the question of substance abuse. The problem of substance abuse among women and its effect on children raises serious policy concerns.

United States Sentencing Commission

As Americans have watched these devastating changes to their everyday lives, they also have witnessed the proliferation of crack cocaine sale and use. While there is some indication that crack use is declining, it is difficult to ignore the potential association between these phenomena.

In summary, while it is true that powder cocaine and crack cocaine pharmacologically are the same drug and equally true that neither form of cocaine is physiologically addictive, important distinctions between the two may warrant higher penalties for crack than powder. For example, factors in the route of administration (*i.e.*, smoking versus snorting) and attributes of the crack cocaine market make crack different from powder from a policy perspective. These factors generally include: 1) a greater risk for psychological addiction due to the rapid high and concomitant rapid low resulting from inhalation of crack; 2) because powder cocaine can be converted easily into smaller doses of crack that can be sold more cheaply and in potent quantities, crack is more readily available to a larger segment of the population, particularly women, children, and the economically disadvantaged; 3) the apparently higher correlation between crack and violence than between powder and violence; and 4) the increased use of young people in the distribution of crack.

Even so, given its review of the subject, the Sentencing Commission cannot support the current penalty scheme. The factors that suggest a difference between the two forms of cocaine do not approach the level of a 100-to-1 quantity ratio. Research and public policy may support somewhat higher penalties for crack versus powder cocaine, but a 100-to-1 quantity ratio cannot be recommended.

Notwithstanding the Sentencing Commission's broad examination of these issues, much more research is needed into the distinctions between powder and crack cocaine. To the extent practicable, medical and social science research, as well as law enforcement arrest data, must distinguish between the two forms of cocaine. The present failure to distinguish between crack and powder in data on arrests, cocaine-exposed babies, maternal neglect and substance abuse, and violence associated with drug use and distribution continuously frustrated the Commission's study.

Recommendations: The Sentencing Commission shares congressional and public concern about the harms associated with crack cocaine – both to users and to the society as a whole – including the violence associated with its distribution, its use by juveniles, the involvement of women and juveniles in its distribution, and its addictive potential. However, the Sentencing Commission concludes that Congress's objectives with regard to punishing crack cocaine trafficking can be achieved more effectively without relying on the current federal sentencing scheme for crack cocaine offenses that includes the 100-to-1 quantity ratio.

Rather than propose a specific statutory change in the current 100-to-1 quantity ratio, the Sentencing Commission recommends that the guidelines system be revised to further the purposes of sentencing and to address congressional concerns. Given the Sentencing Reform Act of 1984, the most efficient and effective way for Congress to direct cocaine sentencing policy is through the

established process of sentencing guidelines, rather than relying solely on a statutory distinction between the two forms of the same drug. This has not yet occurred because the current guideline sentencing scheme was overlaid onto the already existing mandatory minimum structure for cocaine sentencing that Congress created in 1986. The current sentencing scheme, therefore, should be amended to account for and punish more fully and appropriately for the dangers associated with both crack and powder cocaine.

A number of related sentencing policies currently under consideration by Congress and the Sentencing Commission may affect the final sentencing scheme for cocaine. For example, the Commission is now considering amendments concerning the use of juveniles in offenses, gang involvement, and the drug guidelines generally. Congress is considering changes to sentences for offenses involving firearms and enhanced penalties for drug sales to, or distribution involving, minors.

As a priority matter upon completion of this report, the Sentencing Commission will further develop appropriately weighted guideline enhancements (*i.e.*, specific offense characteristics, general adjustments, offender characteristics) corresponding to important offense and offender characteristics present in crack cases that justify higher sentences. The guidelines currently provide enhancements for a number of societal harms associated with crack; to the extent Congress factored in these same harms in establishing the 100-to-1 quantity ratio, double punishment occurs. If guideline enhancements cannot sufficiently account for harms associated with crack, the guidelines can provide an increased ratio through the base offense level. Workable guideline provisions can be developed to account fully for harms related to crack and powder cocaine without the difficulties associated with an automatic 100-to-1 ratio.

In setting these guidelines, the Commission will consider, to the extent relevant to congressional concern and the purposes of sentencing as set forth at 18 U.S.C. § 3553(a)(2), the following: 1) the form of cocaine involved; 2) whether a firearm or other dangerous weapon was involved; 3) whether the offense resulted in serious bodily injury or death to another person; 4) the quantity of cocaine involved; 5) the extent to which the powder cocaine defendant knew the drug would be converted into crack; 6) the extent to which the offense involved systemic crime, that is, crime related to the drug's marketing, distribution, and control; 7) the extent to which the offense involved social harms, that is, harms associated with increased addictiveness, parental neglect, child and domestic abuse, and high risk sexual behaviors; 8) whether the offense involved the use or employment of any person under the age of 18; 9) whether the defendant performed a managerial or leadership role in the offense; 10) the defendant's prior criminal record; and 11) any other aggravating or mitigating factors necessary to ensure adequate and appropriate punishment for defendants convicted of cocaine offenses.

Assuming that the guidelines can be reshaped to account more fully for the heightened harms associated with crack, grounds may still exist for differentiating between otherwise similar crack and

powder cocaine offenses. Any such differential could be implemented through guideline base offense levels and would represent the Sentencing Commission's best judgment regarding a more appropriate quantity ratio between powder and crack cocaine. However, until the possibility has been thoroughly explored of using specific guideline enhancements to account for the more significant societal harms associated with crack, the Sentencing Commission cannot state definitively that some base differential is warranted and whether that differential should be guideline-based or statutory.

The Sentencing Commission contemplates that this guideline refinement procedure can be accomplished within the current and next amendment cycles, resulting in the submission to Congress no later than May 1, 1996, of a comprehensive revision of the guidelines applicable to cocaine offenses.

The considerations described above similarly warrant congressional reconsideration of the dramatic distinction in simple possession penalties for crack versus powder cocaine and other drugs. The Sentencing Commission recommends that Congress revisit the unique penalties for simple possession of crack enacted in 1988 and, as with the trafficking penalty scheme, afford sufficient latitude for the Commission to design a fairer, more proportional approach within the guidelines structure.

Having broadly delegated to the Sentencing Commission responsibility for developing a comprehensive and rational system of sentencing guidelines for all offenses, Congress should consider relying on the same approach to implement appropriate policy adjustments in this specific area. Among other advantages, this approach would permit the Sentencing Commission, which is responsible for continually refining the guidelines system, greater flexibility to make adjustments reflecting advances in knowledge about the impact of cocaine on society. Most importantly, through the guidelines system, consistent, appropriately individualized, and substantially fairer outcomes can be achieved that effectively promote the concerns of Congress as identified in the statutory purposes of sentencing.

Chapter 1

BACKGROUND AND METHODOLOGY

A. INTRODUCTION

Federal sentencing policy for cocaine offenses has come under criticism during the past few years. Public comment received by the Sentencing Commission, statements made by public officials, by criminal justice practitioners, researchers, and interest groups, and extensive litigation challenging the constitutionality of the sentencing laws have all raised questions about whether the current approach to sentencing for cocaine offenses is fair and whether it is effective. Critics have focused especially on the differences in penalty levels between two forms of cocaine – powder and crack.

The current sentencing structure for cocaine offenses is primarily the result of the Anti-Drug Abuse Act of 1986. It established mandatory minimum penalties for persons convicted of trafficking in a variety of controlled substances. The 1986 Act pegged the mandatory minimums to specific quantities of drugs distributed. The quantities triggering the Act's mandatory minimum penalties differed for various drugs and in some cases for different forms of the same drug. Cocaine base, commonly referred to as crack cocaine, was treated differently than cocaine hydrochloride, commonly referred to as powder cocaine. The Act established what has come to be known as a 100-to-1 quantity ratio between the two forms of cocaine. It takes one hundred times as much powder cocaine to trigger the same mandatory penalties as for a given amount of crack. For example, a person convicted of selling 500 grams of powder cocaine is subject to the same five-year minimum sentence as a person selling 5 grams of crack cocaine.

In 1987, the Sentencing Commission used the same 100-to-1 quantity ratio in setting drug penalties under the sentencing guidelines. The mandatory minimum statutes list only two quantities for each form of the drug. In the case of crack, these are five and five hundred grams, which correspond to five- and ten-year mandatory minimum sentences for first offenders. The sentencing guidelines go further and set sentences for the full range of possible drug quantities using the same 100-to-1 quantity ratio.

Congress also distinguished crack cocaine from both powder cocaine and other controlled substances in the Anti-Drug Abuse Act of 1988 by creating a mandatory minimum penalty for

United States Sentencing Commission

simple possession of crack cocaine. This is the only federal mandatory minimum for a first offense of simple possession of a controlled substance. Under this law, possession of more than five grams of crack cocaine is punishable by a minimum of five years in prison. Simple possession of any quantity of any other substance – including powder cocaine – by first-time offenders is a misdemeanor offense punishable by no more than one year in prison.

B. AUTHORITY

The Sentencing Reform Act of 1984 created the United States Sentencing Commission as an independent agency in the judicial branch of government.¹ The Act directed the Commission to establish sentencing policies and practices for the federal criminal justice system through a detailed framework of sentencing guidelines.² In addition, the Act required the Commission to monitor and report periodically on the operation of the sentencing guidelines and gave the Commission ongoing sentencing and crime policy research responsibilities.³ The Act recognizes "the importance of sentencing and corrections research in . . . improving the ability of the Federal criminal justice system to meet the goals of sentencing."⁴

This report is submitted pursuant to both the Commission's ongoing statutory authority and responsibility to advise Congress on sentencing policy (described in 28 U.S.C. §§ 994-95) and a specific statutory directive contained in section 280006 of Public Law 103-322, the Violent Crime Control and Law Enforcement Act of 1994. This latter provides that "the United States Sentencing Commission shall submit a report to Congress on issues relating to sentences applicable to offenses involving the possession or distribution of all forms of cocaine. The report shall address the different penalty levels which apply to different forms of cocaine and include any recommendations the Commission may have for retention or modification of these differences in penalties."

C. THE ISSUES

In broad outline, critics of current cocaine sentencing policies argue that the 100-to-1 quantity ratio is unfair and ineffective. They claim it has led to harsher punishment of small-quantity retail crack cocaine dealers than is imposed on more sophisticated powder cocaine dealers

¹ The Commission's duties and authorities are set out in chapter 58 of title 28, United States Code.

² See generally 28 U.S.C. § 994.

³ See 28 U.S.C. § 995(a)(8), (9), (12)(A), (13)-(16), (20), (21).

⁴ S. Rep. No. 225, 98th Cong., 1st Sess. 162 (1983).

who are higher up in the same drug distribution chain and who are involved in larger quantities of cocaine. They argue that, like other mandatory minimums, the crack penalties are unevenly applied depending on what charges are brought against defendants and whether they are prosecuted in state or federal court. This leads to disparate punishment for defendants guilty of similar conduct.

Critics contend that the lengthier sentences for crack have not been more effective than the shorter sentences for powder in deterring use or in reducing trafficking. They say that many of the harms associated with crack use – such as crime, violence, and the breakdown of innercity neighborhoods – are not products of the drug alone but result from the total social and economic environment in which the drug is typically used. Lengthy terms of imprisonment have not effectively addressed these harms, but have had a destructive effect on the lives of crack offenders. Finally, critics point to the impact of the lengthier sentences for crack on minority defendants, which has contributed to a growing gap between the average sentence imposed on Whites and on minorities in the federal courts.

Those who support a differential in crack and powder cocaine penalties argue that it is appropriate to punish crack cocaine offenders more harshly than powder cocaine offenders because crack is a more dangerous drug. They believe that the introduction of crack increased the accessibility of cocaine, increased the number of open-air drug markets in many cities, and increased the violence associated with the drug trade. Crack cocaine, they contend, is more addictive and produces more health and social problems than powder cocaine.

Tough punishment, supporters of a penalty differential claim, is needed to send a clear signal that trafficking in crack will not be tolerated. They argue that the threat of punishment discourages use and distribution, and that lengthy terms of imprisonment improve public safety by keeping known offenders off the streets. In addition, law enforcement officials say that the current penalties assist them in infiltrating larger drug organizations by inducing defendants facing stiff sentences to cooperate following arrest.

Supporters of the current penalties point out that crack has been particularly destructive of minority communities and they believe that strict law enforcement stands to benefit these communities. The penalties themselves are racially neutral and unbiased, they argue, and the fact that a higher proportion of minority defendants are convicted of crack than of powder cocaine offenses simply reflects that a higher proportion of minorities commit crack offenses.

D. METHODOLOGY

To weigh these competing arguments and evaluate the current cocaine penalty structure, the Commission identified the concerns of Congress with cocaine use and its goals for cocaine sentencing policy. We reviewed the legislative history of the relevant penalty provisions and the

purposes that Congress has established for sentencing. We then turned to the findings, from the research literature and from the Commission's own empirical study and its hearings on cocaine sentencing, to learn what is known about the two forms of the drug and the effects of the current sentencing policy.

Chapters 2 through 7 report the findings of this examination and lay the groundwork for the report's conclusions. Chapter 2 examines the forms and methods of cocaine use, and the effect of cocaine on the body and mind when used in its various forms. Chapter 3 looks at the trends in cocaine use, the prevalence of crack cocaine and powder cocaine use today, how these forms of the drug affect individual lifestyles and the community-at-large, and the available treatment strategies for cocaine users.

Chapter 4 examines the business side of cocaine, focusing on trafficking and distribution patterns, marketing techniques, and profitability, as well as how the markets for powder and crack cocaine differ from one another. Chapter 5 reviews the research literature on the relationship between cocaine and crime. Chapter 6 explores the national law enforcement response to cocaine, including the history of enforcement efforts, the current federal enforcement policies, current state sentencing laws for cocaine offenses, and questions related to race and cocaine sentencing policy. The Commission presents its own empirical research in Chapter 7, namely a comprehensive statistical analysis of drug cases and defendants sentenced in the federal courts.

In Chapter 8, the Commission synthesizes and analyzes the issues raised in the earlier chapters and presents its recommendations. We begin by asking, "Is crack more harmful than powder cocaine?" We focus particularly on what we know today about those harms that were of most concern to Congress when it enacted the differential penalty structure. Comparing the harmfulness of the two forms of the drug proved complicated because many of the problems associated with crack are not clearly caused by the drug alone, but appear to result from a combination of the drug with other factors in the social and economic context in which it is typically used.

Measuring the seriousness of a crime and assigning just punishment is especially difficult for drug crimes. The harmfulness of a drug and the amount involved are two considerations. In addition, many other factors – including a defendant's culpability for the harm caused by drug use, his or her role in the crime, whether violence was used, and other aggravating and mitigating circumstances surrounding the offense – should be considered. We found that the sentencing guidelines take many of these factors into account, and could be amended to reflect better the greater seriousness of certain cocaine offenses. The current mandatory minimum penalty statutes do not take account of many of these factors.

In summary conclusion, the Commission found that the current differences in penalty levels for crack and powder cocaine should be reexamined. We believe that the sentencing guidelines,

freed from the constraints of the current mandatory minimums, would be better able to address the increased harm of crack cocaine and avoid the unfairness of the current statutory system. Our recommendations for what changes are needed are found in Chapter 8.

The report contains three appendices. Appendix A summarizes the Commission's November 9, 1993, public hearing on crack cocaine. Appendix B summarizes comment received by the Commission on the differing penalty schemes for crack and powder cocaine as a result of both the Commission's requests for comment published in the Federal Register in December 1992 and December 1993, and directed requests made by the Commission to various organizations. Appendix C outlines the unsuccessful constitutional and other legal challenges to the statutory and sentencing guideline distinctions made between powder cocaine and crack cocaine, including a list of cases in which these issues were raised.

E. A NOTE ON TERMINOLOGY AND DRAWING CONCLUSIONS

The following definitions explain selected terms commonly referred to in this report.

Powder cocaine refers to cocaine hydrochloride.

Cocaine base refers to cocaine in a base form. Cocaine base includes coca paste, other intermediate forms of cocaine, freebase cocaine, and crack cocaine.

Crack cocaine refers to a specific smokable base form of cocaine derived from powder cocaine through a process that chemically separates hydrochloric acid from the cocaine alkaloid.

100-to-1 quantity ratio refers to the comparative amounts of powder cocaine and crack cocaine needed to trigger the five- and ten-year mandatory minimum penalties mandated by 21 U.S.C. § 841(b)(1).

Finally, when undertaking this study, the Commission was frustrated by limitations in the current research. We wish we knew more than we do before setting policy in this area. Throughout the report, limitations in the available data are noted and we call for additional research where it is especially needed. The conclusions drawn are made cautiously with these qualifications in mind.

At the same time, we recognize that there are also limitations in drawing conclusions based only on isolated instances, anecdotes, news media reports, or even based on "common sense," which can be distorted by stereotypes or by the conventional wisdom of the day. We believe that the research presented here provides new information and a more sound basis for setting policy than was available to Congress when it acted and to the Commission when it promulgated the original

United States Sentencing Commission

guidelines. Accordingly, it is fitting to reexamine this important area in light of a fuller understanding of the problem of cocaine in America.

Chapter 2

COCAINE, ITS FORMS, METHODS OF USE, AND PHARMACOLOGY

A. INTRODUCTION

Cocaine is a naturally occurring substance derived from the leaves of erythroxylon plants indigenous to South America. Pharmacologically, cocaine has two prominent actions: 1) it is a potent anesthetic; and 2) it is a powerful stimulant. Cocaine has been used in South America for more than 3,000 years and in the United States since the 19th century in a variety of forms: coca leaves, coca paste, powder cocaine, and cocaine base (*e.g.*, freebase and crack cocaine). The final form of cocaine dictates how the drug can be administered and, as a consequence, the intensity and duration of its physiological and psychotropic effects. For example, to be effective powder cocaine can be injected, insufflated (snorted), or ingested, while crack cocaine can only be smoked. Therefore, while powder cocaine users can administer the drug in a variety of ways, crack cocaine users are limited to smoking the drug.

This chapter provides a basic overview of cocaine: what it is, where it comes from, how it is used, its effects on the body, and its addictive potential. Section B of this chapter provides background on the origins of cocaine, its use, and abuse. Section C examines the different forms of cocaine – leaf, paste, powder, and base – the ways cocaine is administered, and the differing methods by which cocaine is absorbed and distributed within the body. Section D discusses the physiological and psychotropic effects of cocaine use, outlining both the impact of various routes of administration (ingestion, injection, insufflation, inhalation) on the intensity and duration of these effects and the side effects and toxicity associated with cocaine abuse. This section also discusses the physiological and psychological aspects of cocaine dependence.

B. ORIGINS OF COCAINE USE AND ABUSE

Coca leaves have been used by South American Indians for more than 3,000 years. The use of coca leaves was associated historically with the religious ceremonies of the Incas and reserved specifically for nobility. Today, the leaves are chewed regularly in Peru and Bolivia for their

therapeutic value.¹ Chewing coca leaves provides a long-lasting, low-grade euphoria that reduces appetite, increases physical stamina, and counters symptoms associated with "mountain sickness" and oxygen deprivation.²

Cocaine was first extracted from coca leaves around 1860 and used as an anesthetic that proved to be a boon for ophthalmology.³ In addition to anesthetizing the eye and preventing muscle reflex, cocaine constricts the arterioles which, in turn, reduces the amount of bleeding in an otherwise blood-rich area. Cocaine also widens the air sacs in the lungs, constricts the capillaries in the nasal passages, and makes breathing significantly easier.⁴ During the 19th century, cocaine was promoted as a remedy for such respiratory ailments as asthma, whooping cough, and tuberculosis. Additionally, it was publicized, most notably by Sigmund Freud, as an aphrodisiac and an antidote for morphine addiction and alcoholism.⁵

By 1890, cocaine had become the primary ingredient in many elixirs and other "restoratives" that claimed to provide relief from depression and a multitude of ailments. It was an ingredient in cigars, cigarettes, chewing gum, and several "tonics," most notably *Coca-Cola* (today's *Coca-Cola* does not contain cocaine).⁶ Cocaine use during the 19th century, however, was far from benign. In 1891, for example, 200 cases of death from cocaine intoxication were reported.⁷ According to one estimate, the U.S. population in 1906 – numbering only half of today's population – consumed as much cocaine as did the U.S. population in 1976.⁸

During the beginning of the 20th century, the general perception was that cocaine use increased the risk of crime. By 1914, 46 states, in an effort to control crime, had enacted legislation

¹ J. Murray, "An Overview of Cocaine Use and Abuse," 59 Psychological Reports 243-264 (1986); D.F. Allen and J.F. Jekel, Crack: The Broken Promise (1991).

² C. Van Dyke, P.I. Jatlow, P.G. Barash, and R. Byck, "Oral Cocaine: Plasma Concentrations and Central Effects," 200 Science 211-213 (1978).

³ *Id.*; M. Ellenhorn and D. Barceloux, Medical Toxicology: Diagnosis and Treatment of Human Poisoning (1988).

⁴ P. Jatlow, "Drugs of Abuse Profile: Cocaine," 33 Clinical Chemistry 66-71 (1987).

⁵ Murray, *supra* note 1.

⁶ *Id.*; Jatlow, *supra* note 4; Van Dyke *et al.*, *supra* note 2; G. Das, "Cocaine Use in North America," 33 Journal of Clinical Pharmacology 296-310 (1993).

⁷ Allen and Jekel, *supra* note 1.

⁸ *Id.*

regulating the use and distribution of cocaine.⁹ That same year Congress passed the Harrison Narcotics Act, banning non-medical use of the drug and requiring strict accounting of medical dispensing to patients.¹⁰

Cocaine became scarce following passage of the Harrison Act. As its availability diminished, the popularity of amphetamines – legal drugs with similar physiological and psychotropic effects – increased. By the 1950s, cocaine was no longer considered a law enforcement problem.¹¹ During the 1960s, however, cocaine reemerged as a drug of abuse.¹² In 1970, Congress classified cocaine as a Schedule II controlled substance. While Schedule II controlled substances have legitimate medicinal uses – cocaine is used as a local anesthetic – they are recognized as having a high potential for abuse and dependency.¹³

C. FORMS OF COCAINE AND METHODS OF USE

Cocaine derives from plants indigenous to the Andes Mountains of South America. Of the 17 species of erythroxyton plants that produce cocaine, only two (erythroxyton coca and erythroxyton novogranatense) yield sufficient levels of the cocaine alkaloid to justify mass cultivation for processing into cocaine. These two species, cultivated primarily in Peru, Bolivia, and Colombia, supply the world's cocaine.¹⁴

1. Forms of Cocaine

Coca leaves can be processed into a variety of usable forms using an array of different and oftentimes toxic chemicals. Because all forms are derivatives of the coca plant, the active ingredient – the cocaine alkaloid – is common to all. Figure 1 illustrates the processing and routes of

⁹ D. Musto, The American Disease: Origins of Narcotic Control (1973).

¹⁰ *Id.*

¹¹ Murray, *supra* note 1; R. Siegel, "New Patterns of Cocaine Use: Changing Doses and Routes," 61 National Institute on Drug Abuse Research Monograph Series 204-222 (1985).

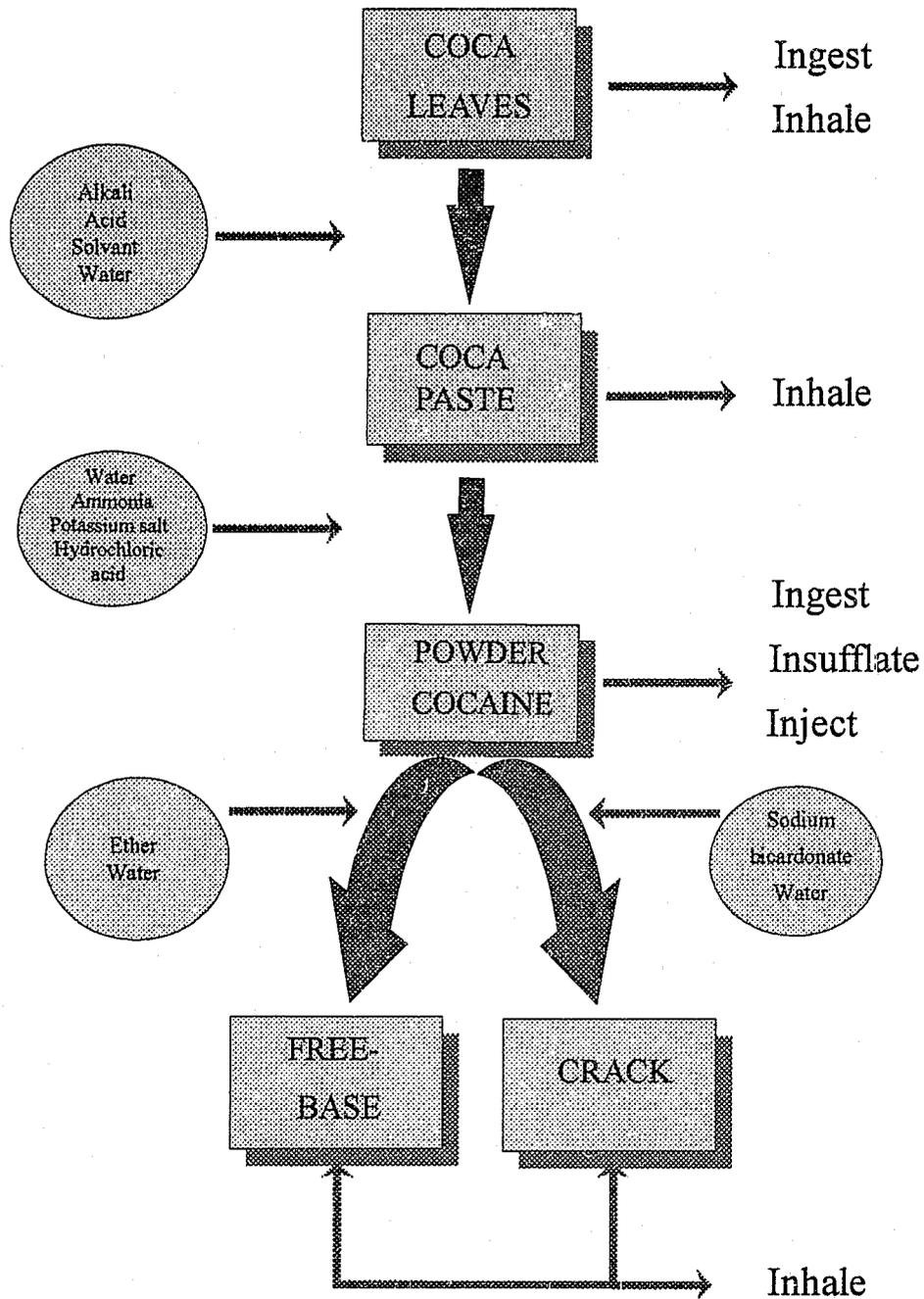
¹² *Id.*

¹³ 21 U.S.C. § 812.

¹⁴ Murray, *supra* note 1; U.S. Department of Justice, Drug Enforcement Administration, Drugs of Abuse (1989).

Figure 1

PROCESSING OF COCA LEAVES



administration of the five basic forms of the drug: coca leaves, coca paste, powder cocaine, freebase cocaine, and crack cocaine.¹⁵

a. Coca Leaves

Due to differing environmental factors, the cocaine content of the coca leaf ranges between 0.1 percent and 0.8 percent. Coca plants grown at higher altitudes contain a higher percentage of the cocaine alkaloid than those grown at lower altitudes and are consequently more potent.¹⁶ Coca leaves typically are chewed but can be rolled into cigarettes or cigars and smoked or infused in liquid and consumed like tea.¹⁷

b. Coca Paste

Coca paste is a chunky, off-white to light-brown, putty-like substance that exists primarily as an intermediate product in the processing of coca leaves into powder cocaine. Coca paste is derived from coca leaves by mixing the leaves with an alkaline material (*e.g.*, sodium bicarbonate), an organic solvent (*e.g.*, kerosene), and water. The mixture is agitated and the cocaine alkaloid and the organic solvent naturally separate from the water and the leaves. The water and the leaves are removed from the mixture and discarded. Using an acid, the cocaine alkaloid and the kerosene are separated and the kerosene is drawn off the mixture. Additional sodium bicarbonate is added and a solid substance separates from the solution. This solid substance, the coca paste, is removed and allowed to dry.¹⁸

Chemically, coca paste is a base form of cocaine (similar to freebase cocaine and crack cocaine) and typically contains residual toxins from the conversion process. Because coca paste is a base, it is hydrophobic – not readily absorbed into water – and, thus, cannot be injected, insufflated, or ingested. While most coca paste is converted into powder cocaine, the paste itself is smoked in South American countries that produce cocaine.¹⁹ During the early 1980s, several cities

¹⁵ The distinction between base and non-base forms of cocaine is important in determining the route of administration. Because, in comparison to base forms of cocaine (*e.g.*, crack cocaine), non-base forms (*i.e.*, powder cocaine) vaporize at significantly higher temperatures that tend to decompose the cocaine molecule; non-base forms of cocaine generally are not smoked.

¹⁶ Murray, *supra* note 1; U.S. Drug Enforcement Administration, *supra* note 14.

¹⁷ *Id.*

¹⁸ U.S. Department of Justice, Drug Enforcement Administration, Cocaine: Cultivation and Cocaine Processing: An Overview (1991).

¹⁹ R. Jones, "The Pharmacology of Cocaine Smoking in Humans," 99 National Institute on Drug Abuse Research Monograph Series 30-41 (1990).

in the United States also experienced sporadic episodes of coca paste smoking.²⁰ However, coca paste is typically not imported into the United States.²¹

c. Powder Cocaine

Powder cocaine is a white, powdery substance produced by reacting coca paste with hydrochloric acid. It is the most commonly used form of cocaine. As illustrated in Figure 1, cocaine powder is derived by dissolving the coca paste in hydrochloric acid and water. To this mixture a potassium salt (potassium permanganate) is added. The potassium salt causes undesired substances to separate from the mixture. These substances are then discarded. Ammonia is added to the remaining solution, and a solid substance – the powder cocaine – separates from the solution. The powder cocaine is removed and allowed to dry.²² Prior to distribution, powder cocaine typically is "cut," or diluted, by adding a variety of one or more adulterants: sugars, local anesthetics (e.g., benzocaine), other drugs, or other inert substances.²³ Consequently, the purity level of powder cocaine may vary considerably.

While the active ingredient in powder cocaine – the cocaine alkaloid – does not differ from the active ingredient in coca paste or other forms of cocaine, the salt substrate causes the drug to be hydrophilic – readily dissolved, or absorbed, into water – and, thus, easily injected, insufflated, or ingested. However, unlike base forms of cocaine (such as freebase and crack cocaine), powder cocaine cannot be inhaled (smoked).²⁴ The cocaine alkaloid molecule, when in the powder cocaine form, begins to decompose at a temperature close to which the drug vaporizes (198°C, 388°F).²⁵

²⁰ U.S. Department of Justice, Drug Enforcement Administration, Crack Cocaine: An Overview. (1989).

²¹ *Id.*

²² U.S. Department of Justice, Drug Enforcement Administration, *supra* note 18.

²³ U.S. Department of Justice, Drug Enforcement Administration, Illegal Drug Price and Purity Report (1992).

²⁴ M. Perez-Reyes, S. Di Guiseppi, G. Ondrusek, A.R. Jeffcoat, and C.E. Cook, "Free-base Cocaine Smoking," 32 Clinical Pharmacology and Therapeutics 459-465 (1982); P. Wilkinson, C. Van Dyck, P.I. Jatlow, P. Barash, R. Byck, "Intranasal and Oral Cocaine Kinetics," 27 Clinical Pharmacology and Therapeutics 386-394 (1980).

Technically, cocaine is not smoked. The concept of smoking implies that the substance is burned and the smoke from the burning substance is inhaled. "Smoked" cocaine, however, is actually vaporized, much like water is vaporized when it boils, and the cocaine-laden vapor is inhaled into the lungs. For the purposes of this discussion, the terms "vaporized" and "smoked" will be used interchangeably to mean inhalation into the lungs.

²⁵ S. Budavari, M. O'Neil, A. Smith, and P. Heckelman (Eds.) The Merck Index. An Encyclopedia of Chemicals, Drugs, and Biologicals (1989); D.R. Wesson and P. Washburn, "Current Patterns of Drug Abuse that Involve Smoking," 99 National Institute on Drug Abuse Research Monograph Series 5-11 (1990).

Once the cocaine alkaloid decomposes, it is inactive pharmacologically and no longer produces any physiological or psychotropic effects.²⁶

d. Cocaine Base

Cocaine base is produced from powder cocaine. In this form, the cocaine alkaloid has been "freed" from the salt substrate and is once again in a base form similar to that of coca paste. Cocaine base vaporizes at a significantly lower temperature (98°C, 208°F) than powder cocaine (198°C, 388°F). This lower vaporization point results in less of the drug being decomposed when heated.²⁷ However, as a base, the drug is not water-soluble. Therefore, if injected, nasally insufflated, or ingested, it will not be absorbed readily into the body. Powder cocaine can be converted into two forms of cocaine base, freebase cocaine or crack cocaine.

i. Freebase Cocaine

Freebase cocaine is derived from powder cocaine that has been dissolved in water and a strong alkaloid solution, typically ammonia. Ether or another organic solvent is added, and a solid substance separates from the solution. This solid substance is the cocaine base.²⁸ Prior to adoption of the federal drug paraphernalia laws in 1986, kits containing the necessary materials and ingredients (except for the cocaine) to "freebase" could be purchased in drug paraphernalia shops.²⁹

The use of freebase cocaine was documented first in the mid-1970s. Because freebase cocaine is significantly purer than coca paste or powder cocaine, many users believed that it was a healthier form of the drug. Even though an estimated ten to 20 percent of the cocaine-abusing population was using freebase cocaine during the 1970s, many resisted the freebasing process because of its complexity and potential danger. Ether, a highly volatile and flammable solvent, will ignite or explode if the freebase cocaine is smoked before the ether has evaporated entirely. This danger received extensive media coverage in 1980 when comedian Richard Pryor suffered third-degree burns over his torso and face while freebasing cocaine.³⁰

²⁶ C. Cook and A. Jeffcoat, "Pyrolytic Degradation of Heroin, Phencyclidine and Cocaine: Identification of Products and Some Observations on their Metabolism," 99 National Institute on Drug Abuse Research Monograph Series 97-120 (1990).

²⁷ Budavari, *et al.*, *supra* note 25; Wesson and Washburn, *supra* note 25.

²⁸ U.S. Department of Justice, Drug Enforcement Administration, *supra* note 18.

²⁹ *Id.*; 21 U.S.C. § 863.

³⁰ T. Morganthau, "Crack and Crime," Newsweek, June 16, 1986, at 16-22.

ii. Crack Cocaine

Crack cocaine, another form of cocaine base, also is derived from powder cocaine. Unlike the processing of freebase cocaine, converting powder cocaine into crack cocaine does not involve any flammable solvents. The powder cocaine is simply dissolved in a solution of sodium bicarbonate and water. The solution is boiled and a solid substance separates from the boiling mixture. This solid substance, crack cocaine, is removed and allowed to dry.³¹ The crack cocaine is broken or cut into "rocks," each typically weighing from one-tenth to one-half a gram. One gram of pure powder cocaine will convert to approximately 0.89 grams of crack cocaine. The Drug Enforcement Administration estimates that crack rocks are between 75 and 90 percent pure cocaine.³²

2. Administration of Cocaine

While cocaine in any form – paste, powder, freebase, or crack – produces the same type of physiological and psychotropic effects, the onset, intensity, and duration of its effects are related directly to the method of use. The form of cocaine generally defines the routes by which it can be administered. Powder cocaine can be injected, insufflated, or ingested; cocaine base, however, can only be smoked.³³ This section describes the principles underlying drug absorption by and distribution within the body. It compares the four primary routes of cocaine administration – ingestion, nasal insufflation (snorting), injection, and inhalation (smoking) – and the impact of each route on drug absorption and distribution.

a. Absorption and Distribution Within the Body

The route of administration directly affects the rate at which the drug will be absorbed into the bloodstream and transported to the central nervous system and brain where it produces physiological and psychotropic effects. Absorption of a drug into the bloodstream is regulated by two primary factors: the amount of blood flowing to the site of ultimate consumption (*e.g.*, the

³¹ U.S. Department of Justice, Drug Enforcement Administration, *supra* note 18.

³² U.S. Department of Justice, Drug Enforcement Administration, *supra* note 23. *See also*, Budavari, *et al.*, *supra*, note 25 at 2451. Although crack cocaine theoretically should be as pure as freebase cocaine, in practice it is less pure because crack cocaine processors tend to be less careful when making crack cocaine. In addition, crack cocaine processors often cut the end product with adulterants to increase the weight and bulk of the crack rocks (*See also*, Chapter 4).

³³ R. Foltin and M. Fischman, "Smoked and Intravenous Cocaine in Humans: Acute Tolerance, Cardiovascular and Subjective Effects," 257 *Journal of Pharmacology and Experimental Therapeutics* 247-261 (1991); R. Jones, "The Pharmacology of Cocaine," 50 *National Institute on Drug Abuse Research Monograph Series* 34-53 (1984); J. Javaid, M. Fischman, C. Schuster, H. Dekirmejian, and J. Davis, "Cocaine Plasma Concentrations: Relation to Physiological and Subjective Effects in Humans," 202 *Science* 227-229 (1978).

stomach or small intestine); and the surface area over which the drug is absorbed. Following nasal insufflation (snorting), for example, the surface area is limited to the nasal mucosa in the nasal cavity. In contrast, following cocaine inhalation (smoking), the drug is absorbed by the air sacs of the lungs which have a surface area the size of a football field.

The impact of a drug is additionally governed by the proportion of the drug distributed to various parts of the body. Of ultimate importance is the proportion of the drug reaching the central nervous system, particularly the brain – the primary site of action for drugs of abuse. For example, when a drug is injected intravenously, 100 percent of the drug is distributed to the body. Other routes of administration result in smaller proportions of the administered dose being available for distribution to the central nervous system. This phenomenon is attributable both to the smaller fraction of the drug being absorbed into the bloodstream and to natural safeguards in the body (e.g., metabolism) that cleanse the blood of toxic substances. Figure 2 depicts the pathway of a drug from administration to the central nervous system and brain.

b. Onset of Physiological and Psychotropic Effects

The faster a drug reaches the bloodstream, the faster it is distributed throughout the body and the faster the user feels the desired physiological and psychotropic effects.³⁴ The level of effect and the length of time until maximum effect differ according to the method of administration.³⁵ Figures 3 and 4 summarize these differences. Figure 3 depicts, by method of consumption, the average change in physiological and psychotropic responses after cocaine is administered. Figure 4 depicts the average time interval required to reach maximum physiological and psychotropic response after cocaine is administered. The figures show that, upon administration of the drug, the average level of effect and the time until onset of the physiological and psychotropic responses differ significantly based on route of administration. The figures indicate that the psychological effect of the drug – the perceived intoxication – is very strongly associated with the route of administration. Intoxication begins soon after drug use and is perceived as more intense when use is through injection or smoking.

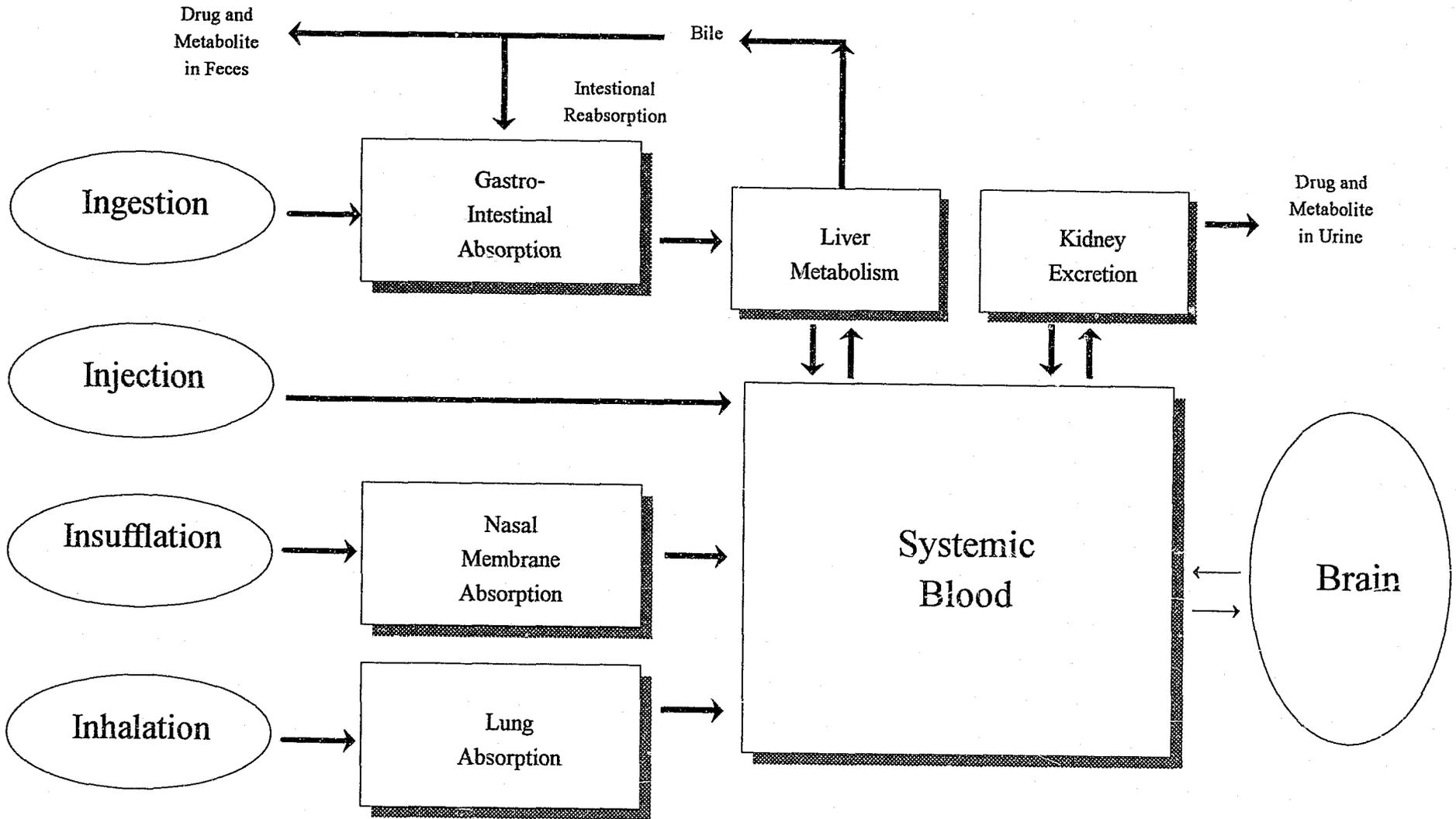
The psychotropic feelings, described as "stimulated" or "high," are correlated to the rate of increased concentration of cocaine in the blood, particularly blood flowing to the brain. The faster

³⁴ *Id.*, Wesson and Washburn, *supra* note 25.

³⁵ Foltin and Fischman, *supra* note 33.

Figure 2

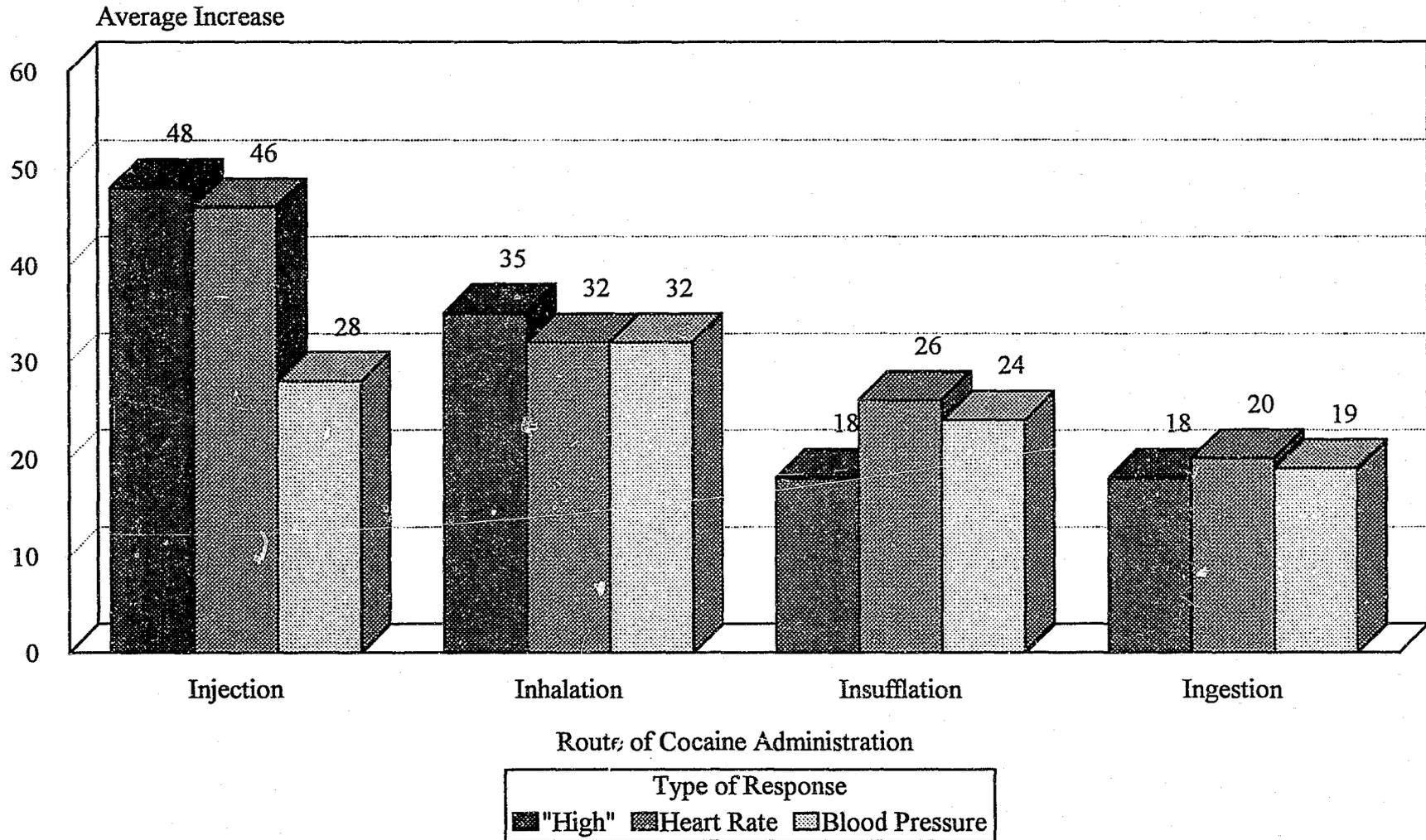
DRUG PATHWAYS BY ROUTE OF ADMINISTRATION



SOURCE: Adapted from C.N. Chiang and R.L. Hawks, "Implications of Drug Levels in Body Fluids: Basic Concepts," in R.L. Hawks and C.N. Chiang, "Urine Testing for Drugs of Abuse," NIDA Research Monograph 73 (1986), p.63.

Figure 3

**AVERAGE INCREASE IN PHYSIOLOGICAL AND PSYCHOTROPIC RESPONSES
BY ROUTE OF ADMINISTRATION**



"High" measured by subjective self-report scale.

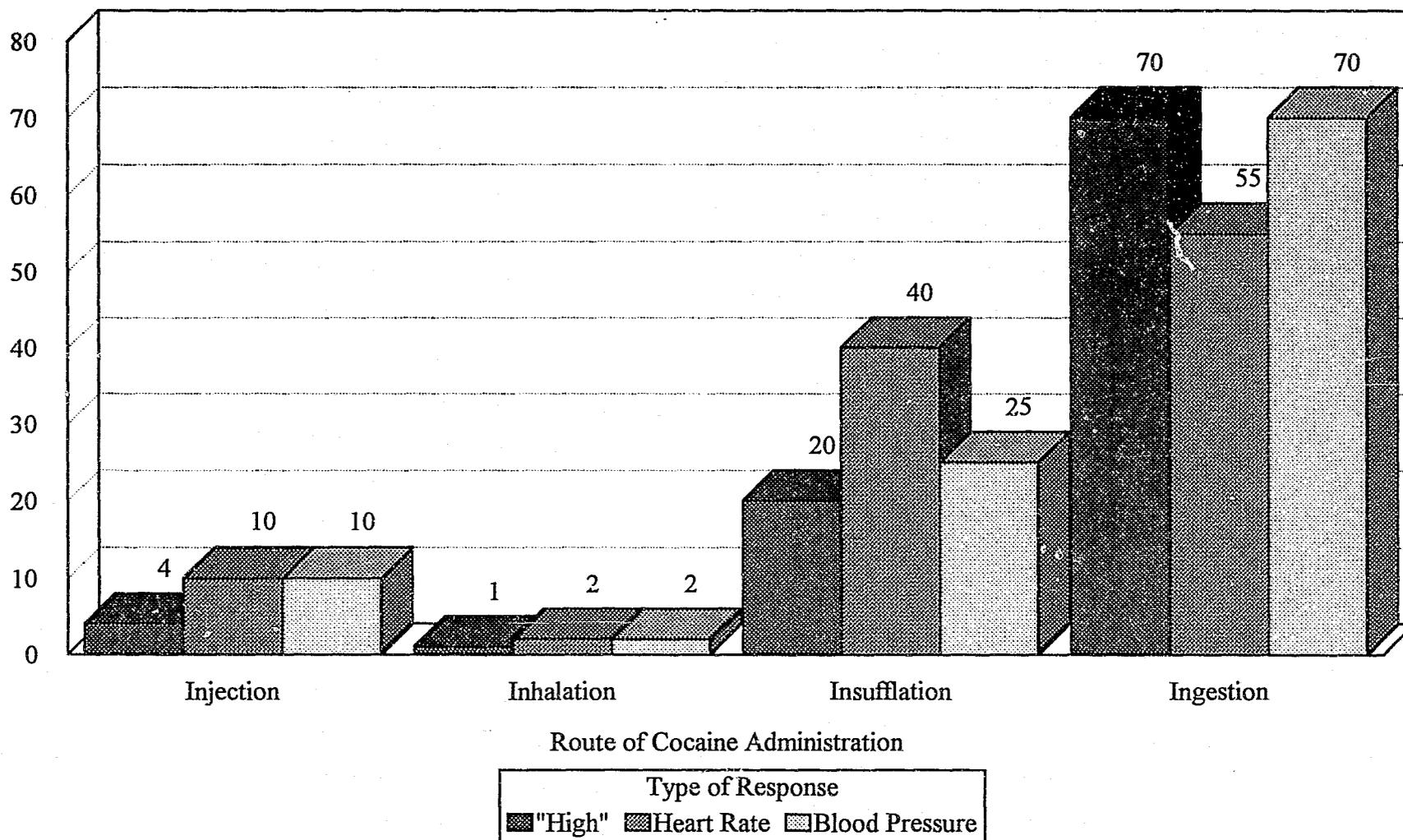
Heart rate measured in beats per minute (BPM).

Blood pressure measured in mmHg for Systolic Blood Pressure.

SOURCE: R.T. Jones, "The Pharmacology of Cocaine Smoking in Humans," 99 NIDA Research Monograph 30.

Figure 4

**TIME TO MAXIMUM CHANGE IN PHYSIOLOGICAL AND PSYCHOTROPIC RESPONSES
BY ROUTE OF ADMINISTRATION**



"High" measured by subjective self-report scale.
Heart rate measured in beats per minute (BPM).
Blood pressure measured in mmHg for Systolic Blood Pressure.

Source: R. T. Jones, "The Pharmacology of Cocaine Smoking in Humans," 99 NIDA Research Monograph 30.

cocaine reaches the brain, the greater the intensity of the psychotropic effects.³⁶ However, these intense psychotropic responses also dissipate more quickly. Consequently, routes of cocaine administration with the more immediate and intense psychotropic responses (specifically, injection of powder cocaine or smoking cocaine vapors) maintain the intensity for shorter periods of time than slower routes of administration.³⁷

c. Routes of Administration

i. Ingestion

Users who ingest cocaine typically chew the coca leaves in their mouths much like chewing tobacco. Coca leaves typically are mixed with an alkaline substance (such as lime) and chewed into a wad that is retained in the mouth between gum and cheek and sucked of its juices. The juices are absorbed slowly by the mucous membrane of the inner cheek and by the gastro-intestinal tract when swallowed. Alternatively, coca leaves can be infused in liquid and consumed like tea.³⁸ Ingesting coca leaves generally is an inefficient means of administering cocaine. Because cocaine is hydrolyzed (rendered inactive) in the acidic stomach, it is not readily absorbed. Only when mixed with a highly alkaline substance (such as lime) can it be absorbed into the bloodstream through the stomach.³⁹ Absorption of orally administered cocaine is limited by two additional factors. First, the drug is partly metabolized in the liver. Second, capillaries in the mouth and esophagus constrict after contact with the drug, reducing the surface area over which the drug can be absorbed.⁴⁰

Orally administered cocaine takes approximately 30 minutes to enter the bloodstream. Typically, only 30 percent of an oral dose is absorbed, although absorption has been shown to reach 60 percent in controlled settings.⁴¹ Given the slow rate of absorption, maximum physiological and

³⁶ N. Benowitz, "Clinical Pharmacology of Inhaled Drugs of Abuse: Implications in Understanding Nicotine Dependence," 99 National Institute on Drug Abuse Research Monograph Series 12 (1990); M. Benuck, A. Lajtha, and M. Reith, "Pharmacokinetics of Systemically Administered Cocaine and Locomotor Stimulation in Mice," 257 Journal of Pharmacology and Experimental Therapeutics 307 (1991); J. Boni, W. Barr, and B. Martin, "Cocaine Inhalation in the Rat: Pharmacokinetics and Cardiovascular Response," 257 Journal of Pharmacology and Experimental Therapeutics 307 (1991); Van Dyke, *et al.*, *supra* note 2.

³⁷ J. Ambre, S. Belknap, J. Nelson, T. Rho, S. Shin, and A. Atkinson, "Acute Tolerance to Cocaine in Humans," 44 Clinical Pharmacology and Therapeutics 1 (1988).

³⁸ Murray, *supra* note 1.

³⁹ Wilkinson *et al.*, *supra* note 24; Van Dyke *et al.*, *supra* note 2.

⁴⁰ *Id.*

⁴¹ *Id.*; Jones, *supra* note 33.

psychotropic effects are attained approximately 60 minutes after cocaine is administered by ingestion. While the onset of these effects is slow, the effects are sustained for approximately 60 minutes after their peak is attained.⁴²

ii. Nasal Insufflation (Snorting)

Users who insufflate cocaine "snort" the drug into their nasal passages. The powder cocaine typically is apportioned into "lines," each representing between ten and 35 mg. of cocaine. The powder is drawn into each nostril through a thin straw and absorbed into the bloodstream through the capillaries of the mucous membranes of the nasal cavity.⁴³ Like ingestion, nasal insufflation is not the most efficient route of cocaine administration. Cocaine constricts the capillaries in the nasal membranes, thus reducing the surface area and making absorption slow and incomplete. Absorption following snorting cocaine is dose-dependent, with larger doses more completely absorbed than smaller doses.⁴⁴ One study found that only 28 percent of a 64 mg. intranasal dose of cocaine was absorbed compared to almost 69 percent of a 96 mg. dose.⁴⁵

Cocaine snorted through the nasal passages appears in the blood three to five minutes after administration, significantly faster than the 30 minutes required for it to reach the bloodstream through ingestion.⁴⁶ However, both ingestion and insufflation result in approximately the same proportion of the drug being absorbed: 30 to 60 percent.⁴⁷ Compared to ingestion, the faster absorption of insufflated cocaine results in quicker attainment of maximum drug effects. Snorting cocaine produces maximum physiological effects within 40 minutes and maximum psychotropic effects within 20 minutes.⁴⁸ Similar to ingestion of cocaine, physiological and psychotropic effects

⁴² *Id.*

⁴³ J. Javaid, M. Musa, M. Fischman, C. Schuster, and J. Davis, "Kinetics of Cocaine in Humans after Intravenous and Intranasal Administration," 4 Biopharmacuetics and Drug Disposition 9-18 (1983); A. Jeffcoat, M. Perez-Reyes, J. Hill, B. Sadler, and C. Cook, "Cocaine Disposition in Humans after Intravenous Injection, Nasal Insufflation, or Smoking," 17 Drug Metabolism and Disposition 153-159 (1989).

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ G. Barnett, R. Hawks and R. Resnick, "Cocaine Pharmacokinetics in Humans," 3 Journal of Ethnopharmacology 353 (1981); Jones, *supra* note 19; Wilkinson *et al.*, *supra* note 24; Van Dyke *et al.*, *supra* note 2.

⁴⁸ Jones, *supra* note 19.

from nasally insufflated cocaine are sustained for approximately 60 minutes after the peak effects are attained.⁴⁹

iii. Injection

Cocaine injectors dissolve powder cocaine in water and inject the mixture into a vein, typically in the arm, using a hypodermic syringe. While injection is an effective method of delivering a drug dose, it is potentially problematic. Because the drug is injected directly into the bloodstream, natural safeguards (e.g., metabolism) are bypassed. Given the unknown purity of street doses, intravenous drug users are less able to monitor and correct dosages, and therefore are subject to unexpected drug reactions or overdoses.⁵⁰ Further, safe intravenous administration requires sterile conditions – conditions typically not associated with illicit drug use. Consequently, illicit drug users who inject drugs are generally at a greater risk of health problems than illicit drug users who use drugs in other fashions.⁵¹ (See Chapter Three, Cocaine Use and Public Health Issues, for a detailed discussion of the health problems associated with intravenous drug use.)

Intravenously administered cocaine is absorbed completely into the bloodstream, requiring only one minute to reach the brain.⁵² The time interval to attainment of maximum physiological and psychotropic effects is much shorter than the interval following either ingestion or intranasal administration. Maximum physiological effects occur in ten minutes; maximum psychotropic effects in four minutes. These effects are sustained for approximately 30 minutes.⁵³

iv. Inhalation (Smoking)

Cocaine base (including coca paste, freebase cocaine, and crack cocaine) typically is smoked in pipes constructed of glass bowls fitted with one or more fine mesh screens that support the drug. The user heats the side of the bowl (usually with a lighter), and the heat causes the cocaine base to vaporize. The user inhales the cocaine-laden fumes through the pipe. Alternatively, crack cocaine can be sprinkled in cigarettes and smoked.⁵⁴

⁴⁹ Van Dyke, *et al.*, *supra* note 2.

⁵⁰ R. Julien, *A Primer of Drug Action* (1988).

⁵¹ *Id.*

⁵² Benowitz, *supra* note 36.

⁵³ Jones, *supra* note 19.

⁵⁴ U.S. Department of Justice, Drug Enforcement Administration, *supra* note 20.

Smoking cocaine combines the efficiency of intravenous administration with the relative ease of consumption of ingestion and insufflation.⁵⁵ Facilitated by the large surface area of the lungs' air sacs, cocaine administered by inhalation is absorbed almost immediately into the bloodstream, taking only 19 seconds to reach the brain.⁵⁶ However, only 30 to 60 percent of the available dose is absorbed due to incomplete inhalation of the cocaine-laden fumes and variations in the heating temperature.⁵⁷ Cocaine smokers achieve maximum physiological effects approximately two minutes after inhalation.⁵⁸ Maximum psychotropic effects are attained approximately one minute after inhalation.⁵⁹ Similar to intravenous administration, the physiological and psychotropic effects of inhaled cocaine are sustained for approximately 30 minutes after the peak effects are attained.⁶⁰

D. EFFECTS OF COCAINE

Cocaine is the most potent central nervous system stimulant of natural origin.⁶¹ While different forms of cocaine do not result in different types of physiological or psychotropic effects, the route of administration does impact, as discussed above, the immediacy, intensity, and duration of cocaine's effects. The sections below discuss cocaine's physiological and psychotropic effects.

1. Physiological Effects of Cocaine

Cocaine, like other central nervous system stimulants such as amphetamine, caffeine, and nicotine, produces alertness and heightens energy.⁶² Cocaine acts on the central nervous system by

⁵⁵ Wesson and Washburn, *supra* note 25; R. Foltin and M. Fischman, "Self-Administration of Cocaine in Humans: Choices Between Smoking and Intravenous Cocaine," 261 Journal of Pharmacology and Experimental Therapeutics 841-849 (1992).

⁵⁶ Benowitz, *supra* note 36.

⁵⁷ Boni *et al.*, *supra* note 36; Foltin and Fischman, *supra* note 33; Jeffcoat *et al.*, *supra* note 43; D. Paly, P. Jatlow, C. Van Dyke, F. Jeri, and R. Byck, "Plasma Cocaine Concentrations during Coca Paste Smoking," 30 Life Sciences 731-738 (1982).

⁵⁸ *Id.*

⁵⁹ Benowitz, *supra* note 36.

⁶⁰ Boni *et al.*, *supra* note 36; Foltin and Fischman, *supra* note 33; Jeffcoat, *et al.*, *supra* note 43; Paly *et al.*, *supra* note 57; Perez-Reyes, *et al.*, *supra* note 24.

⁶¹ U.S. Department of Justice, Drug Enforcement Administration, *supra* note 14.

⁶² F. Gawin and E. Ellinwood, "Cocaine and Other Stimulants: Actions, Abuse and Treatment," 318 New England Journal of Medicine 1173 (1988).

inhibiting the re-uptake of the neurotransmitter norepinephrine. The augmentation of norepinephrine results in increased motor activity, with slight tremors and convulsions in the user's extremities.⁶³ In the cardiovascular system, the augmentation of norepinephrine results in increased heart rate, elevated blood pressure, and other symptoms similar to hypertension.⁶⁴ The rate of increase in these physiological responses varies by route of cocaine administration, with the most efficient absorption routes (inhalation and injection) producing the most rapid increases.⁶⁵

Cocaine's vasoconstrictive properties reduce the size of the blood vessels, causing the air sacs in the lungs to dilate and the capillaries in the nasal passages to constrict.⁶⁶ Because cocaine permits less body heat to be lost, cocaine users generally experience an increase in body temperature. In cases involving cocaine overdoses, body temperatures as high as 114°F have been reported.⁶⁷

2. Psychotropic Effects of Cocaine

Cocaine also inhibits the re-uptake of dopamine, a neurotransmitter that controls the pleasure centers in the central nervous system, causing a sense of euphoria, decreased anxiety and social inhibitions, and heightened sexuality.⁶⁸

Increased dosages of cocaine and use of the most rapid drug administration routes produce euphoric experiences that create vivid, long-term psychological memories that form the basis for subsequent craving of the drug.⁶⁹ Psychoses and hallucinations have been reported with increased doses of cocaine, including foraging and "skin picking" (a slang term for a condition in which addicts mistakenly believe that bugs are crawling on their skin). In addition to producing euphoria and psychoses, cocaine use causes the user to crave other drugs, including alcohol. Polydrug use is particularly significant because concurrent use of cocaine and other drugs is associated with

⁶³ Jatlow, *supra* note 4; Julien, *supra* note 50; Jones, *supra* note 33; U. Raczowski, Y. Hernandez, H. Erzouki, and T. Abrahams, "Cocaine Acts in the Central Nervous System to Inhibit Sympathetic Neural Activity," 258 Journal of Pharmacology and Experimental Therapeutics 511 (1991).

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ R.A. Wise, "Neural Mechanisms of the Reinforcing Action of Cocaine," 50 National Institute on Drug Abuse Research Monograph Series 15-33 (1984).

⁶⁹ Gawin and Ellinwood, *supra* note 62.

increased toxicity.⁷⁰ (See Chapter Three, Cocaine Use and Public Health Issues, for a discussion of the toxicity associated with cocaine and polydrug use.)

3. Drug Dependence

Drug dependence can be both physiological and psychological. Psychoactive substance dependence has been described as

a cluster of cognitive, behavioral, and physiologic symptoms that indicate that the person has impaired control of psychoactive substance use and continued use of the substance despite adverse consequences . . . [including but] not limited to the physiologic symptoms of withdrawal and tolerance. . . [Withdrawal symptoms] vary greatly across classes of substances. Marked and generally easily measured physiologic signs of withdrawal are common with alcohol, opiates, sedatives, hypnotics, and anxiolytics. Such signs are less obvious with amphetamines, cocaine, nicotine, and cannabis, but intense subjective symptoms can occur upon withdrawal from heavy use of these substances.⁷¹

The nature and severity of dependence has been shown to be primarily influenced by the individual's drug tolerance and the immediacy and duration of the drug's effect.

a. Physiological Dependence

Unlike some drugs, cocaine is not physiologically addicting.⁷² Examples of drugs that cause physiological dependence include:

- opiates (*e.g.*, heroin, morphine, codeine, and methadone),
- barbiturates (*e.g.*, phenobarbital, secobarbital),

⁷⁰ *Id.*

⁷¹ American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders: DSM-III-R (1987).

⁷² K. Blum, Handbook of Abusable Drugs (1984); L. Keltner and D. Folks Psychotropic Drugs. (1993). Physiological dependence occurs when prolonged use of the drug causes systemic changes in the central nervous system (*e.g.*, lower pulse rate, decreased body temperature, or depressed respiration). When drug use is withdrawn, the body responds with an effect that is opposite the drug's action in an effort to maintain the new equilibrium established through use of the drug. For example, if the drug causes the body temperature to decrease by three degrees, the person's body temperature will increase by three degrees when the drug is withdrawn. Physical changes resulting from cessation of prolonged drug use (such as significant increases in body temperature) cause the user discomfort, including physical events such as nausea, convulsions, or seizures or psychological effects such as hallucinations or paranoia. Withdrawal symptoms can be stopped or mitigated by re-administering the drug. Over time, the homeostatic response to the dependence restores equilibrium in the body's varied systems.

- anxiolytics (e.g., diazepam, meprobromate),
- nicotine (e.g., tobacco products),
- caffeine (e.g., coffee and tea), and
- alcohol.⁷³

For drugs that cause physiological dependence, the nature of withdrawal symptoms varies with the type of drug. For example, opiate withdrawal is characterized by restlessness, sweating, extreme anxiety, fever, chills, and extreme diarrhea; alcohol withdrawal is characterized by hyperexcitability, hallucinations, psychomotor agitation, confusion, and delirium tremens – a syndrome characterized by a variety of discomforts.⁷⁴

While cocaine is not physiologically addicting, users may experience anxiety and depression when cocaine is not available for use. These sensations, while possibly affecting physical systems in the body, have not been demonstrated to be related to bodily function; rather, these sensations have been classified as psychological manifestations resulting from psychological dependence.⁷⁵

b. Psychological Dependence

Psychological dependence is a compulsion for repeated use of a drug for its euphoric effects despite any adverse effects that may occur.⁷⁶ Cocaine exhibits powerful reinforcing properties that cause users compulsively to misuse the drug resulting in psychological addiction.⁷⁷ The psychological craving for cocaine is the most important contributor to its abuse potential.⁷⁸

Cocaine users discover that higher doses intensify the euphoria. Therefore, unless the user has imposed a limit on the quantity of drug used during a fixed period, or an external limit on supply exists, some users will gradually increase the frequency of use and quantity of the dose. The pursuit of euphoria becomes so great that users may often ignore all signs of physical and psychological risk, either to the individual or to others. With continued use, elation and self-confidence associated with the euphoria diminish, and depression and irritability set in. Often, in an attempt to ward off

⁷³ *Id.*

⁷⁴ Julien, *supra* note 50.

⁷⁵ F.H. Gawin, "Cocaine Abuse and Addiction," 29 Journal of Family Practice 193-197 (1989).

⁷⁶ Julien, *supra* note 50; American Psychiatric Association, *supra* note 71.

⁷⁷ Murray, *supra* note 1; J. Spotts and F. Shortz, "Drug-Induced Ego States: I. Cocaine Phenomenology and Implications," 19 International Journal of the Addictions 119 (1984).

⁷⁸ Gawin, *supra* note 75.

depression and/or the "crash" from the high, cocaine users further intensify their pattern of use, resulting in cocaine binges lasting for several hours or even days.⁷⁹

The psychological components of dependence are the same across all categories of psychoactive drugs.⁸⁰ For example, persons dependent on psychoactive drugs may exhibit a compulsion to use a drug over a longer period than originally intended. The criteria described in Table 1 were established by the American Psychiatric Association to diagnose drug dependency and the severity of the dependence. These criteria paint a picture of an individual whose drug-using behavior is out of control: the individual uses larger amounts of the drug while enjoying the drug experience less. Because the user is unable to reduce or discontinue use and behavior associated with procuring, preparing, or being intoxicated, drug use consumes increasing amounts of the individual's life. Once the individual seeks treatment for dependence, the distinction between physiological and psychological dependence becomes irrelevant: physiological dependence becomes merely one factor in the diagnosis of psychoactive substance dependence.⁸¹

c. Mechanisms of Dependence

The level and severity of cocaine dependence is affected by two factors: route of administration and drug tolerance.

i. Route of Administration

As stated earlier, cocaine, regardless of how it is administered (injection, inhalation, nasal insufflation, or ingestion), produces the same type of psychotropic effects but with different levels of immediacy, intensity, and duration. Because of its relationship with immediacy, intensity, and duration, the route of administration plays an important role in determining the likelihood that use will lead to dependence and abuse.⁸² First, the intensity of the psychotropic effects is greater for those methods of administration that deliver the drug most rapidly to the brain. Consequently, routes of administration that result in the most rapid increases in blood concentration will provide the maximum levels of psychotropic effects.⁸³

⁷⁹ Gawin and Ellinwood, *supra* note 62.

⁸⁰ American Psychiatric Association, *supra* note 71.

⁸¹ *Id.*

⁸² Foltin and Fischman, *supra* note 33; Foltin and Fischman, *supra* note 55; Perez-Reyes, *et al.*, *supra* note 24.

⁸³ Foltin and Fischman, *supra* note 33; Gawin and Ellinwood, *supra* note 62; Javaid, *et al.*, *supra* note 33; Jeffcoat, *et al.*, *supra* note 43; Wesson and Washburn, *supra* note 25.

Table 1

CRITERIA FOR DIAGNOSING DRUG DEPENDENCE

CRITERIA	
<p>In order for drug dependence to be diagnosed, at least three of the following criteria must be met for a period of at least one month.</p> <ul style="list-style-type: none"> • Substance taken in larger amounts over a longer period than originally intended • Substance used to relieve or avoid stress (not applicable to cannabis, hallucinogenics, or PCP). • One or more unsuccessful attempt to cut down or to control substance use or a persistent desire to do so. • Considerable time spent in activities necessary to obtain the substance, using the substance, or recovering from its effects. • Symptoms of intoxication or withdrawal occur when expected to fulfill major obligations at work, school, or home. • Important activities or obligations are reduced or unmet due to substance use. • Continued substance use despite knowledge that a persistent or recurrent social, psychological, or physical problem is related to use of the substance. • Marked tolerance with increased amount of the substance (at least 50%) to achieve intoxication or desired effect; markedly diminished effect with use of the same amount of the substance. • Substance use to relieve or avoid withdrawal symptoms. 	
CRITERIA FOR SEVERITY	
Mild	Few, if any, symptoms in excess of those required to make the diagnosis, and the symptoms result in no more than mild impairment in occupational functioning or in the usual social activities with others.
Moderate	Symptoms or functional impairment between "Mild" and "Severe."
Severe	Many symptoms in excess of those required to make the diagnosis and the symptoms markedly interfere with occupational functioning or with usual social activities or relationships with others.

SOURCE: Diagnostic and Statistical Manual of Mental Disorders: DSM-III-R (1987).

Second, the duration of the effect is inversely related to its intensity: methods of administration that bring about the most intense effects also will have the shortest durations.⁸⁴ Consequently, routes of cocaine administration that result in more rapid increases in the blood's drug concentration – such as injection and inhalation – are more likely to lead to drug dependence. For the injection and inhalation administration methods, cocaine's effects are quick in onset, short-acting, and carry a greater likelihood that the user will administer the drug more frequently (*e.g.*, daily or more often). Inhalation also carries a greater likelihood that users will administer the drug in binges. For the insufflation or ingestion administration methods, the cocaine effects are slow in onset, longer acting, and less likely to involve administering the drug frequently (*e.g.*, daily or more often) or in bingeing episodes.

ii. Drug Tolerance

Drug tolerance is the process by which the effectiveness of a drug diminishes over time such that increasing doses are necessary to achieve effects comparable to prior doses. Acute tolerance is defined as a change in responsiveness to a drug's effects in the short-term, even within the course of a single dose.⁸⁵ Cocaine's physiological and psychotropic effects dissipate quickly, but the drug continues to be present in the bloodstream after the effects are no longer being experienced. Therefore, acute tolerance to the physiological and psychotropic effects of cocaine develops rapidly.⁸⁶ When tolerance occurs, users need increasing amounts of the drug to achieve comparable levels of physical and psychological euphoria. Consistent with the development of drug tolerance, experienced users are often able to administer doses that would otherwise be fatal to a first-time user.⁸⁷

E. SUMMARY

Table 2 summarizes the discussion in this chapter, comparing the various characteristics of powder cocaine and cocaine base.

⁸⁴ Ambre, *et al.*, *supra* note 37.

⁸⁵ *Id.*

⁸⁶ M. Chow, J. Ambre, T. Atkinson, D. Banshen, and M. Fischman, "Kinetics of Cocaine Distribution, Elimination, and Chronotropic Effects," 38 Clinical Pharmacology and Therapeutics 318-324 (1985).

⁸⁷ M. Fischman, "The Behavioral Pharmacology of Cocaine in Humans," 50 National Institute on Drug Abuse Research Monograph Series 71-91 (1984).

Table 2

COMPARISON OF POWDER COCAINE AND CRACK COCAINE

	Powder Cocaine	Crack Cocaine*
Source	Coca plant	Coca plant
Active Ingredient	Cocaine	Cocaine
Administration	Injection Insufflation ("snorting") Ingestion	Inhalation (smoking)
Time until entry into bloodstream	Injection: 0 seconds Insufflation: 5 minutes Ingestion: 30 minutes	9.5 seconds
Time until entry into brain	Injection: 4 minutes Insufflation: 5 minutes Ingestion: 30 minutes	19 seconds
Time to maximum physiological effect	Injection: 10 minutes Insufflation: 40 minutes Ingestion: 60 minutes	2 minutes
Time to maximum psychotropic effect	Injection: 4 minutes Insufflation: 20 minutes Ingestion: 60 minutes	1 minute
Duration of effect	Injection: 30 minutes Insufflation: 60 minutes Ingestion: 60 minutes	30 minutes
Type of addiction	Psychological	Psychological
Risk of addiction	Yes	Yes
Aberrant behavior and psychoses	Yes	Yes
Poly-drug use	Yes. Most cocaine-related medical emergencies involve alcohol abuse; most cocaine-related deaths result from combination abuse with opiates or alcohol	Yes. Most cocaine-related medical emergencies involve alcohol abuse; most cocaine-related deaths result from combination abuse with opiates or alcohol

*These characteristics of crack cocaine smoking also apply to other forms of cocaine base which are inhaled, including coca paste and freebase cocaine.

Chapter 3

COCAINE USE AND PUBLIC HEALTH ISSUES

A. INTRODUCTION

Although the vast majority of Americans do not use illegal drugs, their use by a small minority affects the public health of the United States in many ways. This chapter focuses on cocaine use and its public health impact on the national community. The chapter analyzes both the impact of cocaine generally, and, where possible, the different impacts of powder and crack cocaine specifically. Section B examines current use data, including demographic information indicating use trends by such factors as gender, age, and race, through the findings of four separate national data collection efforts monitoring cocaine use. Section C examines various health effects of cocaine use, including the link between cocaine use and sexually transmitted and other diseases and the effects of cocaine use during and following pregnancy. Section D surveys other social problems affected by cocaine use, including the impact of cocaine use on social institutions and the workplace, and the connection between cocaine and domestic violence. Finally, Section E examines the availability of treatment for cocaine users.

B. TRENDS IN COCAINE USE IN THE UNITED STATES

The federal government funds several major data collection efforts to measure the prevalence of drug use across the nation. Each of these efforts taps a different data source for information on a specific population subgroup. No single dataset is currently available to provide precise national estimates of either casual or heavy drug use or precise demographic breakdown of users. When these separate data sources are examined collectively, however, a broad view of cocaine use in the United States emerges.

It is important to note that the data presented here relate to cocaine *users* and not cocaine *traffickers*. There is little statistical data on the overall numbers or demographic breakdown of cocaine traffickers. The information that is available on cocaine traffickers is discussed in Chapters 4 and 7.

Drug use statistics from four data sources are presented here:

- The National Household Survey on Drug Abuse (NHSDA);
- The Drug Use Forecasting Program (DUF);
- The Drug Abuse Warning Network (DAWN): Hospital Data; and
- The Drug Abuse Warning Network (DAWN): Medical Examiner Data.

Table 3 describes the characteristics of these data sources including the limitations on their application to drug use analyses.

1. Drug Use Among the Household Population

The National Institute on Drug Abuse (NIDA) has annually conducted the National Household Survey on Drug Abuse (NHSDA). This self-report survey produces estimates of drug use among household members aged 12 years and older in the contiguous United States. One of the NHSDA's limitations is its omission of the homeless, prisoners, and those in residential drug treatment.

a. General Prevalences

Data from the 1991 NHSDA indicate that while most people reported they have never used cocaine, 11.5 percent of the population reported using it at least once during their lifetime, 3.0 percent reported using it at least once in the past year, and 0.9 percent reported using it in the past month.¹ National trend data from the NHSDA indicate that recent cocaine use (*i.e.*, use at least once during the previous year) peaked at 6.0 percent between 1985 and 1988 and has declined since.² In 1988, 4.1 percent of the population were using cocaine at least once during the survey year, compared to 3.0 percent in 1992. Similarly, monthly use of cocaine has declined since 1988. In that year, the NHSDA estimated that 1.5 percent of the population were using cocaine at least once in the past month, compared to 0.6 percent in 1992.

For four years since 1988, the NHSDA has asked about the use of crack separately from general cocaine use. Trends in the use by the general population of the two forms of cocaine are shown in Figure 5. While use of all cocaine has declined, the use of crack has remained relatively stable. The data indicate that 0.5 percent of the population were using crack at least once a year during 1988, compared with 0.4 percent in 1992. From 1988 through 1992, NHSDA reports no change in the monthly use of crack (0.2%).

¹ National Institute on Drug Abuse, National Household Survey on Drug Abuse: Main Findings 1991 58 (Table 4.4) (May 1993) (hereinafter "NHSDA:1991").

² *Id.* at 60 (Table 4.6).

Table 3

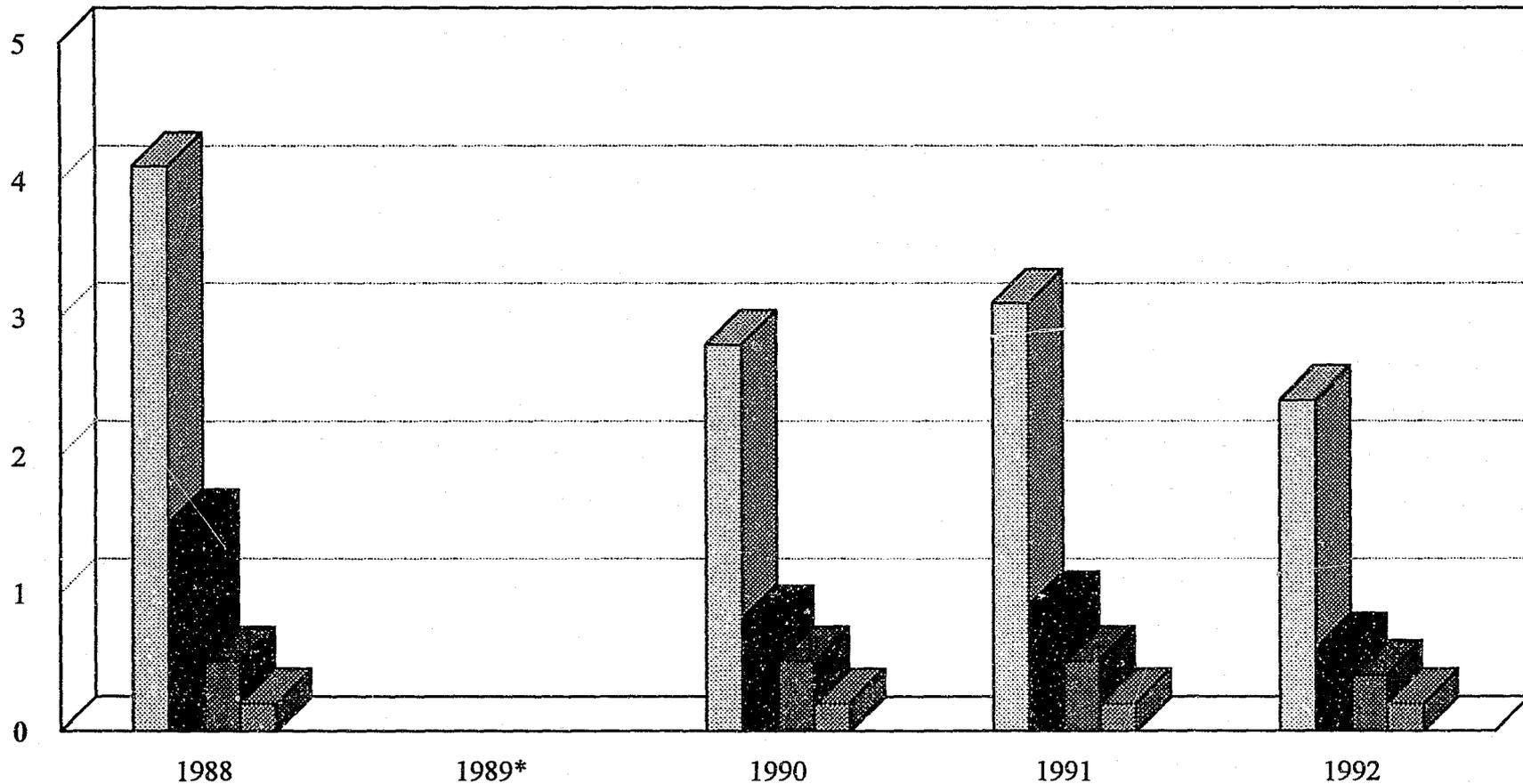
COMPARISON OF MAJOR DRUG ABUSE DATA SOURCES

	National Household Survey on Drug Abuse (NHSDA)	Drug Use Forecasting (DUF)	Hospital Emergency Room Data: DAWN	Medical Examiner Data: DAWN
Sponsor	National Institute on Drug Abuse/Substance Abuse & Mental Health Services Administration	National Institute of Justice	National Institute on Drug Abuse	National Institute on Drug Abuse
Frequency	Annual	On-going; reported annually	On-going; reported annually	On-going; reported annually
Population	Civilian non-institutionalized population aged 12 years and older within the United States, including non-institutionalized group quarters	Arrestees in 24 large cities	All episodes in which the hospital emergency room visit was directly related to the use of an illegal drug or the non-medical use of a legally available drug	Drug abuse episodes that result in death and are identified as drug-abuse related by the reporting agency
Format	Face-to-face interview with national random sample	Criminal justice administrative data collection	Administrative data from 503 hospitals in 27 metropolitan areas	Administrative data from 135 medical examiners in 21 metropolitan areas
Limitations	Omission of homeless, prisons, residential drug treatment facilities may underestimate national drug use	Includes only arrestees in large cities who voluntarily submit to testing	Counting of visits, not individuals, may overcount individuals; non-emergency hospital admissions excluded; data do not distinguish between crack cocaine and powder cocaine but do distinguish between routes of administration	Methods vary from toxicological analysis to circumstantial evidence; establishing a single drug as the cause of death is problematic in polydrug episodes; data on route of administration missing in 73 percent of cases

Figure 5

PERCENTAGE OF GENERAL POPULATION REPORTING COCAINE AND CRACK USE DURING PAST YEAR AND PAST MONTH, 1988 THROUGH 1992.

Percent



*1989 data are missing

Legend:
■ Cocaine Use Past Year
■ Cocaine Use Past Month
■ Crack Use Past Year
■ Crack Use Past Month

SOURCE: National Household Survey on Drug Abuse: Population Estimates 1992, 1991, 1990, 1988

According to the NHSDA report, crack cocaine use was most common among young and middle-aged adults, males, especially those who were Blacks, residents of metropolitan areas, those with less than a high school education, and the unemployed.³

Although the NHSDA data indicate that the number of casual users of all forms of cocaine has declined substantially, from 7.3 million in 1988 to 5.5 million in 1990, the same data indicate that the number of hard-core users has remained fairly constant. The NHSDA study estimated more than 2.1 million "heavy" cocaine users for 1991, a number that has changed little since 1988, and reported approximately 620,000 Americans (0.3%) using cocaine on a weekly basis.⁴ These findings suggest that little progress has been made in combating cocaine abuse within the hard-core user population.⁵

According to the NHSDA data, among those who used cocaine at least once in the past year, insufflation ("snorting") is the most common route of administration. A total of 76.0 percent of such cocaine users snort cocaine, while 27.9 percent smoke cocaine. About equal percentages (10.8% and 10.5%, respectively) either ingest or intravenously inject cocaine.⁶ Figure 6 details the NHSDA data on prevalence of the various routes of administration of cocaine.

b. Age and Trends in Cocaine Use

The rates of those who reported using cocaine in any form during each of the survey years are consistently and significantly highest for individuals aged 18 to 25 years, peaking in 1979. Since 1985, the data indicate a steady decline in use across all age groups.⁷ Figure 7 demonstrates rates of use in the survey years by age group.

The NHSDA reports that crack cocaine is most popular among young adults ages 18-25. However, of those who used cocaine in the past year, a higher proportion of 12- to 17-year-olds used

³ *Id.*

⁴ In fact, this number has remained fairly constant since 1985. *Id.* at 40, 60.

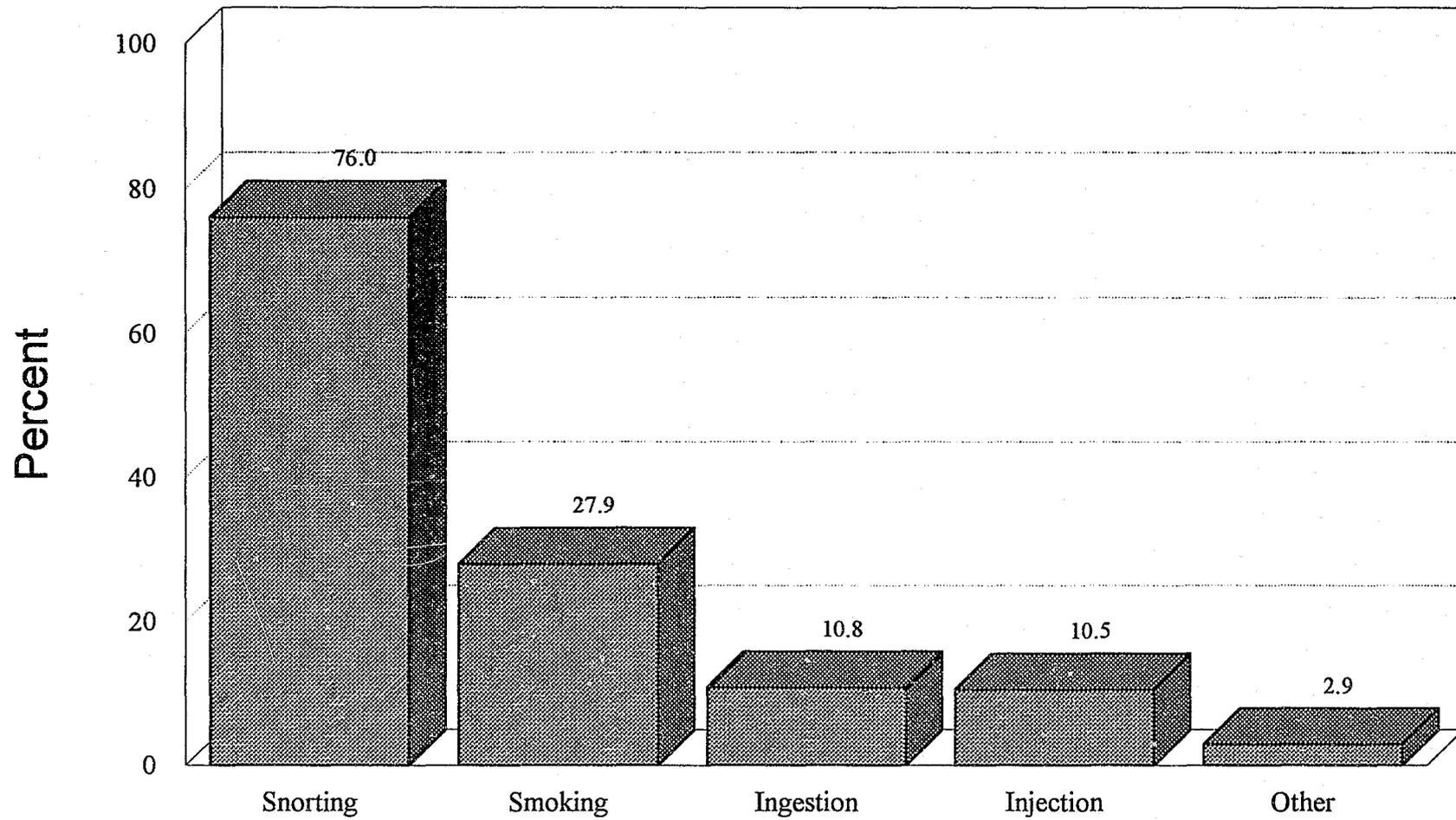
⁵ See e.g., D. Hunt and W. Rhodes, Office of National Drug Control Policy, Characteristics of Heavy Cocaine Users Including Polydrug Use, Criminal Activity, and Health Risks (Dec. 1992).

⁶ NHSDA: 1991, *supra* note 1, at 61 (Table 4.7). Data on routes of administration reflect that some number of respondents reported using more than a single route of administration during the survey year.

⁷ *Id.* at 27 (Table 2.7).

Figure 6

ROUTES OF COCAINE ADMINISTRATION

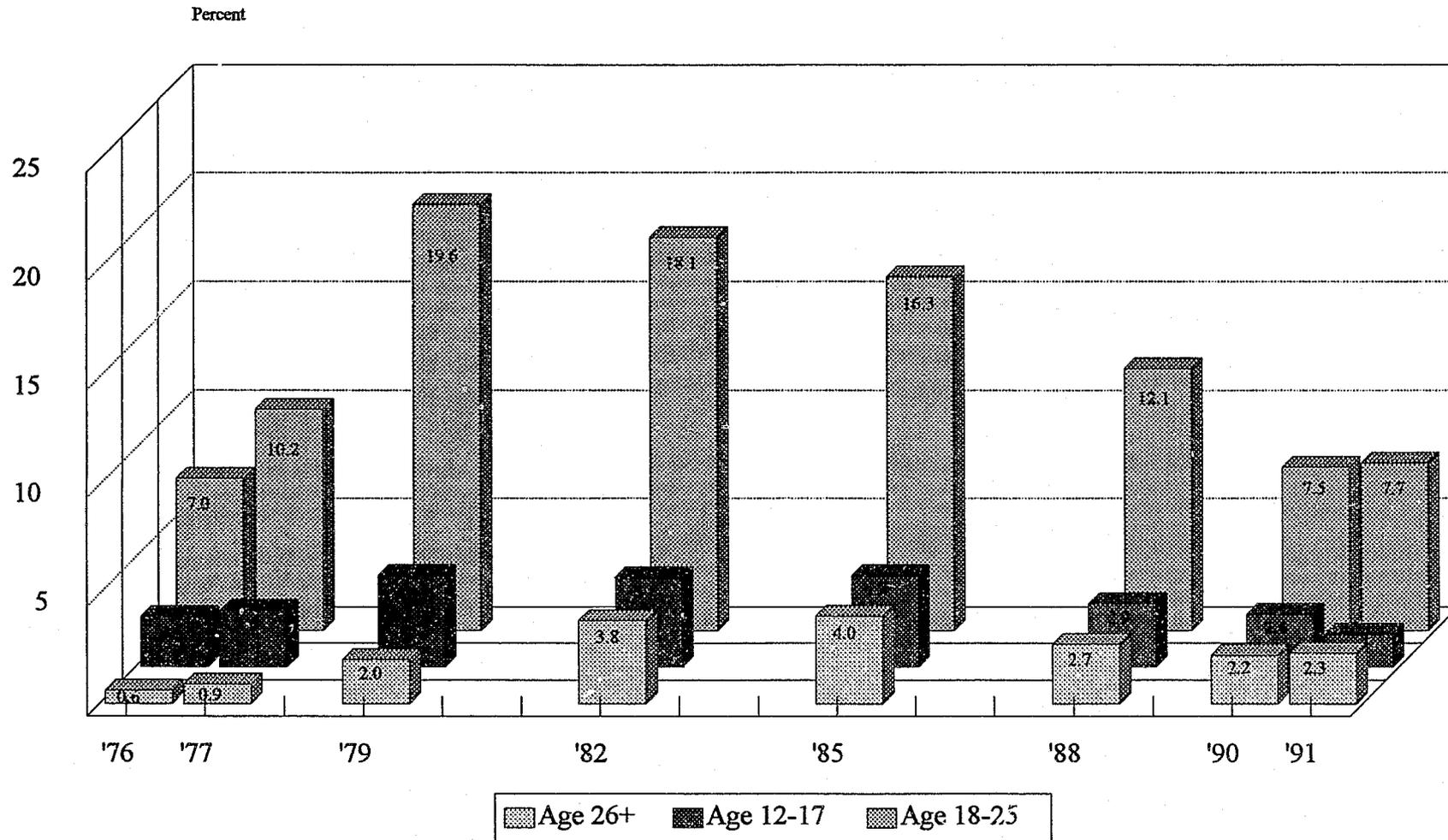


NOTE: Multiple responses; sum of percentages exceeds 100%.

SOURCE: NIDA National Household Survey on Drug Abuse 1991.

Figure 7

**PERCENT REPORTING COCAINE USE IN THE PAST YEAR
BY AGE CATEGORY: 1976 THROUGH 1991**



SOURCE: NIDA National Household Survey on Drug Abuse 1991.

crack (26.7%) compared to 18- to 25-year olds (13.0%), 26- to 34-year-olds (15.7%), or 35 years and older (21.4%).⁸

In addition to the NHSDA, NIDA conducts an annual survey of drug use among high schoolers. That survey also has shown a decline in both powder and crack cocaine use since 1986 (the first year the survey included questions on crack cocaine use). In 1986, 12.7 percent of twelfth graders reported using cocaine (of any kind) at least once in the reporting year. In 1994, 3.6 percent reported using cocaine in the reporting year. Similarly, in 1986, 4.1 percent of twelfth graders reported using crack cocaine at least once in the reporting year versus 1.9 percent in 1994. It is worth noting that in the last year (between 1993 and 1994) there was a slight increase in both crack and powder cocaine use among young people (a 0.4% increase for crack and a 0.3% increase for powder)⁹

The high schooler survey also provides trend data on the occasional use of cocaine and crack by young adults. Among young adults NHSDA data indicate a decline in the use of both of these drugs. From 1987 through 1993, there was a 71 percent (13.6% to 3.9%) decrease in the proportion of young adults reporting the use of cocaine within the past year. Also declining substantially were the proportion of young adults reporting cocaine use within the past 30 days, which decreased by 77% (4.8% to 1.1%) between 1987 and 1993. During this period, the data show a 58 percent drop in the proportion of young adults that used crack at least once in the past year. From 1987 to 1990, the proportion of young adults reporting crack use within the past month decreased 60 percent (1.0% to 0.4%). However, from 1990 through 1993, the percentage of young adults reporting crack use within the past month remained constant.

c. Race and Trends in Cocaine Use

Public opinion tends to associate the country's drug crisis, specifically its perceived "crack problem," with Black, innercity neighborhoods.¹⁰ The NHSDA found that cocaine in any form was used by 2.8 percent of Whites, 3.9 percent of Blacks, and 3.8 percent of Hispanics in the survey population during the 1991 reporting year.¹¹ Because Blacks and Hispanics comprise significantly smaller percentages of the total population, the majority of those reporting cocaine use were White. The survey found that of those reporting cocaine use at least once in the reporting year, 75 percent were White, 15 percent Black, and 10 percent Hispanic. And of those reporting crack use at least

⁸ *Id.* at 56, 63 (figures derived from Tables 4.2 and 4.9).

⁹ National Institute on Drug Abuse, Monitoring the Future Study, (Table 3) (Dec. 1994).

¹⁰ M. Fullilove, "Perceptions and Misperceptions of Race and Drug Use," 269 Journal of the American Medical Association, 1034 (Feb. 24, 1993).

¹¹ NHSDA: 1991, *supra* 1, at 56.

once in the reporting year, 52 percent were White, 38 percent were Black, and 10 percent were Hispanic. (Thus, within racial categories, 0.3% of Whites, 1.5% of Blacks, and 0.6% of Hispanics reported crack cocaine use at least once in the reporting year.)

The survey found that of those reporting any form of cocaine use at least once in their lifetime, 82 percent were White, 10 percent Black, and 8 percent Hispanic (within racial categories, 11.8% of Whites, 11.2% of Blacks, and 11.1% of Hispanics reported some form of cocaine use in their lifetime). Of those reporting crack cocaine use at least once in their lifetime, 65 percent were White, 26 percent Black, and 9 percent Hispanic (within racial categories, 0.3% of Whites, 1.5% of Blacks, and 0.6% of Hispanics).¹² Because so few report crack use in the past month, NIDA does not publish a racial breakdown of those figures.¹³ Percentages of use by race have shifted somewhat over time, but percentages of all races using cocaine have steadily declined since 1985.¹⁴

A significant limitation on the observations that may be made from data on race and cocaine use trends is that race is highly correlated with place of residence, and neighborhood-level social and environmental conditions are significant factors driving drug abuse. Also, as will be discussed in Chapter 4, the ability to distribute crack cocaine in single-dose amounts makes crack cocaine more marketable in lower-income neighborhoods than powder cocaine, sold only in larger, more expensive quantities.

A recent study reanalyzed NHSDA data using neighborhood and social condition explanatory factors. The analysis found that crack cocaine smoking did not depend strongly on the race of the individual, but instead on social conditions. The study noted that if factors such as drug availability and social conditions are held constant, the odds of crack cocaine use within a population do not differ significantly by race/ethnicity.¹⁵ Consistent with this, a study in the Miami, Florida metropolitan area, which recruited a street-based sample of 350 cocaine users, found few differences in level of crack use among participants aged 13-29 years based on the race of the individual. With the exception of one sub-group (Hispanics aged 20-29 years), more than 90 percent of participants reported that crack was the primary form of cocaine used, regardless of race. The authors also report that among older cocaine users (aged 30-49 years), Whites are more likely to

¹² See, e.g., S. Belenko, Crack and the Evolution of Anti-Drug Policy (1993).

¹³ *Id.* at 49-50. Of Blacks using cocaine, more than twice as many reported using powder cocaine than using crack cocaine.

¹⁴ NHSDA:1991, *supra* note 1.

¹⁵ M. Lillie-Blanton, J. Anthony, and C. Schuster, "Probing the Meaning of Racial/Ethnic Group Comparisons in Crack Cocaine Smoking," 269 Journal of the American Medical Association 993, 996 (Feb. 24, 1993).

report crack as the primary form of cocaine used and Blacks are least likely to use crack as their primary form of cocaine ingestion.¹⁶

d. Other Demographic Trends in Cocaine Use

Metropolitan Areas. The NHSDA data indicate that the highest rates of cocaine use were reported in large metropolitan areas. Of those surveyed from large metropolitan populations, 3.4 percent reported using cocaine in the past year, compared with 3.0 percent of those from smaller metropolitan populations and 2.3 percent of those from non-metropolitan populations.¹⁷

Gender. The 1992 NHSDA indicates that 3.2 percent of males reported using cocaine at least once in the past year, compared to 1.7 percent of women.¹⁸ In 1991, the rate of males using cocaine in the past year (4.1%) was more than twice that for females (2.0%).¹⁹ Since 1985, the rates of use for men have been roughly twice as high as the rates for women, although rates of use for both genders have consistently declined.

Employment. Of the people reporting cocaine use during the 1991 reporting year, 71.4 percent were employed.²⁰ However, the *rate* of use is higher for the unemployed. NIDA's 1991 survey indicates that 11.8 percent of unemployed persons used cocaine in the past year, compared to 3.2 percent of the employed.²¹

¹⁶ Lockwood, D., Pottieger, A., Inciardi, J. Crack Use, Crime by Crack Users, and Ethnicity. For publication in: Darnell F. Hawkins (ed) Ethnicity, Race and Crime, Suny Press, 1994. See also United States Sentencing Commission, Hearing on Crack Cocaine 73-75 (statement of Dr. Jerome H. Skolnick, Professor of Law at the University of California at Berkeley) for further support of this funding.

¹⁷ NHSDA: 1991, *supra* note 1, at 56 (Table 4.2).

¹⁸ National Institute on Drug Abuse, National Household Survey on Drug Abuse: Population Estimates 1992 115 (Table 21-A) (Oct. 1993) (hereinafter "1992 Population Estimates").

¹⁹ *Id.*

²⁰ NHSDA:1991, *supra* note 1 at 56 (Table 4.2) (this reflects an estimated 0.9 million adult employed cocaine users).

²¹ *Id.*

2. Drug Use Among the Arrestee Population

The Drug Use Forecasting (DUF) program collects data on drug use by arrestees but does not distinguish between crack and powder cocaine.²² As will be discussed in Chapter 6, various factors including the national drug enforcement strategy, local law enforcement training, priorities, and resources, and individual prosecutorial discretion affect police charging decisions. All of these factors affect the demographics of arrestees generally, and, thus, of arrestee populations sampled for DUF analysis.

The DUF 1993 Annual Report indicates that cocaine use among arrestees remains at high levels and continues to be the most prevalent drug used by arrestees in 1993. The percent of male arrestees testing positive for the use of cocaine range from a low of 19 percent in Omaha, Nebraska, (where 54% tested positive for any drug) to a high of 66 percent in Manhattan, New York (where 78% tested positive for any drug). The percent of female arrestees testing positive for cocaine ranged from a low of 19 percent in Indianapolis, Indiana (where 51 percent of female arrestees tested positive for any drug), to a high of 70 percent in Manhattan, New York (where 83% of female arrestees tested positive for any drug). Consistent with DUF findings since 1987, cocaine remains the most pervasive drug among both male and female arrestees.

3. Hospital Emergency Room Episodes

The Drug Abuse Warning Network (DAWN) gathers data on drug-related emergency room visits and medical examiner cases as reported from selected hospitals and medical examiners in specified metropolitan areas. DAWN data for 1992 indicate an upward trend in drug-related (any drug type) hospital emergency room visits since 1990, with an estimated 433,493 such visits in 1992.²³ Data demonstrate a similar trend in cocaine-related episodes, with the total increasing from one percent of all emergency room visits in 1978 to 27.6 percent in 1992. Cocaine ranked second only to alcohol in drug mentions.

The 119,843 cocaine-related episodes reported in 1992 represented an 18-percent increase from 1991. Cocaine-related emergency care was divided fairly equally among detoxification (25.7%), unexpected reaction (24.0%), and chronic effects of habitual use (19.5%).²⁴ The number

²² U.S. Department of Justice, Office of Justice Programs, National Institute of Justice, Drug Use Forecasting 1993 Annual Report (Nov. 1994). These data result from analysis of voluntary and anonymous urine samples collected at booking centers across the country.

²³ National Institute on Drug Abuse, Series 1, Number 12-A, Annual Emergency Room Data 1992 85 (Table 4.03) (Mar. 1994) (hereinafter "1992 Emergency Room Data"). Note that alcohol in combination with any other drug remains the largest component of emergency room drug episodes.

²⁴ *Id.* at 44 (Table 2.14).

of visits related either to unexpected reactions from cocaine or to its chronic effects increased by more than 50 percent since 1990. Cocaine-related emergencies were also sometimes associated with overdosing (13.6%).²⁵ In addition, between 1991 and 1992, cocaine mentions increased for almost every demographic subgroup.²⁶ In 1992, 57.7 percent of episodes involved Blacks, 26.6 percent involved Whites, and 9.9 percent involved Hispanics.²⁷

While cocaine-related episodes have risen, increased use of other drugs has contributed to the overall increase in emergency room episodes. Since 1990, heroin-related episodes have risen considerably: in 1992, the 48,003 mentions represent a 34-percent increase compared to the previous year.²⁸ Between 1990 and 1992, the number of heroin-related emergency room episodes more than doubled in Boston, Baltimore, and New York City.²⁹ Marijuana- and hashish-related episodes are at their highest levels since 1988 and reflect a 48-percent increase between 1991 and 1992. PCP has received increased mentions as well.³⁰

In addition to information on reasons for seeking emergency care, the DAWN Emergency Room Data examine motives for drug use by those who sought emergency room care. Of those reporting use due to drug dependence or for recreational purposes, 64.6 percent reported dependence on cocaine and 12.5 percent reported recreational use of cocaine.³¹ Although alcohol (30.9%) remains the most frequently mentioned drug used in combination with other drugs, cocaine (25.7%) ranks a close second.³²

DAWN does not distinguish between crack cocaine and powder cocaine; however, information on route of administration is a proxy for distinguishing between the two forms of cocaine. Injection or snorting involves only powder cocaine; smoking (inhalation) is most likely to involve crack cocaine, although it could involve "freebasing" powder cocaine (*see* Chapter 2 for a further discussion of routes of cocaine administration). For cases in which information on the

²⁵ *Id.* at 44 (Table 2.14). Information on reason for emergency room visit was missing for 15.3 percent of cocaine drug abuse mentions.

²⁶ *Id.* at 41 (Table 2.11).

²⁷ *Id.*

²⁸ *Id.* at 85 (Table 4.03).

²⁹ *Id.* at 88 (Table 4.05b).

³⁰ *Id.* at 85 (Table 4.03).

³¹ *Id.* at 43 (Table 2.13). For drug-use motive, 13.8 percent of the information on cocaine mentions is missing.

³² *Id.* at 49 (Table 2.19).

route of administration was available, DAWN reported that 38.2 percent of emergency room admissions involved smoking; 17.5 percent involved injection; and 11.3 percent involved snorting.³³ In 30 percent of the cases, the route of administration was unavailable.³⁴ These data indicate that most cocaine-related hospital emergencies involve the two most rapid routes of cocaine administration – inhalation and injection – but that episodes involving smoking are two times higher than those involving injection. Figure 8 illustrates DAWN data on cocaine-related emergencies by the primary reported route of cocaine administration.³⁵

The emergency room data indicate significant increases in cocaine-related visits, and the DAWN report provides three possible hypotheses for the increases. First, the DAWN report posits that higher purity levels may account for the increase in emergency room visits. The Drug Enforcement Administration reports that the average purity of an ounce of powder cocaine increased from 58 percent in 1990 to 74 percent in 1992. During that time, the number of cocaine-related emergency room visits attributed to overdose increased by 47 percent.³⁶

Second, changes in patterns of use, such as route of administration or dosage amount, may impact on the number of emergency room visits. For example, DAWN posits that the emergence of crack smoking in the mid-1980s may be responsible for the increase in cocaine mentions. DAWN data presented in Figure 8 illustrate that smoking was the most common administration route for cocaine-related hospital emergencies.

Finally, reports of an increase in the rate of polydrug use may account for the change. Past DAWN reports indicate that cocaine users, in general, are more likely to be polydrug users than are users of other drugs.³⁷ As mentioned in Chapter 2, polydrug use – the concurrent use of two or more drugs – significantly increases the risk of injury or death. For example, in 1992, 60.0 percent of cocaine-related emergency room admissions³⁸ and 73.2 percent of all cocaine-related deaths involved at least one other drug.³⁹

³³ *Id.* at 47 (Table 2.17).

³⁴ *Id.*

³⁵ Figure 8 also arrays cocaine death data by route of administration.

³⁶ 1992 Emergency Room Data, *supra* note 23, at 45.

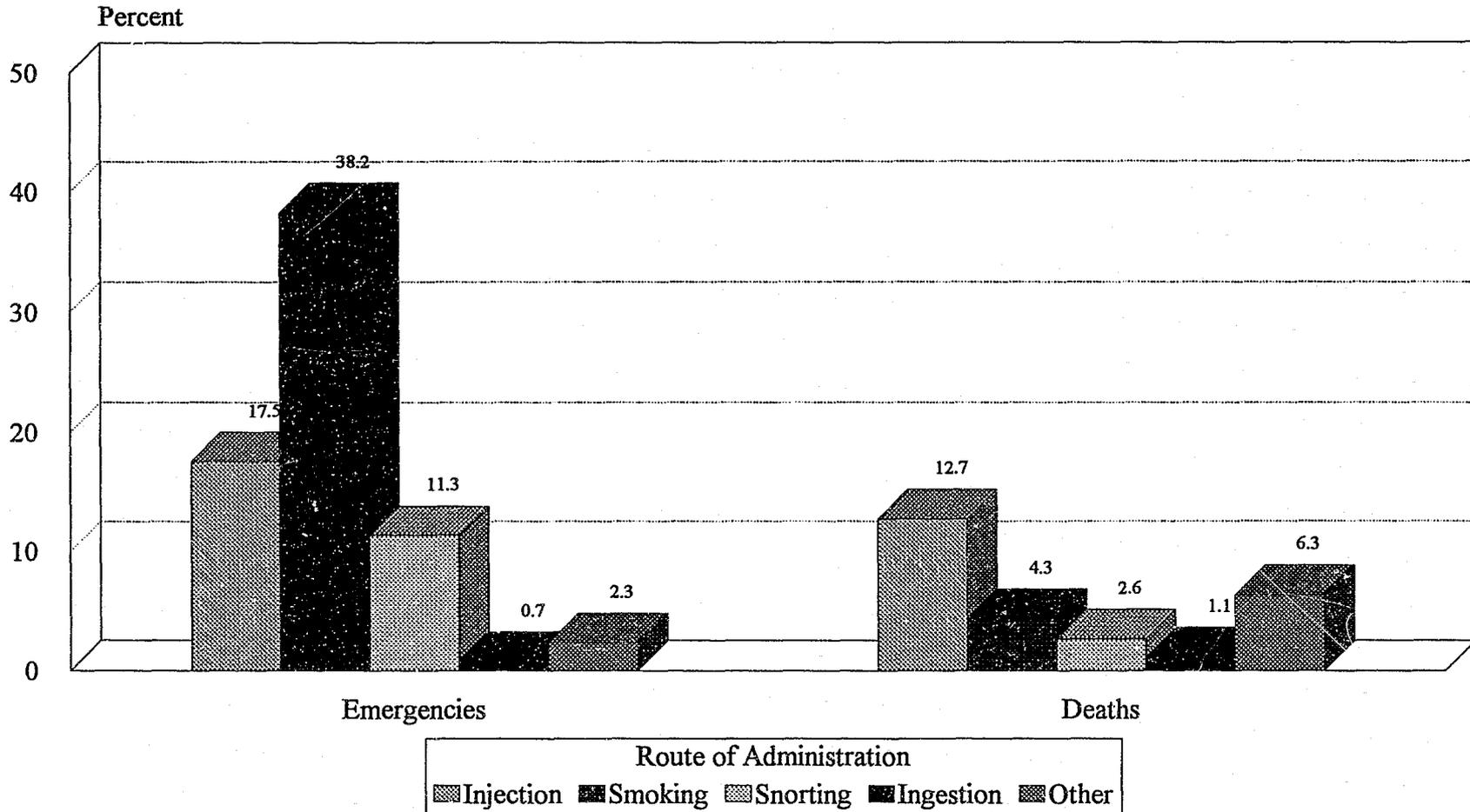
³⁷ *Id.* at 49 (Table 2.19).

³⁸ *Id.*

³⁹ National Institute on Drug Abuse, 1992 Medical Examiner Data 31 (Table 2.17) (1994) (hereinafter "1992 Medical Examiner Data").

Figure 8

**COCAINE-RELATED EMERGENCIES AND DEATHS
BY ROUTE OF ADMINISTRATION, 1991**



Note: Missing 30.0% of data for Emergencies and 73.0% for Deaths.

SOURCE: NIDA Drug Abuse Warning Network (DAWN).

Consistent with the increased toxicity of concurrently administered cocaine and alcohol,⁴⁰ medical emergencies are most likely when the drug used with cocaine is alcohol. Their concurrent use accounted for 40.8 percent of cocaine-related emergency room admissions.⁴¹ Concurrent use of cocaine and heroin is the second most likely cause of cocaine-related emergency room admissions (12.7%).⁴²

4. Medical Examiner Reports

DAWN gathers data on the number of deaths related to drug use. In 1991, 135 medical examiners in 21 metropolitan areas reported a total of 7,532 deaths that involved drug overdoses or in which drug abuse was a contributing factor.⁴³

Consistent with the research discussed above, 74.5 percent of drug-related deaths involved polydrug use.⁴⁴ Among cocaine-related deaths, concurrent use with alcohol was the most deadly combination. The cocaine/alcohol combination was involved in 37.1 percent of cocaine-related deaths,⁴⁵ followed closely by opiates and heroin, involved in 29.5 percent of deaths.⁴⁶

In total, 45.8 percent of the drug-related deaths involved cocaine (either alone or in combination with another drug).⁴⁷ The number of drug-related deaths involving cocaine increased 20 percent between 1990 and 1991.⁴⁸ As shown in Figure 8, the most frequent route of

⁴⁰ Concurrent use of cocaine and alcohol results in the body's manufacture of cocaethylene, a pharmacologically active metabolite that stimulates the cardiovascular system and produces the same feelings of euphoria as cocaine. The effects of cocaethylene are similar to – but more intense, longer-lasting, and more toxic – than those of cocaine alone. W. Hearn, S. Rose, J. Wagner, A. Ciareglio and D. Mash, "Cocaethylene is More Potent than Cocaine in Mediating Lethality," 39 *Pharmacology and Biochemistry and Behavior* 531-533 (1991).

⁴¹ 1992 Emergency Room Data, *supra* note 23, at 51 (Table 2.21).

⁴² *Id.*

⁴³ 1992 Medical Examiner Data, *supra* note 39, at 11 (Table 2.01). These data do not include deaths involving AIDS, homicide-related drug abuse deaths, or cases for which the drug used was unknown.

⁴⁴ *Id.* at 13 (Table 2.03).

⁴⁵ 1992 Medical Examiner Data, *supra* note 39, at 33 (Table 2.19).

⁴⁶ *Id.*

⁴⁷ Cocaine was the most frequently mentioned substance (46.0% of total episodes) among all drug-related deaths. The next most frequently mentioned substances were alcohol in combination with other drugs (34.1%) and heroin/morphine (38.7%). *Id.* at 16 (Table 2.06a).

administration for cocaine-related deaths was injection (12.7%).⁴⁹ Cocaine-related deaths have been associated most commonly with respiratory failure, acute increase in blood pressure, rupture of a weak cerebral blood vessel, and major convulsive seizures.⁵⁰

For the medical examiner data, cocaine was the drug most frequently mentioned for all age groups, for both sexes, and for two of the three racial categories: Blacks and Hispanics. The data show 43.5 percent of all mentions involved Blacks, 39.1 percent involved Whites, and 15.9 percent involved Hispanics.⁵¹ Cocaine ranked third in frequency for Whites, behind alcohol in combination with another drug and heroin/morphine.⁵²

5. Combined Results for NHSDA, DUF, and DAWN

The data outlined above measure different aspects of the drug abuse problem and reflect patterns among different populations. A study conducted in 1992 for the Office of National Drug Control Policy combined results from NHSDA, DUF, and DAWN, along with several other reports, to estimate the number of heavy cocaine users in the United States.⁵³ This study does not distinguish between powder cocaine and crack cocaine.

The study estimated that the casual use of all forms of cocaine has decreased since 1988, while the number of hard-core users has remained fairly constant.⁵⁴ The study estimated more than 2.1 million heavy cocaine users in 1991, a number that has changed little since 1988. However, the number of casual users declined substantially from 7.3 million in 1988 to 5.5 million in 1990.⁵⁵

⁴⁸ *Id.* at iv.

⁴⁹ *Id.* at 30 (Table 2.16). Note that for 73.0 percent of the medical examiner reports on cocaine-mention deaths, data on the route of administration were missing.

⁵⁰ *Id.*

⁵¹ *Id.* at 26 (Table 2.12).

⁵² *Id.* at 18-20. Route of administration and form of the drug were unavailable in most cases, making it impossible to determine how many of the deaths could be attributed to crack cocaine. Therefore, statistics for cocaine include all forms of the drug.

⁵³ Hunt and Rhodes, *supra* note 5.

⁵⁴ *Id.* at 6 (Table 1).

⁵⁵ *See, e.g.,* Hunt and Rhodes, *supra* note 5; NHSDA: 1991, *supra* note 1.

A study utilizing much of this same data, conducted by the Rand Foundation and released in 1994, similarly found that fewer Americans are now using cocaine than in the 1980s.⁵⁶ The report concluded, though, that total consumption has remained roughly constant, because of consumption by heavy users.⁵⁷ The report calculated that heavy users accounted for more than two-thirds of the total demand for cocaine in 1992, up from less than one-half in 1980.⁵⁸

C. COCAINE USE AND HEALTH EFFECTS

The use of illicit drugs, including all forms of cocaine, impacts the public health of the United States in many ways. This section examines various health effects of cocaine use, including the link between cocaine use and HIV infection, sexually transmitted diseases, and the effects of cocaine use during and following pregnancy.

1. Cocaine and Disease Transmission

Cocaine use raises serious public health concerns about disease transmission due to the patterns of cocaine use, the commonly associated phenomenon of user binges, and the rise of "shooting galleries" (for powder cocaine) and "crack houses" (for crack cocaine). These concerns center on four major areas: 1) HIV and AIDS transmission; 2) other sexually transmitted diseases (STDs); 3) prostitution; and 4) other diseases.

a. Cocaine and HIV/AIDS Transmission

i. Intravenous Cocaine Injection

More than 30 percent of individuals with Acquired Immunodeficiency Syndrome (AIDS) are abusers of intravenous (IV) drugs. Thousands of other IV drug abusers carry the Human Immunodeficiency Virus (HIV), the virus that causes AIDS.⁵⁹ Intravenous drug users who share

⁵⁶ S. Everingham and C. Rydell, Drug Policy Research Center, Modeling the Demand for Cocaine 27 (Figure 3.8) (RAND) (1994).

⁵⁷ *Id.* at 15-18. Heavy users were defined in the study as those using cocaine at least once a week.

⁵⁸ *Id.*

⁵⁹ G. Pratsinak and R. Alexander (Eds.), Understanding Substance Abuse and Treatment 157 (1992).

needles, syringes, or other drug equipment (such as drug-injection cookers or cotton balls) can exchange small amounts of blood on these articles and transmit the virus.⁶⁰

The spread of the AIDS virus is positively associated with IV drug injection.⁶¹ In the prototypical "shooting gallery" environment, drug injection equipment is passed from one user to another, producing an increased risk for the transmission of the HIV virus.⁶² In addition, IV cocaine use is believed to present a higher risk of HIV infection than do the use of heroin or other IV drugs because of the relatively short-lived euphoria of cocaine (*i.e.*, cocaine injectors are more likely to reinject frequently to sustain the drug high than are abusers who inject other illicit drugs such as heroin).⁶³ Consequently, cocaine injectors who frequent "shooting galleries" are at the greatest risk.

ii. Sexual Transmission

Drug use has been associated with an increased risk of HIV transmission through the high-risk sexual activity of users.⁶⁴ Compared to powder cocaine injectors, crack cocaine smokers exhibit more high-risk sexual behaviors, including multiple sexual partners, sex without condoms or other barriers, and sexual activity during or following drug use.⁶⁵ Whether crack cocaine is the cause of this association cannot be determined due to limitations in the available data. The relationship between crack cocaine smoking and high-risk sexual behavior holds across demographic and lifestyle groups.⁶⁶ Another factor increasing the risk of HIV infection among crack cocaine users concerns "sex for crack," where an individual exchanges sex for a dose of crack cocaine.⁶⁷ Although the practice of trading sex to support a drug habit is not unique to crack cocaine – between one-

⁶⁰ D. Longshore and M. Anglin, HIV Transmission and Risk Behavior among Drug Users in Los Angeles County 1991 Update (1991).

⁶¹ *Id.*

⁶² M. Wallace, M. Galanter, H. Lifshutz, and K. Krasinski, "Women at High Risk of HIV Infection from Drug Use," 12 Journal of Addictive Diseases 83 (1993).

⁶³ "New Evidence Links Cocaine Use and HIV," 30 Journal of Psychosocial Nursing 45 (1992).

⁶⁴ Belenko, *supra* note 12, at 41 (1993).

⁶⁵ R. Booth, J. Watters, and D. Chitwood, "HIV Risk-Related Sex Behaviors among Injection Drug Users, Crack Smokers, and Injection Drug Users Who Smoke Crack," 83 American Journal of Public Health 1146-1147 (1993). *See also*, B. Edlin, M.D., *et al.*, "Intersecting Epidemics – Crack Cocaine Use and HIV Infection Among Inner-City Young Adults," The New England Journal of Medicine 1422 (Nov. 24, 1994).

⁶⁶ Longshore and Anglin, *supra* note 60, at 37.

⁶⁷ U.S. General Accounting Office, The Crack Cocaine Epidemic: Health Consequences and Treatment 20 (Jan. 1991).

quarter and one-third of all drug users have traded sex either for drugs or for the money to buy drugs⁶⁸ – this practice is common in "crack houses" that sell the drug and provide a location for its use. Consequently, rates of HIV infection are nearly equal between crack cocaine smokers who are at greater risk due to high-risk sexual practices and powder cocaine injectors who are at greater risk because of the potential for infection from shared injection equipment.⁶⁹

Drug-related increases in HIV/AIDS transmission are not solely limited to the drug users themselves. For example, an increasing percentage (34% in 1991, up from 29% in 1986) of new female AIDS cases links transmission to heterosexual contact with high-risk partners.⁷⁰

b. Cocaine and Other Sexually Transmitted Diseases

The same high-risk sexual behaviors that increase the likelihood of HIV transmission among crack cocaine smokers also increase the risk of sexually transmitted diseases (STDs) such as gonorrhea, herpes, and syphilis. The nationwide increase in syphilis in the late 1980s paralleled the growth in crack cocaine use. In some areas, the increase was concentrated among powder cocaine and crack cocaine users as well as prostitutes. Cases of penicillin-resistant gonorrhea also rose, with the new cases occurring in greater numbers among young Blacks, prostitutes, persons in low-income neighborhoods, and drug abusers.⁷¹

Research indicates that crack cocaine users are significantly more likely to contract STDs than are intravenous powder cocaine users. For example, crack cocaine smokers were up to twice as likely as IV cocaine users to test positive for syphilis and gonorrhea.⁷²

Public health professionals report that it is difficult to contain the spread of syphilis within the high-risk populations of either cocaine users or prostitutes.⁷³ The difficulty is the ineffectiveness of established public health procedures for identifying and notifying sexual partners. Within the sexually active populations of crack cocaine smokers, including prostitutes and those who exchange

⁶⁸ Longshore and Anglin, *supra* note 60, at 28.

⁶⁹ Booth *et al.*, *supra* note 65, at 1147.

⁷⁰ T. Ellerbrock, S. Lieb, P. Harrington, T. Bush, S. Schoenfisch, M. Oxtoby, J. Howell, M. Rogers and J. Witte, "Heterosexually Transmitted Human Immunodeficiency Virus Infection Among Pregnant Women in a Rural Florida Community," 327 New England Journal of Medicine 1704 (Dec. 10, 1992).

⁷¹ U.S. General Accounting Office, *supra* note 67, at 20-21.

⁷² Booth *et al.*, *supra* note 65, at 1146.

⁷³ J. Hibbs and R. Gunn, "Public Health Intervention in a Cocaine-Related Syphilis Outbreak," 81 American Journal of Public Health 1259 (Oct. 1991).

sex specifically for crack (or for the money to acquire it), individuals are often unable or unwilling to provide information on the identity of their sexual partners or the location of crack houses.⁷⁴

Further, because members of these populations generally are not preventive health care consumers who receive regular medical attention, their infections are more likely to remain undiagnosed. Undiagnosed syphilis infections are spread easily. Public health officials are trying to develop alternative methods for case-finding to combat the crack-related spread of sexually transmitted disease.⁷⁵

Finally, an increase in the non-HIV STD rates can trigger an increase in HIV infection rates. For example, genital sores produced by syphilis can provide open wounds that facilitate HIV transmission during sexual contact.⁷⁶

c. Cocaine and Other Diseases

Disease spread among drug users is a continuing concern of public health practitioners. In addition to the spread of the HIV virus and sexually transmitted diseases, transmission of other major diseases has been associated with cocaine use. For example, viral hepatitis is a disease that can be transmitted in the same manner as HIV/AIDS.⁷⁷ Given the behavior profiles of IV cocaine abusers and crack smokers, users of either form of cocaine can be exposed.⁷⁸ Also, as compared to the general population, powder cocaine users are at greater risk of contracting pneumonia, and crack smokers are at greater risk of exhibiting bronchitis, chronic cough, and black sputum.⁷⁹

2. Cocaine-Exposed Infants and Children

Another area of concern cited by policymakers is the danger of maternal drug use on children. "Cocaine-exposed infants" are newborns who have been exposed to cocaine prior to birth. "Crack babies," a term widely used in the media, is misleading because of the inability to determine

⁷⁴ Centers for Disease Control, "Alternative Case-Finding Methods in a Crack-Related Syphilis Epidemic - Philadelphia," 40 Morbidity and Mortality Weekly Report 77 (Feb. 8, 1991).

⁷⁵ Centers for Disease Control, "Selective Screening to Augment Syphilis Case-Finding - Dallas, 1991," 42 Morbidity and Mortality Weekly Report 424 (June 11, 1993).

⁷⁶ U.S. General Accounting Office, *supra* note 67, at 21.

⁷⁷ N. Benowitz, "Clinical Pharmacology and Toxicology of Cocaine," 72 Pharmacology and Toxicology 9 (1993).

⁷⁸ G. Comer, M. Mittal, S. Donelson, and T. Lee, "Cluster of Fulminant Hepatitis B in Crack Users," 86 American Journal of Gastroenterology 331 (1991).

⁷⁹ M. Ellenhorn and D. Barceloux, Medical Toxicology: Diagnosis and Treatment of Homeless Persons (1988).

whether the fetus's prenatal exposure was due to crack cocaine or some other form of cocaine. While many health practitioners associate cocaine-exposed infants with crack cocaine use, it must be noted that exposure to either powder cocaine or crack cocaine prior to birth produces the same types of symptoms and problems for the infant. Many health practitioners have noted a significant increase in cocaine-exposed infants since crack cocaine use became widespread. Researchers and scientists do not distinguish between the two forms of cocaine, however, and results of perinatal cocaine exposure studies apply to all forms of cocaine.

In addition, when children of drug-addicted mothers develop poorly, it is difficult to pinpoint the precise root of the problem. Factors other than cocaine abuse that affect the physiological or behavioral development of a child are commonly seen among cocaine-abusing women, and their presence may confound the results of research on developmental effects.⁸⁰ These factors include poor nutrition, cigarette smoking, other drug use,⁸¹ lack of prenatal and postnatal care, and dysfunctional parenting. Each of these factors can cause many of the effects discussed below and limit the conclusions that can be drawn about the effects of cocaine exposure on infant and child development.

a. Incidence of Perinatal Drug Exposure

Existing data cannot estimate accurately the total number of *in utero* drug-exposed newborns due to several factors.⁸² First, most research to date has focused on urban hospitals and as such reflects only the general demographics of the country's urban areas. Therefore, results from these studies cannot be generalized to the population as a whole. Second, these studies rely on mothers' self-reporting (a scenario that presents obvious incentives to underreport drug use) or on urine screenings at hospital admission (which may detect very recent drug use but will fail to detect use earlier in pregnancy). Consequently, the prevalence of drug-exposed infants may be underestimated.⁸³

⁸⁰ J. Ellis, L. Byrd, W. Sexson and C. Patterson-Barnett, "In Utero Exposure to Cocaine: A Review," 86 Southern Medical Journal 725, 730 (July 1993). This document is an extensive review of available literature on the subject in which Ellis *et al.* summarize others' findings and draw some general conclusions based on the works they reviewed.

⁸¹ National Institute on Drug Abuse, "Developmental Effects of Prenatal Drug Exposure May Be Overcome," NIDA Notes (Jan./Feb. 1992).

⁸² National Institute on Drug Abuse, Maternal Drug Abuse and Drug Exposed Children: Understanding the Problem 12 (Sept. 1992). NIDA's National Pregnancy and Health Survey used a national probability sample covering approximately 5,000 hospital-delivering mothers in 106 hospitals. The hospitals screened the mothers for drug use upon admission and collected information on type of drug, frequency and duration of use, route of administration, doses consumed, infant status, and length of stay in the hospital.

Researchers using these limited data estimate that 7.5 to 17 percent of pregnant women use illicit drugs during their pregnancy, resulting in the births of 100,000 to 740,000 drug-exposed babies each year. A study of births in New York City reported that the proportion of birth certificates indicating maternal illicit substance abuse tripled between 1981 and 1987. Depending on the research, estimates of the number of cocaine-exposed babies born annually range from 30,000 to 160,000.⁸⁴ One study estimates that nationally two to three percent of all newborns have been exposed to cocaine.⁸⁵

Although the national estimate of cocaine-exposed infants is notable at two to three percent, cocaine is used less frequently during pregnancy than other drugs. For example, fetal alcohol syndrome is a serious drug-related problem among newborns.⁸⁶ In addition, studies show that 38 percent of all newborns have been exposed to tobacco, and up to 12 percent of newborns have been exposed to marijuana.⁸⁷

b. Physiological Effects on the Fetus

Because the studies do not distinguish among cocaine-exposed infants, no medical evidence exists to indicate whether more infants are born to mothers who used crack cocaine during pregnancy versus those who used powder cocaine. Additionally, the research cannot determine whether a mother who uses crack cocaine during pregnancy is more likely to endanger her infant than a mother who uses similar amounts of powder cocaine. Further questions need to be explored in order to answer these questions. For example, the percentage of pregnant women who use crack cocaine as opposed to powder cocaine and whether pregnant crack users are likely to become frequent or binge users are two relationships that would appear to warrant further investigation.

Unlike infants exposed to narcotics or opiates prior to birth, cocaine-exposed infants are not born addicted to cocaine and typically do not experience withdrawal. However, cocaine use can produce detrimental effects on both the mother and the fetus. First, cocaine causes constriction of

⁸³ There is consequently no data reflecting the degree of exposure. The studies do not address at what levels of *in utero* exposure the exposed infant is likely to be affected. Note also that most studies of the effects of maternal cocaine use were conducted in the mid-1980s, prior to the surge in crack cocaine use.

⁸⁴ D. Gomby and P. Shiono, "Estimating the Number of Substance-Exposed Infants," The Future of Children 22 (Spring 1991). W. Chavkin, "Treatment Programs Shun Addicted Pregnant Women," 2(15) Alcoholism & Drug Abuse Week 6 (Apr. 18, 1990).

⁸⁵ *Id.* at 23.

⁸⁶ Among its various problems, fetal alcohol syndrome is a known cause of central nervous system abnormalities.

⁸⁷ Gomby and Shiono, *supra* note 84, at 21-22.

blood vessels that restricts the flow of oxygen and other vital nutrients to the fetus. The sudden constriction of blood vessels can also cause the placenta to tear away from the uterine wall, resulting in premature delivery. In addition, brain cells deprived of oxygen will atrophy and may die, leaving behind lesions on the surface of the brain, the effects of which are uncertain and may remain hidden for years. Heavy cocaine use during the later months of pregnancy can lead to a complete disruption of the fetal blood supply to an organ or a limb. Occasionally, cocaine-exposed children are born with obvious signs of abnormality such as organ deformities or shriveled arms or legs.

Cocaine use also is associated with *in utero* developmental problems, including increased incidence of spontaneous abortion, small head circumference, low birth weight, retarded growth, and urogenital abnormalities.⁸⁸ In addition, infants exposed to cocaine prior to birth are more likely to experience Sudden Infant Death Syndrome (SIDS), seizures, or neurobehavioral dysfunctions such as high irritability and arousal problems.⁸⁹

c. Cocaine Exposure After Birth

In addition to uterine exposure, infants can be exposed to cocaine after birth in a variety of ways. Infants may be exposed indirectly through their mothers' breast milk or directly when nursing mothers apply cocaine to their nipples to reduce pain during breastfeeding. Infants may also be exposed, second-hand, to cocaine vapors via proximity to someone free-basing or smoking crack cocaine. Cocaine may also be deliberately administered to soothe colic or teething pain.⁹⁰ Children suffering from cocaine poisoning via direct or second-hand vapor exposure may experience drowsiness, nausea, hallucinations, and coma. Infants exposed through breast milk may be susceptible to seizures, heart attacks, strokes, and death.⁹¹

⁸⁸ See, generally, National Institute on Drug Abuse, *supra* note 82; Ellis *et al.*, *supra* note 80, at 725; B. Zuckerman, "Effects of Maternal Marijuana and Cocaine Use on Fetal Growth," 320 New England Journal of Medicine 762 (Mar. 23, 1989).

⁸⁹ See, Ellis *et al.*, *supra* note 80, at 728. A recent study by Bauchner *et al.*, found that risk of SIDS in infants exposed to cocaine was less than reported previously. The study reported that the elevated risk of SIDS among these infants probably reflects the health behaviors and socio-demographic characteristics of their mothers that are independently associated with SIDS. H. Bauchner, B. Zuckerman, M. McClain, D. Frank, L. Fried and H. Kayne, "Risk of Sudden Infant Death Syndrome Among Infants with *In Utero* Exposure to Cocaine," 113 Journal of Pediatrics 831, 834 (Nov. 1988).

⁹⁰ United States Sentencing Commission, Hearing on Crack Cocaine 174 (Statement of Robert S. Hoffman) (Nov. 1993).

⁹¹ *Id.*

d. Behavioral Effects on Infants and Children

Behavioral problems are the most commonly cited effect observed in cocaine-exposed children. A clear association has been found between maternal drug use and developmental difficulties.⁹² For example, cocaine-exposed babies usually perform poorly on responsiveness tests. They are easily overstimulated, which can result in excessive sleeping or bouts of crying that may last hours.⁹³ For older children, maternal drug-use effects include developmental disabilities or behavioral dysfunctions. Researchers believe these adverse effects may be the result of cocaine's effect on the neurotransmitters, the signals that help control a person's mood and responsiveness.

e. Mitigating Behavioral Effects Through Intervention

Post-natal studies on cocaine-exposed children confirm that the physiological and behavioral development of these children is not determined solely by their mothers' drug use. Important factors include the quality of health care, family lifestyle, and the genetic disposition of both the mother and the child.

To mitigate complications, early intervention for cocaine-exposed children is crucial. One study examined 400 children exposed to cocaine or other drugs before birth and followed their subsequent development. Pregnant women in the study received prenatal care and participated in treatment programs during their pregnancy. Both the infants and their mothers received intensive postnatal support.⁹⁴ Importantly, researchers found that cocaine exposure does not affect intellectual functioning.⁹⁵ Of the children born to these mothers, 95 percent were "mainstreamed" in school and required no special educational interventions.⁹⁶ However, behavioral abnormalities continued for a small percentage of these children.

f. Economic Costs of Cocaine-Exposed Infant Care

In addition to physiological and developmental risks for both mother and fetus, the cost of caring for cocaine-exposed infants imposes an added burden on the health-care and welfare systems of this country. Costs of prenatal substance abuse are incurred in both the short and long term. Short-term costs include: longer hospital stays for both mother and infant, special care provided by

⁹² National Institute on Drug Abuse, *supra* note 82.

⁹³ *Id.*

⁹⁴ I. Chasnoff, "Hope for a Lost Generation," *School Safety* 4 (Winter 1992).

⁹⁵ *Id.*

⁹⁶ *Id.*

neonatal intensive care units, lost productivity from job and family-related activities, and boarding of babies until child welfare systems can place the child in foster care.⁹⁷ Long-term costs, which are harder to quantify, can include: treatment for chronically ill or disabled children, treatment of AIDS-related illness, placements in foster care, and special education needs.⁹⁸

A 1985-86 cost analysis study at Harlem Hospital in New York City estimated neonatal cost differentials for cocaine-exposed versus unexposed infants. This study found that neonatal hospital costs were \$5,200 higher for cocaine-exposed infants than for unexposed infants. Neonatal medical (physician) costs were \$2,610 higher, and lengths of hospital stay increased by four days for cocaine-exposed infants when compared to unexposed infants.⁹⁹

Exposure to other illicit substances was associated with higher costs and longer stays as well.¹⁰⁰ Finally, the study suggests that drug treatment programs and prevention targeted at this population of users could substantially reduce the short-term costs of prenatal cocaine exposure.

g. Governmental Responses to Perinatal Drug Exposure

Many states have vacillated in their response to mothers giving birth to drug-exposed babies. Several states now have laws that allow child-abuse charges to be pressed against any woman with illegal drugs in her bloodstream who gives birth to a child, arguing that the presence of illegal drugs is *prima facie* evidence of child neglect. Other states have simply removed exposed babies from their mothers, making them wards of the state. However, some of these states have more recently turned to intensive treatment programs rather than removing the children from their mothers. These programs often adopt a carrot and stick approach, directing mothers whose newborns test positive for cocaine to enter a treatment program or give up the child.¹⁰¹

⁹⁷ C. Phibbs, "The Economic Implications of Prenatal Substance Abuse," The Future of Children 114 (Spring 1991). "Boarder babies" refers to infants who stay in a hospital after they have been cleared for medical discharge. Typically, these infants no longer require medical attention but must undergo a social evaluation or placement in foster care, generally because their mothers are unable or unfit to care for them.

⁹⁸ *Id.*

⁹⁹ C. Phibbs, D. Bateman and R. Schwartz, "The Neonatal Costs of Maternal Cocaine Use," 266 Journal of the American Medical Association 1521 (Sept. 18, 1991).

¹⁰⁰ *Id.*

¹⁰¹ J. Willwerth, "Should We Take Away Their Kids? Often the Best Way to Save the Child is to Save the Mother As Well," 137 Time (May 13, 1991).

D. OTHER SOCIAL PROBLEMS AFFECTED BY COCAINE USE

In addition to its impact on public health, cocaine use may affect other social problems. This section reviews available information relating to the effects of cocaine use on domestic violence and social institutions, including the workplace and the family.

1. Cocaine and Domestic Violence

Studies of domestic violence have long pointed to alcohol and drugs as contributing factors in violence within the family.¹⁰² However, most research examines the impacts of generic "substance abuse" rather than specific effects of individual drugs on either spousal abuse¹⁰³ or child abuse.¹⁰⁴

Research on domestic violence suggests that alcohol abuse by itself may represent a far greater risk for domestic violence than illicit drug use.¹⁰⁵ It is difficult to predict the potential outcome if illicit drugs are used in combination with alcohol. The psychopharmacological effects of an illicit drug may mitigate or enhance the effects of alcohol, and it is likely that the level and direction of the effects will vary by drug and by an individual's reaction to a drug.¹⁰⁶

There is very little information concerning the relationship between cocaine and domestic violence or the relationship of crack versus powder cocaine and domestic violence. Researchers have consistently found, however, that domestic violence increases in families where there is alcohol or drug abuse.¹⁰⁷ Most researchers agree "[i]t is . . . clear that the great majority of battery incidents are alcohol and/or drug related."¹⁰⁸ The general consensus in the research community is that in

¹⁰² See, e.g., K. Leonard and T. Jacob, "Alcohol, Alcoholism, and Family Violence," Handbook of Family Violence (1988).

¹⁰³ B. Miller, T. Nochajski, K. Leonard, H. Blane, D. Gondoli and P. Bowers, "Spousal Violence and Alcohol/Drug Problems Among Parolees and Their Spouses," 1 Women and Criminal Justice 55, 56 (1990).

¹⁰⁴ J. Bays, "Substance Abuse and Child Abuse, Impact of Addiction on the Child," 37 (4) Pediatric Clinics of North America (1990).

¹⁰⁵ M. de la Rosa, "Introduction: Exploring the Substance Abuse-Violence Connection," in M. de La Rosa, B. Gropper, and E. Lambert (Eds.), Drugs and Violence: Causes, Correlates, and Consequences 5 (1990).

¹⁰⁶ *Id.* at 184-188.

¹⁰⁷ Bays, *supra* note 104, at 891.

¹⁰⁸ A. Roberts, "Psychosocial Characteristics of Batterers: A Study of 234 Men Charged with Domestic Violence Offenses," 2 Journal of Family Violence 81, 82 (1987).

domestic violence, alcohol abuse is more prevalent than drug abuse,¹⁰⁹ and the relationship between alcohol abuse and spousal abuse is the most significant.¹¹⁰ Similarly, research shows an important association between alcohol consumption and violence against children.

2. Cocaine in the Workplace

Data from the 1991 NIDA National Household Survey indicate that 13.1 percent of full-time employees reported illicit drug use during the survey year. About half that rate, 6.3 percent, reported use of any illicit drug during the past month.¹¹¹ In an earlier NIDA study on drugs in the workplace, 8.2 percent of full-time employees reported current illegal drug use.¹¹² In comparison, 3.2 percent of the full-time employed reported use of cocaine in the past year and 1.0 percent reported use in the past month.¹¹³ Of the full-time employed, 0.4 percent reported use of crack cocaine in the past year.¹¹⁴ Data on monthly use of crack cocaine among the employed were not available. Studies have shown that employees who have used illegal drugs recently consume more medical benefits, file more workers' compensation claims, are absent more often, and are fired more frequently than other workers.¹¹⁵

Although the cost of drug abuse to American businesses is difficult to determine, one study estimates that drug-induced absenteeism, accidents, fatalities, damages to equipment, insurance claims, tardiness, theft, and decreases in worker productivity cost American businesses tens of billions of dollars annually.¹¹⁶ In 1986, estimates for lost productivity alone resulting from drug and alcohol abuse ranged from \$60 to \$100 billion.¹¹⁷ Alcohol accounted for \$50.6 billion in reduced

¹⁰⁹ *Id.* at 82.

¹¹⁰ Most research shows that 60 to 70 percent of batterers are under the influence of alcohol. Correspondingly, only 13 to 20 percent of batterers are under the influence of some drug other than alcohol.

¹¹¹ NHSDA: 1991, *supra* note 1, at 35-36.

¹¹² National Institute On Drug Abuse, Research on Drugs and the Workplace, NIDA Capsules 1 (1990). This shows a reduction in the rate of use from 8.2 to 6.3 percent between 1989 and 1991. "Current use" is defined as use within the past month.

¹¹³ NHSDA: 1991, *supra* note 1, at 56-57.

¹¹⁴ *Id.* at 63.

¹¹⁵ *Id.* at 2.

¹¹⁶ S. Smarr, "The Dope on Drugs in the Workplace," 31 Bobbin 100, 100 (1989).

¹¹⁷ T. Rosen, "Identification of Substance Abusers in the Workplace," 16 Public Personnel Management 197 (1987).

productivity in 1980, compared with \$25.7 billion for all other drugs combined. Estimates generally focus on the costs of alcohol compared to other drugs, rarely distinguishing between specific illegal drugs.¹¹⁸

3. Social Isolation and Cocaine Abuse

When cocaine use becomes uncontrolled, an individual's links to the social and economic world can disintegrate. Physical, psychological, and behavioral changes can begin soon after an individual begins to use cocaine. However, in general, clear-cut and identifiable changes in the consistent cocaine user may not be apparent for three to six months for crack cocaine users or two years or longer for powder cocaine users.¹¹⁹

As users become cocaine dependent, their family and social lives disintegrate. They concentrate their energies on finding the next dose; employed users may spend all earnings on cocaine; a parent may leave children unsupervised for extended periods.¹²⁰

Unemployed cocaine abusers, like unemployed abusers of many drugs, frequently are asked to leave the family due to the friction caused by the cocaine dependence. In a study of voluntary inpatients in a hospital unit, 18.7 percent of the 245 study participants had been asked to leave their homes. More than half of those asked to leave (51.1%) became homeless (entering the homeless shelter system, living on the street, or moving among temporary situations in homes of friends or relatives).¹²¹

Research confirms that those who are homeless and abuse drugs are most likely to abuse alcohol,¹²² but abuse of other drugs is common. For example, one Los Angeles study reported that just under one-third of homeless shelter residents abused drugs other than alcohol,¹²³ while another study in Los Angeles reported that half of the homeless individuals surveyed had used illegal drugs

¹¹⁸ *Id.* at 198.

¹¹⁹ D. Allen and J. Jekel, Crack: The Broken Promise 34 (1991).

¹²⁰ *Id.* at 29.

¹²¹ B. Wallace, "Crack Addiction: Treatment and Recovery Issues," Contemporary Drug Problems 74 (Spring 1990).

¹²² P. Fisher, "Estimating Prevalence of Alcohol, Drug, and Mental Health Problems in the Contemporary Homeless Population: A Review of the Literature," 16 Contemporary Drug Problems 334 (1989).

¹²³ P. Koegel, A. Burnam, and R. Farr, "The Prevalence of Specific Psychiatric Disorders Among Homeless Individuals in the Inner City of Los Angeles," 45 Archives of General Psychiatry 1088 (1988).

within the past month.¹²⁴ Homeless shelters in New York City reported that the most frequently abused drug among shelter residents was cocaine, both powder and crack.¹²⁵

E. AVAILABILITY OF TREATMENT FOR COCAINE ABUSERS

1. Treatment Strategy

Treatment for cocaine dependency is similar in many ways to treatment for dependency on other drugs, including alcohol. Generally, the strategy has two stages: detoxification and treatment. Detoxification, the precursor to treatment, focuses on getting the abuser to stop drug use and on monitoring the abuser's body until it is free of the drug. Because cocaine is not physically addictive, withdrawal – although unpleasant – is not physically hazardous or life-threatening for cocaine abusers. Detoxification may result in symptoms of irritability, depression, anxiety, sleep irregularities, lack of energy, and strong cravings.¹²⁶ The severity of withdrawal varies depending on the predominant route of drug administration, frequency of use, and dosage amount.

After detoxification, the recovering abuser's drug treatment focuses on avoiding a relapse into drug use. There are three traditional formats for drug treatment that are used alone or in combination to meet the needs of the patient. These are inpatient treatment, residence in a therapeutic community, and outpatient treatment.¹²⁷ Inpatient treatment is the most expensive of the drug treatment formats. In this format, the individual becomes a medical patient in a hospital or other medical facility, typically for one month. The patient usually is expected to participate in after-care following discharge.¹²⁸ Residence in a therapeutic community involves residing with other recovering abusers for a year or longer in a structured, hierarchical regimen designed to instill responsibility.¹²⁹ Outpatient treatment is the most commonly used drug treatment: the individual

¹²⁴ L. Gelberg, L. Linn and B. Leake, "Mental Health, Alcohol and Drug Use, and Criminal History Among Homeless Adults," 145 American Journal of Psychiatry 194 (1988). Note that the sample included homeless individuals located in shelters, parks, parking lots, shopping malls, soup kitchens, beach areas, food distribution centers, and job service/social service assistance areas.

¹²⁵ W. Breakey and P. Fischer, "Homelessness: The Extent of the Problem," 46 Journal of Social Issues 40 (1990).

¹²⁶ Pratsinak and Alexander, *supra* note 59, at 90.

¹²⁷ R. Rawson, "Cut the Crack: The Policymaker's Guide to Cocaine Treatment," 51 Policy Review 11 (Winter 1990).

¹²⁸ *Id.*

¹²⁹ *Id.*

remains in his or her usual living environment and visits a treatment center for counseling and therapy.¹³⁰

Regardless of format, all treatment programs encourage either individual and/or peer group counseling, behavioral therapy, and support networks. The 12-step program developed under Alcoholics Anonymous and adopted by Narcotics Anonymous and Cocaine Anonymous is often cited as an effective component for drug abuse treatment success.

2. New Concepts in Cocaine Treatment

An emerging area of cocaine drug treatment research involves the development of drugs that lessen the distress from and/or diminish the craving for cocaine. In particular, pharmaceutical companies are seeking to develop drugs to block cocaine euphoria, to address post-use dysphoria, to curb cocaine desire, or to control depletion of dopamine from nerve synapses. While several such current research projects may prove promising, to date there is no demonstrated effective pharmacologic treatment for cocaine abuse.¹³¹

Another experimental therapy for the treatment of crack cocaine addiction involves acupuncture. The treatment structure involves daily sessions of 45 minutes for ten to 14 days. Five needles are inserted into each ear to stimulate detoxification and relaxation. Preliminary results appear to indicate that acupuncture, coupled with additional types of therapy, can assist in the treatment process¹³² and help control craving and withdrawal symptoms.¹³³

3. Potential for Successful Treatment

These approaches to drug treatment are available regardless of drug type. There are no indications that the success of any given approach is particularly correlated to the drug of abuse. Rather, the success rate across drug types is related directly to the length of treatment. For example, those who complete the residence program in a therapeutic community have a greater than 75 percent chance of being drug free five to seven years later. The success rates are approximately 50

¹³⁰ A. Washton, "Outpatient Treatment Techniques," in A. Washton and M. Gold (Eds.), Cocaine: A Clinician's Handbook 117 (1987).

¹³¹ Benowitz, *supra* note 77, at 10.

¹³² U.S. General Accounting Office, *supra* note 67.

¹³³ B. Wallace, Crack Cocaine: A Practical Treatment Approach for the Chemically Dependent 165 (1991).

percent for those who stay in the program one year and approximately 25 percent for those who stay in the program less than one year.¹³⁴

Because crack cocaine's popularity is a relatively recent phenomena, research has not yet produced conclusions concerning which, if any, of these treatment formats is most appropriate for crack cocaine abusers.¹³⁵ However, as is true for other drug and alcohol abusers, the diverse population of crack cocaine abusers makes it unlikely that one single "best" treatment modality will be identified.

As it is for all drug abuse treatment, "success" for cocaine treatment is difficult to define. Treatment practitioners traditionally consider two or three years of drug abstinence a success. However, even short periods of abstinence or continued cocaine use at reduced frequencies can indicate a positive treatment outcome. Success rates for cocaine drug treatment – measured as abstinence of one year or longer – vary from 25 to 50 percent. The higher rates are characteristic of abusers who are professional or skilled workers, with much lower success rates for unskilled workers and long-time users who also use other drugs.¹³⁶ One study found that outpatient treatment combined with drug testing, individual and group therapy, and relapse prevention achieved a 75-percent success rate for recovering crack cocaine abusers who finished the program.¹³⁷

¹³⁴ *Id.* at 175.

¹³⁵ *Id.* at 80.

¹³⁶ Benowitz, *supra* note 77, at 9.

¹³⁷ Washton, *supra* note 130, at 171.

Chapter 4

THE DISTRIBUTION AND MARKETING OF COCAINE

A. INTRODUCTION

This chapter examines the markets for crack cocaine and powder cocaine in the United States. These markets are inescapably intertwined because virtually all cocaine enters the United States in the powder form. Only at the wholesale and retail levels in the distribution chain does some of the powder cocaine get transformed into crack cocaine. This fact ultimately has critical implications for cocaine sentencing policy.

Policymakers generally view the drug distribution chain using a vertical framework that involves importers, wholesale distributors, and retail-level dealers; that is, focusing on how drugs enter the country, move between and within states, and ultimately reach the user.¹ Theoretically, each level closer to retail sales involves less culpable individuals trafficking in lesser quantities of drugs. Viewing drug distribution through this vertical framework, however, does not preclude the existence of horizontally integrated drug distribution chains that involve separate and distinct organizations. From an enforcement perspective, for example, a single conspiracy at the retail level may be quite extensive, involving a major distributor, four or five mid-level dealers, and 30 street sellers. The distinctions between these vertical and horizontal frameworks for viewing drug distribution are important to keep in mind as one considers the material presented in this chapter.

Section B describes the development of the current cocaine markets. Section C discusses the importation and regional distribution of cocaine. Section D looks at the wholesale and retail markets for powder cocaine and crack cocaine, examining their development and layers of distribution. Section E discusses the different forums of retail cocaine distribution. Section F describes the structure of organizations involved in the distribution of crack and powder cocaine, including the roles of individual freelance distributors, small groups, and urban gangs. Section G discusses the roles of youth and women in cocaine distribution, and Section H, the prices, profits, and revenues in the cocaine markets.

¹ See sections B and C, *infra*.

B. THE DEVELOPMENT OF CURRENT COCAINE MARKETS

1. The Development of Drug Markets Generally

The existence of historical cycles, or "drug eras," for most drugs (including marijuana, and heroin, as well as both powder and crack cocaine) has been suggested by some researchers. Theoretically, during these drug eras, once a drug is first introduced, its use soon expands, later peaks, levels off, and eventually declines to an equilibrium level.²

A comparison of drug eras shows relatively consistent time periods (10-15 years) from introduction of a drug to peak use. Moreover, drug eras show a pattern of initiation and violent consolidation in the market for the new drug, typically followed by a relatively peaceful plateau period and eventual decline in use.³

2. The Evolution of the Crack Cocaine Market

The types of organizations dominating distribution of crack cocaine have evolved, at least in primary markets such as New York City and Los Angeles, from primarily freelance distributors (1984-1985) to gang and small-group distributors (1985-1986) and ultimately to small-group and freelance distributors (1987-present).⁴

In 1984-1985, the crack cocaine market was highly decentralized, involving primarily freelance distributors, characteristic of many early drug distribution markets. The demand for crack cocaine was not well-established and distribution systems were not well developed, leaving the market open to any person with access to cocaine and a desire to distribute.⁵

Over time, the crack cocaine market transformed from this decentralized system into a growing, non-competitive market, to a system in which relatively well-organized gangs used

² See Hamid, *infra* note 4, *passim*; Bruce D. Johnson & Ali Manwar, Towards a Paradigm of Drugs Eras *passim* (paper presented at American Society of Criminology, San Francisco, California) (copy on file with the Commission) (Nov. 21, 1991); and Andrew Golub and Bruce D. Johnson, Drugs Eras: A Conceptual Model for the Dynamics of Change in the Population of a Particular Drug *passim* (paper presented at the Society for the Study of Social Problems Annual Meeting) (copy on file with the Commission) (Aug. 11, 1993).

³ See Johnson & Manwar, *supra* note 2, at 7-8.

⁴ T. Mieczkowski, "Crack Distribution in Detroit," 17 Contemporary Drug Problems 9, 16 (1990) (data derived from Detroit Drug Use Forecast questionnaires from 454 self-reported crack users and sellers); A. Hamid, "The Development Cycle of a Drug Epidemic: The Cocaine Smoking Epidemic of 1981-1991," 24 Journal of Psychoactive Drugs 340 (1992).

⁵ *Id.*

violence to consolidate individual dealers and eliminate uncooperative distributors.⁶ By 1986, gangs and small-group distributors dominated the market. Following the consolidation, no single gang or organization controlled distribution, leading one researcher to note that crack cocaine

appears to be distributed largely by multiple units of small entrepreneurs rather than by any mega-organization that controls the crack trade [leading to the] speculation . . . that crack distribution lacks a set of highly centralized or formally organized distribution syndicates. It relies heavily on the "low end" dealer [and] users [who] . . . occupy a shadowy ground between dealing and consuming.⁷

Other research confirms a generally stable market among gang and small-group distributors during this time. For example, the market among entrepreneurial gangs in northern California became unstable only when these gangs sought to expand marketshare.⁸ Even among cultural gangs in Los Angeles, violence subsided as the markets consolidated and the gangs became more entrepreneurial. According to one gang member,

Now you might see a neighborhood that is Blood and Crip together. But that's because they got something going on with drugs. They got some kind of peace because of drugs.⁹

Other ethnographic researchers present similar findings with respect to this period.¹⁰

⁶ United States Sentencing Commission, Hearing on Crack Cocaine 64-68 (Nov. 1993) (statement of Paul J. Goldstein, Professor of Epidemiology, University of Illinois at Chicago Circle) (hereinafter "Commission Hearing"); J. Skolnick, T. Correl, E. Navarro, and R. Rabb, "The Social Structure of Street Dealing," 17 American Journal of Police 1, 20 (1990) (noting "if the market is stable there is little violence, . . . if the market is destabilized, whether by a rival gang or by law enforcement, then violence is likely to erupt").

⁷ Mieczkowski, *supra* note 4, at 20-21.

⁸ Skolnick *et. al*, *supra* note 6, at 17.

⁹ *Id.*

¹⁰ See, e.g., Hamid, *supra* note 4.

Today, researchers and some law enforcement officials believe the market to be again dominated by a "cottage industry" of small-group and freelance distributors.¹¹ In New York City, for example, researchers report:

Despite a systematic effort to locate vertically-organized crack distribution groups in which one or two persons control the activities and gain the returns from labor of 15 or more persons, no such groups have been located, and no distributors report knowing of such groups. Instead, freelance crack selling dominates most drug street scenes.¹²

C. INTERNATIONAL AND REGIONAL DISTRIBUTION OF COCAINE

Powder cocaine generally is imported into a limited number of "source cities."¹³ The powder cocaine then is dispersed to regional and wholesale distributors for later retail sales. As stated above, crack cocaine rarely, if ever, is imported into the United States. Instead, powder cocaine is imported, with some of it later converted into crack cocaine.

Powder cocaine is smuggled into the United States primarily from Colombia, Mexico, and Caribbean nations through Arizona, southern California, southern Florida, and Texas.¹⁴ Powder cocaine, typically in shipments exceeding 25 kilograms and at times reaching thousands of kilograms, generally is channeled to one of four "source" cities (Houston, Los Angeles, Miami, and New York City) for distribution there and throughout the country.¹⁵

¹¹ S. Belenko, Crack and the Evolution of Anti-Drug Policy 112 (1993) (citing J. Fagan and K. Chin, "Violence as Regulation and Social Control in the Distribution of Crack," in M. de la Rosa, B. Gropper, and E. Lambert (Eds.), Drugs and Violence: Causes, Correlates, and Consequences (1990), and B. Johnson, T. Williams, K. Dei and H. Sanabria, "Drug Abuse and the Inner City: Impacts of Hard Drug Use and Sales on Low Income Communities," in Q. Wilson and M. Tonry (Eds.), 13 Crime and Justice: An Annual Review of Research 9-67 (1990)); U.S. Department of Justice, Drug Enforcement Administration, DEA Drug Situation Report: Crack Cocaine 12, 17, v (Nov. 4, 1993) (draft) (hereinafter "DEA Report").

¹² Johnson *et al.*, *supra* note 11, at 360-61.

¹³ U.S. Department of Justice, Drug Enforcement Administration, U.S. Drug Threat Assessment (1993) 14 (Sept. 1993) (hereinafter "DEA Threat Assessment").

¹⁴ DEA Report, *supra* note 11, at iii, v.

¹⁵ Commission Hearing, *supra* note 6, at 15-16 (statement of Kevin M. Donnelly); DEA Threat Assessment, *supra* note 13. Los Angeles, Miami, and New York City also serve as source cities for powder cocaine destined for conversion into crack cocaine. See DEA Report, *supra* note 11, at 1.

Colombian and Mexican suppliers are the primary importers of powder cocaine.¹⁶ While Mexican smugglers supply cocaine in the southwest, the Colombian Medellín and Cali Cartels control importation into the source cities. According to the DEA, the cartels maintain "operational headquarters" in major U.S. cities (Chicago, Houston, Los Angeles, New York, Philadelphia, San Francisco) to control wholesale and regional distribution networks within those cities. The Cali Cartel's operational cells are directed by managers based in Colombia and operate independently of other cells. The Medellín Cartel's operations are less compartmentalized, involving drug trafficking groups that generally make joint decisions but permit some managers discretion in operations.¹⁷

A few large gangs in the source cities (the Crips and the Bloods in Los Angeles and Jamaican Posses, Dominican, and Haitian groups in Miami and New York City) purchase powder cocaine from cartel members for further intrastate and interstate distribution primarily as powder cocaine.¹⁸ In addition, Cuban and Mexican groups are involved heavily in the distribution of powder cocaine that generally is not converted to crack cocaine.¹⁹

D. WHOLESALE AND RETAIL DISTRIBUTION OF COCAINE

1. Wholesale Distribution

Wholesale cocaine traffickers purchase cocaine from importers and regional distributors usually in kilogram or multikilogram allotments. Some wholesalers then transport the cocaine, almost always in powder form, elsewhere interstate or intrastate.²⁰ Other wholesalers package powder cocaine into retail quantities (ounces or grams) or convert powder cocaine into crack for retail sales. These distributors often manage crack or shooting houses or street-corner sales and may supervise as many as 20 sellers. The gangs involved in wholesale distribution generally are also involved in retail distribution of cocaine, as are other small-group and freelance distributors.²¹ Conversion of powder cocaine to crack occurs at both wholesale and retail levels.

¹⁶ Belenko, *supra* note 11, at 113; DEA Report, *supra* note 11, at 2.

¹⁷ DEA Threat Assessment, *supra* note 13, at 14, 20.

¹⁸ Commission Hearing, *supra* note 6, at 13 (statement of Kevin M. Donnelly); DEA Report, *supra* note 11, at 1-2.

¹⁹ *Id.* at 15; DEA Threat Assessment, *supra* note 13, at 14; Skolnick *et. al*, *supra* note 6, at 4, 30.

²⁰ DEA Report, *supra* note 11, at 2.

²¹ *Id.* at 2.

United States Sentencing Commission

The Drug Enforcement Administration notes that in recent years some wholesale distributors who initially handled crack cocaine now distribute powder cocaine to avoid "the harsh Federal sentencing guidelines that apply to higher-volume crack sales."²²

2. Retail Distribution

Retail distributors sell cocaine to the consumer and may conduct hundreds or thousands of transactions annually.²³ For a variety of reasons including the enticement of profits, there is a large supply of retail dealers. Indeed, in many communities, retail dealers who are arrested or otherwise leave the market are "almost immediately replaced."²⁴ An FBI agent involved in an 11-month investigation of drug sales at the Kenmore Hotel in New York, for example, found a "seemingly unending well of crack dealers."²⁵ Dealers arrested "were replaced by other crack dealers, who easily absorbed the prior dealers' clientele."²⁶

Researchers note several similarities among certain "street" retailers of crack cocaine and street retailers of powder cocaine. Researchers found that in New York City, for example, street retailers of both drugs are primarily poor, minority youth, generally under the age of 18, and were first attracted by large profits.²⁷ In many cases, these dealers distribute both drugs.²⁸

But, researchers also note differences between retail crack and powder cocaine distribution. For example, crack is sold in smaller quantities than powder. Many in law enforcement believe that as a result, crack is more easily transported, distributed, and, if necessary, hidden or discarded upon an encounter with law enforcement than powder cocaine.²⁹ According to a Miami narcotics detective, crack cocaine is "easy to get rid of in a pinch. Drop it on the ground and it's almost

²² *Id.* at iv.

²³ Mieczkowski, *supra* note 4, at 17.

²⁴ DEA Report, *supra* note 11, at 2, 7.

²⁵ Affidavit of FBI Special Agent Kenneth R. Weiss In Support of Verified Complaint and Seizure Warrant, United States v. 143-147 East 23rd Street [which includes the Kenmore Hotel], at 3-4.

²⁶ *Id.*

²⁷ Belenko, *supra* note 11, at 109; DEA Report, *supra* note 11, at 17; T. Williams, The Cocaine Kids (1989).

²⁸ P. Reuter, R. MacCoun, P. Murphy, A. Abrahamse, and B. Simon, Money From Crime: A Study of the Economics of Drug Dealing in Washington, D.C. (RAND) 1990. Data derived from District of Columbia Pretrial Services Agency data on the 11,430 D.C. residents charged with drug selling during 1985-1987 and interviews with 186 probationers in the District of Columbia who acknowledged a recent history of drug dealing.

²⁹ M. Klein, C. Maxson, and L. Cunningham, "'Crack,' Street Gangs, and Violence," 29(4) Criminology 623, 625 (1991).

impossible to find; step on it and the damn thing is history. All of a sudden your evidence ceases to exist."³⁰ Some authorities relate that retailers of both powder and crack cocaine "drip" traffic; that is, they carry small quantities on their person for immediate distribution and leave additional quantities in drop spots to which they can return.³¹ Firearms may be located near the stash for use against rival groups or others seeking to take the drugs.

The ease of disposal and the tactic of "dripping" increase the likelihood that, in the event of arrest, the retail dealer's criminal liability will be limited to the quantity on his/her person, a quantity that will likely be less than the total quantity the dealer intended to distribute. Of course, the retail-level dealer who distributes from a crack or shooting house is prevented by the nature of that forum from "dripping" and generally will be held liable for the entire quantity of drugs found in the house.³²

3. Polydrug Distribution

Researchers and law enforcement officials indicate that cocaine distributors at all levels generally distribute more than one drug. For example, in New York City, distributors package crack cocaine and powder cocaine in the same apartments for later retail distribution. The DEA believes:

Without exception, each of [the four wholesale trafficking groups - Jamaican Posses, Crips and Bloods, Dominican and Haitian groups] started out as poly-drug traffickers, concentrating primarily on marijuana and cocaine HCl, and continue to sell these drugs. [Similarly, retailers often sell other drugs in addition to crack.]³³

Considerable research suggests that drug dealers gravitate toward distribution of the substance that produces the highest net income (*see* Section H, "Prices, Profits, Revenues").³⁴

³⁰ J. Inciardi, "Beyond Cocaine: Basuco, Crack, and Other Cocoa Products," Contemporary Drug Problems 470-71 (1987).

³¹ For discussion regarding "dripping," *see e.g.*, Commission Hearing, *supra* note 6, at 44 (statement of Kevin M. Donnelly).

³² *Id.* Regardless of the dealer's mode of operation, his sentence under the sentencing guidelines is determined using the aggregate quantity of drugs associated with the offense(s) of conviction and all related conduct. *See*, U.S. Sentencing Commission, Guidelines Manual (hereinafter "USSG") §1B1.3 (1994).

³³ DEA Report, *supra* note 11, at 4.

³⁴ Reuter *et al.*, *supra* note 28, at 59.

E. FORUMS FOR RETAIL DISTRIBUTION

Powder and crack cocaine are distributed at the retail level by similar means. The DEA notes that cocaine sales take place in dwellings (urban and suburban) and on innercity street corners.³⁵ Researchers identify four general forums for retail distribution: through freelance individuals, open-air street sales, sales by runners or beepermen, and sales in crack or shooting houses. Although there is a reasonably clear idea of who sells cocaine in the street and in crack and shooting houses, there is less awareness of how cocaine is sold in the suburbs, in upper-class neighborhoods, and to business people.³⁶ Dealers who sell to the more affluent users are generally more difficult to target and thus more difficult to inventory.

1. Street-Corner or Open-Air Forum

Distribution of crack and powder cocaine on the street-corner or in open-air markets involves alley, sidewalk, or roadway sales, or sales in fenced-in areas such as public housing compounds. Sales typically consist of small retail quantities sold to walk-up or drive-up buyers. Generally no consultation takes place between the parties prior to the purchase. This method is the least sophisticated type of retail sale and is used frequently for distribution of both crack cocaine and powder cocaine.³⁷

The DEA notes advantages to street-corner transactions, such as the availability of avenues of escape, the ability to change locations to avoid law enforcement detection, the ability to use decoy sellers to disrupt surveillance, and the low overhead associated with the street-corner market.³⁸ In addition, where a street-corner market has been staked out by a group of cooperating freelancers or a gang, competition and associated violence may be limited.³⁹

Where competition is not controlled (*i.e.*, where freelancers predominate or where gangs are attempting to consolidate competition), violence aimed at controlling rivals may threaten the security of the street corner.⁴⁰ The security of some street-corner transactions is maintained by

³⁵ DEA Report, *supra* note 11 at 3; Skolnick *et. al*, *supra* note 6, at 28.

³⁶ *Id.*

³⁷ T. Mieczkowski, "The Operational Styles of Crack Houses in Detroit," in M. de la Rosa, B. Gropper, and E. Lambert (Eds.), Drugs and Violence: Causes, Correlates, and Consequences 61 (1990); Reuter *et al.*, *supra* note 28, at 17.

³⁸ DEA Report, *supra* note 11 at 3.

³⁹ Hamid, *supra* note 4, at 342-43.

⁴⁰ Hamid, *supra* note 4, at 341-43.

lookouts or enforcers who carry firearms to protect the street retailer from undercover police, rivals, and customers. For instance, in the District of Columbia, police "very seldom[ly]" arrest multiple drug dealing conspirators working in open-air markets, because a lookout monitoring the transaction from another corner often signals the conspirators, thus allowing for widespread escape.⁴¹

In Detroit during the late 1980s, street transactions were the least popular method of distribution - only 4 percent of distributors reported using this method exclusively.⁴² In other cities, such as New York City, Trenton, New Jersey, and Los Angeles, street-corner transactions predominate.⁴³ In the District of Columbia, open-air markets increased from between 10 and 20 in the early 1980s (distributing primarily phenmetrazine, dilaudid, heroin, and marijuana) to more than 80 that currently distribute crack cocaine.⁴⁴

2. Beepermen, Touters, and Runners

A second distribution system involves a "beeperman" who exchanges drugs with the drug user after having been contacted by phone or beeper. In some cases, the beeperman personally identifies the buyer and exchanges the drugs; in others, an intermediary (a "touter") serves as a sales agent or broker who identifies buyers. A "runner" may deliver the drugs and retrieve the money for the beeperman or touter.⁴⁵

Beepermen may employ more than one trusted runner or touter, often using a merchandise consignment system in which the beeperman receives a fixed sum and the touter or runner keeps anything else he/she arranges with the buyer. In addition, the touter or runner may be permitted to retain a portion of the drugs exchanged. The runner assumes the risk of loss of the cocaine, whether to law enforcement, rival dealers, or customers. This assumption of risk, along with other conditions, may serve "as an entree for violent behavior" in this system of distribution.⁴⁶

⁴¹ Commission Hearing, *supra* note 6, at 46-47 (testimony of John J. Brennan, Sergeant, Narcotics and Special Investigations, Metropolitan Police Department, District of Columbia); Skolnick *et. al.*, *supra* note 6, at 28 (citing Bowser (1988)).

⁴² Mieczkowski, *supra* note 37, at 63.

⁴³ Hamid, *supra* note 4, at 341-43; Commission Hearing, *supra* note 6, at 18 (statement of Kevin M. Donnelly) (data for Trenton, New Jersey); Klein *et al.*, *supra* note 29, at 631.

⁴⁴ Commission Hearing, *supra* note 6, at 8 (testimony of John J. Brennan).

⁴⁵ Mieczkowski, *supra* note 4, at 24, 61-63 (data for Detroit); T. Williams, *supra* note 27 (data for New York City).

⁴⁶ Mieczkowski, *supra* note 37, at 61-63, 65-67.

Beepermen may deliver drugs to a home or office, meet at a designated location, or have the consumer retrieve the drugs from a particular place. Public places such as fast-food restaurant parking lots are considered more secure delivery points than covert locations. This method may be most commonly used in powder cocaine transactions, at least among wealthy users, because it offers privacy and security from law enforcement.⁴⁷ In Detroit, 21 percent of dealers primarily relied on this method.⁴⁸

3. Crack and Shooting Houses

Distribution through crack and shooting houses involves use of a fixed location from which drugs are sold to visiting consumers.⁴⁹ Crack and shooting houses may be established through converting dwellings by coercion or by bribing the occupants with drugs. Some research indicates that tenants who initially consent to the use of a portion of the residence by a gang for crack cocaine production or distribution later may be coerced into permitting the gang to dominate use of the entire property. Such tenants ultimately may be compelled by the gang to leave the property, lose the property to seizure, or suffer the consequences of a law enforcement raid or a deal gone awry.⁵⁰

Research identifies various benefits of crack and shooting house distribution. Chief among these is a more secure environment, including armed employees and one or more lookouts who alert residents to approaching law enforcement officials.⁵¹ Houses also facilitate sex-for-drugs arrangements that commonly substitute as a medium of exchange for cocaine, as well as other drugs. Other frequently mentioned mediums of exchange at crack houses are stolen property,⁵² firearms, and food stamps.⁵³ (See Chapter 5 for a further discussion of crime associated with cocaine.)

Although crack and shooting houses offer some advantages for distribution, they nevertheless are more likely to be subject to surveillance and raids by law enforcement officials; and successful raids often turn up large quantities of drugs.⁵⁴ Further, crack and shooting houses,

⁴⁷ Reuter *et al.*, *supra* note 28, at 17.

⁴⁸ Mieczkowski, *supra* note 37, at 63.

⁴⁹ *Id.* at 62.

⁵⁰ *Id.* at 70, 79-80.

⁵¹ D. Allen and J. Jekel, Crack: The Broken Promise 17-18 (1991).

⁵² Mieczkowski, *supra* note 37, at 75, 82, 87.

⁵³ Skolnick *et. al.*, *supra* note 6, at 19-20.

⁵⁴ *Id.* at 34.

particularly those with areas set aside for smoking or shooting cocaine, encourage customers to loiter, which may attract thieves (whether outsiders, customers, or the operators of the house) and others seeking confrontation. In short, the intimate and extended circumstances of the transfer of drugs may make customers and crack house operators more vulnerable to violence and other crime. Indeed, some patrons are "more scared about a user" or "a rip-off or stickup" than about a "bust" by law enforcement.⁵⁵

Among gang and non-gang distributors, crack houses appear to be used at similar rates. In Los Angeles, both gang and non-gang groups use crack houses for distribution in less than six percent of all sales.⁵⁶ In Kansas City, Jamaican Posses reportedly run approximately 100 crack houses.⁵⁷ In Miami, approximately 700 crack houses are in operation.⁵⁸

Two general types of crack and shooting houses exist: (1) "austere" or "fortified" houses and (2) "open" or "social" houses.

a. "Fortified" or "Austere" Crack and Shooting Houses

"Fortified" crack and shooting houses are characterized by limited buyer-seller interaction, bricked or boarded windows, rear or alley entryways, and slots through which the transaction occurs.⁵⁹ Structures used include inhabited or abandoned dwellings and buildings, clubs, or motel rooms.⁶⁰ Approximately half of the structures used for distribution in Los Angeles had some form of fortification, including burglar bars on windows or reinforced entrances to the building.⁶¹

⁵⁵ Mieczkowski, *supra* note 37, at 72, 85-86; Skolnick *et. al*, *supra* note 6, at 34. Skolnick quotes a dealer who held little fear of actually being caught:

The police just give themselves away. You just know them when they come, you know, undercover. It's just instinct from being a street person. They catch somebody, they catch little naive people with three or four rocks, and they be right out of jail right away.

⁵⁶ Klein *et al.*, *supra* note 29, at 631.

⁵⁷ D. Barton, "The Kansas City Experience: 'Crack' Organized Crime Cooperative Task Force," 55 The Police Chief 30 (1988).

⁵⁸ J. Inciardi and A. Pottieger, "Kids, Crack, and Crime," 21 (2) The Journal of Drug Issues 260 (1991) (data derived from interviews with 699 Miami cocaine users - half on the street, half in residential treatment - interviewed from April 1988 to March 1990).

⁵⁹ Mieczkowski, *supra* note 37, at 71.

⁶⁰ Williams, *supra* note 27; DEA Report, *supra* note 11, at 7.

⁶¹ Klein *et al.*, *supra* note 29, at 632.

"Fortified" houses involve a risk of predatory violence among the parties because their familiarity with each other is limited and conditions favor robbery.⁶² As a consequence, firearms are regularly present. In Los Angeles, firearms were seized in 58 percent of raided crack houses.⁶³ In Trenton, New Jersey, where crack houses are not common, one house was fortified by boarding the windows with 2-by-6 boards and by fortifying the front door with metal doors. The house had no furniture but was stocked with a sawed-off shotgun, a .38-caliber handgun, 9-millimeter handguns, and a machine gun.⁶⁴

b. "Open" or "Social" Crack and Shooting Houses

"Open" houses permit considerable interaction between buyers and sellers. The more interactive houses may include an area for smoking and/or shooting, and even rudimentary child care facilities. The arrangement typically leads to loitering among consumers as they socialize or smoke. As a result, additional goods and services, such as drug paraphernalia, liquor, other drugs, and stolen goods may be provided for a fee.⁶⁵

Although the houses are "open" and "social," drug transactions generally are conducted among regulars or customers with whom the seller has some relationship. Pervasive loitering often requires bodyguards or enforcers to keep the peace. Enforcers might patrol the premises with shotguns or knives or stand at the door with a gun.⁶⁶

A variation on this "open" crack house is the "freak house," a relatively recent development in New York City. The "freak house" is typically a dwelling in which a male crack user permits several homeless, crack-user females to reside in the dwelling in exchange for providing sex to male customers. The men, who may or may not be users, generally purchase crack cocaine (or have it purchased) in street-corner markets and exchange the crack for sex ("freaking"). The male crack user receives sex and crack cocaine from the women in his employ, and crack or cash from the male visitors.⁶⁷

⁶² Mieczkowski, *supra* note 37, at 71.

⁶³ Klein *et al.*, *supra* note 29, at 642.

⁶⁴ Commission Hearing, *supra* note 6, at 19 (statement of Kevin M. Donnelly).

⁶⁵ Mieczkowski, *supra* note 37, at 71, 81-82; DEA Report, *supra* note 11, at 3.

⁶⁶ Mieczkowski, *supra* note 37, at 81, 84-85.

⁶⁷ Hamid, *supra* note 4, at 344; Johnson *et al.*, *supra* note 11, at 361, 363.

For one researcher, the freak house is symptomatic of the decline of the crack cocaine era:

The freakhouse is a culmination of social processes at work both in the crack-using population and in the low-income neighborhood at large. . . Especially when contrasted with the preceding period of curbside use and distribution, which provided formats for the rapid, widespread diffusion of crack use, freakhouses speak of its contraction. However, declining crack use in freakhouses portends even greater trouble than has already been attributed to it. The risk of heterosexual transmission of AIDS is compounded . . . In its decline, therefore, the cocaine-smoking epidemic intersects with disease and death.⁶⁸

4. Prevalence of Drug Distribution Forums

The prevalence of one forum for cocaine distribution over another often is associated with climatic conditions (*e.g.*, cities in colder climates experience larger numbers of crack and shooting houses), the level of law enforcement activity (*e.g.*, an area subject to a number of raids on houses may see more street distribution), and exposure to violence.⁶⁹

Distribution of crack in Detroit most frequently is accomplished through crack houses; 71 percent of dealers used this forum alone or in connection with other forums.⁷⁰ Other Detroit data indicate that 63.7 percent of respondents purchase or distribute through a crack house, while 11.8 percent use touters or beepermen, and 10.4 percent purchase from street sellers. Sharing with a friend makes up the remaining 14.1 percent.⁷¹

Other studies show the important, if not necessarily dominant, role of crack houses in crack cocaine distribution in New York City.⁷² One researcher notes frequent use of crack houses, primarily apartments or after-hours clubs, in Hispanic neighborhoods of New York.

However, some evidence indicates that crack houses in Harlem generally have disbanded "rapidly" when users became disaffected with the excessively entrepreneurial nature of this distribution forum, particularly the renting of paraphernalia, which elsewhere is often provided free,

⁶⁸ Hamid, *supra* note 4, at 344.

⁶⁹ DEA Report *supra* note 11, at 3.

⁷⁰ Mieczkowski, *supra* note 37, at 63, 64.

⁷¹ Mieczkowski, *supra* note 4, at 22-23.

⁷² See Belenko, *supra* note 11, at 108.

and the requirement that users leave as soon as smoking was completed.⁷³ Crack cocaine now is sold primarily from apartments of users or curbside.⁷⁴ In Los Angeles, only six percent of crack cocaine sales occurred in crack houses, although one-third of arrests occurred in such houses.⁷⁵

F. ORGANIZATIONAL STRUCTURE OF COCAINE DISTRIBUTORS

Three types of organizational structures are used to distribute both powder cocaine and crack cocaine: freelance individuals, relatively small, non-gang groups, and relatively large, urban street gangs. Only urban street gangs are found at all levels – regional, wholesale, and retail – of distribution.⁷⁶

1. Freelance Individuals

The "freelance" system of distribution, in which loosely organized individuals use *ad hoc* contacts to sell drugs, prevailed during the early stages of both the powder and crack cocaine markets when demand was not well-established.⁷⁷ With the development of new manufacturing techniques, virtually anyone with access to baking soda and water could make crack cocaine from powder cocaine. Indeed, this breakthrough decentralized the manufacturing process for crack cocaine and permitted demand to be met by retail dealers or even consumers themselves.⁷⁸ However, as a practical matter, few retail dealers of crack cocaine manufacture the drugs they distribute. For example, in the District of Columbia, only 11-12 percent do so, compared with double that number, 23 percent, of PCP dealers.⁷⁹

These free-lancing individuals continue to represent a significant portion of retail cocaine distributors, both powder and crack, even with well-established demand and a relatively mature drug

⁷³ Hamid, *supra* note 4, at 340.

⁷⁴ A. Hamid, "The Political Economy of Crack-Related Violence," 17 Contemporary Drug Problems 59 (1990); Hamid, *supra* note 4, at 340-41.

⁷⁵ Klein *et al.*, *supra* note 29, at 631.

⁷⁶ DEA Report, *supra* note 11, at 4.

⁷⁷ Mieczkowski, *supra* note 4, at 16.

⁷⁸ Commission Hearing, *supra* note 6, at 109 (statement of Charles R. Schuster, Senior Research Advisor, Addiction Research Center, National Institute on Drug Abuse); Allen and Jekel, *supra* note 51, at 16.

⁷⁹ Reuter *et al.*, *supra* note 28, at 60-61.

distribution market. Freelance distributors also engage in wholesale distribution.⁸⁰ Many individual cocaine dealers are users who deal to maintain access to the drug or to secure money to purchase cocaine when they otherwise lack financial resources or legitimate employment opportunities.⁸¹

Considerable and nearly unquantifiable freelance distribution occurs in close circles of friends and family as cocaine is shared, borrowed, traded, begged, or otherwise sold.⁸² But substantial street retailing by individual dealers also occurs. In the District of Columbia, for example, approximately 45 percent of distributors of cocaine, both powder and crack, work alone.⁸³ Some individual dealers may choose, after selling with a group, to go independent, believing they can earn higher profits on their own.⁸⁴

A number of limitations hinder the ability of an individual dealer to market his/her drug as successfully as more organized groups, particularly street gangs. Not only is an individual seller more likely to use drugs, thus limiting entrepreneurial effectiveness and ability to evade detection by law enforcement, but the individual seller generally is prevented from entering areas controlled by a neighborhood group with a monopoly on trafficking. Individual dealers generally lack the protective structures of organized gangs that are useful particularly against competition and "ripoffs." Moreover, individual dealers are less protected from undercover operations and informants and lack shared marketing information regarding drug pricing and sources.⁸⁵

Freelance distributors are not without some degree of organization, however, to protect their interests and to regulate the marketplace. As researchers in New York City note:

[F]ree-lancers frequently enter into various short-lived forms of cooperation to protect one another, to assign "spots" [curbside selling locations], and even to raise

⁸⁰ DEA Report, *supra* note 11, at iv, 12.

⁸¹ *Id.* at 2; Allen and Jekel, *supra* note 51, at 17; Mieczkowski, *supra* note 37, at 60, 75; Inciardi and Pottieger, *supra* note 58, at 257, 260.

⁸² Mieczkowski, *supra* note 4, at 18.

⁸³ Reuter *et al.*, *supra* note 28, at 61-62.

⁸⁴ Skolnick *et. al.*, *supra* note 6, at 1, 20.

⁸⁵ *Id.* at 20-21 (noting particular dominance of urban street gangs in Los Angeles). This study involved interviews in 1988 of a sample of 39 California inmates and wards and 42 city and county police, state narcotics officers, and correctional officials.

funds for special events. Each, however, retains his own suppliers and manages his own returns.⁸⁶

2. Small, Non-Gang Groups

Individuals, sometimes gang members acting apart from the auspices of the gang, informally will band together in small groups (typically three members) for the purposes of distributing cocaine.⁸⁷ These groups may have advantages over larger, gang-directed groups because their limited size presents a more difficult target for law enforcement, making group leaders less likely to be discovered.⁸⁸ In addition, the ease and relative cheapness of the ingredients used in manufacturing crack cocaine allow for distribution groups to begin operating with little initial working capital.

The phenomenon of gang members operating independently from the gang itself complicates the classification of distributors as non-gang or gang-related.⁸⁹ Indeed, some researchers suggest that the rise in gang-related activity and the onset of crack cocaine, though coincidental, are not correlated. Instead, they suggest that the groups distributing crack cocaine are entrepreneurial in nature and not traditional street gangs, even if they so designate themselves.⁹⁰

3. Urban Street Gangs

Researchers and law enforcement officials consistently report that certain urban street gangs are involved significantly in both powder and crack cocaine distribution. Some of these gangs are relatively well organized, similar to traditional organized crime, enabling them to move relatively nimbly into and through drug distribution markets. Other gangs, like other unstable, transitory, criminal groups (particularly those involving youths), lack a significant degree of organization or discipline, although they play a significant distribution role in the drug markets.⁹¹

⁸⁶ Johnson *et al.*, *supra* note 11, at 361.

⁸⁷ Belenko, *supra* note 11, at 107; Hamid, *supra* note 74, at 59.

⁸⁸ Reuter *et al.*, *supra* note 28, at 24.

⁸⁹ See Klein *et al.*, *supra* note 29.

⁹⁰ Belenko, *supra* note 11, at 108; Klein *et al.*, *supra* note 29; J. Moore, "Gangs, Drugs, and Violence," in M. de la Rosa, B. Gropper, and E. Lambert (Eds.), Drugs and Violence: Causes, Correlates, and Consequences 160-176 (1990).

⁹¹ DEA Threat Assessment, *supra* note 13, at 34.

a. **Primary Street Gangs**

Four sets of gangs – Jamaican Posses, the Crips and the Bloods, Haitian gangs, and Dominican gangs – are large distributors of both powder and crack cocaine, although they were not organized initially to distribute drugs. These gangs are large, well financed, relatively well organized, well connected in their respective communities, and tend to use violence both to enforce gang discipline and to consolidate market share. Although these larger gangs initially distributed crack cocaine only in large urban areas such as Los Angeles, Miami, and New York City, they now are believed to have established operations nationwide in numerous small and mid-sized cities and towns.⁹² These gangs do not represent the entire population of gangs believed to deal in illegal drugs but are the most widely known and illustrate how gangs often deal in illegal drugs.

The four primary sets of gangs employ similar but not identical methods of distributing both powder and crack cocaine. A brief discussion of the history and structure of each primary group's operations follows.

Jamaican Posses primarily comprise immigrants from Jamaica who have entered the United States since 1980. Many members initially belonged to posses established in Jamaica, but membership increasingly includes Hispanics and Blacks. Posse membership in the United States in 1988 was approximately 11,000 individuals in about 35 posses.⁹³

Jamaican posses distributed crack cocaine initially in New York City and Miami where they had established trafficking organizations for powder cocaine, heroin, and marijuana.⁹⁴ By mid-1987, the posses also became the primary East Coast distributors of crack cocaine, setting up distribution rings in 12 cities.⁹⁵ Operations later spread westward to Dallas, Kansas City, Alabama, Kentucky, Mississippi, West Virginia, the Florida panhandle, and even south-central Los Angeles.⁹⁶

Posses are fragmented and competitive, resulting in relatively undisciplined and unstructured organizations. Indeed, centralizing tendencies have been "strenuously disavowed," at least by those directing marijuana distribution in previous incarnations of the posses. This fragmentation and the experience of many posse members in political revolts in Jamaica in the early 1980s are believed

⁹² DEA Report, *supra* note 11, at 1, 4.

⁹³ U.S. Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms, 1 Caribbean Based Organized Crime 1 (June 1993).

⁹⁴ DEA Report, *supra* note 11, at 4-5; Hamid, *supra* note 74, at 34-35, 57.

⁹⁵ Belenko, *supra* note 11, at 105-106 (citing news sources).

⁹⁶ DEA Report, *supra* note 11, at 1; Barton, *supra* note 57, at 28-31.

to have led to considerable violence committed by and among posses. Nevertheless, some centralizing of crack cocaine operations has been apparent since the late 1980s.⁹⁷

Typical roles within Jamaican Posses include boss (top of the chain of command), manager (oversees operations of retail sellers), courier (transports drugs or money between managers and sellers), seller (distributes drugs at retail level), lookout (protects sellers from law enforcement, competitors, customers), and steerer (directs customers to sellers). Lookouts or bodyguards commonly are employed to protect the drugs and financial interests. While generally only trusted workers are employed, enforcers are required to keep discipline because of disagreements and confrontations leading to violence that arises over profits, losses, and thefts.⁹⁸

Posses, while historically associated with crack cocaine distribution at all levels, increasingly are removing themselves from the violence and exposure to law enforcement entailed in the day-to-day operation of crack houses and street selling, focusing instead on supplying sellers with larger quantities of cocaine.⁹⁹

The Crips and the Bloods are rival gangs in Los Angeles whose membership comprises primarily Black youth. Although not formed initially to distribute drugs, the gangs nevertheless are believed to engage in considerable drug trafficking.¹⁰⁰ They had lucrative drug distribution organizations (concentrating primarily on distributing powder cocaine, marijuana, and PCP) already in place at the time crack cocaine was introduced into the United States.¹⁰¹

The Crips and the Bloods primarily distribute cocaine in the West and the Midwest.¹⁰² They began distributing in Los Angeles where gang leaders and membership were based.¹⁰³ The gangs since have expanded operations into as many as 40 cities across the United States, including Birmingham, Denver, Detroit, Las Vegas, Phoenix, and Seattle. This expansion eastward and

⁹⁷ DEA Report *supra* note 11, at 5; Hamid, *supra* note 74, at 61.

⁹⁸ DEA Report, *supra* note 11, at 6-7.

⁹⁹ *Id.* at 5.

¹⁰⁰ Skolnick *et. al*, *supra* note 6, at 10, 17 (Skolnick calls them "cultural" gangs established primarily around neighborhood identity. As the involvement of these gangs in crack cocaine distribution increases, law enforcement and others have grown skeptical of their "cultural" basis).

¹⁰¹ DEA Report *supra* note 11, at 9-10; Skolnick *et. al*, *supra* note 6, at 5, 8. *But see* the discussion *infra* for contrasting views within the literature regarding the degree of organization of street gangs.

¹⁰² *See* DEA Threat Assessment, *supra* note 13, at 34.

¹⁰³ DEA Report, *supra* note 11, at 9.

northward resulted from pressures by law enforcement and competition, and occurred as the gangs sought to take advantage of higher retail prices in smaller retail markets.¹⁰⁴ Gangs originally established operations in cities and towns in which friends or family were located. Older members often "fronted" drugs to younger ones to facilitate the entry of new sellers into the retail distribution.¹⁰⁵

Loosely organized into small units or "sets" of members, Crips and Bloods are present at all levels of distribution. Gang members serve as retailers dealing multiple grams or ounces on the street or in crack houses, a limited number of wholesale distributors (some of them former retail sellers), and regional traffickers, some with the ability to broker multi-million-dollar deals with Colombian importers.¹⁰⁶

Haitian gangs have been identified among the primary distributors of powder and crack cocaine in Miami, New York City, and the District of Columbia.¹⁰⁷ Haitian gangs often recruit retail sellers from recent, often unemployed, Haitian immigrants. Gang involvement in crack cocaine distribution is facilitated by easy access to powder cocaine that increasingly is transported through Haiti by Colombian cartels.¹⁰⁸

Dominican gangs are among the primary distributors of powder and crack cocaine in New York City and Massachusetts.¹⁰⁹ Bosses operating from the Dominican Republic often recruit Dominican immigrants located in the United States to staff retail distribution positions. The DEA identifies Dominican gangs as "always armed" and technologically sophisticated, using booby traps and walkie-talkies in their operations. The DEA also reports that the Dominican gangs are highly competitive and violent, resulting in less-structured, less-disciplined organizations.¹¹⁰

¹⁰⁴ DEA Threat Assessment, *supra* note 13, at 34.

¹⁰⁵ Belenko, *supra* note 11, at 105-106 (citing news sources); DEA Report *supra* note 11, at 1, 9, 10.

¹⁰⁶ DEA Report, *supra* note 11, at 9-10; Skolnick *et. al*, *supra* note 6, at 6, 18.

¹⁰⁷ Belenko, *supra* note 11, at 106 (citing news sources); DEA Report, *supra* note 11, at 2, 9; *but see* Reuter *et al.*, *supra* note 28, at 24 (indicating gangs "seem to play a minor role" in the District of Columbia).

¹⁰⁸ DEA Report, *supra* note 11, at 9.

¹⁰⁹ *Id.* at 2; Belenko, *supra* note 11, at 106 (citing news sources).

¹¹⁰ DEA Report, *supra* note 11, at 8.

b. Secondary Street Gangs

Numerous local street gangs, including Black organizations in Detroit, West Indian groups in Brooklyn and Harlem, and Black and Hispanic organizations in Los Angeles and northern California, are involved in crack cocaine and powder cocaine distribution to a lesser extent than the primary gangs discussed above.¹¹¹

In New York City, the prior involvement of Caribbean nationals with marijuana and cocaine led them into crack cocaine distribution when marijuana demand fell, marijuana supplies increasingly were interdicted, and, in contrast, powder cocaine became plentiful and in high demand. The relative ease of packaging crack cocaine and the increasing popularity of crack smoking, particularly among West Indian communities, also contributed to the gangs' involvement.¹¹²

c. "Entrepreneurial" or "Business-Model" Gangs

A second class of gangs, "entrepreneurial" or "business-model" gangs, can be distinguished from the primary and secondary "cultural" gangs discussed above. Cultural gangs are established primarily for social purposes, with drug distribution a subsidiary purpose of the gang. The shared ethnic, racial, and neighborhood characteristics of cultural gang members are of paramount importance.¹¹³

Entrepreneurial gangs, on the other hand, are established to further the financial objectives of the organization and not the gangs' cultural or neighborhood objectives. As with cultural gangs, entrepreneurial gangs rely extensively on people who have grown up in the gangs' territory or neighborhood. They exhibit considerable differentiation of roles within the organization, including bosses, couriers, street retailers, lookouts, and steerers.¹¹⁴ Drug supplies typically are "fronted" to sellers, and employees often receive benefits that include bonuses, food, lodging, and drugs.¹¹⁵

Entrepreneurial gangs have two models of organization. The first, the "vertical business" model, involves a multi-layered, hierarchical organization headed by a small number of people who control most aspects of employee distribution, including location of sales, prices, and profits. The

¹¹¹ DEA Report, *supra* note 11, at 5; Mieczkowski, *supra* note 37 (data for Detroit); Hamid, *supra* note 74 (data for Brooklyn and Harlem); Skolnick *et. al.*, *supra* note 6 (data for Los Angeles and Northern California).

¹¹² Belenko, *supra* note 11, at 109.

¹¹³ Skolnick *et. al.*, *supra* note 6, at 8, 11, 13, 15.

¹¹⁴ *Id.* at 8, 11, 13, 15.

¹¹⁵ Johnson *et al.*, *supra* note 11, at 56, 62.

"franchise business" model involves a dealer who distributes on consignment moderate quantities of drugs to several dealers, each of whom controls a separate organization. In either model, employees may frequently shift roles within the organization, and turnover may be high. Control of organization employees and competitors is established through the use of a variety of disciplinary methods and violence that can be "ruthless" and "pitilessly savage."¹¹⁶

G. ROLE OF YOUTH AND WOMEN IN CRACK COCAINE DISTRIBUTION

Research indicates that youth, even children, are prevalent in crack cocaine distribution organizations.¹¹⁷ For example, retail dealers in New York City tend to be under 18 years of age. As one researcher notes, "[a]ges of distributors . . . continue to fall, and today many distributing groups are primarily groups of teenagers," a factor believed to lead to strains that "erupt in violence."¹¹⁸

New York City arrest data indicate that both powder cocaine and crack cocaine distributors are young, but those involved in distributing crack cocaine are younger. Of 339 powder cocaine distributors, 29 percent were 21 years of age or less, and 30 percent were 22-26 years of age. By comparison, of 618 crack cocaine distributors, the figures are 38 percent and 30 percent, respectively.¹¹⁹ Ten percent of the youths who distribute crack cocaine sold only to friends or worked for dealers as lookouts or steerers; two-thirds (67%) were street retailers; and 23 percent not only sold the drug but also manufactured, smuggled, or wholesaled it.¹²⁰ Recent research suggests that the use of teenagers to sell crack cocaine may have plateaued, particularly as retail profits decrease and as social norms develop against "crack heads" and those who sell to them.¹²¹

¹¹⁶ *Id.* at 62-65; Skolnick *et. al.*, *supra* note 6.

¹¹⁷ See, e.g., Commission Hearing, *supra* note 6, at 10, 14 (statement of Jeff L. Tymony, Executive Director, Halfway House for Adults, Wichita, Kansas); J. Fagan and K. Chin, "Initiation into Crack and Cocaine: A Tale of Two Epidemics," 16 *Contemporary Drug Problems* 579-617 (1989); Inciardi & Pottieger, *supra* note 58, *passim*; Allen & Jekel, *supra* note 51, at 17; Mieczkowski, *supra* note 4, *passim*; T. Mieczkowski, *Crack Dealing on the Street: An Exploration of the YBI Hypothesis and the Detroit Crack Trade* (1990) (paper presented at Annual Conference of the American Society of Criminology, Baltimore, Maryland 1990); Skolnick *et. al.*, *supra* note 6, at 22; J. Inciardi, "Trading Sex for Crack Among Juvenile Drug Users: A Research Note," 16 *Contemporary Drug Problems* 689, 689-90 (1989) (citing media reports) (data derived from 254 interviews of crime-involved youth in Miami from October 1986 through November 1987).

¹¹⁸ Hamid, *supra* note 74, at 61.

¹¹⁹ Fagan and Chin, *supra* note 117, at 589-91, 597. *But see also*, pp. 602, 605 for a discussion on limitations of these data.

¹²⁰ Inciardi & Pottieger, *supra* note 58, at 260.

¹²¹ Johnson *et al.*, *supra*, note 11, at 363.

The DEA identifies crack cocaine distributors as responsible in large part for the increase in juvenile involvement in drug trafficking.¹²² In addition, considerable research suggests that crack cocaine dealers use juveniles in more visible roles, such as lookouts, steerers, and runners, in the belief that juveniles are more likely to escape detection and prosecution.¹²³ Young, unemployed or underemployed, illiterate, and otherwise impoverished persons are particularly susceptible to the allure of profits to be made from drug distribution.¹²⁴

Other macro-economic factors associated with crack cocaine distribution, such as the nature of the economy, social structure, and the urban environment, have made it more likely that youth will distribute crack cocaine than powder cocaine (*see* Chapter 5, Section C titled "Cocaine in Context" for more detail).¹²⁵

Similar reasons may be behind an increased use of women to distribute crack cocaine. The DEA suggests that women have greater roles in crack cocaine distribution relative to distribution of other drugs. Women are used to make straw purchases of firearms or to rent residences to use as crack and stash houses on behalf of a distributor so he or she can remain unknown (to the gun dealer or the landlord, as the case may be).¹²⁶ In Miami, 12 percent of youth dealers are women.¹²⁷

H. PRICES, PROFITS, REVENUES

1. Marketing Strategies

As a glut of powder cocaine developed in the early to mid-1980s, prices for both powder cocaine and crack cocaine fell.¹²⁸ Consequently, retail crack cocaine distributors began using new marketing strategies to ensure an expanded market for crack cocaine. One strategy involved varying

¹²² DEA Report *supra* note 11, at 13; Inciardi & Pottieger, *supra* note 58, at 257-58 (same).

¹²³ Commission Hearing *supra* note 6, at 136-37 (statement of Robert Byck); DEA Report, *supra* note 11, at 13; Skolnick *et. al*, *supra* note 6, at 22.

¹²⁴ DEA Report *supra* note 11 at 2; Fagan and Chin, *supra* note 117, at 581.

¹²⁵ Fagan and Chin, *supra* note 117, at 589-91, 597. *But see also*, pp. 602, 605 for a discussion on limitations of these data.

¹²⁶ DEA Report, *supra* note 11, at 13.

¹²⁷ Inciardi & Pottieger, *supra* note 58, at 264.

¹²⁸ Belenko, *supra* note 11, at 5; Klein *et al.*, *supra* note 29, at 625; DEA Report, *supra* note 11, at 1.

prices and quantities depending on the consumer's resources.¹²⁹ Some street gangs distributed free crack cocaine samples for first-time buyers or offered "double ups" (two doses for the price of one) to establish a market in smaller localities or new territory.¹³⁰

Perhaps the most significant marketing strategy involved selling crack in single-dosage units in plastic vials or baggies weighing between 0.1 and 0.5 gram apiece and affordably priced at between \$5 and \$20.¹³¹ In contrast, powder cocaine typically is retailed by the gram,¹³² *i.e.* five to ten doses, for less affordable prices (\$65-\$100). The affordability of crack cocaine expanded the consumer base into socioeconomic groups with less available cash.

Recently, innovations in marketing strategies have been targeted not at inducing new users but at increasing dealer profits. For example, in New York City the same "nickel" (\$5) vials that might have contained 0.1 gram of crack might now contain 0.05 gram. Some report that vials with "V"-shaped bottoms are used to give a false impression of the quantity of drug in the container.¹³³

2. Prices

Prices for crack cocaine and powder cocaine dropped dramatically during the 1980s. Since 1990, however, prices generally have remained constant or increased.¹³⁴ Short-term price fluctuations since 1990 have resulted primarily from law enforcement seizures, changes in demand, increased profit-taking by wholesalers, and worsening economic conditions.

a. Crack Cocaine

As indicated previously, crack cocaine generally is sold for \$5, \$10, or \$20 in single-dosage quantities ranging from 0.1 to 0.5 a gram,¹³⁵ although quantities in some areas have gradually decreased as dealers seek greater profits per sale.¹³⁶ The relatively low price for a dose of crack

¹²⁹ Allen & Jekel, *supra* note 51, at 17.

¹³⁰ Commission Hearing, *supra* note 6, at 42 (statement of Kevin M. Donnelly); DEA Report, *supra* note 11, at 10.

¹³¹ Skolnick *et. al.* *supra* note 6, at 58-59; Belenko, *supra* note 11, at 4; DEA Report, *supra* note 11, at iii.

¹³² Inciardi, *supra* note 30, at 470.

¹³³ Johnson *et al.*, *supra* note 11, at 362.

¹³⁴ Hamid, *supra* note 4, at 343-44.

¹³⁵ Inciardi, *supra* note 30, at 485; Allen & Jekel, *supra* note 51, at 17.

¹³⁶ Hamid, *supra* note 4, at 343.

cocaine makes it more affordable to lower-income persons.¹³⁷ Five grams of crack cocaine, the quantity necessary to trigger the five-year mandatory minimum, represents between 10 and 50 doses and costs between \$225 and \$750 (based on DEA estimates of price per gram).

The DEA notes a typical range of street prices in 1992 of \$10-\$50 depending on the size of the rock or vial, with an average price of \$10-\$20.¹³⁸ The DEA also states 1992 crack cocaine prices were \$45-\$150 for one gram, \$400-\$2,800 for one ounce, and \$14,000-\$40,000 for one kilogram, when available in this quantity.¹³⁹ In some saturated urban markets, the DEA reports even lower 1992 prices (Detroit: \$3 per vial; Philadelphia: \$2.50 per vial; New York City: \$2 per vial). Other rural or small-town markets may command prices closer to \$75 a rock, a factor that induces urban distributors to expand their operations.¹⁴⁰

Other data show prices consistent with the DEA's national data. In Los Angeles, the late 1980s price for a quarter-gram rock varied between \$10-\$25.¹⁴¹ In Detroit, the \$10 rock was "the unit of sale for most street-level distributors in the late 1980s."¹⁴²

b. Powder Cocaine

In contrast with the single-dosage quantities of crack cocaine sold by street retailers, powder cocaine usually is sold in five- to ten-dosage units (about a gram), typically for \$65-\$100 a gram.¹⁴³ In Detroit, an "eight ball" (one-eighth of an ounce or approximately 2.5-3.5 grams) of powder cocaine sells for at least \$125.¹⁴⁴ Five hundred grams of powder cocaine, the quantity necessary to trigger the five-year mandatory minimum, represents between 1000 and 5000 doses and costs between \$32,500 and \$50,000 (based on DEA estimates of price per gram).

¹³⁷ Mieczkowski, *supra* note 4, at 10.

¹³⁸ DEA Report, *supra* note 11, at iii, vi; U.S. Department of Justice, Drug Enforcement Administration, Illegal Drug Price/Purity Report: United States January 1990 - March 1993 3 (July 1993).

¹³⁹ DEA Report, *supra* note 11, at 13-14.

¹⁴⁰ *Id.* at 13.

¹⁴¹ Klein *et al.*, *supra* note 29, at 625 n.1.

¹⁴² Mieczkowski, *supra* note 4, at 10.

¹⁴³ Inciardi, *supra* note 30, at 485.

¹⁴⁴ Mieczkowski, *supra* note 4, at 10, 20.

DEA data indicate that powder cocaine prices in 1992 ranged from \$11,000-\$42,000 per kilogram, \$350-\$2,200 per ounce, and \$15-\$150 per gram. Prices tend to be lower in source cities such as Los Angeles and Miami.¹⁴⁵

3. Profits and Revenue

Estimated profits from distribution of cocaine, whether powder cocaine or crack cocaine, are difficult to specify given the nature of the drug trade, regional variation in cost and sales price, and varying purity of the drug. Nevertheless, some generalizations are possible.

a. Regional and Wholesale Distribution

Individuals at the top of the drug distribution chain make considerably more money than others in the organization.¹⁴⁶ DEA data for 1992 indicate domestic wholesalers can purchase a kilogram of powder cocaine from Colombian sources for \$950-\$1,235. Powder cocaine from other source countries such as Bolivia and Peru generally is more expensive, typically selling for \$1,200-\$2,500 and \$2,500-\$4,000 a kilogram, respectively. As noted above, a kilogram of powder cocaine can be sold wholesale, after dilution, for \$11,000-\$42,000, and can be marketed, after further dilution, in gram quantities for \$17,000-\$173,000. These figures, not considering distribution expenses, produce profits of \$16,000-\$171,000 per kilogram of powder cocaine.¹⁴⁷

Estimates of expenses associated with distribution, other than the wholesale costs of powder cocaine noted above, are not reported frequently in the research literature. However, one estimate is that ten percent of the wholesale price and one percent of the street price represent the costs of distributing the drug.¹⁴⁸

Law enforcement estimates suggest wholesale revenues are considerable. The DEA estimates that the Jamaican Posses gross \$1 billion in drug proceeds annually.¹⁴⁹ Dallas police

¹⁴⁵ DEA Threat Assessment, *supra* note 13, at 2-3.

¹⁴⁶ Belenko, *supra* note 11, at 110; DEA Report, *supra* note 11, at 6, 17.

¹⁴⁷ U.S. Department of Justice, Drug Enforcement Administration, Source to the Street: Mid-1993 Prices for: Cannabis, Cocaine, Heroin 6 (Sept. 1993) (hereinafter "DEA Source").

¹⁴⁸ Skolnick *et. al*, *supra* note 6, at 35. Skolnick *et. al*. go on to note that successful interdiction of cocaine hydrochloride smuggling that increases wholesale costs by an additional ten percent increases retail costs by only one percent. *Id.*

¹⁴⁹ U.S. Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms, VII Jamaican Organized Crime, 2 (June 1992).

estimate that crack houses run by Jamaican Posses in that city gross \$400,000 per day, or about \$146 million annually.¹⁵⁰

Jamaicans dealing crack cocaine in Kansas City operate an estimated 100 crack houses, each of which are required to turn \$4,000-\$10,000 a day in receipts on the sale of up to 1,000 "dimes" (\$10 rocks).¹⁵¹ These figures represent \$360 million in annual crack house sales in Kansas City alone.

b. Retail Distribution

Retail dealers of all drug types experience significant potential for profit-making early in the historical cycle of the drug when demand is high relative to the number of distributors.¹⁵² However, as the drug era progresses and more dealers flood the market, retail dealers generally earn only modest sums of money largely because large supplies and stiff competition tend to lower prices. Additional reasons for the decline in profits include ripoffs, territorial changes, expenditures on or consumption of drugs for personal use, and loss of suppliers, dealers, and buyers through arrest.¹⁵³

c. Actual Profits in Washington, D.C., and New York City

Considerable evidence indicates that crack cocaine users who distributed crack cocaine in the late 1980s earned substantially more than user/sellers of other drugs.¹⁵⁴ Studies from the District of Columbia and New York are illustrative.

District of Columbia. Reuter *et al.* (1990) examined the economics of drug dealing in the District of Columbia and found that profits from the sale of all drugs during 1985-1987 were \$721 per month (median) for part-time sellers and \$2,000 per month for daily sellers. These profits often were matched or exceeded by legitimate income (75% of dealers had regular jobs and a median income of \$850 per month). This factor led the authors to conclude that the data showing legitimate

¹⁵⁰ Phillip C. McGuire, "Jamaican Posses: A Call for Cooperation Among Law Enforcement Agencies," 55 The Police Chief 20, 20 (1988).

¹⁵¹ Barton, *supra* note 57, at 30-31.

¹⁵² Reuter *et al.*, *supra* note 28, at 25-26.

¹⁵³ Hamid, *supra* note 2, at 343; DEA Report, *supra* note 11, at 17.

¹⁵⁴ Belenko, *supra* note 11, at 65 (citing Johnson *et al.* (1993)), 110.

and illicit income were "inconsistent with the hypothesis that individuals are driven to street dealing by sheer economic necessity."¹⁵⁵

In comparison, crack cocaine dealers in the District of Columbia earned median monthly net incomes of \$833. The gross income figures are higher than for powder cocaine, while net income figures are comparable to those for powder cocaine. The authors also note most of this income is derived by individuals working as freelancers or in small groups because gangs and other highly organized systems are not predominant in the District of Columbia.¹⁵⁶

Crack cocaine was the major source of drug income for 34 percent of street retailers in the District of Columbia, while powder cocaine was the major source of income for 32 percent. More dealers, however, sold powder cocaine (54%, including 34% who sold only powder cocaine) than sold crack cocaine (45%, including 25% who sold only crack cocaine).¹⁵⁷

New York City. Johnson *et al.* (1993) examined the 1988 monthly cash income from drug dealing by 1,003 drug users in certain New York City neighborhoods.¹⁵⁸ The data indicate that "nondrug users" who distribute crack cocaine generally sell fewer than four times a day but generally earn monthly cash income (from crack cocaine sales) that was considered "high" (\$1,000-\$6,000) or "very high" (more than \$6,000). These findings suggest that "nondrug users" in fact are involved with distribution, perhaps wholesale distribution, that is not limited to user quantities. "Nondrug users" sold crack cocaine more frequently than any other drug; they generally sold powder cocaine only once a day, if ever, rarely sold marijuana, and never sold heroin. Three-quarters of "nondrug users" who sold powder cocaine had monthly cash income between \$1,000 and \$6,000. For crack cocaine distributors, regardless of history of drug use, 21 percent earned a monthly income

¹⁵⁵ Reuter *et al.*, *supra* note 28, at 62, 68.

¹⁵⁶ *Id.* at 23-24, 62, 68.

¹⁵⁷ *Id.* at 58, 59. Note: Forty-one percent of the street-level dealers in the District of Columbia sold crack cocaine daily, and 39 percent sold powder cocaine daily, compared with 37 percent for all drugs combined. Only 20 percent of cocaine distributors (both powder and crack) sold only one day a week or less. Median time spent selling in the District was four hours a day for cocaine distributors (both powder and crack) compared with three hours a day for all drugs combined. The median number of sales per day was 16 for crack cocaine and 15 for powder cocaine, compared with 13 for all drugs combined. The median number of customers per day was 15 for crack cocaine and 12 for powder cocaine compared with 12 for all drugs combined. *Id.* at 59 and 61.

¹⁵⁸ Bruce D. Johnson *et al.*, "Crack Abusers and Noncrack Abusers: Profiles of Drug Use, Drug Sales, and Nondrug Criminality," 24 *Journal of Drug Issues* 117-141 (1994). This study summarizes interviews of 1,003 persons between August 1988 and July 1989 from New York City settings in which drug abusers could be conveniently recruited, *i.e.*, Northern Manhattan streets, arrestees, inmates, probationers/parolees, and treatment clients.

of less than \$1,000, 42 percent earned \$1,000-\$6,000, and 38 percent earned more than \$6,000. A powder cocaine distributor earned monthly incomes evenly across all three categories.¹⁵⁹

The data also indicate that "heavy crack users" are frequent sellers of crack cocaine (60% sell more than three times a day) and earn "high" or "very high" monthly incomes from crack cocaine distribution (42% of distributors earn more than \$6,000 a month and 40% earn from \$1,000-\$6,000). These heavy crack cocaine users sold crack cocaine more frequently than any other drug, but also sold powder cocaine relatively frequently, with "heavy crack users" earning more than the average drug user.¹⁶⁰

4. Compensation

A variety of methods are used to pay retail distributors. In Jamaican Posses, lookouts and steerers tend to "contract" with a gang for their services, while couriers, street sellers, and managers of sellers tend to be paid employees.¹⁶¹ Kansas City law enforcement reports that Jamaican retail sellers flown in from Miami and New York City were paid \$5 commissions for each quarter gram of crack cocaine they sold and \$10 for each half gram.¹⁶² In Detroit, compensation includes salaries, commissions, bonuses, and permission to operate side enterprises (*e.g.*, sale of drug paraphernalia). In addition, others, often users, are paid in drugs.¹⁶³

In Los Angeles, retail dealers often are provided drugs on consignment and permitted to retain one-quarter of the value of the drugs consigned for their own profits. Typical consignments amounted to \$700-\$4,000 of drugs, although as little as \$100 of crack cocaine may be consigned. Consignment generally is provided to relatives of the wholesaler or to those who have established a satisfactory history of past transactions. Crack users typically are not consigned drugs.¹⁶⁴ Recent research on New York City crack cocaine distribution suggests that the consignment system is used rarely in that city.¹⁶⁵

¹⁵⁹ *Id.* at 28, 30.

¹⁶⁰ *Id.* at 28, 30.

¹⁶¹ DEA Report, *supra* note 11, at 6.

¹⁶² Barton, *supra* note 57, at 30.

¹⁶³ Mieczkowski, *supra* note 37, at 73, 75, 80.

¹⁶⁴ Skolnick *et. al.*, *supra* note 6, at 18-19.

¹⁶⁵ Johnson *et al.*, *supra* note 11, at 361.

According to one study in the District of Columbia, 39 percent of crack cocaine dealers and 33 percent of powder cocaine dealers retain a portion of the drugs they have for sale for their own consumption. One-third of these retain half or more of the drugs.¹⁶⁶ In Miami, youths who sell crack cocaine frequently are paid in crack for their efforts. Thirty-five percent of lookouts and steerers, 85 percent of retail dealers, and 91 percent of wholesale dealers "often" (six or more times in the previous year) are paid in crack.¹⁶⁷

5. Drug Cutting to Increase Profits

Crack cocaine generally is not, contrary to popular belief, 100-percent pure.¹⁶⁸ Rather, the baking soda used in converting the powder cocaine remains as an adulterant in the crack cocaine after conversion, reducing the purity.¹⁶⁹ DEA laboratory analysis during the mid-1980's showed an average powder cocaine purity of more than 80 percent.¹⁷⁰ National Institute on Drug Abuse data show purity of gram quantities of crack cocaine ranging from 50 percent in Seattle to as high as 96 percent in Miami, where ammonia is used instead of baking soda in the conversion process.¹⁷¹

In addition, crack cocaine may be "cut" further or diluted, as is powder cocaine, to increase distributor profits. Although cutting crack cocaine is more difficult than cutting powder cocaine, some dealers attempt it with benzocaine, hicaïne, lidocaine, or procaine. Cocaine may be cut before or after conversion into crack cocaine; in either event, some portion of the cutting agents may survive the conversion process, reducing the purity of the crack cocaine.¹⁷²

Cutting cocaine not only increases the distributor's profits but also may leave chemical substances in the cocaine that cause undesirable side effects for the smoker. Indeed, widespread cutting agents and chemicals of varying quality result in some users purchasing powder cocaine for

¹⁶⁶ Reuter *et al.*, *supra* note 28, at 60-61.

¹⁶⁷ Inciardi & Pottieger, *supra* note 58, at 263.

¹⁶⁸ Inciardi, *supra* note 30, at 469; Belenko, *supra* note 11, at 4 (citing early official descriptions of the drug as nearly pure and recent evidence to the contrary); DEA Report, *supra* note 11, at vi; Skolnick *et. al*, *supra* note 6, at 26 (stating the "dry form of cocaine called 'crack' or 'rock' . . . is nearly pure").

¹⁶⁹ Inciardi, *supra* note 30, at 469.

¹⁷⁰ DEA Report, *supra* note 11, at 14.

¹⁷¹ National Institute on Drug Abuse, Epidemiologic Trends in Drug Abuse: Proceedings of the Community Epidemiology Work Group 11-18 (June 1992) (hereinafter "NIDA Proceedings").

¹⁷² DEA Report, *supra* note 11, at vi, 14; Mieczkowski, *supra* note 37, at 66, 67.

their own conversion in order to avoid crack cocaine that is adulterated with substances such as toxic chemicals, soap, chalk, or plaster.¹⁷³

DEA data show powder cocaine purity averaging 83 percent for kilogram quantities, 74 percent for ounces, and 64 percent for grams.¹⁷⁴ Purity of gram quantities ranges from a low of 15 percent in the District of Columbia to more than 90 percent in some midwestern and northeastern cities.¹⁷⁵

¹⁷³ DEA Report, *supra* note 11, at vi, 13.

¹⁷⁴ DEA Threat Assessment, *supra* note 13, at 4.

¹⁷⁵ NIDA Proceedings, *supra* note 171, at 11-18.

Chapter 5

COCAINE AND CRIME

A. INTRODUCTION

There is widespread belief that cocaine in general and crack cocaine in particular "causes crime to go up at a tremendously increased rate."¹ During debate about the Anti-Drug Abuse Act of 1986, for example, members of Congress expressed deep concern about increased crime related to crack cocaine. This chapter provides an overview of the current understanding of the connection between both powder and crack cocaine and crime. Sources reviewed here include empirical analyses, published and unpublished, and public testimony received by the Sentencing Commission.²

Section B summarizes the limited conclusions drawn by researchers to date on crime and cocaine through a framework that has been widely recognized as helpful in understanding and analyzing the relationship between drugs and crime. Section C provides some context for assessing the association between cocaine and crime. This is done through analyses of the social context surrounding cocaine distribution, how violence associated with both powder and crack cocaine compares historically to violence associated with other "drug eras," and how crime associated with both powder and crack cocaine compares to that associated with other drugs.

There are at least two important limitations concerning the research relied on in this chapter and in research on the relationship between drugs and crime in general. First, conducting research in this area and drawing conclusions from it is complex and otherwise difficult. Determining, for example, whether trafficking in a specific drug has a causal relationship with crime requires studies that disentangle trafficking in that drug from all concurrently influencing factors. It also requires

¹ See 134 Cong. Rec. S17,301 (Oct. 21, 1988) (statement of Sen. Helms, urging that crack cocaine offenses be subject to mandatory minimum penalties in part because "crack [cocaine] has been linked to violent crime"); 134 Cong. Rec. E2,701 (Aug. 10, 1988) (statement of Rep. Miller, expressing concern over the link between the crack cocaine trade and gang activity); 132 Cong. Rec. 31,330 (Oct. 15, 1986) (statement of Sen. Chiles); Hearing on Crack Cocaine, Permanent Subcommittee on Investigations of the Committee on Governmental Affairs, United States Senate, 99th Congress; C. Reinerman and H. Levine, "The Crack Attack: Politics and Media in America's Latest Drug Scare," in J. Best (Ed.), *Images Typifying Contemporary Social Problems* 117 (1989). See also, I. Wilkerson, "Crack's Legacy of Guns and Death Lives On," *The New York Times* A1 (Dec. 13, 1994).

² United States Sentencing Commission, *Hearing on Crack Cocaine* (Nov. 1993) (hereinafter "Commission Hearing").

that conclusions based on a particular sample, at a particular time, and in a particular place, not be readily generalized to the broader population.

Second, in part because of the complexity, little reliable research is available on specific drugs and their relationships to criminal activity. Moreover, there is even less research available on the differences in varying forms of a single drug, such as crack and powder cocaine. This chapter thus relies on the handful of currently available studies that investigate cocaine and crime. The Commission recognizes, as should readers of this report, the limitations of the available research data.

While there is little doubt that an association between drugs and crime can be found, the literature on the drugs/crime connection still provides no consensus as to whether drug use causes crime, involvement in crime causes drug use, or other factors cause both. To inform policy better in this important area, the Sentencing Commission, in conjunction with Florida State University, has recently initiated an examination of causal relationships between drugs and violent crime. The study will distill the body of literature on drugs and violent crime and conduct independent research to build on currently available research. The study is expected to be completed in early 1996.

B. DRUGS, CRIME, AND THE TRIPARTITE FRAMEWORK

In 1985, Dr. Paul J. Goldstein of the University of Illinois School of Public Health described "a tripartite conceptual framework" for analyzing drug-related crime, especially violent crime.³ The Goldstein framework increasingly has been recognized by researchers and others as helpful in understanding the nature of drug/crime associations.⁴ The Goldstein framework sets out three principal types of drug-related crime: systemic crime, psychopharmacologically driven crime, and economically compulsive crime.⁵ Although this framework was developed with violent crime in mind, its economic-compulsive prong is useful and relevant in considering nonviolent drug-related crime as well.

³ P. Goldstein, "The Drugs/Violence Nexus: A Tripartite Conceptual Framework," 14 Journal of Drug Issues 493 (Fall 1985).

⁴ See J. Inciardi, "The Crack-Violence Connection Within a Population of Hard-Core Adolescent Offenders," in M. de la Rosa, B. Gropper, and E. Lambert (Eds.), Drugs and Violence: Causes, Correlates and Consequences 92 (1990) (hereinafter "1990 Inciardi Adolescent Study"); K. Chin and J. Fagan, "Violence as Regulation and Social Control in the Distribution of Crack," in M. de la Rosa, B. Gropper, and E. Lambert (Eds.), Drugs and Violence: Causes, Correlates and Consequences 36 (1990) (hereinafter "1990 Fagan/Chin Study"); A. Reiss and J. Roth, Alcohol, Other Psychoactive Drugs, and Violence in Understanding and Preventing Violence (1993); J. Fagan, "Intoxication and Aggression" in M. Tonry and J.Q. Wilson Drugs and Crime (1990) (hereinafter "1990 Fagan Intoxication Study").

⁵ P. Goldstein, "Drugs and Violent Crime," Pathways to Criminal Violence 16, 24 (Neil A. Weiner *et. al.*, eds., 1989) (hereinafter "1989 Goldstein Violent Crime Study").

1. Systemic Crime

Systemic crime arises out of the system of drug distribution.⁶ It includes:

disputes over territory between rival drug dealers, assaults and homicides committed within dealing hierarchies as a means of enforcing normative codes, robberies of drug dealers and the usually violent retaliation by the dealers or their bosses, elimination of informers, disputes over drugs and/or drug paraphernalia, punishment for selling adulterated or phony drugs, punishment for failing to pay one's debts, and robbery violence related to the social ecology of copping areas.⁷

Systemic violence has been referred to as a means to achieve "economic regulation and control" in an illicit market.⁸ As one expert at the Sentencing Commission hearing on crack cocaine explained regarding this type of crime, "[i]n an underground economy, you can't sue. So you use violence to enforce your breaches of contract or perceived breaches of contract."⁹

a. Empirical Findings on Crack and Powder Cocaine and Systemic Crime

As noted in Chapter 4, many retail powder cocaine distributors also distribute crack. Thus, pulling apart the systemic crime associated with crack cocaine versus powder cocaine is difficult, if not impossible. As one study noted, "it is the frequency of selling cocaine products, not just selling in its smokeable form, that seems to best explain violence in [cocaine] selling."¹⁰

At the Sentencing Commission hearing on crack cocaine, a panel of noted researchers¹¹ addressed the specific topic of crack cocaine and its relationship to violent crime. The panel uniformly agreed that currently, "the primary association between [crack] cocaine and violence is systemic. It is the violence associated with the black market and distribution."¹² Dr. Steven Belenko

⁶ *Id.* at 30.

⁷ *Id.*

⁸ 1990 Fagan/Chin Study, *supra* note 4, at 36.

⁹ Commission Hearing, *supra* note 2, at 72 (testimony of Jerome H. Skolnick).

¹⁰ *See* 1990 Fagan/Chin Study, *supra* note 4, at 27.

¹¹ The panelists were Steven Belenko, Senior Research Fellow at the New York City Criminal Justice Agency; Jerome H. Skolnick, Professor of Law at the University of California, Berkeley; and Paul J. Goldstein, Associate Professor at the School of Public Health at the University of Illinois, Chicago Circle.

¹² Commission Hearing, *supra* note 2, at 67.

explained that such factors as the "volatile and jittery" nature of the early crack cocaine market, its tendency to attract younger, presumably more crime-prone sellers, and later attempts by organized dealer groups to exert control all led to an atmosphere in which participants in the crack cocaine trade were apt to "use . . . violence to maintain discipline, resolve disputes, and enforce control."¹³

The violent nature of the crack cocaine marketplace has been documented in three recent studies. A study of homicides in New York City during 1988 reported by Goldstein *et al.*,¹⁴ found that of 118 crack-related homicides that were studied, 85 percent were systemic in nature.¹⁵ The study examined over 400 New York City homicides during 1988 and found that about 53 percent were "drug related"; of these, about 60 percent were related to crack.¹⁶ Twenty-nine percent of the homicide perpetrators and 34 percent of victims were identified by authorities as drug traffickers, the "vast majority" of whom were considered to be "low level traffickers."¹⁷ The study found that seven crack-related homicides were "multi-dimensional," with systemic being one of the dimensions.¹⁸

The 1990 Inciardi Delinquent Adolescent Study of "seriously delinquent" adolescent offenders in Miami from 1985 to 1988¹⁹ also found an association between crack selling and violent crime. The sample consisted of 611 adolescents who had committed at least ten FBI "index" offenses,²⁰ or 100 lesser crimes, in the preceding 12 months. A second criterion for the sample was that the subjects used some kind of illegal drug regularly at any time during the 90-day period prior

¹³ *Id.* at 55-56.

¹⁴ P. Goldstein, H. Brownstein, P. Ryan, and P. Belluci, "Crack and Homicide in New York City, 1988: A Conceptually Based Event Analysis," 16 Contemporary Drug Problems 650 (Winter 1989) (hereinafter "1988 Goldstein *et al.*, Homicide Study").

¹⁵ *Id.* at 664 (table 2).

¹⁶ *Id.* at 662-663.

¹⁷ *Id.* at 661. Another study found that street-level dealers, who typically carry smaller quantities of crack cocaine and money, were less likely to be involved with violence than dealers at a higher level in the distribution chain. See M. Klein, C. Maxson, and L. Cunningham, "Crack, Street Gangs, and Violence," 29(4) Criminology 623-650 (1991). The DEA has reported, however, that street-level crack cocaine sales may involve a heightened risk of violence because street sellers conduct business in uncontrolled situations and may be unfamiliar with their customers. See U.S. Department of Justice, Drug Enforcement Administration, DEA Drug Situation Report: Crack Cocaine iii, 10 (November 4, 1993) (draft).

¹⁸ *Id.* at 675-78.

¹⁹ 1990 Inciardi Delinquent Adolescent Study, *supra* note 4, at 92.

²⁰ The author reports that "index" offenses, in the FBI's *Uniform Crime Reports*, include criminal homicide, forcible rape, aggravated assault, robbery, burglary, larceny/theft, motor vehicle theft, and arson. *Id.* at 92.

to the study.²¹ The study reported that 29.8 percent of the adolescents used crack cocaine regularly, and 29.3 percent used powder cocaine regularly. It also reported that those involved in dealing crack cocaine committed significantly more robberies than those who were not so involved.²² However, the study reported that higher rates of crack use and distribution do not necessarily translate into higher homicide rates (except in Washington, DC).²³ The study suggested that "the current focus on crack-related violence may be more the result of a media event than an emergent trend."²⁴

A 1990 study by Jeffrey Fagan and Ko-lin Chin found evidence that violence is associated specifically with the "economic regulation and control" of the cocaine marketplace.²⁵ The study compared results for crack and powder cocaine sellers and found that significant percentages of both regularly engaged in a range of violent interpersonal conflicts associated with selling (e.g., assaults to collect debts, fights with other sellers over drug quality).²⁶ The study noted that any increased violence in the crack market was due to two factors:

First, crack selling was concentrated in neighborhoods where social controls had been weakened by intensified social and economic dislocations in the decade preceding the emergence of crack. Second, the rapid development of new drug-selling groups, following the introduction of crack brought with it competition. Accordingly, violence within new selling groups *internally* to maintain control and violence and *externally* to maintain selling territory . . . was more likely to characterize the unstable crack markets than more established drug markets and distribution systems.²⁷

Systemic violence also has been found in analyses of powder cocaine markets. For example, as Inciardi reports, in the late 1970s and early 1980s, Miami's cocaine distribution network experienced vast systemic crime. Prior to this period, Colombians had shipped powder cocaine to Miami, where middlemen distributed it locally or transhipped it elsewhere.²⁸ In the late 1970s, the

²¹ *Id.*

²² *Id.* at 104.

²³ *Id.* at 107.

²⁴ *Id.* at 105.

²⁵ *Id.* at 36.

²⁶ *Id.* at table 6.

²⁷ See 1990 Fagan/Chin Study, *supra* note 4, at 25.

²⁸ See 1990 Inciardi Delinquent Adolescent Study, *supra* note 4, at 108.

Colombian drug kingpins moved to control the market without the middlemen and to take over cocaine distribution in South Florida. According to the study, this led to vastly increased systemic violence as territory was carved out among distributors. The murder rate rose to an all-time high of 621 murders (or 58.8 murders per 100,000 people) in 1981.²⁹ After the market stabilized and the Colombians gained control, the murder rate dropped by a third, down to a low of 33.2 murders per 100,000 people in 1987.³⁰ As crack distribution increased, however, the murder rate rose again after 1987 to 42.5 murders per 100,000 in 1988 and 40.5 in 1989.³¹

2. Psychopharmacologically Driven Crime

Psychopharmacologically driven crime occurs when "individuals, as a result of short- or long-term ingestion of specific substances, become excitable, and/or irrational and exhibit violent behavior."³² In short, use of the drug directly affects behavior, one consequence of which is criminal conduct.

Goldstein cites as an example of psychopharmacologically driven crime his study of heroin-using prostitutes, who may behave more like robbers than prostitutes if they are experiencing withdrawal symptoms. In this state, the women reported "they might attack the client, take his money, purchase sufficient heroin to 'get straight,' and then go back out on the street" to return to "regular" prostitution.³³

Goldstein notes that drugs also may have a psychopharmacological effect if they are used to boost courage to commit crimes, either because they affect the brain in this manner directly or because the user expects the drugs to have this effect and, through a process of "self-fulfilling prophecy," they do.³⁴ In addition, psychopharmacologically driven violence may stem from drug use by the victim as well as the perpetrator. In other words, "drug use may contribute to a person behaving violently or it may alter a person's behavior in such a manner as to bring about that person's violent victimization."³⁵

²⁹ *Id.* at 107.

³⁰ *Id.* at 108 (table 9).

³¹ *Id.*

³² 1989 Goldstein Violent Crime Study, *supra* note 5, at 24.

³³ *Id.* at 25.

³⁴ *Id.* at 26.

³⁵ *Id.*

As discussed in Chapter 2, powder and crack cocaine contain the same active ingredients and thus the psychopharmacological effects of the two are qualitatively the same. The psychopharmacological effects of cocaine use, however, can differ dramatically as a result of the quantity used, the time period over which the use occurs, and the method of consumption (see Chapter 2).

a. Empirical Findings on Crack and Powder Cocaine and Psychopharmacologically Driven Crime

The limited evidence to date suggests that psychopharmacologically driven crime may be least important in explaining the association between crime and both crack and powder cocaine. With respect to violent crime, the 1990 Goldstein *et al.*, Homicide Study found that only three of the 118 exclusively crack-related homicides in the study were psychopharmacological in nature, and in two of these three cases the victim precipitated the crime. The study concluded that there were another two psychopharmacologically driven homicides in which crack was involved. However, alcohol also was involved in these two cases, and overall, some 21 alcohol-only homicides were considered to be psychopharmacologically driven – considerably more than for any other drug – suggesting that alcohol may have played a significant role in these two crack-related cases.³⁶

The 1990 Inciardi Delinquent Adolescent study found that only 5.4 percent of its sample of seriously delinquent adolescents – adolescents who commonly (but not necessarily exclusively or even primarily) used crack cocaine – reported "involvement" in psychopharmacologically driven violence at least once in the prior 12 months.³⁷ Given that nearly 80 percent of the sample also reported involvement in "major felonies" during the same time period – a total of 18,477 such felonies committed by 611 adolescents in the 12-month time frame³⁸ – the reported incidence of psychopharmacologically driven violence is relatively low.

A 1990 study by Fagan also generally concluded that "to date, there has been no systematic research linking crack cocaine use with increased [psychopharmacologically driven] violence."³⁹ Fagan went on to note, however, that "there is evidence of a sudden and precipitous depression

³⁶ *Id.* at 664 (table 2), 665.

³⁷ 1990 Inciardi Delinquent Adolescent Study, *supra* note 4, at 98.

³⁸ *Id.* at table 5.

³⁹ 1990 Fagan Intoxication Study, *supra* note 4, at 241, 257.

following crack use."⁴⁰ He surmised this depression may be more causally related to subsequent economically compulsive crime than to psychopharmacologically driven crime.⁴¹

3. Economically Compulsive Crime

Economically compulsive crime is committed by persons who are financially driven to the criminal activity by financial needs brought about by drug consumption – for example, robbery that is committed by drug users "in order to support costly drug use."⁴² Goldstein notes:

Economically compulsive actors are not primarily motivated by impulses to act out violently. Rather, their primary motivation is to obtain money to purchase drugs. Violence generally results from . . . [s]uch factors [as] . . . the perpetrator's own nervousness, the victim's reaction, [the presence of] weaponry . . . and so on.⁴³

a. Empirical Findings on Crack and Economically Compulsive Crime

A recent study by Inciardi and Pottieger⁴⁴ focused on the criminal activities of the users of crack cocaine. The study found that male "street users" – users from neighborhoods with high rates of cocaine use – engaged in a large number of criminal offenses,⁴⁵ the vast majority of which – more than 98 percent – were retail drug sales.⁴⁶ Most of these street users also reported that some of their living expenses and over 90 percent of their drug use were financed by crime, suggesting that street users rely on frequent, relatively small drug sales to support their crack cocaine habit.⁴⁷

This is not to say, the authors noted, that street users did not engage in other criminal activity to generate cash. The study found, in fact, that 48 percent of the men and 62 percent of the women

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² 1989 Goldstein Violent Crime Study, *supra* note 5, at 27.

⁴³ *Id.*

⁴⁴ J. Inciardi and A. Pottieger, "Crack-Cocaine Use and Street Crime," *Journal of Drug Issues* (forthcoming 1994) (on file with University of Delaware Center for Drug and Alcohol Studies) (hereinafter "Forthcoming Inciardi/Pottieger Users Study").

⁴⁵ *Id.* at 15.

⁴⁶ *Id.*

⁴⁷ *See id.* at 29.

committed, on average, one "petty property crime" (e.g., shoplifting) per week, and some 69 percent of women users "were trading sex for money or drugs, or helping a prostitute partner do so."⁴⁸ The authors also reported that "a significant minority of the men were engaged in fairly high numbers of violent or potentially violent offenses, most commonly as an adjunct to their drug business offenses."⁴⁹ Relatively speaking, however, the criminal conduct of the street users was tilted heavily toward retail crack cocaine selling.

The authors' profile of these offenders as primarily users who sold crack to support their crack consumption – as opposed to sellers who used crack incidentally to their trade – appeared to be supported by a finding that while every male subject (and 94% of female subjects) reported making some retail drug sales, no subjects reported manufacturing or wholesaling crack cocaine.⁵⁰ The study did find, though, that male users in the street user sample who were "engaged in fairly high numbers of violent or potentially violent offenses . . . most commonly [committed such crimes] as an adjunct to their drug business offenses," suggesting a largely systemic component.⁵¹

The fact that many retail crack cocaine sellers are users who deal primarily to finance their consumption of crack is supported by other studies as well. About 61 percent of crack cocaine dealers in one Detroit study cited the desire to consume crack as a principal motivation for their dealing.⁵² In a Miami study, 80 percent of delinquent youths who used crack cocaine also sold it.⁵³

A different analysis of crack users in drug treatment – "treatment sample" – suggested that these crack users are relatively less likely to have engaged in retail drug sales and more likely to have committed "large numbers of petty property crimes" prior to treatment.⁵⁴ The authors surmised that the difference in retail drug selling activity by the street and treatment samples could be due to the fact that:

the street sample consisted of the crack users who happened to be in good locations in which to support their crack use and other expenses by dealing. The treatment

⁴⁸ *Id.* at 18-19.

⁴⁹ *Id.* at 19.

⁵⁰ *See id.* at tables 4 and 6.

⁵¹ Forthcoming Inciardi/Pottieger User Study, *supra* note 44, at 19.

⁵² T. Mieczkowski, "Crack Distribution in Detroit," 17 Contemporary Drug Problems 9, 23 (1990).

⁵³ J. Inciardi and A. Pottieger, "Kids, Crack, and Crime," 21 (2) The Journal of Drug Issues 257, 260 (1991).

⁵⁴ *Id.* at 19.

sample, on the other hand, may be more representative of the customer base of these dealers, and hence more representative of all crack users.⁵⁵

The 1988 Goldstein *et al.* Homicide Study, discussed above, concluded that eight of the 118 exclusively crack-related homicides in the study were economically compulsive crimes. Six of the eight murders involved the murder of elderly persons during a robbery or burglary. One involved an attempted robbery of one crack user by another. The last murder allegedly was victim-precipitated; the victim allegedly was murdered trying to steal auto parts to support his crack habit.⁵⁶

As discussed earlier, there is evidence of increased involvement in prostitution by crack users. Women often trade sex for money or drugs, and some men become "pimps" to support their crack habit.⁵⁷ However, studies further indicate that prostitution is an economically compulsive crime for women who use both crack and powder cocaine (*see* Chapter 3).

4. Crime Indirectly Related to Crack

The Goldstein tripartite framework seeks to explain crime that is drug related, either because the crime is an adjunct to the unregulated marketplace (systemic), is a means to support drug consumption (economically compulsive), or occurs because of the drug's direct (or assumed) psychopharmacological effects on behavior. The tripartite framework, however, does not answer the question as to whether drug sellers, including cocaine sellers, have a tendency to use violence outside the drug context. Nor do other data at this point appear to offer a clear explanation of this association.

Researchers have speculated, however, that nondrug violence may be "intensified"⁵⁸ by the cocaine marketplace (and specifically the crack cocaine marketplace) because systemic violence creates a setting in which violent behavior generally is deemed acceptable.⁵⁹ Others point to the socioeconomic status of innercity neighborhoods as contributing to the extension of market violence to nondrug settings (*see* Section C, *infra*). Nonetheless, empirical studies conducted to date tend to

⁵⁵ *Id.* at 24.

⁵⁶ 1988 Goldstein *et al.* Homicide Study, *supra* note 14, at 666-67.

⁵⁷ K. Chin and J. Fagan, The Impact of Crack on Criminal Careers: Crime and Drug Involvement Following Initiation Into Cocaine Smoking (Aug. 1992) (unpublished, on file with Rutgers University School of Criminal Justice) (hereinafter "1992 Chin/Fagan Study").

⁵⁸ *See also* 1990 Fagan/Chin Study, *supra* note 4, at 36. ("The crack market apparently has intensified the social processes that sustain both drug-related and other violence.")

⁵⁹ S. Belenko, J. Fagan, and K. Chin, Typologies of Criminal Careers Among Crack Arrestees (Nov. 1989) (hereinafter "1989 Belenko *et al.*, Study"); Commission Hearing, *supra* note 2, at 59 (testimony of Steven Belenko).

find an association between crack cocaine involvement and the commission of other kinds of crime. This is true regardless of whether involvement is gauged by using or selling crack cocaine.

In one such study, Steven Belenko *et al.*⁶⁰ examined a group of New York City "crack arrestees," an undifferentiated group of crack cocaine users and sellers. Overall, the study found "both an increased incidence of violent arrest post-[crack] initiation for new offenders and an accelerated rate of violent arrests for those with prior records of violence."⁶¹ The study concluded that the arrestees' increased violence was "not limited to the context of the drug transaction," but rather could occur in other settings.⁶²

The Chin and Fagan⁶³ study, discussed above, was consistent with Belenko but contained a noteworthy refinement. The study distinguished between samples of crack cocaine "users" and "users/sellers" drawn from two New York City neighborhoods with high concentrations of crack cocaine activity. (The "users/sellers" category was denominated as such because the authors were unable to identify sellers who had not also used crack cocaine.)⁶⁴

The authors found that following involvement with crack cocaine, users reported significant increases in aggravated assault, theft, and, among women, prostitution.⁶⁵ The authors also reported, however, that "no users reported initiation into any form of crime following crack initiation. Instead, it appears from this study that crack intensifies the behaviors in which users already were involved."⁶⁶

The picture among users/sellers was somewhat different. Female users/sellers, who typically held only low-level trafficking positions, also reported increased prostitution following crack involvement; but male users/sellers, in contrast to users, reported significant increases in crime only with respect to selling stolen goods,⁶⁷ and their commission of burglaries appeared to drop.⁶⁸

⁶⁰1989 Belenko, *et al.*, Study, *supra* note 59.

⁶¹ *Id.* at 21.

⁶² *Id.* at 25.

⁶³ 1992 Chin/Fagan Study, *supra* note 57, at 13-14.

⁶⁴ *Id.* at 5.

⁶⁵ *Id.* at 11.

⁶⁶ *Id.* at 16.

⁶⁷ *Id.* at 12.

On the other hand, while the data generally did not show that users/sellers increased their commission of violent and other crimes following crack initiation, "[users/sellers] were [already] extensively involved in crimes both within and outside the context of drug selling prior to initiation into crack."⁶⁹ This finding led the authors to conclude that "processes of social or self-selection seemed to attract active offenders into [that] marketplace."⁷⁰ In short, in the authors' view, the direct effect of crack on violent behavior seems to be less clear because of the users/sellers' prior involvement in these behaviors and their general participation in the often violent world of drug selling.⁷¹

In their study, Chin and Fagan found that crack and powder cocaine both attracted younger people to drug selling and violence. They found that "arrest and conviction data suggest that violence and participation in drug selling are more strongly associated with crack than with cocaine [powder]."

C. COCAINE IN CONTEXT

This section provides additional context for evaluating the crime associated with cocaine.

1. The Social Context of Cocaine Distribution

All three panelists testifying on the association between crack cocaine and violence at the Sentencing Commission hearing stressed that crack/crime associations cannot be assessed in isolation from the social environment in which the marketplaces for these drugs occur.⁷² Dr. Skolnick stressed the importance of the varying gang cultures in which cocaine trafficking, including crack cocaine, is often a part. He observed that it is "the underlying culture of the gangs in a particular area that accounts for the violence more than anything else."⁷³

⁶⁸ See *id.* at table 2.

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ *Id.* at 16-17.

⁷² Commission Hearing, *supra* note 2, at 80.

⁷³ *Id.* at 70. Dr. Skolnick's observation appears supported by a recently released study conducted for the National Institute of Justice. E. Walsh, "Chicago Street Gang Study Shows Fearful Toll of Powerful Weapons," *Washington Post* A4 (Nov. 29, 1993) (citing to study conducted by Carolyn Rebecca Black and Richard Black). That study concluded that gang turf battles in many areas were more likely to lead to homicides than drug trafficking disputes.

Dr. Belenko pointed to a range of concurrent non-cocaine forces that he indicated undermine a conclusion that cocaine in general and crack cocaine in particular cause crime:

[W]hile the crack subculture can be characterized as more violent and crime-involved compared with previous or parallel drug subcultures, the reasons for this are quite complex and probably not a function of any psychopharmacological effects. Thus, the media and public fears of a direct causal relationship between crack and other crimes do not seem to be confirmed by empirical data. Rather, the levels of violence and crime associated with crack appear to reflect parallel and other interactive forces that are related to the relative immaturity and volatility of the crack markets, the ages and types of persons initially attracted to crack distribution, the increasing social and economic disorganization of the nation's inner cities beginning in the 1980's, and the mounting proliferation of more powerful guns, as well as a spread of cheaper powder cocaine during the same period of time.⁷⁴

Other researchers have made similar observations about the importance of non-crack factors. Socioeconomic factors, for example, are thought by many to impact directly on the drug/violence relationship. Some sociologists theorize that deviant behavior is more likely to occur in a situation in which individuals lack access to legitimate means to achieve their economic goals.⁷⁵ Others postulate that "in conditions in which law and governmental social control are least developed, violence would be more evident as a form of social control."⁷⁶ The 1990 Fagan and Chin study discussed these theories in relation to the crack economy in the innercity.

Fagan and Chin considered crack cocaine development during a concurrent decline in the lawful economy of innercity neighborhoods. Citing evidence of heavy innercity job loss during a time of job creation in surrounding suburbs and the fact that small-scale sellers were able to participate in the income-generating crack cocaine market, the authors observed that crack cocaine distribution attracted participants at a time when economic and social counterweights to the underground economy were seriously diminishing.⁷⁷

Noting "that the vast majority of [residents] in inner-city communities are not cocaine or heroin abusers or criminals," Bruce Johnson *et al.* similarly found that such factors as the prospects of employment in the crack trade for young persons "who most likely would be otherwise

⁷⁴ *Id.* at 59.

⁷⁵ See 1990 Fagan Intoxication Study, *supra* note 4, at 274.

⁷⁶ See 1990 Fagan/Chin Study, *supra* note 4, at 13.

⁷⁷ 1990 Fagan/Chin Study, *supra* note 4, at 10-12.

unemployed" played a role in expanding "the criminal underclass subculture."⁷⁸ In sum, whatever the precise effects of social and environmental factors, a number of researchers stress their relevance in considering both the rapid development of crack cocaine and crack's association with crime.

2. Cocaine and Other Illicit Drug Markets

The association between drugs and crime is not unique to cocaine. Research previously has found associations between violent crime and marijuana, heroin, and other drug trafficking.⁷⁹ Research conducted since the 1920s has suggested "that while the use of . . . [illicit] drugs does not necessarily initiate criminal careers, it tends to intensify and perpetuate them."⁸⁰

Few researchers who have explored cocaine/crime associations have also directly compared the associations of crime to other drugs. Researchers who have made such comparisons paint a somewhat mixed picture. As stated above, the Goldstein *et al.* Homicide Study found that 60 percent of drug-related homicides in New York City in 1988 were related to crack cocaine. However, because crack cocaine was a particularly popular drug during this period, this finding by itself sheds limited light on crack's relative association with drug-related violence.

The 1990 Inciardi Delinquent Adolescent Study and a companion study⁸¹ suggest a more definite answer. These studies compared crime patterns of "seriously delinquent" adolescent offenders depending on the offenders' "proximity to the crack market." The studies concluded that proximity to crack trafficking correlated with increased commission of major felonies and property crimes.

In particular, it should be noted that these data suggest that it is not drug sales in general but specifically the crack business which is so highly problematic. . . . 86 percent of the non-crack business group were selling *some* drug, averaging around 200 sales per year. But the involvement of this group in major felonies and petty property crime was distinctly lower than that of youths with even minor involvement in the crack business, let alone compared to that of crack dealers.⁸²

⁷⁸ B. Johnson, T. Williams, K. Dei, and H. Sanabaria, "Drug Abuse in the Inner City: Impact of Hard-Drug Use and Sales on Low Income Communities," in M. Tonry and J. Wilson (Eds.), 13 Crime and Justice, An Annual Review of Research 9-68 (1990) (hereinafter "1990 Johnson *et al.* Inner City Study").

⁷⁹ See authorities cited in 1992 Chin/Fagan Study, *supra* note 57, at 4.

⁸⁰ Forthcoming Inciardi/Pottieger Users Study, *supra* note 44, at 5.

⁸¹ J. Inciardi and A. E. Pottieger, *supra* note 53, at 257.

⁸² *Id.* at 268.

This characterization is consistent with testimony of Steven Belenko at the Sentencing Commission's crack hearing.⁸³ Dr. Belenko stated that he had analyzed arrest data for crack cocaine sellers and determined that, relative to powder cocaine sellers, crack cocaine sellers had higher arrest rates for both "nondrug and violent crimes."⁸⁴

The Commission's own data on federal cocaine offenders suggest that crack cocaine distributors are more violent than most other federal drug offenders. Federal crack cocaine offenders are more likely to possess a weapon and also more likely to have an extensive criminal record. (See Chapter 7 for a more detailed discussion of the characteristics of federal drug offenses and offenders.)

Cutting the other direction, perhaps, are findings in the 1990 Fagan/Chin Study.⁸⁵ This study analyzed systemic violence engaged in by drug sellers from two New York City neighborhoods with high concentrations of crack cocaine selling.⁸⁶ Noting that sellers in the study frequently sold more than one drug, the study found that retail crack cocaine sellers reported no more systemic violence than marijuana or heroin sellers.⁸⁷ The study found that those who sold powder cocaine in these neighborhoods – whether with crack cocaine or other drugs – reported the highest levels of systemic crime.⁸⁸

The Inciardi/Pottieger User Study compared economically compulsive crime committed by crack users in Miami with that committed by a comparable sample of heroin users a decade earlier. As noted, this study found that more than 98 percent of the crimes committed by male "street" users of crack cocaine consisted of small retail drug sales; less than two percent were property or other crimes. In contrast, the authors found that "dealing represented 51 percent of total offenses for male heroin users, among whom another 34 percent of all crimes were thefts and other property crimes."⁸⁹ These data show a distinction between the economically compulsive crime most associated with the study's sample of crack cocaine users (retail drug sales) and that associated with the sample of heroin users (a broader mix of drug and property crimes).

⁸³ Commission Hearing, *supra* note 2, at 49-60.

⁸⁴ *Id.* at 57.

⁸⁵ 1990 Fagan/Chin Study, *supra* note 4.

⁸⁶ *Id.* at 13-14.

⁸⁷ *Id.* at 25.

⁸⁸ *Id.* at 27.

⁸⁹ Forthcoming Inciardi/Pottieger Users Study, *supra* note 44, at 17.

3. Violence Associated with the Current Cocaine "Epidemic"

At the Sentencing Commission hearing, Dr. Goldstein commented that systemic violence is not unexpected in a newly developing drug market such as crack cocaine:

Systemic violence fluctuates with phases of the illicit market economy. Rates of homicidal violence were high when a new market was being forged for powder cocaine. Wars between Colombian and Cuban syndicates for control of middle-level cocaine distribution contributed substantially to rising homicide rates in the late 1970s and early 1980s. When these wars were over, even though there was plenty of cocaine on the streets in the mid-1980s, homicide rates declined. The peak level of homicidal violence caused by the crack wars is similar to the peak caused by the powder cocaine wars which is, in turn, similar to the peak caused by the alcohol wars during prohibition.⁹⁰

Whatever conclusions are drawn about current levels of systemic violence in the crack cocaine market relative to levels for the current powder cocaine market, researchers have tended to agree that, from a historical perspective, crack cocaine is not unique. Dr. Goldstein testified that the national homicide rate (based on the number of homicides per 100,000 population) had "changed very little over the last 25 years." In 1992, he stated, the homicide rate was lower than in 1980, when systemic violence arising out of the newly developing powder cocaine market was about at its peak, and lower than in 1933, at the end of prohibition.⁹¹

D. THE DRUGS/VIOLENCE TASK FORCE

In June 1993, in Washington, D.C., the Sentencing Commission held a Symposium on Drugs and Violence in America. One conclusion of the symposium was, as stated earlier, that the currently available research data on the relationship between drugs and violence is limited. As a result, the Commission, together with the School of Criminology and Criminal Justice at Florida State University, is now sponsoring a task force to acquire a better understanding of the drugs/violence relationship.

The task force plans to conduct an in-depth examination of the issues related to the drugs/violence relationship by bringing together the accumulated knowledge and expertise of state and municipal leaders, academia, related federal agencies, Congress, criminal justice professionals, and concerned citizens. This expertise will be used to examine existing research and other

⁹⁰ *Id.* at 67.

⁹¹ *Id.* at 65.

information and to oversee several research projects aimed at clarifying specific matters of concern. The task force will present findings and policy recommendations that will help guide the response to drugs and violence in the future. The task force is expected to issue its report in early 1996.

Chapter 6

THE NATIONAL LEGISLATIVE AND LAW ENFORCEMENT RESPONSE TO COCAINE

A. INTRODUCTION

For at least a century, federal, state, and local governments have responded to drug use. The responses have been shaped by numerous factors, including constitutional and other divisions of governmental responsibility, the extent and nature of the immediate drug use problem, and public concern over the problem. This chapter examines the national legislative and law enforcement response to cocaine, including both federal and state responses.

To give some context, Section B first traces the history of national legislative and law enforcement efforts surrounding cocaine and other drugs. Section C lays out the congressional response to the evolving cocaine problem over the last two decades or so. This section includes a discussion of the reemergence of determinate sentencing in the federal system through the Sentencing Reform Act of 1984, mandatory minimum prison sentences and the Anti-Drug Abuse Acts of 1986 and 1988, and the distinctions made in federal legislation between crack cocaine and powder cocaine. Section D sets forth how the United States Sentencing Commission established sentencing guidelines for cocaine offenses in light of congressional action. Section E addresses the role of federal law enforcement agencies today in the national drug control strategy. Section F lays out the legislative responses of the states to cocaine. Finally, Section G considers the impact of prosecutorial and investigative discretion on cocaine offenders and sentences in the face of federal and state laws.

B. THE HISTORY OF LEGISLATIVE AND LAW ENFORCEMENT EFFORTS

1. An Earlier Cocaine Era

As discussed earlier in this report (*see* Chapter 2), the surge in cocaine use in the 1970s and 1980s was not without precedent. In the mid-1880s, cocaine was introduced into the United States

and was used widely through the early 1900s. Cocaine was promoted as a remedy for respiratory ailments, as an aphrodisiac, and as an antidote for morphine addiction and alcoholism.¹

By the turn of the century, the dangers of cocaine use and addiction were becoming apparent. As noted earlier, in 1891 for example, 200 deaths from cocaine intoxication were reported.² And according to one estimate, the U.S. population in 1906 – numbering only half of today's population – consumed as much cocaine as did the U.S. population in 1976.³

As early as 1887, some states began regulating cocaine. By 1914, the year the Harrison Narcotics Act was passed on the national level, 46 states had laws regulating the use and distribution of cocaine. Leading up to the Harrison Act, in 1910 the President presented Congress with a report that found cocaine to be more dangerous than any other "habit-forming" drug used in the United States. The Harrison Act was then passed, banning non-medical use of cocaine and requiring strict accounting of medical dispensing to patients.⁴

The Harrison Act was enforced by agents in the Treasury Department's Prohibition Unit of the Narcotics Division. Initial law enforcement efforts included arrests of physicians, pharmacists, and unregistered users. The Narcotics Division also aimed at closing clinics that had sprung up to treat addicts and that used maintenance regimens as part of the treatment.

Following passage of the Harrison Act, cocaine became scarce. By the 1950s, use of cocaine had declined, and the drug was no longer considered a problem.⁵ Cocaine reemerged as a drug of abuse during the mid-1960s.⁶

2. Other Drug Enforcement Efforts

Following the Civil War and through the rest of the 19th Century, opium was used extensively in pockets of the United States. In response to this, the first recorded drug law in the United States was passed: a municipal ordinance in San Francisco banning opium dens. A series

¹ J. Murray, "An Overview of Cocaine Use and Abuse," 59 Psychological Reports 243-264 (1986).

² D. Allen and J. Jekel, Crack: The Broken Promise (1991).

³ *Id.*

⁴ D. Musto, "Opium, Cocaine and Marijuana in American History," Scientific American 44 (1991).

⁵ Murray, *supra* note 1; R. Siegel, "New Patterns of Cocaine Use: Changing Doses and Routes," 61 National Institute on Drug Abuse Research Monograph Series 204-222 (1985).

⁶ *Id.*

of state laws followed. In 1887, the federal government prohibited the importation of opium by Chinese nationals, and, in 1905, restricted opium smoking in the Philippines.⁷

In the following years, the United States launched a series of international conventions designed to foster narcotics control activity, including the Shanghai Opium Convention of 1909 and the 1911 International Conference on Opium at The Hague. These conferences ultimately led to the 1914 Harrison Act, regulating cocaine and other drugs.⁸

As the availability of cocaine diminished following the Harrison Act, a concurrent rise occurred in the popularity of marijuana, amphetamines, and other drugs with similar physiological and psychotropic effects. In 1922, the Narcotic Drugs Import and Export Act restricted drug imports and created the Federal Narcotics Control Board composed of the Secretaries of State, Treasury, and Commerce. The Act expanded the role of the Customs Department in interdicting illegal narcotics shipments to the United States.⁹

In 1930, the Federal Bureau of Narcotics was created and charged with enforcing drug laws, excluding alcohol laws. In the next several years, growing public concern about marijuana prompted passage of many state laws prohibiting its use. This led to the Marijuana Tax Act of 1937, which regulated and taxed marijuana at the federal level.¹⁰

Following World War II, drugs again became a national concern. The Boggs Act of 1951 and the Narcotic Control Act of 1956 increased maximum criminal penalties for violations of the import/export and internal revenue laws related to drugs and also established mandatory minimum prison sentences. These penalties were later increased and broadened.¹¹

In 1961, the United Nations adopted the Single Convention on Narcotic Drugs, establishing regulatory schedules for psychotropic substances. In the United States in 1963, the Prettyman Commission recommended the imposition of strict federal control for certain drugs and the transfer of federal law enforcement responsibilities to the Department of Justice. In the 1960s, as a shifting pattern of drug use emerged, federal legislation continued. The 1965 Drug Abuse Control Amendments began regulating the manufacture and distribution of amphetamines and barbiturates

⁷ U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Drugs, Crime and the Justice System, 78-80 (Dec. 1992).

⁸ Musto, *supra* note 4.

⁹ U.S. Department of Justice, *supra* note 7.

¹⁰ Musto, *supra* note 4.

¹¹ U.S. Department of Justice, *supra* note 7.

and included new criminal penalties. In 1966 and 1968, legislation provided for new treatment programs, and, in 1968, the Federal Bureau of Narcotics was transferred to the Department of Justice.¹²

C. THE CONGRESSIONAL RESPONSE TO COCAINE SINCE 1970

1. The 1970s and the Repeal of Mandatory Minimum Penalties

In 1970, Congress overhauled the federal drug control laws. Included in this overhaul was a general repeal of the mandatory minimum sentences for drug offenses.¹³ The authors of the Comprehensive Drug Abuse Prevention and Control Act of 1970 expressed a general concern that "increasingly longer sentences that had been legislated in the past had not shown the expected overall reduction in drug law violations."¹⁴ Moreover, there was general concern that "severe drug laws, specifically as applied to marihuana, have helped create a serious clash between segments of the youth generation and the Government" and have "contributed to the broader problem of alienation of youth from the general society."¹⁵ As a result, the 1970 Act revised the penalty structure of federal drug law. "The main thrust of the change in the penalty provisions [was] to eliminate all mandatory minimum sentences for drug law violations except for a special class of professional criminals."¹⁶

The legislative history of the 1970 Act shows that Congress was concerned that mandatory minimum penalties hampered the "process of rehabilitation of offenders" and infringed "on the judicial function by not allowing the judge to use his discretion in individual cases."¹⁷ Some members of Congress also argued that the mandatory minimum penalties reduced the deterrent effect of the law by reducing the consistency with which the drug laws were applied:

The severity of existing penalties, involving in many instances minimum mandatory sentences, have led in many instances to reluctance on the part of prosecutors to prosecute some violations, where the penalties seem to be out of line with the

¹² *Id.*

¹³ The mandatory penalty provisions of the Continuing Criminal Enterprise offenses remained intact.

¹⁴ S. Rep. No. 613, 91st Cong., 1st Sess. (Dec. 16, 1969).

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

seriousness of the offense. In addition, severe penalties, which do not take into account individual circumstances, and which treat casual violators as severely as they treat hardened criminals, tend to make convictions somewhat more difficult to obtain.¹⁸

In addition, the 1970 Act created a common standard for scheduling drugs. The Racketeer-Influenced and Corrupt Organizations and Continuing Criminal Enterprise laws, also passed in 1970, focused on the leaders of illegal drug enterprises and added forfeiture as an enforcement tool. In 1971, a Presidential Cabinet Committee for International Narcotic Control, chaired by the Secretary of State, was formed. The Foreign Assistance Act, passed in 1971, authorized assistance to countries to control drug trafficking and production. The Drug Abuse Office and Treatment Act of 1972 created the National Institute on Drug Abuse and the Special Action Office for Drug Abuse Prevention. In 1973, the Drug Enforcement Administration was created.

2. The 1980s and the Reemergence of Determinate Sentencing¹⁹

In the 1980s, Congress made "determinate sentencing," which had been gaining acceptance in the states, the center of federal sentencing policy. Congress questioned the legitimacy of indeterminate sentences and early parole release, particularly the ability of prison to rehabilitate offenders and of parole boards to identify offenders ready for release. At the same time an emerging consensus concluded that criminal laws would better help control crime if sentences were more certain, less disparate, and sufficiently punitive.

Through different laws, Congress enacted determinate sentencing in several forms in the 1980s. First, Congress passed the Sentencing Reform Act of 1984.²⁰ This law established the United States Sentencing Commission ("Commission") and directed it to promulgate a system of detailed, mandatory sentencing guidelines to assure more uniform federal court sentencing decisions. In addition, the Act abolished parole for defendants sentenced under the sentencing guidelines.

At the same time, and repeatedly since, Congress enacted mandatory minimum penalties for certain drug and firearms offenses. Mandatory minimums were enacted in 1984, 1986, 1988, and to a lesser extent in 1994, and legislative proposals currently under consideration continue to include

¹⁸ H. Rep. No. 1444, 91st Cong., 2d Sess., at 11 (Sept. 10, 1970).

¹⁹ For further historical background on this topic, see U.S. Sentencing Commission, The Federal Sentencing Guidelines: A Report on the Operation of the Guidelines System and Short-Term Impacts on Disparity in Sentencing, Use of Incarceration, and Prosecutorial Discretion and Plea Bargaining 7-14, 24-28 (Dec. 1991); U.S. Sentencing Commission, Special Report to Congress: Mandatory Minimum Penalties in the Federal Criminal Justice System 5-10 (Aug. 1991).

²⁰ Pub. L. No. 98-473, 98 Stat. 1837 (1984)

mandatory minimum penalty provisions.²¹ These statutes represent an approach very different than that embodied by guideline sentencing.²² Both the mandatory minimums and the guidelines are mandatory determinate sentencing schemes. The statutes, however, set a minimum penalty based on only a few characteristics of the offense and offender, particularly the type and amount of drug involved in the offense. Judges can sentence below this level only when the government makes a motion that the defendant has substantially assisted in the prosecutions of other persons. The guidelines take into account many more aggravating and mitigating factors. Judges can sentence outside the guideline range if there is a unusual factor present in the case that is not taken into consideration by the guidelines.

3. The Anti-Drug Abuse Act of 1986

The Anti-Drug Abuse Act of 1986²³ created the basic framework of mandatory minimum penalties that currently apply to federal drug trafficking offenses. The 1986 Act established two tiers of mandatory prison terms for first-time drug traffickers: a five-year and a ten-year minimum sentence. Under the statute, these prison terms are triggered exclusively by the quantity and type of drug involved in the offense. For example, the ten-year penalty is triggered if the offense involved at least one kilogram of heroin or five kilograms of powder cocaine or 50 grams of cocaine base.²⁴

The 1986 Act initiated the federal criminal law distinction between "cocaine base" and other forms of cocaine. The thresholds triggering the ten-year penalty – five kilograms of powder cocaine and 50 grams of cocaine base – create the 100-to-1 quantity ratio discussed at various points in this report. The identical ratio is reflected in the five-year mandatory minimum thresholds as well: 500 grams of powder cocaine and five grams of cocaine base both trigger the five-year penalty.

a. The General Legislative History of the 1986 Act; Development of the 100-to-1 Quantity Ratio

The 1986 Act was expedited through Congress. As a result, its passage left behind a limited legislative record. While many individual members delivered floor statements about the Act, no

²¹ See, e.g., S. 3 (Violent Crime Control and Law Enforcement Improvement Act of 1995), S. 38 (Violent Crime Control and Law Enforcement Amendments Act of 1995), and H.R. 3 (Taking Back Our Streets Act of 1995).

²² See, e.g., the Comprehensive Crime Control Act of 1984, Pub. L. No. 98-473, 98 Stat. 2019 (1984).

²³ Pub. L. No. 99-570, 100 Stat. 3207 (1986).

²⁴ Under the Act's approach, higher mandatory minimum penalties can apply if the offender previously had been convicted of a drug trafficking offense. See, e.g., 21 U.S.C. § 841(b)(1)(A).

committee produced a report analyzing the Act's key provisions.²⁵ The sentencing provisions of the Act were initiated in August 1986, following the July 4th congressional recess during which public concern and media coverage of cocaine peaked as a result of the June 1986 death of NCAA basketball star Len Bias. Apparently because of the heightened concern, Congress dispensed with much of the typical deliberative legislative process, including committee hearings.

Of particular relevance to this report, the legislative history does not include any discussion of the 100-to-1 powder cocaine/crack cocaine quantity ratio *per se*. Congress did, however, consider a variety of powder/crack quantity ratios before adopting 100-to-1. For example, the original version of the House bill that ultimately was enacted into law (H.R. 5484)²⁶ contained a quantity ratio of 50-to-1,²⁷ a number of other bills introduced during this period contained ratios of 20-to-1.²⁸ One of the bills containing a 20-to-1 ratio (S. 2849) was introduced on behalf of the Reagan Administration by Senate Majority Leader Dole.

The legislative history, as evidenced mainly by the statements of individual legislators, suggests four specific areas of congressional purpose.

- To the extent that Congress saw the drug problem as a national "epidemic" in 1986, it viewed crack cocaine as at the very forefront.
- The decision by Congress to differentiate crack cocaine from powder cocaine in the penalty structure was deliberate, not inadvertent.
- The legislative history, primarily in the form of member floor statements, shows (1) that Congress had concluded that crack cocaine was more dangerous than powder cocaine and (2) that this conclusion drove its decision to treat crack cocaine differently from powder cocaine.
- While Congress determined that the greater dangerousness of crack cocaine warranted "special" heightened penalties, Congress also generally intended that the quantities

²⁵ One committee report was issued on a legislative initiative that mirrored the penalty provisions of the 1986 Act in some ways. See H.R. Rep. No. 845, 99th Cong., 2d Sess., pt. 1 (1986). That report contains some general guidance on the thinking behind penalty levels and is discussed below.

²⁶ H.R. 5484, as amended by S. 2878 (the Anti-Drug Abuse Act of 1986), was passed by Congress and signed into law on October 27, 1986. The Senate bill (S. 2878) contained the 100-to-1 powder cocaine/crack cocaine quantity ratio.

²⁷ See also H.R. 5394 (Narcotics Penalties and Enforcement Act of 1986) (containing 50-to-1 ratio).

²⁸ See, e.g., S. 2787 (Mandatory Crack and Other Drug Penalties Act); S. 2849 (Drug Free Federal Workplace Act of 1986) (The Zero-Tolerance Act); S. 2850 (Drug Enforcement Act of 1986) (The Zero-Tolerance Act).

triggering drug mandatory minimum penalties for crack cocaine would be consistent with the 1986 Act's overall drug mandatory minimum scheme: quantities thought to be associated with "major" traffickers were to subject a defendant to a ten-year penalty and quantities thought to be associated with "serious" traffickers were to subject a defendant to a five-year penalty.

Congress's conclusions about the dangerousness of crack cocaine relative to powder cocaine flowed from specific assumptions. First, crack cocaine was viewed as extraordinarily addictive. This addictive nature was stressed not only in comparison to powder cocaine (*i.e.*, crack cocaine is "the more addictive . . . substance"²⁹) but also in absolute terms. Second, the correlation between crack cocaine use and the commission of other serious crimes was considered greater than that with other drugs. Floor statements focused on psychopharmacologically driven, economically compulsive, as well as systemic crime (although members did not typically use these terms). Third, the physiological effects of crack cocaine were considered especially perilous, leading to psychosis and death.³⁰ Fourth, members of Congress felt that young people were particularly prone to using crack cocaine. This was mentioned in debate as one of crack cocaine's most troubling features. Finally, there was a great concern that crack's "purity and potency," the cost per dose, the ease with which it is manufactured, transported, disposed of, and administered, were all leading to widespread use of crack.

Significantly, all federal circuit courts addressing the constitutionality of crack cocaine penalties have upheld the current federal cocaine sentencing scheme, including the 100-to-1 ratio. The courts have held that Congress had a "rational basis" for the penalty distinction, and that the penalty distinction was created out of the legitimate congressional objective of protecting the public against a new and highly potent, addictive narcotic that could be distributed easily and sold cheaply. (*See* Appendix C for a complete discussion of the legal challenges to crack cocaine penalties.)

b. Legislative History Surrounding Mandatory Minimum Penalties

In tying mandatory minimum penalties to the quantity of drug involved in trafficking offenses, Congress apparently intended that these penalties most typically would apply to discrete categories of traffickers – specifically, "major" traffickers (ten-year minimum) and "serious" traffickers (five-year minimum). In other words, Congress had in mind a tough penalty scheme under which, to an extent, drug quantity would serve as a proxy to identify those traffickers of greatest concern. Senator Byrd, then the Senate Minority Leader, summed up the intent during floor debate:

²⁹ 132 Cong. Rec. S8092 (June 6, 1986) (statement of Sen. D'Amato regarding S. 2580). *See also* 132 Cong. Rec. S14,293 (Sept. 30, 1986) (statement of Sen. Bumpers).

³⁰ 132 Cong. Rec. 26,447 (Sept. 26, 1986) (statement of Sen. Chiles).

For the kingpins – the masterminds who are really running these operations – and they can be identified by the amount of drugs with which they are involved – we require a jail term upon conviction. If it is their first conviction, the minimum term is 10 years . . . Our proposal would also provide mandatory minimum penalties for the middle-level dealers as well. Those criminals would also have to serve time in jail. The minimum sentences would be slightly less than those for the kingpins, but they nevertheless would have to go to jail – a minimum of 5 years for the first offense.³¹

Portions of the limited legislative history suggest that Congress intended, for all drug categories including crack cocaine, to link the ten-year mandatory minimum trafficking prison term to major drug dealers and to link the five-year minimum term to serious traffickers.

Perhaps of greatest import to cocaine offense sentencing, is the report issued by the House Judiciary Subcommittee on Crime following its consideration of an earlier version of the bill (H.R. 5394).³² According to the report, the Subcommittee determined that the five- and ten-year mandatory sentencing scheme would create the proper incentives for the Department of Justice to direct its "most intense focus" on "major traffickers" and "serious traffickers." "One of the major goals of this bill is to give greater direction to the DEA and the U.S. Attorneys on how to focus scarce law enforcement resources."³³ The Subcommittee defined major and serious traffickers as follows:

- **major traffickers:** "the manufacturers or the heads of organizations who are responsible for creating and delivering very large quantities;"³⁴

³¹ 132 Cong. Rec. S. 14,300 (Sept. 30, 1986). See also 132 Cong. Rec. 22,993 (Oct. 11, 1986) (statement of Rep. LaFalce) ("the bill... acknowledge[s] that there are differing degrees of culpability in the drug world. Thus, separate penalties are established for the biggest traffickers, with another set of penalties for other serious drug pushers"); H.R. Rep. No. 9-845, 99th Cong., 2d Sess., pt. 1 at 11-17 (1986) (construing penalty provisions of a comparable bill (H.R. 5394) similarly).

³² The crack cocaine triggering amounts in H.R. 5394 were 20 grams or more (five-year minimum) and 100 grams or more (ten-year minimum). These quantities were somewhat greater than those enacted into law and reflected a 50-to-1 powder-to-crack quantity ratio.

³³ *Id.*

³⁴ H.R. Rep. No. 845, 99th Cong., 2d Sess. pt. 1, at 16-17 (1986).

- **serious traffickers:** "the managers of the retail level traffic, the person who is filling the bags of heroin, packaging crack cocaine into vials . . . and doing so in substantial street quantities."³⁵

The Subcommittee directed staff to consult "with a number of DEA agents and prosecutors about distribution patterns of drugs which if possessed by an individual would likely be indicative of operating at such a high level."³⁶ After consulting with law enforcement professionals but without holding hearings, the Subcommittee set specific quantity levels for the entire range of illegal drugs, including powder and crack cocaine, that would trigger the five- and ten-year mandatory minimum penalties and that generally would be associated with major and serious traffickers. The Subcommittee report indicated that the bill's crack cocaine penalty triggers were set to fit into the major/serious trafficker scheme. In other words, the framework was to apply to crack cocaine in the same way as other drugs. At a mark-up of H.R. 5394, Congressman Hughes stated:

The quantity is based on the minimum quantity that would be controlled or directed by a trafficker in a high place in the processing and distribution chain. . . . For the major traffickers, the levels we have set [include] . . . 100 grams of cocaine freebase . . . ³⁷

As the 1986 Act quickly advanced through the legislative process in late summer and early fall, the Senate increased the powder cocaine-to-crack ratio to 100-to-1. Statements of individual Senators suggest that this augmentation was motivated principally by the perceived heightened harmfulness of crack and that the five- and ten-year mandatory minimum sentences ultimately were equated with those trafficked crack quantities that Congress believed would warrant at least the prescribed minimum sentence. For example, Senator Lawton Chiles, a leader in the effort to achieve stringent crack penalties, explained that:

This legislation will . . . decrease the amount for the stiffest penalties to apply. Those who possess 5 or more grams of cocaine freebase will be *treated as* serious offenders. Those apprehended with 50 or more grams of cocaine freebase will be *treated as* major offenders. Such treatment is absolutely essential because of the especially lethal characteristics of this form of cocaine. (*emphasis added*)³⁸

³⁵ *Id.*

³⁶ *Id.*

³⁷ The Narcotics Penalties and Enforcement Act: Markup on H.R. 5394 Before the Subcomm. on Crime of the Senate Comm. on the Judiciary, 99th Cong., 2d Sess. 131 (1986) (Statement of Rep. Hughes). Chairman Hughes added that the "serious trafficker" definition applied to dealers selling quantities of 20 grams of cocaine base.

³⁸ 132 Cong. Rec. 26,447 (Sept. 26, 1986).

At the same time, the Act's general mandatory minimum penalty scheme continued to be explained by a number of congressional leaders (for example, by Senator Byrd, *supra*) in terms of a correlation between quantities of each of the major street drugs (including crack) and the relative culpability of the typical trafficker involved with those quantities in drug trafficking organizations. Taken as a whole, the abbreviated, somewhat murky legislative history simply does not provide a single, consistently cited rationale for the crack-powder cocaine penalty structure.

4. The Role of the Media and Public Opinion

As stated above, the 1986 Act was notable for the speed of its development and enactment.³⁹ Congressional urgency is chronicled in the legislative history. Drug abuse in general, and crack cocaine in particular, had become in public opinion and in members' minds a problem of overwhelming dimensions.

Recalling recent drug-related deaths of the Boston Celtics' first-round basketball draft pick, Len Bias, and Don Rogers of the Cleveland Browns professional football team, members of Congress repeatedly described the dimensions of the drug problem in such dramatic terms as "epidemic."⁴⁰ Against this background, Senator Hawkins spoke in support of the 1986 Act, reflecting the sentiment for urgent legislation:

Drugs pose a clear and present danger to America's national security. If for no other reason we should be addressing this on an emergency basis . . . This is a bill which has far-reaching impact on the future as we know it as Americans and as we mature into the next century.⁴¹

The media played a large role in creating the national sense of urgency surrounding drugs, generally and crack cocaine specifically. Whether the media simply reported an urgent

³⁹ See 132 Cong. Rec. 31,329 (Oct. 15, 1986) (statement of Sen. Chiles) ("it is historical for the Congress to be able to move this quickly"); 132 Cong. Rec. 26,449 (Sept. 26, 1986) (statement of Sen. Rockefeller) ("I know it seems to some that we are moving too fast and frenetically to pass drug legislation."). Some members were critical of the speed with which the bill was considered. See, e.g., 132 Cong. Rec. 26,462 (Sept. 26, 1986) (statement of Sen. Mathias) ("Very candidly, none of us has had an adequate opportunity to study this enormous package. It did not emerge from the crucible of the committee process."); 132 Cong. Rec. 22,658 (Sept. 10, 1986) (statement of Rep. Lott) ("In our haste to patch together a drug bill - any drug bill - before we adjourn, we have run the risk of ending up with a patch-work quilt . . . that may not fit together into a comprehensible whole.").

⁴⁰ E.g., 132 Cong. Rec. 26,436 (Sept. 26, 1986) (Statement of Sen. Biden); 132 Cong. Rec. 26,444 (Sept. 26, 1986) (Statement of Sen. Deconcini); 132 Cong. Rec. 8,091 (June 20, 1986) (Statement of Sen. D'Amato); 132 Cong. Rec. 8,092 (June 20, 1986) (Statement of Sen. Mattingly).

⁴¹ 132 Cong. Rec. 26,436 (Sept. 26, 1986).

situation or rather itself created an exigency has been and will continue to be debated. What is clear, however, is that the crack problem in the United States coincided with large-scale print media and network news coverage of crack.

Crack cocaine was first mentioned in the media by the Los Angeles Times on November 25, 1984, referring to a cocaine "rock" that was appearing in the barrios and ghettos of Los Angeles. The New York Times first mentioned crack in a story on November 17, 1985. The coverage increased and intensified over time. In the months leading up to the 1986 elections, more than 1,000 stories appeared on crack in the national press, including five cover stories each in Time and Newsweek. NBC news ran 400 separate reports on crack (15 hours of airtime).⁴² Time called crack the "Issue of the Year" (September 22, 1986). Newsweek called crack the biggest news story since Vietnam and Watergate (June 16, 1986). CBS News aired a documentary entitled "48 Hours on Crack Street."

Some assertions made in these reports were not supported by data at the time and in retrospect were simply incorrect. One report in 1986, for example, labeled crack cocaine as "America's drug of choice." At the time, however, there were no prevalence statistics on the use of crack.⁴³ The first statistics on crack cocaine use compiled by NIDA subsequent to the report showed that snorting powder cocaine was still the preferred method of ingestion by 95 percent of cocaine users.⁴⁴

Another example is the coverage surrounding the death of Len Bias in June 1986. Bias died of cocaine intoxication the day after he was the second player drafted in the National Basketball Association's college draft in 1986. The method of cocaine ingestion that killed Bias was not known at the time of his death. Nonetheless, following Bias's death, newspapers across the country ran headlines and stories containing a quote from Dr. Dennis Smyth, Maryland's Assistant Medical Examiner, that Bias probably died of "free-basing" cocaine. Newspapers that ran such headlines included the Los Angeles Times, USA Today, the Chicago Tribune, The Atlanta Constitution, and the Washington Post.⁴⁵

⁴² C. Reinerman and H. Levine, "The Crack Attack: Politics and Media in America's Latest Drug Scare," in J. Best (Ed.), Images of Issues: Typifying Contemporary Social Problems 117 (1989).

⁴³ *Id.* at 121.

⁴⁴ *Id.*

⁴⁵ Dr. Smyth based his assertion on the fact that there were high concentration levels of cocaine in Bias's bloodstream. The previous week, however, Dr. Yale Caplan, a toxicologist in Maryland's Medical Examiner's Office said that the test of cocaine found in the vial at the scene "probably was not crack." And Maryland's Chief Medical Examiner, Dr. John E. Smialek, stated that the evidence suggests that Bias snorted cocaine due to the residue of cocaine in the nasal passages. Dr. Smyth's assertions, however, received the bulk of the coverage.

A few weeks after Bias's death, on July 15, 1986, the United States Senate's Permanent Subcommittee on Investigations held a hearing on crack cocaine. During the debate, Len Bias's case was cited 11 times⁴⁶ in connection with crack. Eric Sterling, who for eight years served as counsel to the House Judiciary Committee and played a significant staff role in the development of many provisions of the Drug Abuse Act of 1986, testified before the United States Sentencing Commission in 1993 that the "crack cocaine overdose death of NCAA basketball star Len Bias"⁴⁷ was instrumental in the development of the federal crack cocaine laws. During July 1986 alone, there were 74 evening news segments about crack cocaine, many fueled by the belief that Bias died of a crack overdose.⁴⁸

Not until a year later, during the trial of Brian Tribble who was accused of supplying Bias with the cocaine, did Terry Long, a University of Maryland basketball player who participated in the cocaine party that led to Bias's death, testify that he, Bias, Tribble, and another player snorted powder cocaine over a four-hour period. Tribble's testimony received limited coverage.

5. The Anti-Drug Abuse Act of 1988

Congress further underscored its concern about drugs generally, and crack cocaine specifically, in the Anti-Drug Abuse Act of 1988.⁴⁹ The most far-reaching change of the Anti-Drug Abuse Act of 1988 applied the same mandatory minimum penalties to drug trafficking conspiracies and attempts that previously were applicable only to substantive, completed drug trafficking offenses. Furthermore, with respect to crack cocaine, the Act amended 21 U.S.C. § 844 to make crack cocaine the only drug with a mandatory minimum penalty for a first offense of simple possession. The Act made possession of more than five grams of a mixture or substance containing cocaine base punishable by at least five years in prison. The five-year mandatory minimum penalty also applies to possession of more than three grams of cocaine base if the defendant has a prior conviction for crack cocaine possession, and to possession of more than one gram of crack if the defendant has two or more prior crack possession convictions.

⁴⁶ See transcript of the "Crack Cocaine" hearing before the Permanent Subcommittee on Investigations of the Committee on Governmental Affairs, United States Senate, 99th Congress.

⁴⁷ See testimony of Eric Sterling before the United States Sentencing Commission on proposed guideline amendments, public comment, March 22, 1993.

⁴⁸ Reinerman and Levine, *supra* note 42, at 117.

⁴⁹ Pub. L. No. 100-690, 102 Stat. 4181 (1988).

a. Congressional Intent Surrounding Crack Cocaine Possession Penalties

As originally introduced, the 1988 bill did not contain mandatory minimum penalties for possession of cocaine base. Rather, the penalties were added by floor amendments in both the House and in the Senate.⁵⁰ Relatively little debate surrounded the proposals to attach mandatory minimum penalties to cocaine base possession. Nevertheless, adoption of the proposals clearly signaled that the congressional concern over crack cocaine had continued and perhaps even increased since enactment of the 1986 Anti-Drug Abuse Act.

The 1988 Act's mandatory minimum penalties single out cocaine base possession in a manner that is much more severe than possession penalties for other serious controlled substances. Under the Act – and under today's law – simple possession penalties for cocaine base compared to any other drug are as follows:

- possession of any quantity of any other drug – whether heroin, powder cocaine, or any other controlled substance – results in a maximum penalty of one year in prison;
- cocaine base possession of between one and five grams, depending on criminal history, results in a minimum penalty of five years in prison.⁵¹

Because there was little debate on the amendments establishing the mandatory minimum cocaine base possession penalties, statements on the floor of the House and Senate by proponents provide the clearest indication of congressional intent. It should also be noted that the Department of Justice opposed the amendments.⁵² In debating the amendments, three reasons were given by proponents for singling out possession of crack cocaine for severe penalties.⁵³

⁵⁰ See 134 Cong. Rec. H.7,704 (Sept. 16, 1988) (Statement of Rep. Shaw); 134 Cong. Rec. S17,320 (Oct. 21, 1988) (Statement of Sen. Helms).

⁵¹ The Act established an anomaly in current law whereby persons with prior convictions for crack cocaine possession under 21 U.S.C. § 844(a) who have now been caught with up to five grams of crack cocaine, have an incentive to bargain with the prosecutor for a plea to trafficking offenses (e.g., a violation of 21 U.S.C. § 841) to avoid the possession mandatory minimum penalty that would otherwise apply. The anomaly results because trafficking traditionally has been considered a more serious offense than simple possession.

⁵² See e.g., 134 Cong. Rec. H7705 (Sept. 16, 1988) (statement of Rep. Rangel).

⁵³ 134 Cong. Rec. S17,301 (Oct. 21, 1988).

First, it was argued that the supply of "cocaine"⁵⁴ was greater than ever. Second, it was argued that crack cocaine "causes greater physical, emotional, and psychological damage than any other commonly abused drug."⁵⁵ Finally, repeating the concern expressed during consideration of the 1986 Act, it was argued that "crack [cocaine] has been linked to violent crime."⁵⁶ Of particular note was the connection between the crack cocaine trade and gang activity.⁵⁷ A strong emphasis was placed on the possession penalties as a means of aiding the enforcement community's efforts against crack cocaine traffickers by setting up a presumption that possession of five grams of crack cocaine meant the possessor was a trafficker. It was thought that possession of as little as five grams of crack cocaine was an indicator of distribution rather than personal use.⁵⁸

Finally, although not necessarily with reference to the cocaine base simple possession mandatory minimum penalties, members voiced notable concern during debate on the 1988 Act over a harm that was not discussed widely during consideration of the 1986 Act: the increase in cocaine-exposed infants due to crack cocaine use.⁵⁹ This concern led to a provision in the drug bill to establish demonstration projects to provide prevention, education, and treatment to substance-abusing pregnant women.⁶⁰

D. FEDERAL SENTENCING GUIDELINES AND COCAINE PENALTIES

Pursuant to the Sentencing Reform Act, the United States Sentencing Commission created sentencing guidelines. The guideline system was designed to provide certainty and fairness in sentencing and to avoid unwarranted sentencing disparities among defendants with similar records who have been found guilty of similar criminal conduct.⁶¹ To achieve these objectives best, the

⁵⁴ *Id.* See also, e.g., 134 Cong. Rec. H7,704 (Sept. 16, 1988) (statement of Rep. Hunter) ("There is so much crack that we . . . are creating users because the supply is so prevalent.").

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ See, e.g., 134 Cong. Rec. E2,701 (Aug. 10, 1988) (statement of Rep. Miller).

⁵⁸ Letter from Senator Jesse A. Helms to William Wilkins, Jr., Chairman, United States Sentencing Commission (May 15, 1989) (on file with the United States Sentencing Commission).

⁵⁹ See, e.g., 134 Cong. Rec. E2,933 (Sept. 14, 1988) (statement of Rep. Vento); 134 Cong. Rec. E2,701 (Aug. 10, 1988) (statement of Rep. Miller); 134 Cong. Rec. S17,320 (Oct. 21, 1988) (statement of Sen. Helms).

⁶⁰ 134 Cong. Rec. E2,933 (Sept. 14., 1988) (statement of Rep. Vento).

⁶¹ See 28, U. S.C., § 991.

Commission created a guideline system that looks, in part, at a defendant's actual conduct rather than just the offense of conviction.⁶² Details of how this system applies to cocaine offenders is provided in Chapter 7.

In setting the appropriate penalty levels for drug offenses, the Commission began by adopting the five- and ten-year mandatory minimum sentences set out in the 1986 Anti-Drug Abuse Act, and the quantities associated with these mandatory minimum sentences, as reference points.⁶³ Trafficking in 50 grams of crack or 5 kilograms of powder cocaine, offenses that carry a ten-year mandatory minimum term of imprisonment pursuant to statute were assigned offense level 32, an offense level corresponding to a guideline range of 121-151 months for a defendant in Criminal History Category I. Trafficking in 5 grams of crack or 500 grams of powder, offenses that carry a five-year mandatory minimum term of imprisonment, were assigned offense level 26, an offense level corresponding to a guideline range of 63-78 months for a defendant in Criminal History Category I.

Using the above two reference points, the offense guidelines were expanded proportionately in two-level increments, upward and downward, to address trafficking in larger and smaller quantities of crack and powder cocaine. The 100-to-1 quantity ratio was maintained throughout the offense levels. Thus, powder cocaine offenses were assigned offense levels from level 12, for offenses involving 25 grams or less, to level 42, for offenses involving 1,500 kilograms or more.⁶⁴ Crack offenses were assigned offense levels from level 12, for offenses involving 250 milligrams or less, to offense level 42, for offenses involving 15 kilograms or more.⁶⁵

E. THE FEDERAL ENFORCEMENT ROLE TODAY

Within the Departments of Justice, Treasury, Transportation, Defense, and State and the U.S. Postal Service, there are numerous agencies with operational and law enforcement responsibilities for drug control. These include, for example, the Drug Enforcement Administration, the Federal Bureau of Investigation, the United States Attorneys, the Immigration and Naturalization Service, the United States Marshals Service, the United States Customs Service, the Bureau of Alcohol,

⁶² See U.S. Sentencing Commission, Guidelines Manual 1-10 (1994).

⁶³ "The Commission has used the sentences provided in, and equivalencies derived from, the statute (21 U.S.C. § 841(b)), as the primary basis for the guideline sentences." *Id.* at §2D1.1, comment. (n.10).

⁶⁴ *Id.* at §2D1.1(c) (Drug Quantity Table). Amendment 505, effective November 1, 1994, specified level 38 as the highest offense level corresponding to drug quantity; however, the presence of other aggravating factors (*e.g.*, possession of a dangerous weapon) may increase the offense level above level 38.

⁶⁵ *Id.*

Tobacco and Firearms, the United States Coast Guard, and the Federal Aviation Administration. Defining the federal role in drug enforcement among and between these agencies and the myriad of state and local law enforcement agencies is difficult at best.

The Office of National Drug Control Policy was created to set forth a strategy to coordinate the federal, state, and local efforts to achieve drug control best. The current strategy defines the federal role in law enforcement. Because federal sentencing policy significantly impacts on this strategy, the strategy is discussed below. In addition, because the Drug Enforcement Administration is the primary drug enforcement agency, its strategic approach is briefly outlined as an example of a federal agency's role. The strategic roles discussed here have been defined by these agencies with respect to the drug problem generally and not with respect to individual drugs.

a. Office of National Drug Control Policy

The Anti-Drug Abuse Act of 1988 created the Office of National Drug Control Policy ("ONDCP") in the Executive Office of the President. The Act charged the Director of ONDCP with coordinating all national drug control policy, with jurisdiction extending to both supply and demand control. The Act requires ONDCP to publish a national strategy for drug control based on quantifiable goals, to advise the National Security Council on drug control policy, to recommend management, personnel, and organizational changes necessary to implement drug control strategy, and to consult with state and local governments.

In February 1994, ONDCP published its current National Drug Control Strategy. In it, ONDCP specifically defines the federal enforcement role in overall drug law enforcement. The National Drug Strategy also outlines the federal anti-drug role in areas other than enforcement. These other areas include providing financial and technical support for drug prevention, drug treatment, and alternative sentencing programs like boot camps, providing money for additional state and local police, and regulating firearms purchases.⁶⁶

The National Drug Control strategy outlines the federal enforcement role as follows:

The Federal role in drug law enforcement includes (1) aggressively pursuing those enforcement efforts that target the major international and inter-State drug enterprises; (2) providing leadership, training, technical assistance, and research; (3) fostering cooperation among Federal, State, and local agencies; and (4) facilitating State and Local enforcement and criminal justice efforts and/or innovative drug control approaches.⁶⁷

⁶⁶ The White House, Office of National Drug Control Policy, National Drug Control Strategy 36-46 (Feb. 1994).

⁶⁷ *Id.*

According to the ONDCP strategy, "[t]argeting the major trafficking organizations will continue to be the top priority of Federal drug law enforcement authorities." As the top priority, the Attorney General and the Secretary of the Treasury are developing a comprehensive investigative plan to ensure integration of efforts by all relevant agencies. Part of the investigative policy outlined by ONDCP includes "the kingpin and enterprise strategies" that are designed to ensure that federal enforcement efforts are focused on major drug trafficking organizations. These strategies target criminal organizations that transport and distribute drugs across state lines as well as those that transport drugs into the United States.⁶⁸

In addition, federal law enforcement agencies are permitted to assist states and localities through participation in joint task forces such as the Organized Crime Drug Enforcement Task Forces "when the needs of the community, the state, or the region are best served by such efforts." These task forces are meant to "support States and localities as they define and improve their criminal justice system." The task forces, and federal enforcement efforts generally, target gangs and other organizations that cause violence in communities regardless of the quantity of drugs distributed by the organizations.

Although such gangs may deal in a volume of drugs lower than that typically seen in Federal drug cases, several factors make Federal participation in State and local investigations and prosecution appropriate and necessary. These include the multi-State nature of gang operations, the potential violation of immigration laws by many of these groups, their involvement in violations of Federal firearms laws, and the threat their violence poses to local communities. Thus, efforts to control the gang problem will be a focus of our national antidrug efforts.⁶⁹

The National Drug Strategy also calls for continued federal involvement in border interdiction and in capturing those involved in money laundering and drug-related financial crimes.

b. Drug Enforcement Administration

In November 1993, the Drug Enforcement Administration (DEA) issued a Strategic Management System, outlining the agency's policies and priorities for the upcoming year. Consistent with the National Drug Control Strategy, DEA's Strategic Management System lays out the following priorities: (1) incapacitating leaders and important players in major international and interstate drug trafficking organizations; (2) disrupting the production of illegal drugs; (3) preventing the diversion of controlled substances; (4) controlling the chemicals used to manufacture illegal

⁶⁸ *Id.*

⁶⁹ *Id.*

drugs; (5) supporting interdiction efforts; and (6) seizing and forfeiting assets derived from drug trafficking.⁷⁰

To achieve these goals, the Strategic Management System delineates three specific responsibilities for DEA. First, DEA is to lead federal drug law enforcement by conducting, managing, and coordinating major investigations and international operations. As part of this responsibility, DEA has implemented the Kingpin Strategy, "DEA's primary enforcement effort focusing on the identification and targeting of drug Kingpins and their supporting infrastructure." Second, DEA is to coordinate and disseminate drug intelligence. For example, DEA manages the National Narcotics Intelligence System, collecting, analyzing, and disseminating drug-related intelligence. Finally, it is DEA's responsibility to share its experience and to provide investigative support to state and local enforcement agencies. DEA's State and Local Task Force Program is the primary vehicle by which DEA provides a federal presence at the state and local law enforcement levels.⁷¹

F. STATE LEGISLATIVE ACTION

To place federal legislative actions in context, the Sentencing Commission surveyed the laws of the 50 states, the District of Columbia, the Virgin Islands, and Puerto Rico⁷² to determine whether and to what extent the states⁷³ distinguish between crack cocaine and powder cocaine.⁷⁴

In addition to collecting information on cocaine penalties, the Commission sought information regarding the following:

- whether the state uses sentencing guidelines (either advisory or mandatory);

⁷⁰ U.S. Department of Justice, Drug Enforcement Administration, Strategic Management System: FY 1994 (Nov. 1993).

⁷¹ *Id.*

⁷² The Commission also surveyed research literature and drug policy experts to determine if the crack cocaine problem is international in scope and whether other countries distinguish crack cocaine from powder cocaine in their criminal laws. Both the literature and the experts suggested that there is no comparable crack cocaine problem outside the United States, although Canada has a significant crack problem. Further, neither the literature nor the experts cite a foreign country that differentiates crack and powder cocaine in its criminal laws.

⁷³ Unless otherwise indicated, this chapter's use of the term "state" hereafter signifies the states and territories contacted for the survey.

⁷⁴ The Commission reviewed relevant state statutes and guideline provisions. In addition, the Commission contacted each state sentencing commission or its counterpart if the state had such an agency. Otherwise, the Commission surveyed the state agency responsible for collecting criminal justice data (*e.g.*, statistical analysis centers).

- whether state guidelines distinguish between crack cocaine and powder cocaine;
- whether state sentences are determinate or whether early release through parole is available;
- whether the state has enacted mandatory minimum drug statutes; and
- whether the state compiles data on crack cocaine's impact on the prison population, on crack cocaine use and violence, or on crack cocaine's relative impact on prosecutorial caseloads.⁷⁵

1. Statutory Distinctions Between Crack Cocaine and Powder Cocaine

Because a primary focus of this report is the significant distinction made in federal statutes between powder cocaine and crack cocaine, the Commission researched whether state statutes distinguish between powder cocaine and crack cocaine. As of the date of this report, 14 states have some form of distinction between crack and powder cocaine in their statutory schemes. Following is a summary of the manner in which each of these states distinguishes between the two forms of cocaine.

It must be noted that depending on the state, the sentence actually served by an offender may be a small fraction of the sentence meted out by the state court. This is true for many reasons, most notably, prison capacity and whether parole is a feature of the state's law. The data on actual time served for defendants were not available to the Commission at the time of this report.

a. Alabama

Although Alabama does not provide different penalties for crack and powder cocaine crimes, it uses a 10-to-1 quantity ratio for determining eligibility for its diversion program. Penalties for cocaine crimes are determined by the quantity of cocaine involved. There is no separate mention of cocaine base or crack cocaine in these provisions.⁷⁶ However, the statutory provisions outlining eligibility for the diversion of offenders to drug treatment rather than prosecution provide different quantity levels for powder cocaine and crack cocaine offenders. If the substance involved in the offense was powder cocaine, the quantity cannot exceed five grams for eligibility for diversion. If the substance was crack cocaine, the quantity cannot exceed 500 milligrams (one-half gram).

⁷⁵ Information related to data collection was not available for all states.

⁷⁶ Alabama Code § 13A-12-231(2) (1993).

b. California

In California, individuals convicted of possession or possession with intent to sell crack cocaine and powder cocaine are sentenced to different terms. Crack cocaine defendants are sentenced to a three-, four-, or five-year term of imprisonment, while powder cocaine defendants are sentenced to a lesser two-, three-, or four-year term.⁷⁷ California statutes provide enhancements if large quantities of drugs are involved in the offense. However, when calculating the quantity levels necessary to trigger these enhancements, California does not distinguish between crack cocaine and powder cocaine.

c. Connecticut

Connecticut differentiates between the two forms of cocaine. The Connecticut statutes set a penalty of 5-20 years to life for trafficking in one ounce or more of cocaine powder. The same penalty applies for trafficking in .5 gram or more of cocaine base. The powder/crack quantity ratio is thus 56.7-to-1.⁷⁸

d. District of Columbia

The District of Columbia criminal code differentiates between cocaine base and cocaine powder. It provides a five-year term for a first offense and a ten-year term for a second offense involving trafficking in various amounts of controlled substances. The threshold amount of cocaine powder for these terms is 500 grams.⁷⁹ The threshold amount for offenses involving cocaine base is 50 grams (a 10-to-1 ratio). However, another code section that establishes specific mandatory minimum penalties for cocaine offenses⁸⁰ provides that if these threshold amounts are met, the minimum terms are four, seven, and ten years, respectively, for a first, second, third, or subsequent offense involving cocaine base. The minimum terms are higher, at five, eight, and ten years, respectively, for a first, second, third, or subsequent offense involving cocaine powder.

⁷⁷ In California, prison sentencing ranges comprise three possible terms: normal, aggravating, and mitigating. For example, the "normal" defendant convicted of crack cocaine possession receives a four-year term. If aggravating circumstances exist, the defendant receives a five-year term. And if mitigating circumstances exist, he/she receives a three-year term. See California Health and Safety Code § 11350, *et seq.*

⁷⁸ Connecticut General Statutes Annotated § 21a-278(a) (West Supp. 1993).

⁷⁹ District of Columbia Code Annotated § 33-541(c)(1)(A) *et seq.*

⁸⁰ The District of Columbia provides penalties for cocaine powder and cocaine base in two statutory provisions.

e. Iowa

Iowa employs a 100-to-1 ratio in distinguishing between powder cocaine and crack cocaine. Unlike the federal statutes, however, this ratio is not reflected in the threshold amounts that trigger the mandatory minimum penalties. Rather, the 100-to-1 quantity ratio is reflected in the threshold amounts that determine the maximum statutory penalty. In other words, a defendant must have 100 times more powder cocaine than another defendant trafficking in crack cocaine in order to trigger the same statutory maximum penalty.

f. Louisiana

Louisiana differentiates between powder cocaine and cocaine base but not through a quantity ratio. The Louisiana statutes provide a sentencing range of 5-30 years for trafficking in any amount of a narcotic drug (which includes cocaine powder) and a sentencing range of 20-50 years for trafficking in any amount of cocaine base.⁸¹

g. Maryland

The Maryland criminal code provides for a five-year mandatory minimum penalty for trafficking in controlled substances. The mandatory minimum is triggered in cases involving 448 grams of cocaine powder or 50 grams of cocaine base.⁸² Maryland does not differentiate punishment ratios for offenses involving bringing a narcotic into the state. In addition, Maryland has a "drug kingpin" statute providing more severe penalties for an offender who meets the statutory definition. Generally, a person is considered a drug kingpin if the offense involved specified quantities of controlled substances. The statute provides different amounts for offenses involving various controlled substances including cocaine, but provides no separate penalties for cocaine base offenses.

h. Missouri

The Missouri statutes provide that offenses involving more than 150 grams but less than 450 grams of cocaine powder are Class A felonies. An offense involving 450 grams or more is a Class A felony for which the offender may not receive probation or parole. The quantities that trigger these same sentences for offenses involving cocaine base are more than two but less than six grams, and six or more grams, respectively.⁸³

⁸¹ Louisiana Revised Statutes Annotated § 40:967(B)(1) *et seq.*

⁸² Maryland Annotated Code art. 27, § 286(f)(1) *et seq.*

⁸³ Missouri Annotated Statutes § 195.222(2).

i. Nebraska

Nebraska sets penalties generally based on the schedule of controlled substance involved in the offense. An offender is subject to punishment for a Class IC felony when seven or more ounces of powder cocaine are involved in the offense or 28 grams of cocaine base. The quantity ratio is thus 7.1-to-1.⁸⁴

j. North Dakota

Following the federal regime, North Dakota uses a 100-to-1 quantity ratio. The criminal code provides for increased penalties in offenses involving 500 grams of cocaine powder or 5 grams of cocaine base.⁸⁵ Unlike the federal system, however, below these threshold quantities, all controlled substances listed in the same schedules are treated alike.

k. Oklahoma

Oklahoma also differentiates between the two forms of cocaine, using roughly a 6-to-1 ratio. The Oklahoma statutes provide ten-year mandatory minimum penalties for offenses involving 28 grams of cocaine powder or 5 grams of cocaine base.⁸⁶ The statutes also provide a 20-year mandatory minimum for offenses involving 300 or more grams of cocaine powder or 50 grams or more of cocaine base.

l. South Carolina

South Carolina's statutory scheme for cocaine penalties is complex.⁸⁷ There are separate offenses for possession, distribution, and trafficking of cocaine base and powder cocaine with different minimum and maximum penalties. The penalties for distribution of cocaine powder are more stringent than those for crack: 5-30 years for a first offense involving the distribution of cocaine powder and 15-30 years for a second offense as compared to 0-25 years for a first offense involving the distribution of cocaine base and 0-30 years for a second offense.⁸⁸ However, there is

⁸⁴ Nebraska Revised Statutes § 28-405.

⁸⁵ Sections 19-03.1-23.1(c)(2) and (3).

⁸⁶ Oklahoma Statutes Annotated Tit. 63, § 2-415(C)(2).

⁸⁷ South Carolina Code Annotated §§ 44.53-370, 44.53-375 (1992 Supp.).

⁸⁸ South Carolina's statutory scheme formerly provided several punishments for offenses involving cocaine base that were significantly lower than those for offenses involving cocaine powder. The current statutory scheme is a result of deliberate attempts to equalize penalties for offenses involving these two forms of cocaine.

also a separate statute that directs sentences for particular quantities of cocaine involved in the case within the larger minimum and maximums. These sentencing ranges are based on the same quantities for cases involving both crack and powder cases. There are also different maximum penalties for offenses involving possession, with those for cocaine base being somewhat higher than those for cocaine powder: for example, for a first offense, crack cocaine possession has a statutory maximum of five years, while powder cocaine possession has a two-year maximum.

m. Virginia

In Virginia, there is no statutory distinction between powder cocaine and cocaine base, generally. The penalties are determined by the schedule of the controlled substance involved in the offense, and all cocaine forms and derivatives are placed in schedule II.⁸⁹ However, Virginia recently enacted a "drug kingpin" statute that provides a 20-year mandatory minimum (with a maximum of life) for offenders who qualify as "drug kingpins" by trafficking in specified quantities of various substances. The "kingpin" level for trafficking in powder cocaine is 500 kilograms, and the level for cocaine base is 1.5 kilograms. This results in a 333-to-1 quantity ratio for those offenders prosecuted as drug kingpins.

n. Wisconsin

In Wisconsin, drug weight ratios of crack cocaine to powder cocaine vary depending on the quantity of drugs. For example, three grams or less of crack cocaine triggers a one-year mandatory minimum sentence, while 25 to 100 grams of powder cocaine trigger the same penalty. A three-year mandatory minimum penalty is mandated in offenses involving 3 to 10 grams of crack cocaine, compared to 100 to 400 grams of powder cocaine. The five-year mandatory penalty is implicated by 10 to 40 grams of crack and 400 to 800 grams of powder cocaine. Finally, more than 40 grams of crack cocaine triggers the ten-year mandatory minimum penalty compared to more than 800 grams of powder cocaine.

o. The Remaining States

The remaining states do not distinguish statutorily between crack cocaine and powder cocaine.

2. Sentencing Guidelines

State criminal penalties are best understood with an awareness of a state's sentencing structure. As part of its survey, the Commission asked whether states had sentencing guideline systems and whether imposed sentences were determinate (*i.e.*, sentence imposed is the sentence

⁸⁹ Virginia Code Annotated § 18.2-248 (1993 Supp.).

served) or indeterminate (*i.e.*, sentence or sentence range imposed with release into the community after service of less than the full sentence). The results of this survey are presented in Table 4.

Twenty-one states employ some form of sentencing guidelines. Some state guidelines are advisory/voluntary, while others are "mandatory." Twenty states have determinate sentencing structures, some in combination with guidelines, some not. At the current time, four states with existing guideline systems, Wisconsin, Maryland, Louisiana, and Virginia, distinguish between cocaine powder and cocaine base in their guidelines. Ohio's proposed guidelines, which have passed the state house and are expected to pass the state senate sometime in 1995, would distinguish between powder cocaine and crack cocaine at a ratio that varies from 2-to-1 to as high as 10-to-1.⁹⁰ There is considerable variation in statewide sentencing schemes. For example, only two of the states with statutes that distinguish between cocaine powder and cocaine base have determinate sentencing. One of these, Louisiana, employs some form of guidelines system; the other, Connecticut, does not. Consequently, little can be said about how varied sentencing structures affect the presence or absence of a distinction between crack cocaine and powder cocaine in the actual sentence served by the offender.

3. Mandatory Minimum Sentences

The Commission surveyed the states on the prevalence of mandatory minimum drug penalties in order to examine the relationship between such penalties and sentencing distinctions made between crack cocaine and powder cocaine. If states did not distinguish between crack cocaine and powder cocaine, the Commission sought to determine whether, nevertheless, they had enacted mandatory minimum penalties for drug offenses.

Table 4 shows that 32 states have mandatory minimum penalties for one or more types of drug offenses (*e.g.*, trafficking, repeat trafficking, repeat possession, and sale of drugs within a certain distance of a protected area such as a school or playground). Most of these states base their minimum penalties on the quantity of drugs for which the defendant is held accountable. All of the states that distinguish between powder cocaine and crack cocaine also have mandatory minimum penalties, except Nebraska.

4. Referral Policies

In addition to determining the ways in which states distinguished between crack cocaine and powder cocaine, the survey sought information about whether the federal statutes' harsher penalties for crack cocaine affected a state's decision to refer crack cases to the federal system for prosecution. States cited three primary reasons for referring a crack cocaine case to federal prosecutors:

⁹⁰ In Ohio, the legislature thus far has chosen not to distinguish between cocaine powder and cocaine base in the statutory scheme.

Table 4

STATE SURVEY

State	Crack Cocaine/ Powder Cocaine Distinction	Guidelines System	Determinate Sentencing	Mandatory Minimums
Alabama	Yes	No	No	Yes
Alaska	No	No	Yes	Yes
Arizona	No	No	No	Yes
Arkansas	No	Yes	Yes	No
California	Yes	No	Yes	Yes ^a
Colorado	No	No	Yes	Yes
Connecticut	Yes	No	Yes	Yes
Delaware	No	Yes	Yes	Yes
District of Columbia	Yes	No	No	Yes
Florida	No	Yes	Yes	No ^b
Georgia	No	No	Yes	Yes
Hawaii	No	No	No	No
Idaho	No	Yes	No	Yes
Illinois	No	No	No	?
Indiana	No	Yes ^c	Yes	Yes
Iowa	Yes	No	No	Yes
Kansas	No	Yes	No	No
Kentucky	No	No	No	No
Louisiana	Yes	Yes	Yes	Yes
Maine	No	No	Yes	No
Maryland	Yes	Yes ^c	No	Yes
Massachusetts	No	No	No	Yes
Michigan	No	Yes ^c	No	Yes
Minnesota	No	Yes	Yes	Yes
Mississippi	No	No	No	Yes
Missouri	Yes	No	No	Yes
Montana	No	Yes ^c	No	Yes
Nebraska	Yes	No	No	No

State	Crack Cocaine/ Powder Cocaine Distinction	Guidelines System	Determinate Sentencing	Mandatory Minimums
Nevada	No	No	No	Yes
New Hampshire	No	No	Yes	No
New Jersey	No	No	No	No
New Mexico	No	No	Yes	No
New York	No ^a	No	No	No
North Carolina	No	Yes	No	Yes
North Dakota	Yes	No	Yes	Yes
Ohio	No	No ^d	No	Yes
Oklahoma	Yes	No	No	Yes
Oregon	No	Yes	Yes	No
Pennsylvania	No	Yes	Yes	Yes
Puerto Rico	No	No	Yes	No
Rhode Island	No	Yes ^c	No	No
South Carolina	Yes	No	No	Yes
South Dakota	No	No	No	Yes
Tennessee	No	Yes	Yes	No
Texas	No	No	No	No
Utah	No	Yes	No	No
Vermont	No	No	No	No
Virgin Islands	No	No	No	Yes
Virginia	Yes	Yes ^c	No	Yes
Washington	No	Yes	Yes	No
West Virginia	No	Yes ^c	No	Yes
Wisconsin	Yes	Yes	No	Yes
Wyoming	No	No	No	No
Total Yes Responses	14	21	20	32

^a Repealed February 1993

^b Repealed 1993

^c Advisory guidelines

^d Bill pending in legislature creating guidelines

^e In 1988, the quantities for felony possession of cocaine were lowered to account for crack; however, there is no distinction in the law based on the crack form.

- involvement of a large amount of drugs (18 states);
- involvement of federal authorities in the investigation (15 states); and
- opportunity for asset forfeiture where the state had no power to seek such forfeiture (6 states).

The federal system's 100-to-1 quantity ratio was not specifically cited as a reason to refer cases to federal prosecutors. However, several respondents stated that if the drug amounts were above the thresholds for federal mandatory minimum penalties, the state would refer the case to federal prosecutors.

5. Impact of Crack Cocaine on State Criminal Justice Systems

As part of the survey, states were asked if they collected empirical data on the number of crack cocaine cases in their state's criminal justice system. The Commission was interested in learning whether the distribution of drug cases at the state level is similar to that of the federal system, and whether states could provide data on crime associated with drug offenses.

Only three states were able to provide statistics on the number of crack cocaine cases and their impact on prosecutorial caseloads. Responses varied widely. For example, 50 percent of South Carolina's drug cases involve crack cocaine. In Minnesota, 17.3 percent of the drug cases involve crack. In Virginia, 18.3 percent of the state's drug convictions were for crack cocaine, compared to 52.8 percent for powder cocaine.

None of the states could provide specific data or any correlation between crack cocaine use and violence. Many respondents provided anecdotes that revealed particular views on these issues, but no quantifiable data. This lack of data may be due to the fact that the majority of states do not distinguish between crack cocaine and powder cocaine for penalty or recordkeeping purposes.

G. THE IMPACT OF PROSECUTORIAL AND INVESTIGATORY DISCRETION ON COCAINE OFFENDERS AND SENTENCES

Discretion exercised by prosecutors and investigators working on cocaine cases can have a significant impact on sentences for any individual cocaine offender. While the exercise of discretion by prosecutors and investigators has an impact on sentences in almost all cases to some extent, because of the 100-to-1 quantity ratio and federal mandatory minimum penalties, discretionary decisions in cocaine cases often have dramatic effects.

1. Prosecutorial Discretion

Federal law enforcement and judicial resources are limited. The federal criminal justice system cannot process all the cases involving violations of federal law. The FBI's Uniform Crime Reports estimate that state and local law enforcement agencies made almost 1.1 million arrests for drug abuse violations in 1990. During the same period, DEA made 21,799 arrests. Nearly all of these arrests, both state and federal, involve violations of both state and federal law. Some of these arrests make their way to the federal system, others to the state (and some were prosecuted in both systems).

Table 5 shows the number and percentage of drug trafficking cases sentenced in the various federal districts and circuits. There are some surprising variations in prosecution practices. The largely rural district of Central Illinois sentenced a considerably higher proportion of crack cocaine cases than the Chicago-driven district of Northern Illinois. Brooklyn, New York, reports a much lower proportion of federal crack sentencings than Northern and Southern West Virginia, though New York City Police Department data show that 45.8 percent of all drug arrests in 1989 were crack cocaine-related.⁹¹ In 1993 the state of South Carolina had more crack cocaine cases (118) than the states of Colorado, Kansas, New Mexico, Oklahoma, Utah, and Wyoming combined (113).

Specific examples further illuminate the impact of prosecutorial discretion. In the Central District of California, which includes Los Angeles, the United States Attorney's Office has stated in court documents that it generally does not prosecute crack cases involving less than 50 grams of crack.⁹² This is borne out by Sentencing Commission data that show only four sentencings for drug trafficking in 1993 for quantities of crack below 50 grams in this district. The result of this policy is that those defendants involved in quantities below the 50-gram threshold are prosecuted in state court and are subject to less severe sentences.⁹³

By contrast, U.S. Attorney's Offices that do not have this policy frequently prosecute defendants who fall below the 50-gram threshold. For example, in the District of Columbia in 1993,

⁹¹ Steven R. Belenko, *Crack and the Evolution of Anti-Drug Policy* (1993), at 118.

⁹² United States v. Washington, et al., CR 91-632-TJH (C.D. Ca. 1993), Declaration of Assistant United States Attorney David C. Scheper attached to Government's Opposition to Defendant's Motion To Dismiss Re: Selective Prosecution.

⁹³ R. Berk, "Preliminary Data on Race and Crack Charging Practices in Los Angeles," 6 Federal Sentencing Reporter 36-38 (1993).

Table 5

DRUG TRAFFICKING SENTENCING BY FEDERAL DISTRICT*
(October 1, 1992 through September 30, 1993)

CIRCUIT District	TOTAL	Powder Cocaine		Crack Cocaine		Heroin		Marijuana		Methamphetamine	
	Number	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
TOTAL	14,297	5,296	37.0	3,109	21.8	1,386	9.7	3,849	26.9	657	4.6
D.C. CIRCUIT	179	11	6.2	160	89.4	7	3.9	1	0.6	0	0.0
District of Columbia	179	11	6.2	160	89.4	7	3.9	1	0.6	0	0.0
FIRST CIRCUIT	365	226	61.9	16	4.4	46	12.6	63	17.0	15	4.1
Maine	44	22	50.0	5	11.4	4	9.1	13	29.5	0	0.0
Massachusetts	64	34	53.1	8	12.5	6	9.4	14	21.9	2	3.1
New Hampshire	37	6	16.2	0	0.0	0	0.0	18	48.7	13	35.1
Puerto Rico	160	119	74.4	2	1.3	26	16.2	13	8.1	0	0.0
Rhode Island	60	45	75.0	1	1.7	10	16.7	4	6.6	0	0.0
SECOND CIRCUIT	1,233	521	42.3	94	7.6	512	41.5	85	6.9	21	1.7
Connecticut	57	42	73.7	4	7.0	7	12.3	4	7.0	0	0.0
New York	1,117	441	39.5	89	8.0	502	44.9	65	5.8	20	1.8
Eastern	613	175	28.6	24	3.9	404	65.9	10	1.6	0	0.0
Northern	109	59	54.1	2	1.8	6	5.5	22	20.2	20	18.4
Southern	280	136	48.6	52	18.6	84	30.0	8	2.8	0	0.0
Western	115	71	61.7	11	9.6	8	7.0	25	21.7	0	0.0
Vermont	59	38	64.4	1	1.7	3	5.1	16	27.1	1	1.7
THIRD CIRCUIT	879	428	48.7	213	24.2	120	13.7	66	7.5	72	8.2
Delaware	26	9	34.6	17	65.4	0	0.0	0	0.0	0	0.0
New Jersey	115	65	56.5	6	5.2	39	33.9	0	0.0	5	4.4
Pennsylvania	696	340	48.9	182	26.2	80	11.5	47	6.8	67	9.6
Eastern	466	219	47.0	132	28.3	40	8.6	17	3.7	58	12.5
Middle	117	68	58.1	12	10.3	22	18.8	26	22.2	9	7.7
Western	113	53	46.9	38	33.6	18	15.9	4	3.5	0	0.0
Virgin Islands	42	14	33.3	8	19.1	1	2.4	19	45.2	0	0.0
FOURTH CIRCUIT	1,744	663	38.0	706	40.5	94	5.4	258	14.8	23	1.3
Maryland	73	23	31.5	16	21.9	33	45.2	0	0.0	1	1.4
North Carolina	663	321	48.4	244	36.8	12	1.8	85	12.8	1	0.2
Eastern	203	83	40.9	96	47.3	1	0.5	23	11.3	0	0.0
Middle	179	56	31.3	102	57.0	8	4.5	13	7.3	0	0.0
Western	281	182	64.8	46	16.4	3	1.1	49	17.4	1	0.4
South Carolina	338	115	34.0	118	34.9	20	5.9	73	21.6	12	3.6
Virginia	366	131	35.8	158	43.2	24	6.6	50	13.7	3	0.8
Eastern	235	68	28.9	114	48.5	24	10.2	27	11.5	2	0.9
Western	131	63	48.1	44	33.6	0	0.0	23	17.6	1	0.8
West Virginia	304	73	24.0	170	55.9	5	1.6	50	16.5	6	2.0
Northern	101	32	31.7	57	56.4	0	0.0	12	11.9	0	0.0
Southern	203	41	20.2	113	55.7	5	2.5	38	18.7	6	3.0

CIRCUIT	TOTAL	Powder Cocaine		Crack Cocaine		Heroin		Marijuana		Methamphetamine	
	Number	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
FIFTH CIRCUIT	2,251	627	27.9	394	17.5	181	8.0	1,045	46.4	37	1.6
Louisiana	260	107	41.2	85	32.7	5	1.9	62	23.9	4	1.5
Eastern	158	81	51.3	52	32.9	5	3.2	22	13.9	1	0.6
Middle	29	15	51.7	12	41.4	0	0.0	2	6.9	0	0.0
Western	73	11	15.1	21	28.8	0	0.0	38	52.1	3	4.1
Mississippi	178	58	32.6	75	42.1	0	0.0	41	23.0	4	2.3
Northern	58	21	36.2	21	36.2	0	0.0	16	27.6	0	0.0
Southern	120	37	30.8	54	45.0	0	0.0	25	20.8	4	3.3
Texas	1,813	462	25.5	234	12.9	176	9.7	942	52.0	29	1.6
Eastern	126	30	23.8	53	42.1	0	0.0	37	29.4	6	4.8
Northern	253	94	37.2	47	18.6	47	18.6	57	22.5	8	3.2
Southern	702	176	25.1	59	8.4	80	11.4	417	59.4	0	0.0
Western	732	162	22.1	75	10.3	49	6.7	431	58.9	15	2.1
SIXTH CIRCUIT	1,171	487	41.6	294	25.1	48	4.1	356	30.4	16	1.4
Kentucky	156	77	49.4	5	3.2	1	0.6	96	61.5	7	4.5
Eastern	114	59	51.8	1	0.9	1	0.9	83	72.8	0	0.0
Western	42	18	42.9	4	9.5	0	0.0	13	31.0	7	16.7
Michigan	365	136	37.3	92	25.2	33	9.0	101	27.7	3	0.8
Eastern	312	123	39.4	87	27.9	33	10.6	68	21.8	1	0.3
Western	53	13	24.5	5	9.4	0	0.0	33	62.3	2	3.8
Ohio	320	128	40.0	106	33.1	10	3.1	74	23.1	2	0.6
Northern	136	73	53.7	31	22.8	2	1.5	28	20.6	2	1.5
Southern	184	55	29.9	75	40.8	8	4.4	46	25.0	0	0.0
Tennessee	330	146	44.2	91	27.6	4	1.2	85	25.8	4	1.2
Eastern	132	43	32.6	28	21.2	0	0.0	59	44.7	2	1.5
Middle	31	18	58.1	3	9.7	1	3.2	9	29.0	0	0.0
Western	167	85	50.9	60	35.9	3	1.8	17	10.2	2	1.2
SEVENTH CIRCUIT	668	361	54.0	142	21.3	40	6.0	124	18.6	1	0.2
Illinois	391	191	48.9	115	29.4	23	5.9	61	15.6	1	0.3
Central	101	40	39.6	40	39.6	3	3.0	17	16.8	1	1.0
Northern	134	103	76.9	6	4.5	20	14.9	5	3.7	0	0.0
Southern	156	48	30.8	69	44.2	0	0.0	39	25.0	0	0.0
Indiana	100	44	44.0	14	14.0	14	14.0	28	28.0	0	0.0
Northern	44	19	43.2	5	11.4	10	22.7	10	22.7	0	0.0
Southern	56	25	44.6	9	16.1	4	7.1	18	32.1	0	0.0
Wisconsin	177	126	71.2	13	7.3	3	1.7	35	19.8	0	0.0
Eastern	121	104	86.0	0	0.0	3	2.5	14	11.6	0	0.0
Western	56	22	39.3	13	23.2	0	0.0	21	37.5	0	0.0
EIGHTH CIRCUIT	807	286	35.4	209	25.9	26	3.2	179	22.2	107	13.3
Arkansas	76	15	19.7	25	32.9	0	0.0	25	32.9	11	14.5
Eastern	57	11	19.3	23	40.4	0	0.0	14	24.6	9	15.8
Western	19	4	21.1	2	10.5	0	0.0	11	57.9	2	10.5
Iowa	115	20	17.4	20	17.4	0	0.0	25	21.7	50	43.5
Northern	59	14	23.7	12	20.3	0	0.0	11	18.6	22	37.3
Southern	56	6	10.7	8	14.3	0	0.0	14	25.0	28	50.0
Minnesota	134	46	34.3	36	26.9	13	9.7	31	23.1	8	6.0
Missouri	331	146	44.1	97	29.3	9	2.7	46	13.9	33	10.0
Eastern	106	44	41.5	31	29.3	5	4.7	17	16.0	9	8.5
Western	225	102	45.3	66	29.3	4	1.8	29	12.9	24	10.7
Nebraska	96	35	36.5	29	30.2	2	2.1	27	28.1	3	3.1
North Dakota	22	10	45.5	0	0.0	2	9.1	9	40.9	1	4.6
South Dakota	33	14	42.4	2	6.1	0	0.0	16	48.5	1	3.0

CIRCUIT District	TOTAL	Powder Cocaine		Crack Cocaine		Heroin		Marijuana		Methamphetamine	
	Number	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NINTH CIRCUIT	1,882	492	26.1	158	8.4	126	6.7	844	44.9	262	13.9
Alaska	15	7	46.7	4	26.7	0	0.0	4	26.7	0	0.0
Arizona	535	85	15.9	1	0.2	23	4.3	417	77.9	9	1.7
California	757	198	26.2	60	7.9	69	9.1	261	34.5	169	22.3
Central	71	34	47.9	8	11.3	10	14.1	5	7.0	14	19.7
Eastern	124	14	11.3	31	25.0	10	8.1	12	9.7	57	46.0
Northern	45	25	55.6	0	0.0	9	20.0	1	2.2	10	22.2
Southern	517	125	24.2	21	4.1	40	7.7	243	47.0	88	17.0
Guam	22	6	27.3	0	0.0	0	0.0	2	9.1	14	63.6
Hawaii	46	23	50.0	0	0.0	2	4.4	5	10.9	16	34.8
Idaho	19	8	42.1	0	0.0	0	0.0	6	31.6	5	26.3
Montana	51	13	25.5	0	0.0	0	0.0	30	58.8	8	15.7
Nevada	89	46	51.7	20	22.5	5	5.6	13	14.6	5	5.6
N. Mariana Islands	0	0	0	0	0	0	0	0	0	0	0
Oregon	176	42	23.9	40	22.7	21	11.9	53	30.1	20	11.4
Washington	172	64	37.2	33	19.2	6	3.5	53	30.8	16	9.3
Eastern	70	22	31.4	14	20.0	0	0.0	27	38.6	7	10.0
Western	102	42	41.2	19	18.6	6	5.9	26	25.5	9	8.8
TENTH CIRCUIT	789	239	30.3	113	14.3	18	2.3	370	46.9	49	6.2
Colorado	152	78	51.3	35	23.0	6	4.0	26	17.1	7	4.6
Kansas	89	28	31.5	25	28.1	1	1.1	29	32.6	6	6.7
New Mexico	306	38	12.4	1	0.3	2	0.7	260	85.0	5	1.6
Oklahoma	128	35	27.3	48	37.5	4	3.1	29	22.7	12	9.4
Eastern	4	1	25.0	0	0.0	0	0.0	2	50.0	1	25.0
Northern	35	6	17.1	25	71.4	0	0.0	3	8.6	1	2.9
Western	89	28	31.5	23	25.8	4	4.5	24	27.0	10	11.2
Utah	75	52	69.3	2	2.7	5	6.7	11	14.7	5	6.7
Wyoming	39	8	20.5	2	5.1	0	0.0	15	38.5	14	35.9
ELEVENTH CIRCUIT	2,329	985	42.3	640	27.5	191	8.2	459	19.7	54	2.3
Alabama	348	95	27.3	153	44.0	1	0.3	88	25.3	11	3.2
Middle	65	22	33.9	20	30.8	0	0.0	23	35.4	0	0.0
Northern	75	27	36.0	18	24.0	0	0.0	25	33.3	5	6.7
Southern	208	46	22.1	115	55.3	1	0.5	40	19.2	6	2.9
Florida	1,596	785	49.2	339	21.2	170	10.7	275	17.2	27	1.7
Middle	568	196	34.5	200	35.2	6	1.1	142	25.0	24	4.2
Northern	198	54	27.3	85	42.9	2	1.0	55	27.8	2	1.0
Southern	830	535	64.5	54	6.5	162	19.5	78	9.4	1	0.1
Georgia	385	105	27.3	148	38.4	20	5.2	96	24.9	16	4.2
Middle	76	16	21.1	51	67.1	0	0.0	9	11.8	0	0.0
Northern	214	67	31.3	60	28.0	20	9.4	51	23.8	16	7.5
Southern	95	22	23.2	37	39.0	0	0.0	36	37.9	0	0.0

*Of the 42,107 guideline cases, 19,475 involved drugs. Of these 19,475 cases, 5,178 cases were excluded for one or more of the following reasons: incomplete guideline application information (3,283); missing drug type (33); cases in which the drug type is other than the five primary drugs listed (987); drug convictions which did not represent the primary offense (2,382).

SOURCE: U.S. Sentencing Commission, 1993 Data File, MONFY93.

111 defendants were sentenced for trafficking less than 50 grams of crack cocaine.⁹⁴ Similarly, in the Southern District of West Virginia, 97 defendants were sentenced for trafficking less than 50 grams of crack. Because the sentencing guidelines at these levels are tied proportionately to the federal mandatory minimum penalties, these defendants are punished more severely than their counterparts in Los Angeles.

Certainly, resource limitations or differing state/federal priorities may restrict the prosecution of crack cases in larger federal districts and help to explain why some of the smaller, more rural federal districts have experienced larger numbers of crack prosecutions. The Commission does not mean to suggest that any apparent disparities are unwarranted. We have not analyzed various factors that might explain these differences, including the strength of the state and local law enforcement efforts directed at the crack cocaine trade, the relative punishment available through state statutes, or the differing needs and problems facing each district.

Most important from the Commission's perspective, the discretion exercised in determining which arrests end up in which system can have a dramatic effect on the ultimate sentence for a particular defendant. Federal courts in 1990 sentenced drug traffickers to an average of 84 months in prison. Under federal law, the vast majority of these sentences are actually served.⁹⁵ By contrast, according to the Department of Justice, state courts in 1988 sentenced drug traffickers to an average maximum sentence of 66 months in prison.⁹⁶ Of the maximum 66 months, the Department of Justice's Bureau of Justice Statistics estimated that, on average, 20 months, or roughly 30 percent, were actually served.

2. Investigatory Discretion

As discussed earlier in this report and documented in the next chapter, generally only retail and small wholesale distributors traffic in crack, while those higher in the distribution chain are involved with the powder form. Obviously, somewhere within this chain someone converts the powder to crack. When an offender is discovered above the conversion level, whether the investigator ties the offender to those lower in the distribution chain can have a dramatic impact on the sentence.

⁹⁴ The United States Attorney's Office in the District of Columbia has recently changed its policy so that crack cases involving less than 50 grams generally are not prosecuted in federal court.

⁹⁵ U.S. Department of Justice, *supra* note 7. A convict's sentence may be significantly reduced on motion of the government if the convict substantially assists the government in the investigation or prosecution of another person who has committed an offense.

⁹⁶ *Id.*

United States Sentencing Commission

For example, if a DEA agent uncovers a person with no criminal history distributing one kilogram of powder cocaine and makes an arrest, that person is subject to roughly a five-year sentence based on the quantity of controlled substance. If the distributor converts that same quantity of cocaine to crack, (perhaps at the agent's suggestion)⁹⁷ the resulting sentence is roughly 15 years.

⁹⁷ At least one district court has found this practice unconstitutional. See United States v. Shepherd, 857 F.Supp. 105 (D.D.C. 1994).

Chapter 7

SENTENCING OF COCAINE OFFENDERS

A. INTRODUCTION

At the heart of the debate surrounding cocaine sentencing lies the 100-to-1 quantity ratio between powder and crack cocaine. This *quantity* ratio leads to a *penalty* ratio for offenders involved with equivalent amounts of either form of crack cocaine. Depending on the exact quantity, the mandatory minimum penalties and sentencing guidelines prescribe prison terms for crack defendants that generally range from three to almost eight times longer than for defendants with equivalent amounts of powder cocaine.

Previous chapters have examined various aspects of the cocaine problem, focusing particularly on similarities and differences between the forms of the drug. Chapter 6 reviewed the legislative and law enforcement response. In this chapter, we focus on the end result of law enforcement – the sentencing of cocaine offenders – with special attention to the differences in penalties associated with crack and powder cocaine. How are penalties in the federal courts determined? What are the typical sentences for crack versus powder cocaine defendants? What is the impact of the 100-to-1 quantity ratio on cocaine sentences? Who are the defendants receiving these sentences? How effective are current policies at identifying for increased punishment the most dangerous and culpable offenders?

B. HOW COCAINE TRAFFICKERS ARE SENTENCED UNDER THE GUIDELINES AND MANDATORY MINIMUM STATUTES

Federal sentences for drug trafficking are determined through the interaction of mandatory minimum statutes and the sentencing guidelines. Section 841 of title 21, U.S.C., identifies seven drugs (including powder and crack cocaine) and assigns each differing quantity levels that trigger five- and ten-year mandatory minimum penalties. The Sentencing Commission incorporated these "triggering amounts" when it created the drug guidelines.

As a general matter, the guidelines assign a base offense level (a number) that serves as a starting point in assessing the seriousness of an offense. This base offense level can increase or

United States Sentencing Commission

decrease based on the circumstances of the particular case. The factors that modify the base offense level ("specific offense characteristics") are enumerated in the guidelines. A base offense level, modified by specific offense characteristics and general adjustments, forms one axis of the table used to determine sentencing ranges. The sentencing table's offense axis extends from level 1 (least serious) to level 43 (most serious).

The other axis reflects the defendant's criminal history category as expressed in one of six categories (Category I-Category VI). The point at which the offense level and criminal history category intersect on the sentencing table determines an offender's guideline range.

In drug cases, the guidelines take account of a large number of relevant factors when determining the offense level and criminal history category:

- **Base offense level:** The most important elements in setting the base offense level are the type and quantity of drugs involved. As discussed above, the guidelines incorporate the penalty levels established in the mandatory minimum statutes and then extrapolate from these across the range of possible drug quantities to achieve a smooth, proportionate increase in sentence length as drug amount increases.¹
- **Specific Offense Characteristics:** The base offense level is adjusted upward by a predetermined amount for drug offenses that involve
 - death or serious bodily injury resulting from the use of the substance;²
 - possession of a dangerous weapon;³
 - use of an aircraft-related skill in importing the substance;⁴ or
 - killing of a victim.⁵

¹ For example, an offense level of 26 (equivalent to the five-year mandatory minimum penalty prescribed by 21 U.S.C. § 841(b)(1)(B)) is applied when crack cocaine weight is 5 grams to 20 grams or powder cocaine weight is 500 grams to 2 kilograms. For detailed instructions on how the guidelines sanction drug offenders, see U.S. Sentencing Commission, Guidelines Manual (hereinafter "USSG") Chapter Two, Part D, "Offenses Involving Drugs."

² USSG §2D1.1(a)(1) or (2).

³ USSG §2D1.1(b)(1).

⁴ USSG §2D1.1(b)(2).

⁵ USSG §2D1.1(d)(1).

- **Other general offense level adjustments:** The base offense level can be adjusted for additional aggravating or mitigating factors
 - if a vulnerable or official victim was involved or a victim was restrained;⁶
 - for a defendant's role in the offense (*e.g.*, acting as leader or organizer of a group), for abuse of a position of trust, or use of a special skill;⁷
 - for obstruction of justice;⁸
 - for multiple counts of conviction;⁹ and
 - for a defendant's acceptance of responsibility for the crime.¹⁰

- **Prior criminal involvement:** The criminal history category is increased if a defendant
 - has a prior record, based on the number, seriousness, and recency of sentences for prior convictions;¹¹
 - committed the new offenses while under another criminal justice sentence;¹²
 - committed a crime of violence related to another offense;¹³ and

⁶ USSG, Chapter Three, Part A ("Victim-Related Adjustments").

⁷ USSG, Chapter Three, Part B ("Role in the Offense").

⁸ USSG, Chapter Three, Part C ("Obstruction").

⁹ USSG, Chapter Three, Part D ("Multiple Counts").

¹⁰ USSG, Chapter Three, Part E ("Acceptance of Responsibility").

¹¹ USSG, Chapter Four, Part A ("Criminal History"), §4A1.1 (a)-(c).

¹² USSG, Chapter Four, Part A ("Criminal History"), §4A1.1(d).

¹³ USSG, Chapter Four, Part A ("Criminal History"), §4A1.1(f).

- receives a career offender enhancement that provides penalties at or near the statutory maximum for drug traffickers with two or more prior convictions (state or federal) for drug trafficking or crimes of violence.¹⁴

The judge must choose a sentence from within the guideline range unless the court identifies an aggravating or mitigating circumstance that was not adequately considered by the Sentencing Commission (a "departure").¹⁵ In mandatory minimum drug cases, judges can depart only upon motion from the government stating that a defendant has provided substantial assistance in the investigation or prosecution of another person.¹⁶ (The numbers of persons receiving these departures are reported below.)

Because guideline base offense levels are pegged to the statutory mandatory minimum drug quantities, all guideline drug sentences are indirectly affected by the mandatory minimums. The base offense levels are set at guideline ranges slightly higher than the mandatory minimum levels to permit some downward adjustment for defendants who plead guilty or otherwise cooperate with authorities. Most of the specific offense characteristics and general adjustments increase the sentence length, as do all of the adjustments for criminal history. The result is that most drug defendants in federal court receive guideline sentences higher than the applicable statutory mandatory minimum penalty. In 79 percent of the 1993 crack cases and 71 percent of the powder cases, the minimum of the guideline range was higher than the applicable statutory mandatory minimum. For cases in which the mandatory minimum level is higher than the guidelines, the statutes "trump" the guidelines and the defendants receive the mandatory minimum penalty.

An exception to the mandatory minimum drug penalties was created by Congress in 1994 for certain first-time, non-violent, low-level drug offenders. This so-called "safety valve" allows qualified defendants to receive the full benefit of any mitigating guideline adjustments that they would otherwise be precluded from due to the mandatory minimum penalties.¹⁷ Only defendants whose guideline sentence is lower than the mandatory minimum level or who qualify for a downward departure actually benefit from the "safety valve" provision. In the first two months of its implementation, 27 powder cocaine and 13 crack defendants benefitted from the "safety valve."¹⁸

¹⁴ 28 U.S.C. § 994(i) and USSG, Chapter Four ("Criminal History and Criminal Livelihood").

¹⁵ 18 U.S.C. § 3553(b) and USSG §5K2.0.

¹⁶ 18 U.S.C. § 3553(e) and USSG §5K1.1.

¹⁷ 18 U.S.C. § 3553(f), and USSG §5C1.2.

¹⁸ The "safety valve" became effective September 23, 1994. As of February 3, 1995, the Sentencing Commission had received and entered into its database 96 cases in which the provision had clearly been applied. (In 28 cases a qualifying defendant received a sentence below the mandatory minimum but court records do not indicate the reason or legal basis.)

C. SENTENCES IMPOSED FOR CRACK AND POWDER COCAINE

1. Sentencing Commission Data

The findings in the following sections were obtained from the U.S. Sentencing Commission's monitoring database for federal offenders.¹⁹ The Sentencing Commission receives information on all cases sentenced under the federal guidelines and maintains an automated database with more than 260 variables for each case.²⁰ The data include only cases convicted at the federal level. Consequently, they cannot be said to present a representative sample of all drug importation, trafficking, and distribution offenses in the United States, nor of the demographics of all drug defendants.

Information in the monitoring database is derived from various documents sent to the Commission from federal district courts (*i.e.*, Judgment of Conviction Order, Presentence Report, Plea Agreement, Report on the Sentencing Hearing, and Guideline Worksheets). In a limited number of cases, documentation is incomplete.²¹ To ensure that the analysis is founded on the best available data, only those cases in which complete court information was received were used.²² Finally, the analysis below is based on the primary type of drug involved in the offense. "Primary drug type" does not mean the only drug involved in the offense, but rather the drug that was most important in determining the defendant's sentence.²³

There is generally a two-month lag between a defendant's sentencing and his/her case file being received by the Commission.

¹⁹ The Sentencing Commission's data system began distinguishing between crack cocaine and powder cocaine defendants in FY 1992. Information in this chapter reflects FY 1993 data, the most complete and recent information publically available. (The analyses presented here were replicated with 1992 data and with 1994 data recently entered at the Commission. No changes in the major findings discussed here were found; 1993 is a representative year.)

²⁰ Case, when referred to in this chapter, is defined in the Commission's data collection system as a single sentencing event for a single defendant. Multiple defendants in a single sentencing event are treated as separate cases. If an individual defendant is sentenced more than once during a reporting year, each sentencing event is identified as a separate case.

²¹ The Sentencing Commission depends upon the district courts to submit data. Defendants sentenced under the guidelines whose files were not forwarded to the Commission are not included in these analyses.

²² Selecting cases using this criterion reduces the number of drug cases for analysis by 3,283 cases.

²³ Many drug dealers simultaneously deal more than one illicit drug (*e.g.*, as discussed in Chapter 4, many crack cocaine dealers also deal in powder cocaine). Because of the current sentencing scheme and the 100-to-1 quantity ratio, crack will usually drive the ultimate sentence in the case of a dealer in both crack and powder cocaine, and thus will be considered the primary drug type. It is possible that such a defendant was involved with a greater quantity of powder cocaine, but the lesser quantity of crack controlled the sentence.

2. Sentences of Drug Traffickers

Of the 42,107 defendants sentenced in federal court in fiscal year 1993, more than 46 percent were convicted of drug offenses. During FY 1993, the number of drug defendants increased by ten percent over the previous year.²⁴ Figure 9 presents the distribution of FY 1993 drug cases by type of drug. Powder cocaine was the most frequently reported primary drug, representing 34.5 percent of federally sentenced drug cases. The remaining 65 percent, in order of prevalence include marijuana (26.7%), crack cocaine (19.4%), heroin (10.0%), methamphetamine (4.9%), and other drugs (4.5%). Combining crack and powder cases, we see that cocaine was the primary drug for 53.9 percent of all federal drug cases sentenced under the guidelines, or a total of 9,925 sentenced offenders.

As outlined above, cocaine sentences are the product of a complex interaction of statutes and guidelines. The result of this interaction has been that crack cocaine defendants are more likely to be sentenced to prison and, on average, receive much longer sentences than powder cocaine offenders. Table 6 shows that approximately 94 percent of all drug trafficking cases receive prison sentences. Crack defendants are even more likely to receive a sentence of imprisonment (97.6% prison), as well as the longest average period of incarceration (median 97 months, mean 126.6 months).²⁵ Methamphetamine cases resulted in the second longest average period of incarceration (median 78 months, mean 106.7 months), followed by powder cocaine cases (median 63 months, mean 96.0 months), heroin cases (median 60 months, mean 71.6 months), and marijuana cases (median 35 months, mean 49.3 months).

Courts have discretion to select a sentence within the guideline range or, in appropriate cases, to depart. Table 7 presents information on sentence departures. Most defendants are sentenced within the guideline range (varying from 53.9% of methamphetamine cases to 69.6% of heroin cases). When departures occur, they are most often the result of a motion from the government that the defendant provided substantial assistance in the investigation or prosecution of another person (ranging between 22.5% of heroin cases and 39.9% of methamphetamine cases).²⁶ Close to 33 percent of powder cocaine defendants receive a departure for substantial assistance compared to 28

²⁴ United States Sentencing Commission, Annual Report (1993).

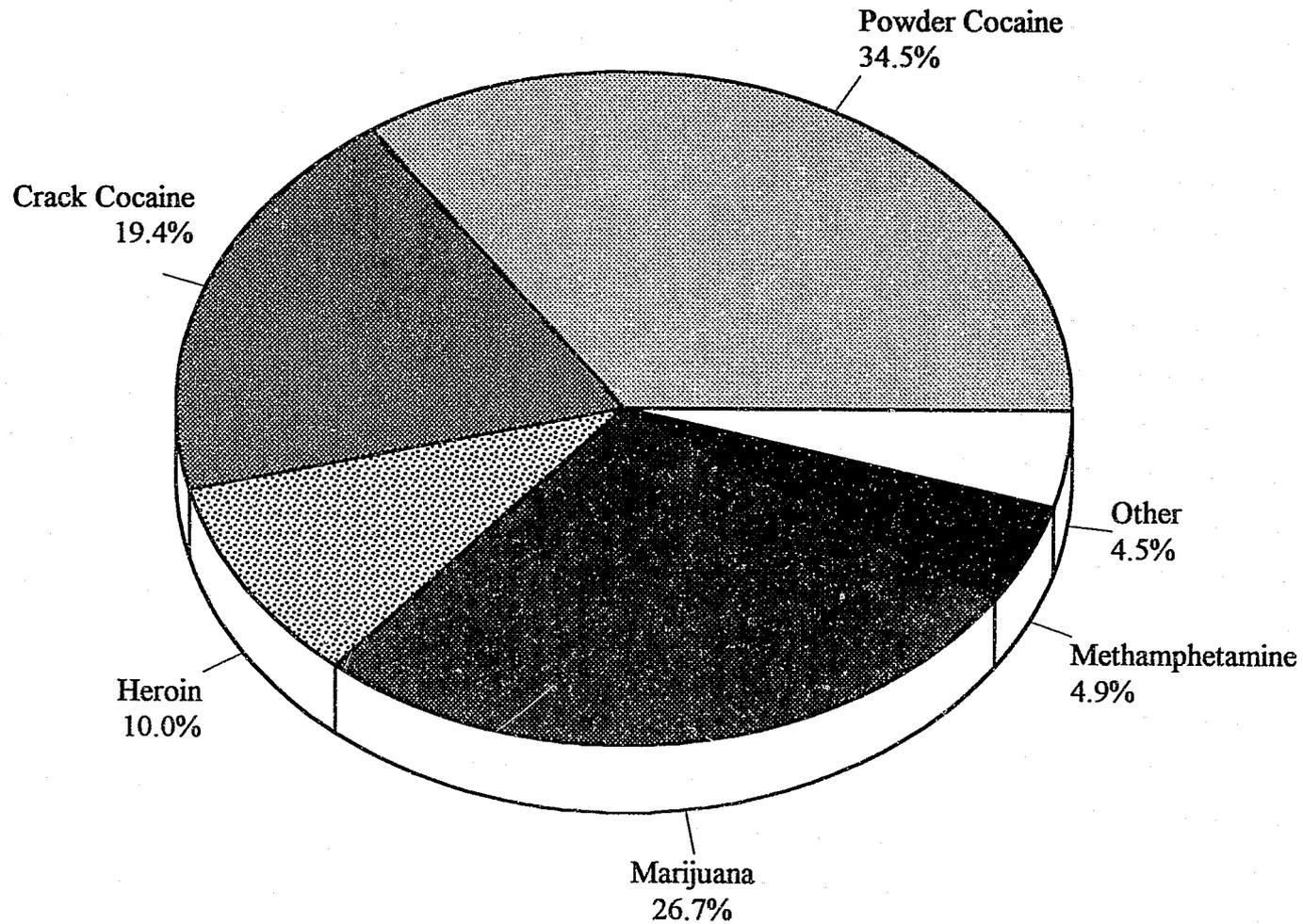
²⁵ The mean and the median are the two most common measures of "central tendency" or typicality of a group of cases. The median is the point at which half the cases fall above and half fall below. The mean is the mathematical average obtained by adding all sentence lengths together and dividing by the number of cases; means, therefore, are affected more by a particularly high or low sentence.

²⁶ The percentage of cases receiving a motion for substantial assistance is the factor that has changed the most over the past three years. In 1992, 20.8 percent of crack cases and 27.2 percent of powder cases received such a motion. This rate has increased every year, with 32.6 percent and 35.7 percent of crack and powder cases, respectively, getting such an adjustment in 1994.

Figure 9

DRUG TRAFFICKING CASES BY DRUG TYPE

(October 1, 1992 through September 30, 1993)



SOURCE: U.S. Sentencing Commission, 1993 Data File, MONFY93.

Table 6

**SENTENCE TYPE AND AVERAGE SENTENCE LENGTH FOR DRUG TRAFFICKING DEFENDANTS*
(October 1, 1992 through September 30, 1993)**

DRUG TYPE	<u>TOTAL</u>		<u>No Prison Sentence**</u>		<u>Received Prison Sentence</u>			
	Number	Percent	Number	Percent	Number	Percent	Mean	Median
TOTAL	14,259	100.0	832	5.8	13,427	94.2	88.9	60.0
Powder Cocaine	5,280	37.1	317	6.0	4,963	94.0	96.0	63.0
Crack Cocaine	3,102	21.8	74	2.4	3,028	97.6	126.6	97.0
Heroin	1,383	9.7	51	3.7	1,332	96.3	71.6	60.0
Marijuana	3,841	27.0	369	9.6	3,472	90.4	49.3	35.0
Methamphetamine	653	4.6	21	3.2	632	96.8	106.7	78.0

*Of the 42,107 guideline cases, 19,475 involved drugs. Of these 19,475 cases, 5,216 cases were excluded for one or more of the following reasons: incomplete guideline application information (3,283); missing drug type (33); cases in which the drug type is other than the five primary drugs listed (987); drug convictions in which the primary drug guideline applied was not §2D1.1 (2,382); or missing sentencing information (38).

**No prison sentence includes cases receiving probation and/or non-prison alternatives. Prison sentence includes cases receiving a prison sentence or a prison sentence plus an alternative sentence.

SOURCE: U.S. Sentencing Commission, 1993 Datafile, MONFY93.

Table 7

GUIDELINE DEPARTURES BY DRUG TYPE*
(October 1, 1992 through September 30, 1993)

PRIMARY OFFENSE	Total		No. Departure		Substantial Assistance		Downward Departure		Upward Departure	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
TOTAL	14,278	100.0	9127	63.9	4114	28.8	991	6.9	46	0.3
Powder Cocaine	5,286	37.0	3295	62.3	1723	32.6	249	4.7	19	0.4
Crack Cocaine	3,109	21.8	2056	66.1	871	28.0	172	5.5	10	0.3
Heroin	1,380	9.7	961	69.6	310	22.5	108	7.8	1	0.1
Marijuana	3,846	26.9	2461	64.0	948	24.7	424	11.0	13	0.3
Methamphetamine	657	4.6	354	53.9	262	39.9	38	5.8	3	0.5

*Of the 42,107 guideline cases, 19,475 involved drugs. Of these 19,475 cases, 5,197 cases were excluded for one or more of the following reasons: incomplete guideline application information (3,283); missing drug type (33), cases in which the drug type is other than the five primary drugs listed (987); drug convictions which did not represent the primary offense (2,382); or missing departure status (19).

SOURCE: U.S. Sentencing Commission, 1993, Data File, MONFY93.

percent of crack cases. Both types of offenders receive similar percentages of other downward departures, 4.7 and 5.5 percent for powder and crack respectively, and virtually identical numbers of upward departures.

The 100-to-1 quantity ratio is a major factor contributing to the differences between powder and crack cocaine sentences. If we compare the average sentence of offenders involved with the same amount of powder and crack cocaine,²⁷ the impact of the quantity ratio can be clearly seen. For defendants involved with 50 to 150 grams of cocaine, crack defendants have median sentences of 120 months, while powder defendants have median sentences of 18 months.

3. Sentences for Offenders Convicted of Simple Possession

Drug possession is treated differently than trafficking under the guidelines. For all drugs other than crack, only the type and not the amount possessed affects the base offense level. Guideline 2D2.1 lists three offense levels: heroin or other opiates and crack are assigned base offense level 8; cocaine, LSD, and PCP base offense level 6; and other controlled substances level 4. These base offense levels correspond to a prison range of 0-6 months for first offenders. This allows them to qualify for alternatives to imprisonment, such as confinement in a residential treatment facility.

A special provision of §2D2.1 accommodates the mandatory minimum penalty for possession of more than five grams of crack. Keeping with the congressional presumption that possession of this amount represents trafficking instead of personal use, the guidelines refer defendants with more than five grams of crack to the drug trafficking guideline. Consequently they are sentenced like drug traffickers, with base offense levels beginning at 26 (corresponding to prison terms of 63 to 78 months for first offenders).

Table 8 shows the average sentences for defendants convicted of possession of various drugs, including crack and powder cocaine. Ninety-eight defendants were sentenced for possession of crack in 1993; 122 were sentenced for possession of powder. The mean sentence for crack was 30.6 months, the mean sentence for powder was 3.2 months; the median for crack was 9.5 months, for powder it was zero. The median of zero for powder indicates that most powder possession cases (73.8%) received probation with no prison term, compared to 32 percent of crack possession cases receiving probation.

²⁷ Drug amount is determined in the database according to the defendant's base offense level. For this analysis, we compare powder defendants at base offense levels 16 and 18 (corresponding to 50 to 200 grams) to crack defendants at level 32 (corresponding to 50 to 150 grams). Thus, the powder cocaine defendants in the sample may have actually had slightly larger amounts of drugs. These amounts were chosen because they are the levels at which a substantial number of defendants can be found for both forms of the drug.

Table 8

**SENTENCE IMPOSED FOR DEFENDANTS CONVICTED OF SIMPLE POSSESSION*
(October 1, 1992 through September 30, 1993)**

Drug Type	n	Total	
		Mean	Median
Total	892	6.3	3.0
Powder Cocaine	122	3.2	0.0
Crack Cocaine	98	30.6	9.5
Heroin	37	6.8	5.0
Marijuana	601	3.2	3.0
Methamphetamine	34	2.4	0.0

*Of the 42,107 defendants sentenced under the guidelines, there were 961 cases in which the primary offense of conviction was simple possession of drugs. Of these 961 cases, 90 cases were excluded due to one or more of the following reasons: other drug type (54); or missing information on sentence imposed (12).

SOURCE: United States Sentencing Commission, 1993 Data file, MONFY93

D. DEMOGRAPHIC PROFILE OF FEDERAL COCAINE OFFENDERS

Who are federal cocaine offenders, and how do powder and crack cocaine offenders compare with each other and with other drug offenders? In particular, are there important offender characteristics that distinguish crack offenders from powder offenders?

1. Citizenship

Table 9 shows the citizenship of federal drug defendants. Among crack cocaine cases, only 8.1 percent were non-U.S. citizens. This contrasts with the higher proportion of aliens for other drugs (powder cocaine 29.7%, heroin 63.0%, marijuana 31.8%, and methamphetamine 9.9%). Within a drug organization, alien status may be associated with the role of mule or courier and the crossing of a U.S. border. As discussed in Chapter 4, crack cocaine cases very infrequently involve crossing the U.S. border.

2. Gender, Age, and Education

Most federal drug defendants are male (89.2% of traffickers, 81.4% of possessors), regardless of the type of drug involved (*see* Table 10). Most (75.2% of traffickers) are 26 years of age or older (*see* Table 11). However, crack cocaine trafficking defendants are generally younger, with nearly half (46.9%) less than 26 years old. Crack cocaine defendants are the only drug group with an average age less than 30 years. As Table 12 shows approximately half (47.9%) of all drug defendants have not graduated from high school. The percentage of defendants not completing high school is highest among marijuana defendants (53.0%). Crack cocaine trafficking defendants have the lowest rates of college attendance or graduation.

3. Race and Ethnicity

Table 13 presents the distribution of drug trafficking cases by defendant's race. In 1993, Whites account for 30.8 percent of all convicted federal drug offenders, Blacks 33.9 percent, and Hispanics 33.8 percent. Sentencing patterns for some drugs show high concentrations of a particular racial or ethnic group. Most strikingly, crack cocaine offenders are 88.3 percent Black. Conversely, methamphetamine offenders are 84.2 percent White. Powder cocaine cases involve sizeable proportions of Whites (32.0%), Blacks (27.4%), and Hispanics (39.3%).

Among defendants convicted of simple possession, 58 percent of powder defendants were White, 26.7 percent were Black, and 15 percent were Hispanic. Among crack defendants, 10.3 percent were White, 84.5 percent were Black, and 5.2 percent were Hispanic.

Table 9

CITIZENSHIP OF DRUG TRAFFICKING DEFENDANTS*
(October 1, 1992 through September 30, 1993)

DRUG TYPE	TOTAL		U.S. CITIZEN		NON-U.S. CITIZEN	
	Number	Percent	Number	Percent	Number	Percent
TOTAL	14,275	100.0	10,295	72.1	3,980	27.9
Powder Cocaine	5,285	37.0	3,718	70.4	1,567	29.7
Crack Cocaine	3,107	21.8	2,854	91.9	253	8.1
Heroin	1,385	9.7	512	37.0	873	63.0
Marijuana	3,842	26.9	2,620	68.2	1,222	31.8
Methamphetamine	656	4.6	591	90.1	65	9.9

*Of the 42,107 guideline cases, 19,475 involved drugs. Of these 19,475 cases, 5,200 cases were excluded for one or more of the following reasons: incomplete guideline application information (3,283); missing drug type (33); cases in which the drug type is other than the five primary drugs listed (987); drug convictions in which the primary drug guideline applied was not §2D1.1 (2,382); or missing citizenship (22).

SOURCE: U.S. Sentencing Commission, 1993 Datafile, MONFY93.

Table 10

GENDER OF DEFENDANT BY DRUG TYPE*
(October 1, 1992 through September 30, 1993)

DRUG TYPE	<u>TOTAL</u>		<u>MALE</u>		<u>FEMALE</u>	
	Number	Percent	Number	Percent	Number	Percent
TOTAL	14,297	100.0	12,752	89.2	1,545	10.8
Powder Cocaine	5,296	4.6	4,682	88.4	614	11.6
Crack Cocaine	3,109	26.9	2,804	90.2	305	9.8
Heroin	1,386	9.7	1,188	85.7	198	14.3
Marijuana	3,849	21.8	3,509	91.2	340	8.8
Methamphetamine	657	37.0	569	86.6	88	13.4

*Of the 42,107 guideline cases, 19,475 involved drugs. Of these 19,475 cases, 5,178 cases were excluded for one or more of the following reasons: incomplete guideline application information (3,283); missing drug type (33), cases in which the drug type is other than the five primary drugs listed (987); drug convictions in which the primary drug guideline applied was not §2D1.1 (2,382).

SOURCE: U.S. Sentencing Commission, 1993 Datafile, MONFY93.

Table 11

AGE OF DEFENDANT BY DRUG TYPE*
(October 1, 1992 through September 30, 1993)

DRUG TYPE	<u>TOTAL</u>		<u>UNDER 26</u>		<u>26 TO 35</u>		<u>36 OR ABOVE</u>		<u>AVERAGE</u>	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Mean	Median
TOTAL	14,284	100.0	3,537	24.8	5,682	39.8	3,065	55.5	33.1	32.0
Powder Cocaine	5,293	37.1	1,097	20.7	2,170	41.0	2,026	33.3	33.9	33.0
Crack Cocaine	3,106	21.7	1,457	46.9	1,130	36.4	519	16.7	28.6	26.0
Heroin	1,382	9.7	238	17.2	560	40.5	584	42.3	34.9	34.0
Marijuana	3,846	26.9	675	17.6	1,537	40.0	1,634	42.5	34.9	34.0
Methamphetamine	657	4.6	70	10.6	285	43.4	302	46.0	35.7	35.0

*Of the 42,107 guideline cases, 19,475 involved drugs. Of these 19,475 cases, 5,191 cases were excluded for one or more of the following reasons: incomplete guideline application information (3,283); missing drug type (33), cases in which the drug type is other than the five primary drugs listed (987); drug convictions in which the primary drug guideline applied was not §2D1.1 (2,382); or missing information on defendant's age (13).

SOURCE: U.S. Sentencing Commission, 1993 Datafile, MONFY93.

Table 12

EDUCATIONAL LEVEL OF DEFENDANT BY DRUG TYPE*
(October 1, 1992 through September 30, 1993)

DRUG TYPE	<u>TOTAL</u>		<u>DID NOT GRADUATE HIGH SCHOOL</u>		<u>HIGH SCHOOL GRADUATE</u>		<u>SOME COLLEGE</u>		<u>COLLEGE GRADUATE</u>	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
TOTAL	14,233	100.0	6,815	47.9	4,736	33.3	2,121	14.9	561	4.0
Powder Cocaine	5,272	37.0	2,241	42.5	1,876	35.6	931	17.7	224	4.6
Crack Cocaine	3,099	21.8	1,611	52.0	1,083	35.0	372	12.0	33	1.1
Heroin	1,377	9.7	685	49.8	355	25.8	198	14.4	139	10.1
Marijuana	3,831	26.9	2,031	53.0	1,138	29.7	518	13.5	144	3.8
Methamphetamine	654	4.6	247	37.8	294	43.4	102	15.6	21	3.2

*Of the 42,107 guideline cases, 19,475 involved drugs. Of these 19,475 cases, 5,242 cases were excluded for one or more of the following reasons: incomplete guideline application information (3,283); missing drug type (33), cases in which the drug type is other than the five primary drugs listed (987); drug convictions in which the primary drug guideline applied was not §2D1.1 (2,382); or missing information on defendant's education (64).

SOURCE: U.S. Sentencing Commission, 1993 Datafile, MONFY93.

Table 13

RACE OF DRUG TRAFFICKING DEFENDANTS*
(October 1, 1992 through September 30, 1993)

DRUG TYPE	TOTAL		WHITE			BLACK			HISPANIC**			OTHER**		
	Number	Percent	Number	Percent of Race	Percent of Drug	Number	Percent of Race	Percent of Drug	Number	Percent of Race	Percent of Drug	Number	Percent of Race	Percent of Drug
TOTAL	14,293	100.0	4,403	30.8	--	4,843	33.9	--	4,826	33.8	--	221	1.5	--
Powder Cocaine	5,296	37.0	1,694	38.5	32.0	1,452	30.0	27.4	2,079	43.1	39.3	71	32.1	1.3
Crack Cocaine	3,109	21.8	128	2.9	4.1	2,745	56.7	88.3	221	4.6	7.1	15	6.8	5
Heroin	1,384	9.7	173	3.9	12.5	487	10.1	35.1	676	14.0	48.8	48	21.7	3.5
Marijuana	2,848	26.9	1,855	42.1	48.2	149	3.1	3.9	1,794	37.2	16.6	50	22.6	1.3
Methamphetamine	656	4.6	553	12.6	84.2	10	0.2	1.5	56	1.2	8.5	37	16.7	5.6

*Of the 42,107 guideline cases, 19,475 involved drugs. Of these 19,475 cases, 5,182 cases were excluded for one or more of the following reasons: incomplete guideline application information (3,283); missing drug type (33), cases in which the drug type is other than the five primary drugs listed (987); drug convictions in which the primary drug guideline applied was not §2D1.1 (2,382); or missing information on defendant's race (4).

**For purposes of this report, defendants whose ethnic background is designated as Hispanic are shown as Hispanic regardless of racial background. The Other category includes defendants of Native American, Alaskan Native, and Asian or Pacific Islander origin.

SOURCE: U.S. Sentencing Commission, 1993 Datafile, MONFY93.

4. The Effect of the 100-to-1 Quantity Ratio on Differences in Average Sentences Imposed on Various Racial Groups

Findings in a recent Bureau of Justice Statistics study, conducted by Douglas McDonald and Kenneth Carlson, suggest that between 1986 and 1990 both the rate and the average length of imprisonment for federal offenders increased for Blacks in comparison to Whites.²⁸ The researchers concluded that this increase, based on legally relevant offense characteristics, was caused largely by the mandatory minimum penalties for drug offenses and more specifically by the 100-to-1 quantity ratio of powder cocaine to crack cocaine. The study states that with the implementation of sentencing guidelines and mandatory minimum penalties,

[t]he main reason that Blacks' sentences were longer than Whites' during the period from January 1989 to June 1990 was that 83% of all Federal offenders convicted of trafficking in crack cocaine in guideline cases were Black, and the average sentence imposed for crack trafficking was twice as long as for trafficking in powdered cocaine.²⁹

McDonald and Carlson examined a number of offense- and offender-related characteristics and found that White, Black, and Hispanic crack cocaine traffickers differed in drug amounts, prior record, weapon involvement, trial rates, and charge reductions resulting from pleas. They conclude that within the category of crack cocaine trafficking, "these differences accounted for all the observed variation in imprisonment sentences."³⁰

Interpreting their findings, McDonald and Carlson suggest that "[m]odification of specific laws and/or guidelines would essentially eliminate the racial/ethnic differences..."³¹ More specifically, they single out the 100-to-1 quantity ratio and argue that

[i]f legislation and guidelines were changed so that crack and powdered cocaine traffickers were sentenced identically for the same weight of cocaine, this study's analysis suggests that the Black/White difference in sentences for cocaine trafficking would not only evaporate but would slightly reverse.³²

²⁸ U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Sentencing in the Federal Courts: Does Race Matter? (Nov. 1993).

²⁹ *Id.* at 1.

³⁰ *Id.* at 2.

³¹ *Id.* at 1.

³² *Id.* at 2.

The 100-to-1 crack cocaine to powder cocaine quantity ratio is a primary cause of the growing disparity between sentences for Black and White federal defendants.

E. IDENTIFYING THE MORE DANGEROUS DEFENDANTS

1. Prior Record

Research has shown that the best way to identify offenders who are most likely to commit new offenses is to focus on their prior criminal record. The sentencing guidelines increase a defendant's sentence based on the seriousness of his/her criminal history to ensure that persons who are a continuing threat to the community are sufficiently punished. The Commission's criminal history categories have been shown to be valid predictors of recidivism and dangerousness for drug offenders.³³

Table 14 presents data on the criminal history categories of federal drug trafficking defendants. In general, federal defendants do not have serious prior criminal records: 62.0 percent fall in Category I, that is, they have either no prior record, a single minor offense, or very old convictions. Examination by specific drug type, however, indicates that crack cocaine defendants as a group have more serious records of prior convictions than defendants convicted of other drug offenses. Crack defendants are least likely to have the lowest criminal history score (44.8%) and most likely to score in the career offender range (6.3%).

Table 15 shows that crack cocaine defendants also are more likely to have a recent criminal record, with 33.7 percent under a pre-existing criminal justice sentence at the time of their most recent federal offense. Additionally, crack cocaine defendants are most likely (4.2% compared to 1.7% for powder cocaine defendants) to have committed the instant offense within two years of release from imprisonment for a prior offense. Finally, 14.5 percent of crack cocaine defendants (compared to 7.6% of the powder cocaine defendants) are *both* under a pre-existing sentence when they commit their offense and commit the new offense within two years of a release for a prior sentence.

³³ See U.S. Department of Justice, *An Analysis of Non-Violent Drug Offenders with Minimal Criminal Histories* (Feb. 1994), Table 26 Part I (reporting results of follow-up study of a cohort of drug offenders with a range of criminal histories. Offenders with zero criminal history points were still successful three years after release 92% of the time. Those with over ten points succeeded only 23% of the time. Among Category I offenders, half the failures were for drug sale or possession, 14% were for property crimes, 12% were for driving while intoxicated, and 6% were for simple assault. The remainder were for technical violations or other offenses.)

Table 14

**CRIMINAL HISTORY CATEGORY OF DRUG TRAFFICKING DEFENDANTS*
(October 1, 1992 through September 30, 1993)**

DRUG TYPE	TOTAL		I		II		III		IV		V		VI NON-CAREER OFFENDER		VI CAREER OFFENDER		MEDIAN CRIMINAL HISTORY CATEGORY
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
TOTAL	14,297	100.0	8,867	62.0	1,819	12.7	1,809	12.7	688	4.8	329	2.2	304	2.2	490	3.4	I
Powder Cocaine	5,296	37.0	3,413	64.4	679	12.8	667	12.6	211	4.0	74	1.4	85	1.6	167	3.2	I
Crack Cocaine	3,109	21.8	1,393	44.8	446	14.4	527	17.0	276	8.9	142	4.6	128	4.1	197	6.3	II
Heroin	1,386	9.7	1,067	77.0	101	7.3	104	7.5	38	2.7	18	1.3	24	1.7	34	2.5	I
Marijuana	3,849	26.9	2,651	69.1	496	12.9	399	10.4	128	3.3	57	1.5	41	1.1	67	1.7	I
Methamphetamine	657	4.6	333	50.7	97	14.8	112	17.1	35	5.3	29	4.4	26	4.0	25	3.8	I

* Of the 42,107 guideline cases, 19,475 involved drugs. Of these 19,475 cases, 5,178 cases were excluded for one or more of the following reasons: incomplete guideline application information (3,283); missing drug type (33); cases in which the drug type is other than the five primary drugs listed (987); drug convictions in which the primary drug guideline applied was not §2D1.1 (2,382).

SOURCE: U.S. Sentencing Commission, 1993 Datafile, MONFY93.

Table 15

**CRIMINAL JUSTICE STATUS AND RECENCY OF PRIOR SENTENCE
AT TIME OF CURRENT DRUG TRAFFICKING OFFENSE***
(October 1, 1992 through September 30, 1993)

DRUG TYPE	TOTAL		UNDER CRIMINAL JUSTICE SENTENCE AT TIME OF CURRENT OFFENSE		CURRENT OFFENSE WITHIN TWO YEARS OF RELEASE FOR PAST OFFENSE		BOTH		NEITHER	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
TOTAL	14,297	100.0	1,877	13.1	286	2.0	1,107	7.7	11,023	77.1
Powder Cocaine	5,296	37.0	653	12.3	88	1.7	347	6.6	4,208	79.5
Crack Cocaine	3,109	21.8	598	19.2	130	4.2	451	14.5	1,928	62.0
Heroin	1,386	9.7	111	8.0	16	1.2	73	5.3	1,186	85.6
Marijuana	3,849	26.9	404	10.5	35	0.9	164	4.3	3,244	84.3
Methamphetamine	657	4.6	111	16.9	17	2.6	72	11.0	457	69.6

*Of the 42,107 guideline cases, 19,475 involved drugs. Of these 19,475 cases, 5,178 cases were excluded for one or more of the following reasons: incomplete guideline application information (3,283); missing drug type (33), cases in which the drug type is other than the five primary drugs listed (987); or drug convictions in which the primary drug guideline applied was not §2D1.1 (2,382).

SOURCE: U.S. Sentencing Commission, 1993 Datafile, MONFY93.

2. Weapons

Another element of dangerousness includes the involvement of weapons in drug trafficking offenses. Under the guidelines, drug trafficking defendants receive a sentence enhancement if they or someone with them possess a weapon in connection with the offense. The weapon need not be present during the commission of the crime so long as it is in reasonable proximity to the place and time that conduct relevant to the drug trafficking occurred.³⁴ Some defendants are convicted under 18 U.S.C. § 924(c) which mandates a five-year mandatory consecutive sentence for use of a weapon in relation to a drug offense.

Table 16 examines the application of these sentence enhancements for weapons by the type of drug involved in the offense. Most drug defendants (83.5%) do not receive a weapon adjustment. However, this percentage decreases when the primary drug involved is either crack cocaine or methamphetamine. The guideline weapon enhancement is applied to 13.9 percent of crack defendants, 13.1 percent of methamphetamine defendants, and 8.8 percent of powder offenders. The charge for possession of a weapon under section 924(c) is applied to 14.0 percent of crack cases, 9.9 percent of methamphetamine cases, and 6.3 percent of powder defendants.

3. The Effectiveness of Current Policy in Targeting Dangerous Offenders

When Congress established the 100-to-1 quantity ratio, the sentencing guideline system was not yet in place. Both Congress in passing mandatory minimums penalty statutes and the Commission in its guidelines have targeted dangerous offenders for lengthier terms of imprisonment. The result of these dual efforts, however, is a complicated system of overlapping statutes and guidelines. The two systems use different criteria to target the most dangerous defendants.

The data show that the form of cocaine involved in an offense is not as accurate an index of a defendant's dangerousness (*e.g.*, criminal record, weapon possession) as are the guideline enhancements designed explicitly to capture these characteristics. Hence, while more crack offenders have prior records than do other drug offenders, 44 percent have either minor records or none at all. Furthermore, while more crack offenders possess a weapon in connection with their offense than other drug offenders, 72 percent do not. All defendants who receive enhanced sentences for dangerousness under the guidelines actually have more serious prior records or show other evidence of greater risk; this is not the case for defendants punished by the 100-to-1 quantity ratio.

The application of lengthy penalties to all persons based solely on whether they fit the statute-defined criteria (drug type and amount) results in a problem that is common to all mandatory

³⁴ USSG §2D1.1(b)(1) and Comment. (N.3).

Table 16

**POSSESSION OF A DANGEROUS WEAPON BY DRUG TRAFFICKING DEFENDANTS*
(October 1, 1992 through September 30, 1993)**

DRUG TYPE	TOTAL		NO WEAPON ENHANCEMENT		GUIDELINE WEAPON ENHANCEMENT		ENHANCEMENT UNDER 18 U.S.C. § 924(c)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
TOTAL	14,297	100.0	11,942	83.5	1,334	9.3	1,021	7.1
Powder Cocaine	5,296	37.0	4,498	84.9	467	8.8	331	6.3
Crack Cocaine	3,109	21.8	2,240	72.1	433	13.9	436	14.0
Heroin	1,386	9.7	1,280	92.4	63	4.6	43	3.1
Marijuana	3,849	26.9	3,418	88.8	285	7.4	146	3.8
Methamphetamine	657	4.6	506	77.0	86	13.1	65	9.9

*Of the 42,107 guideline cases, 19,557 involved drugs. Of these 19,475 cases, 5,178 cases were excluded for one or more of the following reasons: incomplete guideline application information (3,283); missing drug type (33), cases in which the drug type is other than the five primary drugs listed (987); drug convictions in which the primary drug guideline applied was not §2D1.1 (2,382).

SOURCE: U.S. Sentencing Commission, 1993 Datafile, MONFY93.

minimum statutes – unwarranted uniformity.³⁵ Offenders who differ in terms of danger to the community, culpability, or other ways relevant to the purposes of sentencing but not listed in the statute, are treated the same. This "tariff" approach to sentencing was rejected historically because too many important distinctions among defendants were obscured by the single, flat approach. Sentencing guidelines were intended to permit more sophisticated, calibrated gradations among offenses and offenders than are possible in a broad statutory system.³⁶

F. IDENTIFYING THE MORE CULPABLE DEFENDANTS

As reviewed in Chapter 6, Congress was particularly concerned when it enacted the cocaine penalties to single out the most culpable defendants for lengthy terms of imprisonment. In general, the higher-level drug dealers were to get at least ten years in prison, the middle-level dealers at least five. At the same time, Congress mandated that crack defendants receive relatively harsher penalties because of the perceived heightened harmfulness of crack. Thus, both quantity and type of drug involved in the offense were used in the statute as proxies for different levels of culpability.

The culpability of a defendant is an important consideration at sentencing for a number of reasons. The seriousness of an offender's crime depends in part on how responsible that particular person is for the harms that flow from the crime. For example, defendants trafficking in particularly harmful drugs are considered more culpable than those trafficking in drugs that are relatively less dangerous. Likewise, major dealers in drug trafficking operations – those who mastermind the crime, direct the activities of others, and stand to reap the profits – are considered more blameworthy than the underlings who know less, control fewer of the operations, and make much less money. Leaders are less easily replaced than workers, and imprisoning them for longer periods is more disruptive to the criminal organization. Finally, leaders are more likely to weigh the costs of a crime against its benefits, and thus to be deterred by lengthy terms of imprisonment. For all these reasons, targeting the most culpable defendants for more severe punishment is an important purpose of sentencing.

As described in Chapter 4, drug trafficking activities include many steps (*e.g.*, growing, processing, importing, refining, packaging, and selling, from wholesale amounts to retail street deals). Drug distribution usually involves many persons, each performing one or more tasks. In some circumstances, the different roles are well defined and exist within an organizational structure. In other cases a small number of persons may perform a number of activities as independent

³⁵ See Stephen J. Schulhofer, "Assessing the Federal Sentencing Process: The Problem is Uniformity, Not Disparity," 29 *American Crim. Law Rev.* 833 (1992).

³⁶ For a full discussion of the "tariff" effect of mandatory minimum penalty statutes, see U.S. Sentencing Commission, *Special Report to Congress: Mandatory Minimum Penalties in the Criminal Justice System* (Aug. 1991).

entrepreneurs, linked temporarily into a quasi-organization for the purpose of furthering their mutual goal – profit.

1. The Guideline Role Adjustment

The sentencing guidelines adjust for a defendant's role in the offense, increasing the sentence for organizers, leaders, managers, or supervisors and decreasing it for those with minor roles. Most drug trafficking defendants (73.5%) receive no aggravating or mitigating role adjustment at sentencing. The mitigating role adjustment is granted least often for crack cocaine defendants (8.7%), while approximately ten percent of defendants receive an aggravating role adjustment regardless of the drug type.

The guideline role adjustment is not intended to measure a defendant's function within a drug trafficking organization or a defendant's culpability relative to the entire drug distribution system. This is because the adjustment is made relative to the scope of trafficking that the defendant is held accountable for under the relevant conduct guideline. For example, a retail street dealer at the bottom of a multi-state trafficking organization would not necessarily be granted an adjustment for minor role if he/she was indicted alone and was held accountable only for the drugs he/she personally sold. For this particular offense, the defendant was not a minimal or minor participant.

2. Analyzing Defendants' Functions Within Drug Organizations

The Commission conducted a special study in 1993 to more completely assess defendants' functions within drug organizations. Defendants were classified by their drug distribution activities in two dimensions: 1) geographic range, *e.g.*, international, interstate, intrastate (and local); and 2) function, *e.g.*, courier, mule, street-level, mid-level, and upper-level.³⁷

a. Geographic Range of Activity

As shown in Table 17, the geographic scope of activity for crack cocaine cases is largely limited on the local level (76.8%), at a rate nearly twice that of powder cocaine, the drug with the next highest rate (39.0%). This confirms what the literature reviewed in Chapter 5 concluded: cocaine is generally distributed in powder form until it is close to the point of retail sale. Interstate activity by crack cocaine defendants was uncommon (14.6%) and international activity was

³⁷ The four-level classification scheme was constructed from codes that identified each defendant in terms of the role he/she played in the distribution organization. Upper-level includes: high-level dealers/importers, financiers, growers/manufacturers, and pilots. Mid-level includes: mid-level dealers or broker, steerers, or go-betweens. Street-level includes only street-level dealers or bodyguards. The final category includes couriers and mules. Not included in this analysis are defendants described as gofer/off-loaders, renters, enablers, or users. This information was coded from a five-percent stratified random sample of drug cases sentenced during FY 1992.

Table 17

GEOGRAPHICAL RANGE OF DRUG DEFENDANT'S ACTIVITY*
— 1992 Drug Sample —

GEOGRAPHICAL RANGE	TOTAL		Powder Cocaine		Crack Cocaine		Heroin		Marijuana		Methamphetamine	
	n	%	n	%	n	%	n	%	n	%	n	%
TOTAL	692	100.0	182	26.3	151	21.8	113	16.3	167	24.1	79	11.4
Local	286	41.3	71	39.0	116	76.8	32	28.3	42	25.2	25	31.6
Intrastate	84	12.1	21	11.5	11	7.3	10	8.8	17	10.2	25	31.6
Interstate	158	22.8	57	31.3	22	14.6	7	6.2	44	26.4	28	35.4
International	164	23.7	33	18.1	2	1.3	64	56.6	64	38.3	1	1.3

*Of the 840 defendants in the sample, 148 were excluded due to one or more of the following conditions: not a §2D1.1 drug case (73); drug involved was LSD (59); or the geographical range of the defendant's activities could not be determined (17). If the defendant was held accountable for more than one drug type in the instant offense, the drug that produced the highest base offense level was the primary drug type used.

SOURCE: Stratified random sample of 1992 drug cases, U.S. Sentencing Commission, 1992 Datafile, MONFY92.

extremely rare (1.3%). For other drugs, approximately 50 percent or more of defendants were involved in interstate or international drug trafficking activities (powder cocaine 49.4%, heroin 62.8%, marijuana 64.7%). Methamphetamine defendants in the sample were not active in international trafficking; however, 35.4 percent were involved in interstate trafficking activities.

b. Defendant Function

Table 18 shows for five drug types the number and percent of defendants with various functions in the drug distribution organization. Among cocaine offenders generally, relatively few are classified as high level (9.2% and 5.5% for powder and crack, respectively.) Reflecting international and interstate trafficking patterns, 21.6 percent of the powder cocaine cases involve mules and couriers. The highest percentage of powder cocaine defendants are mid-level (38.2%), followed by street-level (31.2%). The majority of crack defendants, however, are street-level (59.6%).

c. Profits to be Reaped

Drug quantities specified in the mandatory minimum statutes are incorporated into the system of guidelines offense levels, which are in turn linked to months of imprisonment. Table 19 shows the street value, as determined by the Drug Enforcement Administration, of the quantity of various drugs associated with particular offense levels. First offenders at level 14 are subject to 15-21 months of imprisonment based solely on drug quantity (other guideline adjustments may increase or decrease the sentence). A marijuana defendant with an offense level of 14 would have been dealing drugs worth \$42,000. A powder cocaine defendant at the same offense level would have been dealing cocaine worth about \$2,675. A crack dealer would have been dealing \$29 worth of crack. At guideline level 32, first offenders receive more than ten years of imprisonment. Dealers of drugs other than crack would be involved with between \$500,000 and \$8 million worth of drugs at level 32. Crack offenders would be involved with around \$5,750 of crack at the same ten-year level.

3. Assessing the Real Offense in Crack Cocaine Possession Cases

Under the mandatory minimums and the guidelines, crack possessors are treated the same as crack distributors if they have amounts above the statutory threshold (five grams for first offenders; as little as one gram for repeat offenders.) Congress believed that persons with these amounts were likely to be engaged in distribution and deserved to be sentenced as such.

To discover if these crack defendants are in fact engaged in distribution, the Commission examined all 1993 crack possession cases with a base offense level indicating possession of more than the statutory minimum amount. Of the 32 defendants who fit this criteria, 24 were originally indicted for distribution, and pleaded to (or, in some cases, were found by a jury guilty of) only

Table 18

DEFENDANT'S FUNCTION* IN DRUG TRAFFICKING OPERATION**
— 1992 Drug Sample —

Function	Total		Powder Cocaine		Crack Cocaine		Heroin		Marijuana		Methamphetamine	
	n	%	n	%	n	%	n	%	n	%	n	%
TOTAL	618	100.0	173	28.0	146	23.6	105	17.0	132	21.4	62	10.0
High-Level Dealer	69	11.2	16	9.2	8	5.5	10	9.5	21	15.9	14	22.6
Mid-Level Dealer/Broker	208	33.7	66	38.2	45	30.8	20	19.0	44	33.3	33	53.2
Street-Level Dealer/Bodyguard	191	30.9	54	31.2	87	59.6	25	23.8	12	9.1	13	21.0
Courier/Mule	150	24.3	37	21.4	6	4.1	50	47.6	55	41.7	2	3.2

*If a defendant had more than one function, the most serious function was used. If the defendant was held accountable for more than one drug type in the instant offense, the drug that produced the highest base offense level was the primary drug type used.

**Of the 840 defendants in the sample, 222 were excluded due to one or more of the following conditions: not a §2D1.1 drug cases (73); drug involved was LSD (59); the defendant's function was not one of the functions listed above (79); or the defendant's function in the instant offense could not be determined (12).

SOURCE: Stratified random sample of 1992 drug cases, U.S. Sentencing Commission, 1992 Data File, MONFY92.

Table 19

**STREET-LEVEL VALUE OF DRUG QUANTITY
BY DRUG TYPE AND BASE OFFENSE LEVEL***

BASE OFFENSE LEVEL/QUANTITY	Powder Cocaine (\$107/gram)	Crack Cocaine (\$38.33 ¹ / ₃ gram)	Heroin (\$10/10 mg)	Marijuana (\$237.57/ounce)	Methamphetamine (\$95/gram)
Level 12	--	--	--	\$20,950	--
Level 14	\$2,675	\$29	\$5,000	\$41,900	\$475
Level 16	\$5,350	\$58	\$10,000	\$83,800	\$950
Level 18	\$10,700	\$115	\$20,000	\$167,600	\$1,900
Level 20	\$21,400	\$230	\$40,000	\$335,200	\$3,800
Level 22	\$32,100	\$345	\$60,000	\$502,800	\$5,700
Level 24	\$42,800	\$460	\$80,000	\$670,400	\$7,600
Level 26	\$53,500	\$575	\$100,000	\$838,000	\$9,500
Level 28	\$214,000	\$2,300	\$400,000	\$3,352,000	\$38,000
Level 30	\$374,500	\$4,025	\$700,000	\$5,866,000	\$66,500
Level 32	\$535,000	\$5,750	\$1,000,000	\$8,380,000	\$95,000
Level 34	\$1,605,000	\$17,250	\$3,000,000	\$25,140,000	\$285,000
Level 36	\$5,350,000	\$57,500	\$10,000,000	\$83,800,000	\$950,000
Level 38	\$16,050,000	\$172,500	\$30,000,000	\$251,400,000	\$2,850,000

*Street-level value is derived from the U.S. Drug Enforcement Administration's Illegal Price and Purity Report, United States: January 1990-December 1993, April 1994 and U.S. Drug Threat Assessment: 1993, September 1993. The DEA reports the price paid for kilograms, pounds, ounces, and grams. Because the DEA reports a range of prices for each drug, the midpoint was chosen for this analysis. Further, the price range chosen was that typically associated with retail sale, e.g., for cocaine powder the price per gram was selected whereas for marijuana the price per ounce was selected.

simple possession. This finding suggests that most of these offenders are engaged in distribution. Given that 25 of these offenders were identified as having a substance abuse problem or addiction, they may fit the typical pattern of a user/dealer, described in Chapter 4.

For comparison, the Commission examined a random sample of 34 powder cocaine simple possession cases. In 18 of these cases, the defendant had originally been indicted for distribution. As described above, crack possessors have a mean sentence of 30.6 months and a median of 9.5 months. Most powder defendants are sentenced to probation, in some cases with drug treatment and testing as a condition of supervision.

4. Flattening and Inversion of Penalties

Crack's unique distribution pattern, in combination with the 100-to-1 quantity ratio, can lead to anomalous results in which retail crack dealers get longer sentences than the wholesale drug distributors who supply them the powder cocaine from which their crack is produced. The following example from a recent federal case illustrates this sentencing anomaly:

Two defendants purchased approximately 255 grams of powder cocaine from their supplier, returned home, and "cooked" the powder cocaine, producing approximately 88 grams of crack cocaine. Unhappy with the amount of crack produced (typically the yield would be about 200 grams), the defendants called their supplier and complained. The supplier agreed to replace the 255 grams of powder cocaine at no additional cost. The defendants returned to their supplier with the 88 grams of crack in their possession and were arrested prior to completing the transaction.

At sentencing, the supplier's guideline sentencing range (a first-time offender) for selling the 255 grams of powder is 33 to 41 months' imprisonment; the range for the defendants (also first-time offenders) who bought a portion of the supplier's powder and cooked it is 121 to 151 months. In addition, the two crack defendants are subject to a mandatory minimum penalty of ten years, while the supplier who sold them the powder cocaine is subject to no statutory minimum penalty.³⁸

This case, while extreme in its details, is not atypical of the inversion of penalties between high-and low-level distributors caused by the 100-to-1 quantity ratio.

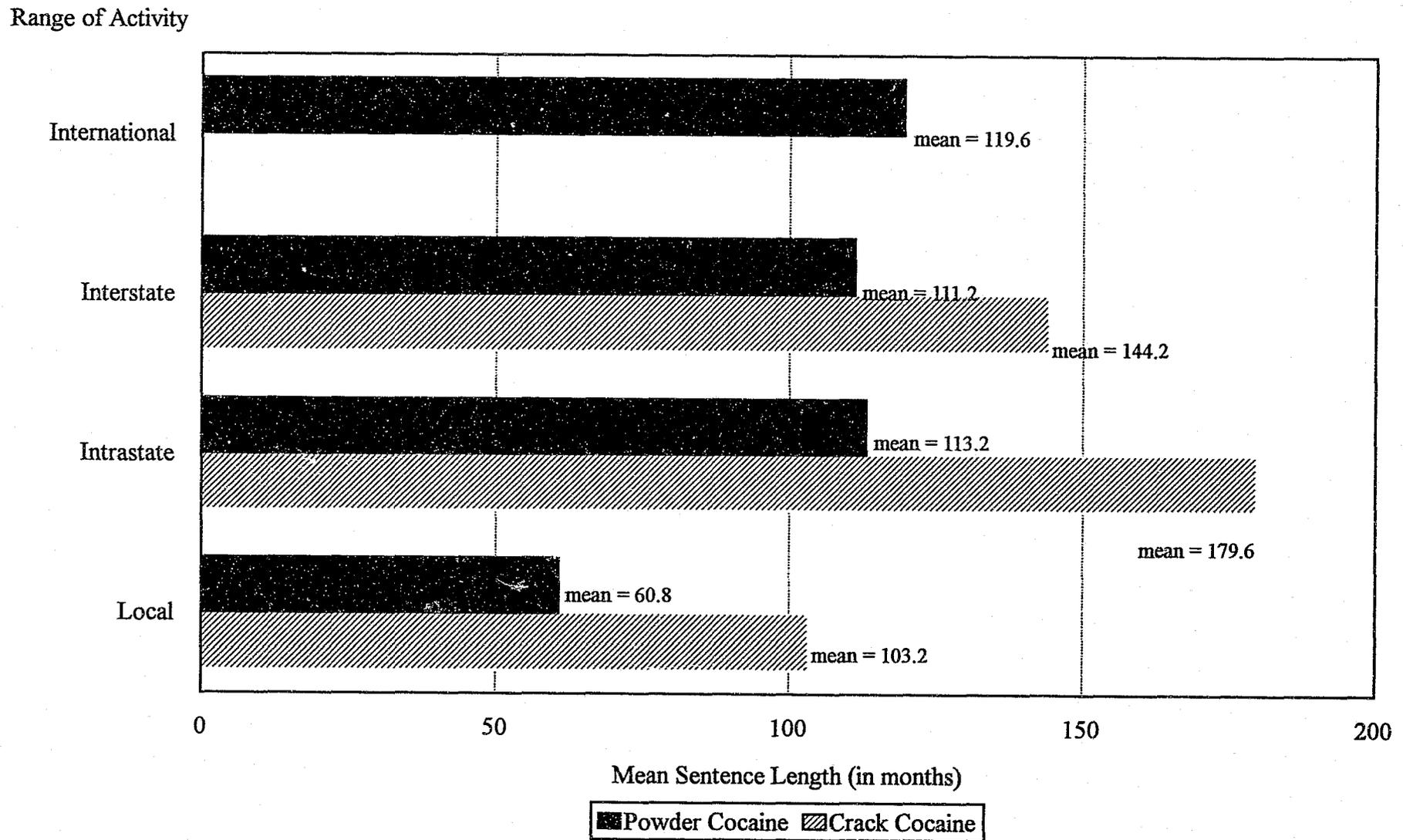
³⁸ U.S. Sentencing Commission, Hotline Database, (Nov. 1994).

In more general terms, in order to receive a five-year mandatory minimum sentence, a crack dealer must traffic only in five grams of crack. Five grams of crack represents 10-50 doses of crack, with an average retail price of \$225-\$750 for the total five grams. In contrast, a powder cocaine dealer must traffic in 500 grams of powder cocaine in order to receive the same five-year sentence. The 500 grams of powder cocaine represent 2,500-5,000 doses, with an average retail price of \$32,500-\$50,000 for the 500 grams.

Viewed another way, the 500-gram quantity of powder cocaine that can send one powder cocaine distributor to prison for five years can be distributed to up to 89 different street dealers who, if they chose to turn it into crack cocaine, could make enough crack to trigger the five-year penalty for each defendant.

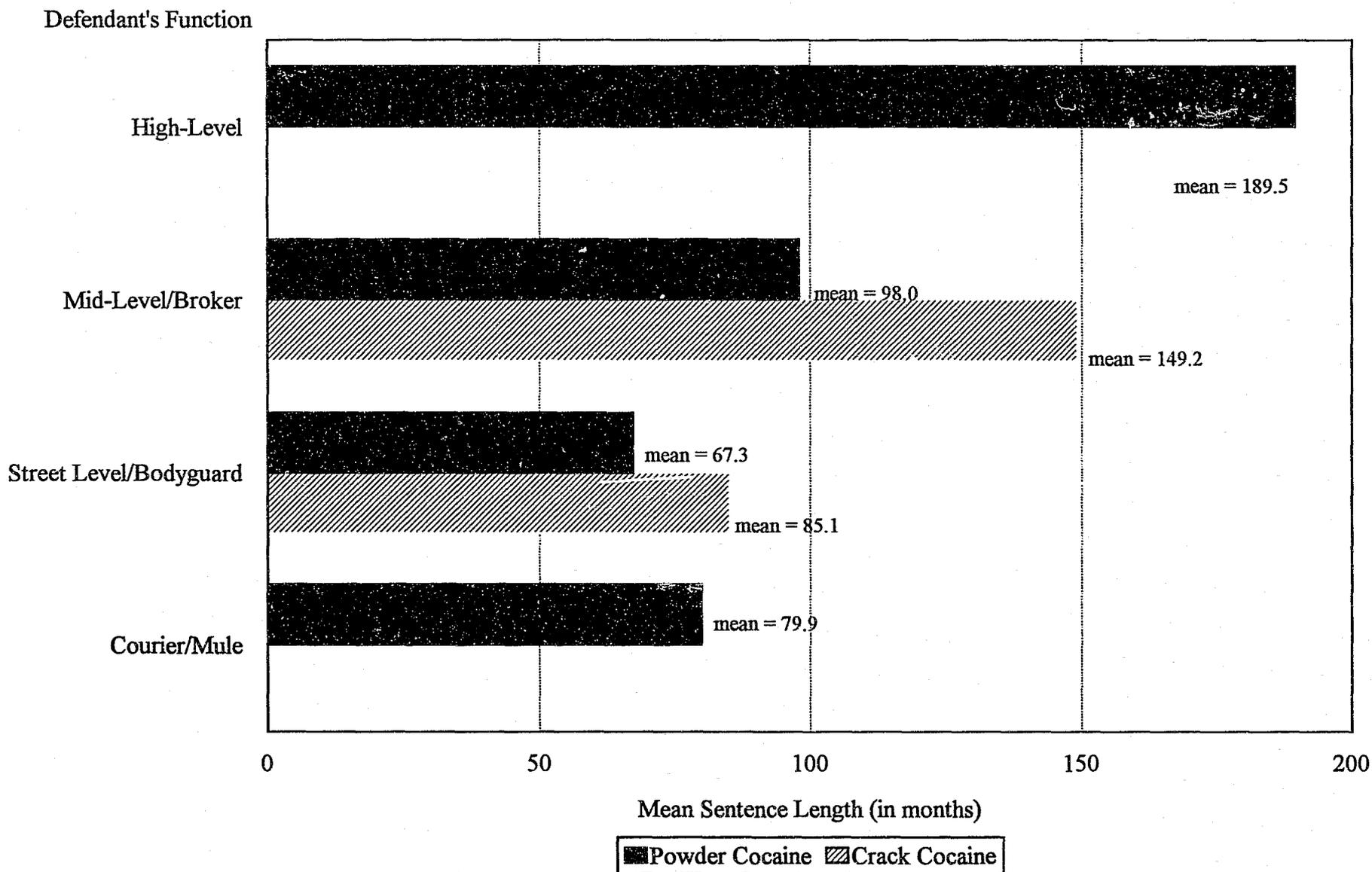
Using the sample of cocaine cases described above, we determined the average sentence presently imposed on offenders by function and range of activity. Figure 10 shows that local-level crack dealers get average sentences quite similar to intrastate and interstate powder cocaine dealers. Both intra- and interstate crack dealers get average sentences *longer* than international powder cocaine traffickers. (There are too few international crack traffickers to include in these estimates.) Figure 11 shows that crack dealers at the street- and mid-levels receive longer sentences than their powder counterparts, and crack street dealers get average sentences almost as long as the mid-level powder brokers and suppliers from whom they get their drugs.

Figure 10
MEAN SENTENCE LENGTH BY RANGE OF ACTIVITY
-1992 Drug Sample-



SOURCE: Stratified random sample of 1992 drug cases, U.S. Sentencing Commission, 1992 Data File, MONFY92.

Figure 11
MEAN SENTENCE LENGTH BY DEFENDANT'S FUNCTION
-1992 Drug Sample-



SOURCE: Stratified random sample of 1992 drug cases, U.S. Sentencing Commission, 1992 Data File, MONFY92.

Chapter 8

FINDINGS, DISCUSSION, AND RECOMMENDATIONS

A. INTRODUCTION

In 1986, prior to implementation of the federal sentencing guidelines, Congress enacted the Anti-Drug Abuse Act, establishing a 100-to-1 quantity ratio between powder cocaine and crack cocaine that lies at the heart of the debate surrounding cocaine and federal sentencing policy. In addition, Congress set forth in the Anti-Drug Abuse Act of 1988 a mandatory minimum penalty for simple possession of crack cocaine that distinguished it from simple possession of all other controlled substances. In light of research and information drawn from preceding chapters, this chapter discusses the factors that led Congress to distinguish between powder cocaine and crack cocaine. Further, this chapter discusses the part federal sentencing guidelines play in setting cocaine sentencing policy. Finally, the chapter concludes with recommendations to the Congress concerning possible changes to current cocaine sentencing policy.

In summarizing the perceived distinctions between powder cocaine and crack cocaine, certain caveats are important. Specifically, the Commission acknowledges the limited research concerning those factors most frequently cited as distinguishing powder cocaine from crack cocaine. For example, it generally is believed that smoking crack cocaine tends to create more dependency on the drug - that is, is more psychologically "addicting" - than snorting powder cocaine, but the research does not quantify how much more "addictive" smoking crack is than snorting powder. Obviously, such a figure could assist the informed determination of an appropriate ratio. Similarly, while there is some research confirming in part and rebutting in part the perception that distribution and use of crack cocaine has resulted in increased criminal activity, the data are not definitive concerning the impact of crack cocaine use and sales on crime. The empirical evidence also is inadequate to permit firm conclusions about whether crack has resulted in the birth of more babies exposed to drugs or in greater neglect of children by mothers addicted to the drug.

The absence of firm answers does not mean that the perceptions are necessarily wrong. However, gaps in the data make it difficult to draw precise conclusions about the merits of existing congressional distinctions in cocaine sentencing policy. Further, to the extent that Congress has created a sentencing system that so disparately and substantially punishes crack cocaine over other

forms of the same drug, the absence of comprehensive data substantiating this legislative policy is troublesome.

B. FINDINGS

In the early to mid-1980s, a national sense of urgency surrounded the drug problem generally, and crack cocaine specifically (*see* Chapter 6). Whether the media simply reported an urgent situation or helped create a sense of emergency has been and will continue to be debated. What is clear, however, is that the crack cocaine problem in the United States received unprecedented coverage in newspapers, news magazines, and on network television during this period.

Evoking the then-recent drug-related deaths of two nationally known sports figures, Len Bias and Don Rogers, members of Congress repeatedly described the dimensions of the crack problem in such dramatic terms as "epidemic." Because of this heightened public concern and media emphasis, Congress acted quickly to pass the Anti-Drug Abuse Act of 1986, which established mandatory minimum penalties for drug trafficking offenses in general and the powder cocaine and crack cocaine quantity differential in particular.

1. Congressional Concerns Leading to the Powder Cocaine/Crack Cocaine Differential

The Commission's review of the legislative history suggests the following with regard to Congress's action on the 1986 Act: 1) Congress determined that substantial involvement in drug trafficking, measured in terms of specified threshold quantities of each of the more common street drugs, warranted a mandatory minimum sentence (ten years for major traffickers involved with larger quantities, five years for serious traffickers involved with somewhat lesser quantities); 2) to the extent Congress saw the drug problem as a national epidemic, it viewed crack cocaine to be at the forefront of that epidemic; 3) the decision by Congress to differentiate between powder and crack cocaine in the penalty structure was deliberate, not inadvertent; and 4) the congressional decision to treat powder and crack cocaine differently arose primarily from members' beliefs that crack cocaine was significantly more dangerous than powder cocaine (*see* Chapter 6).

As noted in Chapter 6, Congress considered crack more dangerous than powder for several reasons. First, members viewed crack cocaine as extraordinarily addictive, characterizing it in such terms as "intensely addictive" and "quite possibly the most addictive drug on Earth." Second, members perceived crack cocaine to be "caus[ing] crime to go up at a tremendously increased rate," emphasizing what they believed was a higher correlation between crack cocaine use and the commission of other serious crime. Members believed that crack users stole money to support their habits, that crack addicts committed especially brutal acts due to the drug's influence, and that sellers

traded drugs for stolen property thereby encouraging a market in stolen goods. Third, Congress considered the physiological effects of crack cocaine to be especially perilous, leading to higher rates of psychosis and death. Fourth, and of particular concern, members felt that young people were especially prone to crack cocaine use because the drug could be obtained relatively easily. Finally, Congress believed that crack cocaine's purity and potency, relatively low cost, ease of manufacture, transportation, disposal, and consumption were leading to widespread use.

Congress demonstrated its continued concern about the increased dangers of crack cocaine in 1988 when it established a different penalty structure for crack offenses charged under the simple possession statute than for other drug offenses so charged (*see* Chapter 6). The clearest indication of congressional intent comes from floor statements by the amendments' chief sponsors. These statements suggest that 1) the apparently increasing supply of cocaine (particularly crack cocaine) threatened to create new users due to the drug's easy availability; 2) crack cocaine "cause[d] greater physical, emotional, and psychological damage than any other commonly abused drug"; 3) crack cocaine was considered "linked to violent crime," especially with gang activity; and 4) because the stiff penalties set forth in the 1986 Act presumptively discouraged dealers from carrying quantities above five grams, Congress assumed that "possession of as little as five grams means individuals [carrying such amounts] in most instances are dealers, not users."

The Commission's research shows that the use and marketing of crack cocaine were still in their infancy in the mid-1980s when Congress established the powder/cocaine quantity ratio and enhanced penalties for crack possession. This chapter reassesses the quantity ratio and enhanced penalties for crack possession in light of empirical information not available when Congress adopted these laws. The factors set forth below are those considered by Congress in establishing the present 100-to-1 quantity ratio.

a. Cocaine and Addiction

Neither powder cocaine nor crack cocaine are physiologically addictive; however, both are psychologically addictive (*see* Chapter 2). Moreover, psychological dependence usually is as devastating as physiological addiction. A comparison of the relative addictive qualities of the two forms of cocaine indicates that there is a greater likelihood of addiction resulting from the casual use of crack cocaine than from the casual use of powder cocaine. That this is so, however, is not due to the difference in the chemical makeup of the two substances, but instead results from the method of administration associated with each.

In particular, the three primary methods of administering cocaine are snorting, smoking, and injection (*see* Chapter 2). One can snort or inject powder cocaine or easily convert it to a smokable

form; however, for the most part, those who smoke cocaine use crack cocaine.¹ No matter the route of administration, use of cocaine produces the same type of physiological and psychotropic effects. The intensity and duration of these effects, however, differ significantly based on the method of administration; and it is the intensity and duration of the physiological and psychotropic effects that determine the likelihood of dependency and abuse. Specifically, the greater the amount of cocaine absorbed and the faster it is absorbed, the greater the intensity and the shorter the duration of the psychotropic effects. The greater the intensity of these effects and the shorter their duration, the greater the likelihood cocaine use will lead to dependence and abuse.

As a result, for a given quantity of cocaine, smoking crack cocaine or injecting powder cocaine produces the most intense physiological and psychotropic effects.² Snorting powder cocaine produces less intense effects and does so at a much slower rate. For those who either smoke crack cocaine or inject powder, the effects begin rapidly (1-4 minutes), are intense, and dissipate quickly (30 minutes); for those who snort powder, the effects begin in 20 to 40 minutes and last about one hour. Accordingly, compared to those who snort cocaine, smokers and injectors are more likely to use cocaine frequently and are more likely to become cocaine dependant. Moreover, crack smokers are more likely to engage in binging.

The route of administration, therefore, can be an important factor in the creation of psychological dependence and abuse. Accordingly, the form of cocaine is significant to the extent that it acts as a proxy for a given route of administration. However, the form of cocaine operates only as a limited proxy for a method of administration. That is, crack cocaine can only be smoked, which means that crack is always in a form that makes its user most vulnerable to dependency. Powder cocaine, however, can be snorted, which renders it less addictive, or injected, which renders it more addictive. Accordingly, while crack always represents the most addictive form of cocaine, powder can represent either a less addictive or equally addictive form of the drug, depending on the method by which it is administered. Therefore, the form of cocaine can be an adequate proxy for addictiveness when the cocaine is in crack form, but an inadequate proxy when the cocaine is in powder form. Determining the appropriate degree of enhancement in penalty based solely on the form of cocaine, therefore, is difficult.

Compounding this difficulty is the existence of incomplete data on the percentage of people who inject cocaine versus those who smoke it. For example, if one knew that half of all cocaine users smoked crack cocaine and half injected powder cocaine, there would be no rational basis for

¹ Although one can smoke "freebase" powder cocaine, the dangers inherent in such an activity, as a result of the substance's great flammability, and the availability of a "safe" smokable alternative, in crack, have rendered freebasing to be an unpopular and impractical method of administration. Moreover, the availability of a smokable alternative in crack has made an "intense" form of cocaine more accessible to juveniles.

² The effects of smoking and injection are comparable. Although crack cocaine produces somewhat less intense effects, it does so at a slightly more rapid rate (*see* Chapter 2).

distinguishing, on addictive grounds, the penalty for the two forms, as they would be equally addictive. The limited available data,³ however, suggest that substantially more people smoke cocaine than inject it. Indeed, the ease of smoking, compared to the greater difficulty and unpleasantness involved in injecting any substance, suggests that smoking will be inherently more tempting for the first time user and more appealing for the repeat user than will injection. Moreover, to the extent that both smoking and injecting lend themselves to binge use, a user can smoke for a longer period of time than he/she can inject, due to the limit on the number of times one can inject something into one's body during a short period of time.

Ideally, to determine a precise ratio based solely on addictiveness, one would have to devise a formula that considered the relative increase in likelihood of addiction based on smoking or injecting versus snorting, as well as the relative proportion of users who smoked crack versus those who injected powder. Alternatively, one could conclude that calculating a ratio based on the form of the drug is too problematic, suggesting that one should not increase the ratio based on this factor alone.

In summary, the higher addictive qualities associated with crack combined with its inherent ease of use can support a higher ratio for crack over powder. However, determining the precise magnitude of that ratio based on the available evidence is difficult.

b. Psychosis and Death

The absence of studies focusing on cocaine and psychosis makes it difficult to support or refute congressional concern that more psychosis results from crack cocaine use than from powder cocaine or other drug use. As discussed below and in Chapter 5, much of the crime associated with crack cocaine use appears to be systemic (*i.e.*, associated with the drug trade) as opposed to psychopharmacological (*i.e.*, drug-induced criminal activity). Although the lack of cocaine-associated psychopharmacological crime should not be construed to mean that crack cocaine and powder cocaine use do not lead to psychosis, it provides a positive indication that cocaine use in both forms does not produce individuals psychotically driven to commit crime.

Research also is relatively scant with respect to drug use and death. The Drug Abuse Warning Network (DAWN) gathers data on drug-related emergency room visits and medical examiner cases as reported from selected hospitals and medical examiners in specified metropolitan areas (*see* Chapter 3). However, because neither data collection effort distinguishes between powder

³ Data on method of cocaine use during the past year from the National Household Survey on Drug Abuse show that 10 percent of cocaine users inject the drug, 28 percent smoke it, and 75 percent snort it. While there is little reliable data on the total consumption of powder versus crack or on the amount of powder snorted versus injected, the data suggest that considerably more powder is snorted than is injected. These data must be considered in light of the limitations inherent in the National Household Survey which potentially underrepresents lower-income populations and overrepresents middle or upper-income populations or those who reside in households (*see* Chapter 3).

and crack cocaine, it is difficult to draw firm inferences about the possible different effects of powder and crack cocaine. Both data collection efforts provide information on route of administration which can be used, to a limited extent, as a proxy for the form of cocaine. For cases reporting information on the route of administration in 1991 (the most recent complete data available), DAWN reported that 38.2 percent of cocaine-related emergency room admissions involved smoking cocaine; 17.5 percent involved injection; and 11.3 percent involved snorting (*see* Chapter 3).⁴ These data indicate that most cocaine-related hospital emergencies involve the two most rapid routes of administration – smoking and injection – with smoking crack accounting for twice as many admissions as injecting powder.

The medical examiner data suggest that the vast majority of drug-related deaths, 74.5 percent, involve polydrug use (*see* Chapter 3). Cocaine, either alone or in combination with another drug, accounts for 45.8 percent of the drug-related deaths. Among cocaine-related deaths, concurrent use with alcohol is the most deadly combination. Moreover, the number of drug-related deaths involving cocaine increased 20 percent between 1990 and 1991.

In contrast to the emergency room data, the DAWN medical examiner data indicate that injecting powder accounts for three times as many deaths as smoking crack. Specifically, the most frequent route of administration for cocaine-related deaths was injection (12.7%), compared to 4.3 percent for inhalation.⁵ Therefore, while most cocaine-related emergency room admissions result from smoking crack, most cocaine-related deaths result from injection of powder (*see* Chapter 3).

c. Correlation between Crack Cocaine and Other Serious Crime

As discussed in Chapter 5, both Congress and the public view violence as one of the greatest concerns associated with drug use and distribution. A secondary concern is the relationship between drug use and distribution and an increase in non-violent crime, as well as the relationship between drugs and a general breakdown in the social order in neighborhoods where drug use and distribution is most prevalent.

The Commission has heard frequently from certain observers that the advent of crack cocaine has devastated the innercities of America in a way uncharacteristic of any other drug. Nevertheless, identifying the extent to which a particular drug, alone or in combination with other factors, may have contributed to certain negative social phenomena is problematic. The prevalence of cocaine-exposed babies, children neglected or abandoned by mothers addicted to drugs, an increase

⁴ In approximately 30 percent of the cases, the route of administration was unavailable.

⁵ Because in 70 percent of the medical examiner cases the route of drug administration was unavailable, these findings should be viewed with caution.

in illegitimate births, or an increase in gratuitous violence (*e.g.*, drive-by shootings) are complex issues not attributable to any single cause.

Drawing empirically sound conclusions about the use or distribution of any drug and its causal relationship to the commission of crime is difficult, because demonstrating such a relationship requires one to isolate the drug activity from other factors influencing criminal behavior. Drawing such conclusions about crack cocaine, a relatively new drug, is particularly difficult, given the very limited available research and law enforcement data. Moreover, there is even less reliable research comparing crack cocaine and powder cocaine in their relation to criminal activity. In particular, the Commission has had only three somewhat limited studies on which to rely in drawing inferences on this question. More studies in this area would be useful and, to the extent that Congress desires precise empirical conclusions, are necessary. Beyond the limitations in the research, arrest data generally are unhelpful in this area because urinalysis tests cannot distinguish between the presence of powder cocaine and crack cocaine in a subject's system. The administration of such tests at the time of arrest or during pretrial supervision cannot reveal which of the two forms of the drug may have been used at that time or, more importantly, at the time the offense was committed.

Notwithstanding these limitations, the available research suggests that crack cocaine is significantly associated with systemic crime – that is, crime related to its marketing and distribution. At a Sentencing Commission hearing on crack cocaine, a panel of noted researchers agreed that crack's violence is associated with the emergence of an illicit market for a new drug and the attempts by competing factions to consolidate distribution (*see* Chapter 5). As a result, individuals operating on street corners and in open-air markets and crack houses are prone to be involved in, as well as victimized by, increased levels of violence. Consistent with its distribution forums, crack offenders are more likely to carry weapons than individuals trafficking in other drugs, a finding borne out in the Commission's data in which 27.9 percent of crack offenders sentenced in the federal courts in 1993 were found to possess dangerous weapons, compared to 15.1 percent of powder cocaine offenders.

Two popular forums for distributing powder and crack cocaine, street-corner or open-air markets and crack houses or shooting galleries, lend themselves to increased violence. The security of these forums often is maintained by lookouts or enforcers who carry firearms to protect street retailers or customers from law enforcement, rivals, and other customers. Further, crack houses and shooting galleries facilitate sex-for-drugs and the use of stolen property, firearms, and food stamps as mediums of exchange for drugs (*see* Chapter 4). The intimate nature of drug transfer in crack houses and shooting galleries as well as the "open" aspect of street-corner transactions make customers and retailers particularly vulnerable to violence.

No significant conclusions can be drawn from the available research regarding an association between crack cocaine and non-systemic crime (*see* Chapter 5). The limited research to date suggests that there is little distinction between crack cocaine and powder cocaine use in terms of

psychopharmacological crime (*i.e.*, crime resulting from the behavioral effects of the drug). Given the fact that crack and powder contain the same active ingredients, the only potential psychopharmacological difference likely would involve different effects resulting from the frequency of use, with inhalation of crack tending to produce more binge users than snorting of powder.

The Commission found virtually no research that compared the respective association of crack and powder cocaine with economically driven crime. Available research, although limited, suggests that there is some association between crack cocaine and economically driven crime. For example, Inciardi reports that 48 percent of men and 62 percent of women who used crack engaged in petty property crime, and that a significant minority of the men committed fairly high numbers of violent or potentially violent offenses (*see* Chapter 5). His study also reports that 69 percent of women crack users engage in prostitution (other studies reported in Chapter 3 indicate that women who use powder cocaine also engage in prostitution). Finally, Inciardi notes that the main criminal activity of participants in his study involved retail drug distribution. Other studies show a similar association between crack cocaine and economically driven crime, but none of the studies the Commission uncovered contrast this association to that for powder cocaine. Accordingly, the Commission lacks a basis for comparing the effects of crack and powder cocaine on economically driven crime.

The limited available research suggests that there appears to be more criminal activity associated with crack cocaine use and distribution than with powder cocaine use and distribution. However, nothing in this research permits a firm basis for numerically contrasting the two.

On the other hand, data collected by the Sentencing Commission provide precise information about the prior criminal records of federal defendants charged with distributing crack cocaine versus those charged with distributing powder cocaine. A comparison of federal drug defendants reveals that crack defendants have worse criminal records than any other category of federal drug defendant. Specifically, crack defendants are least likely to have the lowest criminal history score (Category I), with only 44.8 percent in Category I, as compared to 64.4 percent of powder cocaine defendants. Further, 4.1 percent of crack defendants have the most extensive criminal record (Category VI), while only 1.6 percent of powder defendants are found in that category. Of the three most serious criminal history categories, Categories IV-VI, 17.6 percent of crack defendants are found in these categories, compared to only 7.0 percent of powder defendants. Approximately six percent (6.3%) of crack defendants compared to 3.2 percent of powder cocaine defendants qualify for career offender status.⁶

⁶ The career offender provision of the guidelines refers to an offender who has at least two prior crimes of violence or drug trafficking and whose instant offense is a crime of violence or drug trafficking.

Crack defendants also are more likely to have a recent criminal record than any other category of drug offender, with 33.7 percent under a pre-existing criminal justice sentence at the time of their most recent federal offense, as compared to 18.9 percent of powder defendants. Crack defendants (18.7%) commit the instant offense within two years of release from imprisonment at a much higher rate than powder defendants (8.3%) (*see* Chapter 7).

While these numbers show that crack defendants typically have more serious criminal records than other drug defendants, the guidelines already increase an offender's sentence based on the severity and recency of his/her record. As a result, some offenders are punished further under the guidelines for behavior previously considered by Congress in setting an increased ratio for crack offenses.

d. Young People as Users and Distributors of Crack Cocaine

The National Household Survey sheds some light on whether young people are more prone to use crack than powder cocaine (*see* Chapter 3). For reporting year 1991 (the most recent year with complete data), approximately 16.7 percent of all cocaine users smoked crack at least one time (83.3% used powder cocaine at least once). Looking at trend data, the rates of those who reported using cocaine in any form during each of the survey years are consistently and significantly highest for individuals aged 18 to 25 years. The same is true for crack cocaine; it is most popular among young adults (ages 18-25).

A somewhat different picture emerges when one compares powder cocaine use to crack use within age categories. Powder cocaine remains more popular than crack cocaine at each age category. However, of those who used cocaine in the past year, a higher proportion of 12- to 17-year-olds used crack (26.7%), compared to 18- to 25-year olds (13.0%), 26- to 34-year olds (15.7%), or 35 years and older (21.4%).

Studies also show that, while both powder cocaine and crack cocaine distributors often are young, those involved in distributing crack are younger. The DEA cites the crack cocaine phenomenon as responsible in large part for the increase in juvenile involvement in drug trafficking. In addition, considerable research suggests that crack cocaine dealers use juveniles in more visible roles, based on the assumption that juveniles are more likely to escape detection and prosecution. Indeed, the street level sale of crack requires little sophistication and lends itself to the use of young people in a way that larger scale and more "sophisticated" drug trafficking activities might not. Young, unemployed or underemployed, illiterate, and otherwise impoverished persons, accordingly, are particularly susceptible to the allure of profits to be made from drug distribution (*see* Chapter 4).

As part of the Anti-Drug Abuse Act of 1986, Congress expressed its concern about traffickers using young people to distribute drugs when it created a new offense for using individuals

under age 18 to distribute drugs. Congress reiterated its concern in the Anti-Drug Abuse Act of 1988 by directing the Commission to assign a minimum guideline base offense level of 26 for that offense, generally equivalent to a five-year minimum sentence.

e. **Crack Cocaine in Relationship to Ease of Ingestion, Manufacture, Transportation, and Disposal and General Affordability**

Crack cocaine typically is "smoked" in pipes constructed of glass bowls fitted with one or more fine mesh screens that support the drug. The user heats the side of the bowl, the heat causes the crack to vaporize, and the user inhales the cocaine-laden fumes through the pipe. Smoking crack cocaine achieves the efficiency of intravenous administration (very fast absorption into the bloodstream) without the inherent dangers associated with injecting powder cocaine directly into the circulatory system.

Powder cocaine that is insufflated (snorted) is equally easy to administer but does not have the same efficiency in terms of speed of absorption. Injecting or freebasing powder cocaine, however, is more complicated and dangerous (*see* Chapter 2).

Freebasing cocaine, popular among cocaine users in the 1970s, permitted the user to smoke powder cocaine and thereby receive the more intense and quick effects associated with injection. Freebasing, however, involved a fairly dangerous process. Media coverage following an incident in which comedian Richard Pryor suffered third-degree burns over his torso and face while freebasing cocaine prompted many freebase cocaine users to shift to smoking crack. Unlike the process for freebasing cocaine, powder cocaine may be converted into crack without the use of flammable solvents. Powder cocaine simply is dissolved in a solution of sodium bicarbonate and water, boiled, and a solid substance separates from the boiling mixture. This solid substance, crack cocaine, is removed and allowed to dry. The crack cocaine is broken or cut into "rocks," each typically weighing from one-tenth to one-half gram (*see* Chapter 2).

Because of its ease of manufacture, any distributor with enough powder cocaine, baking soda, and a stove or microwave has available a steady supply of crack cocaine. The distribution of crack cocaine does not require major trafficking efforts involving importation from other countries; rather, importation occurs when the cocaine is still in powder form. Crack cocaine usually is manufactured in the community in which it will be distributed, virtually eliminating the need to transport the drug long distances (*see* general discussion, Chapter 4).

Accordingly, with crack, distributors have a fairly easy manufacturing process that yields a "safe," smokable form of the drug that can deliver just as intense and as quick a high as could be had through the more cumbersome and less appealing process of injecting powder cocaine. Beyond its ease of manufacture, crack can be marketed in smaller, more cheaply priced units, thereby rendering it more appealing to people with less money. Indeed, as a glut of powder cocaine

developed in the early to mid-1980s, prices for both powder cocaine and crack cocaine fell (*see* Chapter 4). Consequently, retail crack cocaine distributors developed new marketing strategies, the most significant of which involved selling crack in single-dosage units, in plastic vials or baggies, weighing between 0.1 and 0.5 grams apiece, affordably priced from \$5 to \$20. In contrast, powder cocaine was sold typically by the gram – between five and ten doses – for less affordable prices (\$65-\$100). The affordability of crack cocaine expanded its consumer base to lower income individuals.

In addition, because it is sold in smaller quantities than powder cocaine, many law enforcement officials believe that crack is more easily transported, distributed, and, if necessary, hidden or discarded (*see* Chapter 4). Some authorities, however, report that easy disposal is not limited to crack cocaine; these officials relate that retailers of both powder and crack cocaine "drip" traffic whereby they carry small quantities on their person for immediate distribution and leave additional quantities in "drop spots" to which they can return. The ease of disposal and the practice of "drip trafficking" increase the likelihood that, in the event of arrest, the retail dealer's criminal liability will be limited to the quantity on his/her person, a quantity that likely will be less than the total quantity the dealer intended to distribute.⁷

f. Use of Crack Cocaine and Public Health Concerns, such as, "Crack Babies," "Boarder Babies," and the Spread of HIV/AIDS

In the congressional debates of 1986 and 1988, members voiced concern about such social welfare issues as "crack babies," "boarder babies," and HIV/AIDS transmission associated with crack cocaine use. However, because medical tests cannot distinguish between the presence of crack or powder in a mother or newborn child, the relative frequency of use between the two types of drugs among pregnant women cannot yet be medically determined.⁸

Similarly, because medically the two forms of cocaine cannot be distinguished, research cannot determine whether a baby born of a crack mother suffers more harm from its mother's drug usage than a baby born of a mother who used powder cocaine. Studies find that cocaine causes constriction of blood vessels, restricting the flow of oxygen and other vital nutrients to the fetus (*see* Chapter 3). Cocaine use also is associated with *in utero* developmental problems, including increased incidence of spontaneous abortion, small head circumference, low birth weight, retarded growth, and urogenital abnormalities. In addition, infants exposed to cocaine prior to birth are at higher risk of Sudden Infant Death Syndrome, seizures, or neurobehavioral dysfunctions. Building

⁷ During the congressional debate related to increased penalties for simple possession of crack cocaine, members expressed concern that, because of the relatively small dosage units for crack cocaine, it is difficult to determine whether an individual carrying five grams and less would be carrying the drug for personal use or sale.

⁸ To compare the relative usage, a researcher must ask the mother which form of cocaine she had been using. If future research found that significantly more pregnant women use crack cocaine than powder, it arguably would support a policy determination that crack distribution should be more severely sanctioned than powder distribution.

on what the Commission has learned with respect to crack cocaine – *i.e.*, because the high and low are quicker when using crack cocaine, crack users are more likely to use increased quantities of the drug or to engage in bingeing – it is likely that pregnant women who use crack cocaine will expose their infants to greater quantities of the drug and, thus, to more harm. Furthermore, babies exposed to crack may experience greater problems because crack smokers achieve higher concentration of the drug in their bloodstreams than do cocaine snorters. These inferences, however, have not been documented in the research literature.

In addition to cocaine-exposed babies, concern has been raised about the influence of substance abuse and maternal neglect, teenage pregnancy, and the phenomenon of boarder babies. The Commission's research, however, reveals virtually no studies that address these concerns as they relate to crack cocaine. Some of the research, although very limited, focuses on cocaine in general, but the majority of studies address the broader question of substance abuse. That these societal problems exist seems quite clear (see discussion Chapter 3); much of the evidence, however, comes from news magazine reports as opposed to medical and scholarly journals. For example, Time magazine reported on some of the "tragic chapters in the saga of crack," illustrating its story with anecdotal quotes from individual doctors and gripping accounts of individual children but no empirical research findings.

The numbers associated with the above social pathologies are staggering. In particular:

about 375,000 babies, or 9 percent of births each year, are exposed to illegal drugs in the womb. Nearly 1 of every 3 births is out of wedlock. Two out of 3 African-American babies are born to single mothers ... the figure for white babies is 22 percent and skyrocketing. Black or white, these women – and many are that only biologically given their youth – tend to be ill educated and unable to provide for themselves or their offspring.⁹

That these phenomena (neglect, teen pregnancy, boarder babies) coincide with a rise in crack cocaine use leads many to believe that the two are somehow related – and they may be. Although no medical data compare the rate of crack-exposed babies to powder-exposed babies, the dramatic rise in cocaine-exposed babies coincidental with the introduction of crack into this country suggests an obvious relationship.

That there is no empirical research pointing to the respective relationships between crack, powder, and the problems of neglect, boarder babies, and teen pregnancy does not suggest that empirical work has not been done. The scholarly journals report a serious problem with substance abuse in general among mothers. One study reports that, in New York City, the proportion of birth

⁹ M. Ruby, "The Children's Crusade. How to Improve Social Conditions for Children," U.S. News & World Report, 112 (Dec. 13, 1993).

certificates indicating maternal illicit substance abuse tripled between 1981 and 1987, and that 40 percent of 300 or more babies boarded in city hospitals each day resulted from maternal drug abuse (see Chapter 3). Another study, pointing to the problem of polydrug use among pregnant women, found that most of the mothers of drug-exposed children had been polysubstance abusers during their pregnancy.

Many states recognize the birth of drug-exposed infants as evidence of maternal neglect. Several states have enacted laws that allow child abuse charges to be brought against any woman with illegal drugs in her bloodstream who gives birth to a child. Other states simply remove drug-exposed babies from their mothers, making them wards of the state. Some states have tried these methods and rejected them in favor of mandatory treatment programs in which mothers must enter treatment or lose their children.

The findings related to HIV/AIDS transmission and cocaine use are mixed as well. More than 30 percent of all individuals with Acquired Immunodeficiency Syndrome (AIDS) are abusers of intravenous (IV) drugs. Thousands of other IV drug abusers carry the Human Immunodeficiency Virus (HIV), the virus that causes AIDS. The spread of the AIDS virus is positively associated with IV drug injection. In the stereotypic "shooting gallery" environment, drug injection equipment is passed from one user to another, producing an increased risk of HIV-transmission. Because of the short-lived euphoria of cocaine, powder cocaine injectors are more likely to reinject frequently than are injectors of other illicit drugs.

However, it cannot be concluded that powder cocaine, because it is injected, creates a greater risk of AIDS transmission than crack (see Chapter 3). Increasingly, crack cocaine smokers exhibit sexual behavior that places them at risk of HIV-transmission. These high-risk sexual behaviors may include multiple partners, sex without condoms or other barriers, sex for crack, and sexual activity during or following drug use. Consequently, rates of HIV infection are nearly equal between crack cocaine smokers (at greater risk due to their sexual practices) and powder cocaine injectors (at risk because of the potential for infection from shared injection equipment).

2. Additional Issues Relevant to the Powder Cocaine/Crack Cocaine Differential

In addition to the concerns articulated by members of Congress, the Commission's research has uncovered a number of other issues that are relevant to the debate over the propriety of the current powder to crack cocaine quantity ratio.

a. Polydrug Use and Distribution

Past DAWN reports indicate that cocaine users, in general, are more likely to be polydrug users than are other drug users. DAWN reports that, in 1992, 60.0 percent of cocaine-related emergency room admissions and 73.2 percent of all cocaine-related deaths involved at least one

other drug (*see* Chapter 3). For medical emergencies resulting from multiple drug use, the most common combination is cocaine and alcohol. Concurrent use of heroin and cocaine is the second most likely cause of cocaine-related emergency room admissions. Unfortunately, as these studies do not distinguish between powder and crack cocaine, an important part of the question remains unanswered.

Moreover, researchers and law enforcement officials indicate that cocaine distributors at all levels generally distribute more than one drug. According to the DEA, all of the wholesale drug trafficking gangs – Jamaican Posses, Crips and Bloods, Dominican, and Haitian – began as polydrug traffickers, concentrating primarily on marijuana and powder cocaine, and continue to sell those drugs as they move into new markets. The same generally is true for crack distributors; many started out distributing other drugs and moved to crack cocaine as the market expanded, but continue to offer other drugs for sale as well (*see* Chapter 4).

b. Women as Distributors of Crack Cocaine

In much the same way as youth are used to distribute crack (*see* discussion above), women appear to have a somewhat greater role in crack distribution relative to the distribution of other drugs. Women are used by distributors to make straw purchases of firearms or to rent residences to use as crack and stash houses so that the distributor can remain unknown to the gun dealer or landlord. As with juveniles, women are viewed as less at risk for prosecution and lengthy sentences and therefore more attractive as distributors. Indeed, studies have shown that many of the young people involved in drug distribution are women (*see* Chapter 4).

c. Racial Implications

One of the issues driving the debate concerning the different penalty structures for crack and powder cocaine relates to the perception of disparate treatment for defendants convicted of either possession or the distribution of crack cocaine. Some argue that the 100-to-1 quantity ratio (powder to crack) is not in keeping with the policy, goal, and mission of federal sentencing – that is to be fair, uniformly consistent, and just. That argument goes on to assert that 88.3 percent of the offenders convicted in federal court for crack cocaine distribution in 1993 were Black and 7.1 percent were Hispanic (*see* Chapter 7). While neither the decisions of the courts nor the research conducted by the Commission support a finding that racial bias or animus undergirded the initiation of this federal sentencing law, the problem with perception still obtains. To the extent that a comparison of the harms between powder and crack cocaine reveals a 100-to-1 quantity ratio to be an unduly high ratio, the vast majority of those persons most affected by such an exaggerated ratio are racial minorities. Thus, sentences appear to be harsher and more severe for racial minorities than others as a result of this law, and hence the perception of unfairness, inconsistency, and a lack of evenhandedness.

d. Increased Penalties for Higher Level Distributors

In its determination of the appropriate quantity of a drug necessary to trigger a mandatory minimum penalty for that drug, Congress evaluated the relative harms presented by each drug and set an amount representative of that judgment. Thus, believing heroin and methamphetamine to create more social harms than powder cocaine, Congress set the "ratio" for those drugs higher than that set for powder cocaine. Conversely, believing marijuana to be far less dangerous than powder cocaine, Congress set the quantity necessary for the former to trigger a mandatory penalty at a much higher level than for powder cocaine.

In setting the ratio for crack cocaine versus powder cocaine, Congress likewise expressed its belief about the relative harms of those two substances. Because crack and powder are two forms of the same drug, with one form produced by a simple conversion process applied to the other, the vastly different ratios between the two forms has created tremendous anomalies in the federal sentencing system. Specifically, large scale suppliers of powder cocaine distribute to mid-level suppliers who in turn sell the powder down the distribution chain until it reaches retail dealers who may traffic in the powder, or who may add baking powder to the powder cocaine, heat the mixture, and create crack, which can then be distributed.

When Congress set mandatory minimum penalties for drug trafficking offenses in 1986, one of its primary objectives sought to ensure that major and serious drug dealers received harsher, more certain punishment. Congress assumed that an offender would be punished in proportion to the quantity of drug that he/she sold. In this way, an offender who distributed a greater quantity of a given drug throughout a community, inflicting greater societal harms due to increased availability of the drug to more people, would receive higher penalties. The 100-to-1 quantity ratio between crack and powder cocaine, however, tends to confound that assumption.

Specifically, research suggests that this policy may achieve its intended effect with most drugs, but that often the mandatory minimum penalties are applied to lower-level crack cocaine offenders (*see* Chapter 7). As a result, crack cocaine offenders differ characteristically (*e.g.*, smaller range of activity, less likely to be characterized as performing important functions) from other drug offenders at the higher penalty levels.

Issues of "fairness" or "just punishment" – not to mention frustration of some congressional objectives – result when relatively low-level crack retailers receive higher sentences than the wholesale-level cocaine dealer from whom the crack sellers originally purchased the powder to make the crack. For example, two defendants in a recent federal case purchased approximately 255 grams of powder cocaine from their supplier, returned home, and "cooked" the powder cocaine, producing approximately 88 grams of crack cocaine. Unhappy with the amount of crack produced – typically the yield should have been about 200 grams – the defendants called their supplier and complained about the poor yield. The supplier agreed to replace the 255 grams

of powder cocaine at no additional cost. The defendants returned to their supplier with the 88 grams of crack in their possession and were arrested prior to completing the transaction.

At sentencing, the supplier's guideline sentencing range (a first-time offender) for selling the 255 grams of powder is 33 to 41 months' imprisonment; the range for the defendants (also first-time offenders) who bought a portion of the supplier's powder and cooked it is 121 to 151 months. In addition, the two "crack" defendants are subject to a mandatory minimum penalty of ten years, while the supplier who sold them the powder cocaine that enabled them to make crack is subject to no statutory minimum penalty. This case illustrates the anomalous effects of the 100-to-1 quantity ratio.

In more general terms, in order to receive a five-year mandatory minimum sentence, a crack dealer must traffic only in five grams of crack. Five grams of crack represents 10-50 doses of crack, with an average retail price of \$225-\$750 for the total five grams. In contrast, a powder cocaine dealer must traffic in 500 grams of powder cocaine in order to receive the same five-year sentence. The 500 grams of powder cocaine represent 2,500-5,000 doses, with an average retail price of \$32,500-\$50,000 for the 500 grams.

Viewed another way, the 500-gram quantity of powder cocaine that can send one powder cocaine distributor to prison for five years can be distributed to up to 89 different street dealers who, if they chose to turn it into crack cocaine, could make enough crack to trigger the five-year penalty for each defendant.

e. Prosecutorial Practices and Resources

In setting stiff mandatory minimum penalties carrying a sharp distinction between powder and crack cocaine, Congress attempted to frame a national policy that would be applied uniformly across the country in federal drug cases. The Commission's research, however, suggests that uniform application is not occurring. Because of widely varying but almost universally lower state penalties for crack, the decision to prosecute in federal versus state court often can make a dramatic difference in an individual's sentence, thereby making the choice of forum perhaps the most important determinant of sentence length. The Commission lacks national data on this important question, but some limited inferences can be drawn based on reported crack convictions.

The present record shows differences in prosecution practices (*see* Chapter 6). For example, the more rural district of Central Illinois has experienced a considerably higher proportion of federal crack cocaine convictions than the largely Chicago-driven district of Northern Illinois. Similarly, Brooklyn, New York, reports a much lower proportion of federal crack sentencings than Northern

and Southern West Virginia.¹⁰ Yet, according to New York City Police Department data, 45.8 percent of all drug arrests in 1989 were crack cocaine related (*see* Chapter 6). Consider the fact that in 1993 the state of South Carolina (n=118) had more crack cocaine cases than the states of Colorado, Kansas, New Mexico, Oklahoma, Utah, and Wyoming combined (n=113). Certainly, resource limitations or differing state/federal priorities may restrict the prosecution of crack cases in larger federal districts and help to explain why some of the smaller, more rural federal districts have experienced larger numbers of crack prosecutions. Nevertheless, these data suggest that the uniform national policy Congress had hoped to engender does not play out in practice.

C. SUMMARY

As discussed above, a review of the relatively sparse empirical evidence available concerning those factors Congress considered in distinguishing crack from powder cocaine leads to mixed conclusions and few clear answers. Nevertheless, the Commission concludes that a policymaker could infer that crack cocaine poses greater harms to society than does powder cocaine. For example, because smoking crack cocaine lends itself to binge use in a way not found with snorting powder – the most popular way of administering that form of the drug – crack has a greater potential for creating dependency. Moreover, the ease by which crack can be administered and its ability to be marketed cheaply have made it particularly appealing and accessible to a broader population, including some of the most vulnerable members of society: the poor and the young. Further, both forms of cocaine appear to be associated with systemic violence, that is, violence associated with the marketing of a drug; however, crack dealers generally, tend to have a stronger association with systemic violence and are more likely to possess weapons than powder cocaine dealers. Finally, crack dealers, generally, have more extensive criminal records than other drug dealers, and they tend to use young people to distribute the drug at an increased rate.

A conclusion that crack cocaine poses somewhat greater harm to society, however, does not answer the question whether the 100-to-1 quantity ratio between powder and crack cocaine is one that this Commission would recommend. In addressing that question, the Commission notes that there is no precise method by which one can determine the optimal penalty differential between drugs or even between kinds of offenses. While medical and pharmacological research can calibrate closely the appropriate amount of medication necessary to treat an illness, there is no comparable test to identify the appropriate punishment level for the illegal sale of a controlled substance. Instead, in establishing a penalty level for trafficking in a particular drug, the policymaker must

¹⁰ The Commission does not mean to suggest that any apparent disparities are unwarranted. As a general matter, the Commission has not analyzed various factors that might explain these and other differences, including the strength of the state and local law enforcement efforts directed at the crack cocaine trade, the relative punishment available through state statutes, differing needs and problems facing each district, and resource allocation issues.

United States Sentencing Commission

weigh pharmacological evidence and the other societal harms posed by the substance to arrive at a sound penalty level.

Accordingly, even while agreeing that crack may be more harmful than powder cocaine, the Commission is not prepared at this time to say definitely how that additional harm should be accounted for within the current penalty scheme. Indeed, for reasons discussed below, the Commission will not recommend in this report a particular ratio or ratios or a particular structure that it can endorse. Nevertheless, the Commission firmly concludes that it cannot recommend a ratio differential as great as the current 100-to-1 quantity ratio.

Several factors lead the Commission to a conclusion that a 100-to-1 differential cannot be recommended. First, when Congress established the quantity ratio in 1986, there were no sentencing guidelines; rather, the guidelines took effect in 1987 and were not fully implemented until 1989. Accordingly, Congress had only the possibility of an enhanced ratio to look to in capturing, in a sentencing structure, the additional harms that legislators felt inhered in crack cocaine. Therefore, to the extent that the guidelines now provide a punishment for some of those same factors subsumed in the ratio, those factors generate an enhancement both through an increased ratio differential and through guideline adjustments. In short, they are doubly punished through the interplay of the two structures.

Accordingly, if Congress believed that certain factors warranted a 100-to-1 quantity ratio and if the subsequently adopted guidelines provided a punishment for some of those factors, then, as a logical matter, the ratio should be lowered by an amount commensurate with the extent to which these factors are addressed by the guidelines. For example, Congress was concerned greatly about the increase in crime, and particularly the increase in violent crime, resulting from the trafficking and use of crack cocaine. Some factors, however, such as the more addictive nature of crack, clearly are not addressed by the guidelines. Other factors, such as a tendency toward increased violence associated with crack distribution, are addressed, at least in part.

Specifically, the likelihood of violence in connection with the trafficking of a drug is increased greatly if those trafficking in that drug carry guns or have prior criminal records. Certainly the harm of the crime is greater if someone is killed. The guidelines can provide an enhancement for each of these factors. That is, a defendant who carries a firearm or is involved in a drug conspiracy in which another participant carries a firearm will receive an enhancement for possession of that firearm. In addition, the punishment of a defendant who has a prior record is increased in proportion to the extensiveness of that record. Further, if in relation to the crack distribution a victim is killed, the guidelines typically provide a life sentence and, because there is no parole in the federal system, a life sentence means life in prison.

Although the guidelines provide punishment for some of the factors that led Congress to establish the 100-to-1 quantity ratio, the guidelines do not address all of the factors that concerned

Congress. For example, no provision of the guidelines accounts for the increased addictiveness of crack or its increased attraction as a result of its cheap marketability to a broader and more vulnerable part of the population. Neither do the guidelines address completely all aspects of the relationship between crack and crime associated with crack distribution or other social consequences. Thus, concerns about unnecessarily duplicative punishment between the more finely calibrated sentencing guidelines and the broader brush 100-to-1 quantity ratio explain, but only partially, the Commission's conclusion that the 100-to-1 quantity ratio should be reconsidered.

Another central basis for the Commission's rejection of this ratio is the extreme anomalies in sentencing produced by such a high differential in penalties between two easily convertible forms of the same drug. Crack cocaine is made through a simple conversion process applied to powder cocaine. Thus, those who traffic in crack necessarily have obtained the "raw material" for their drug through the powder cocaine distribution chain. One premise of the mandatory minimum sentencing structure is that, all other things being equal, a drug dealer's danger to society is in direct proportion to the quantity of the drug in which he/she deals. Yet, as a result of the ratio differential, a large scale powder cocaine dealer who trafficks in 500 grams (2,500-5,000 dosage units) of powder cocaine will receive the same sentence as a crack dealer who has sold only 5 grams (10-25 doses) of crack cocaine; that is, a five-year sentence of imprisonment.

Such a vast difference in the quantity of drug necessary to trigger the same sentence would be acceptable if the threat of increased dangers and harms created by crack versus powder cocaine appeared commensurate. Yet, even though crack is arguably more addictive than powder, when the latter is only snorted, the Commission cannot say that the increased likelihood of dependency or binge use posed by crack is commensurate with a ratio differential as great as 100-to-1.

Similarly, although evidence suggests that the trafficking and use of crack cocaine have engendered more violence associated with marketing the drug than has powder cocaine, the evidence does not indicate that the increased level of violence and crime justifies a ratio as large as 100-to-1. Moreover, to the extent that some members of Congress expressed concern in 1986 that use of crack tends to alter a person's behavior in such a way as to cause that person to commit a crime (psychopharmacologically induced crime), the evidence does not suggest any greater association for crack than for powder cocaine with that type of criminal activity.

For all of these reasons, the Commission concludes that the 100-to-1 quantity ratio that presently drives sentencing policy for cocaine trafficking offenses should be re-examined and revised.

In the Commission's view, the considerations described above suggesting a need for reexamination of the 100-to-1 quantity ratio underlying cocaine trafficking penalties similarly warrant congressional reconsideration of the dramatic distinction in simple possession penalties

for crack versus powder cocaine and other drugs. A number of other concerns also point to the need to modify this policy.

First, focusing on the difficult problem of user/possessors, there appears to be an insufficient basis for punishing heavy crack users who possess a measurable fraction over five grams (10 to 50 doses, at .1 to .5 gram/dose) by a mandatory minimum term of imprisonment (five years) that is five times the maximum imposable sentence (one year) for simple possession of a similar or greater quantity of any other drug. In general, the unique approach to emphasizing severe punishment of those who possess crack for personal consumption is at odds with the prevailing, treatment-oriented approach prescribed by Congress for other drug users/possessors.

Secondly, the crack simple possession penalties have created sentencing anomalies and unwarranted disparities in the treatment of essentially similar defendants, results that conflict with the fundamental purposes of the Sentencing Reform Act. In particular, the sentencing "cliff" between a first offender who simply possesses as much as 5.0 grams of crack (or any quantity of any other drug) and an otherwise similarly situated defendant having a minutely measurable greater quantity (*e.g.*, 5.01 gram) of crack – statutory maximum sentence of one year's imprisonment for the former, minimum sentence of five years' imprisonment for the latter – creates a wide disparity and disproportionality that the sentencing guidelines cannot rectify. And, for repeat possessors of small quantities of crack (greater than three grams but less than five grams for a first repeater, greater than one gram but less than five grams for a second repeater), the unusual statutory scheme creates the anomalous result of the defendant faring better if convicted and sentenced as a trafficker (ordinarily the more serious offense) than if sentenced under the simple possession statute.

D. RECOMMENDATIONS

The Commission strongly recommends against a 100-to-1 quantity ratio. Having said that, the Commission is not prepared in this report to recommend a specific different ratio or a specific different structural approach to deal with the enhanced dangers believed to be presented by crack. Rather, as a priority matter, the Commission intends to develop a model or models for Congress to consider in determining whether to revise the current approach that it takes in the sentencing of crack offenses.

At the outset, the Commission will focus on a model that maximizes the development of offense- and offender-specific guideline enhancements addressing as many of the discrete, substantial harms associated with crack offenses as reasonably can be handled in a guideline system. For example, Congress is rightly concerned with the use of juveniles in distributing crack and the growing problem of cocaine-exposed babies. To address these concerns relating

to some but not all crack distribution offenses, the Commission will investigate the feasibility of a guideline enhancement that additionally punishes those who engage youth to distribute drugs and an enhancement for those who sell crack to pregnant women. Currently, an offender does not receive enhancement for these acts unless the government charges the specific act and a conviction results.

Further, Congress accurately expresses concern with the violence associated with crack distribution. The Commission will examine more effective means of incorporating appropriate enhancements for that violence into the guidelines. In addition to the currently available enhancements for weapons and prior criminal record, the Commission might add enhancements for type of weapon, discharge of weapon, injury to victims, bystander injury, and crack houses or shooting galleries.

In comparison to a penalty scheme that relies exclusively or primarily on a quantity ratio to distinguish among offenders warranting greater punishment, this approach is distinctly fairer and more consistent with the more uniform but appropriately individualized sentencing approach Congress envisioned under the Sentencing Reform Act. To illustrate using the youth as distributor phenomenon, consider that, to the extent that a ratio is used as the principal means of meting out greater punishment for crack offenses and that ratio is increased to punish those who engage youth to distribute crack, such an enhancement also has the undesirable effect of overpunishing the defendant who may have never been involved in such a venture. In contrast, a well-crafted guideline provision that is focused specifically on the particular harm of engaging youth to distribute crack will additionally punish only those who have created that identified harm.

Following this approach, the Commission will attempt to identify all such harms frequently and substantially associated with crack offenses and seek to determine the extent to which they can be addressed in a guideline system. More specifically, the Commission will consider, to the extent relevant to congressional concern and the purposes of sentencing as set forth at 18 U.S.C. § 3553(a)(2), the following: 1) the form of cocaine involved; 2) whether a firearm or other dangerous weapon was involved; 3) whether the offense resulted in serious bodily injury or death to another person; 4) the quantity of cocaine involved; 5) the extent to which the powder cocaine defendant knew the drug would be converted into crack; 6) the extent to which the offense involved systemic crime, that is, crime related to the drug's marketing, distribution, and control; 7) the extent to which the offense involved social harms, that is, harms associated with increased addictiveness, parental neglect, child and domestic abuse, and high risk sexual behaviors; 8) whether the offense involved the use or employment of any person under the age of 18; 9) whether the defendant performed a managerial or leadership role in the offense; 10) the defendant's prior criminal record; and 11) any other aggravating or mitigating factors necessary to ensure adequate and appropriate punishment for defendants convicted of cocaine offenses.

The Commission is aware that there may well be some harms that are inherent in the drug itself and that, as a practical matter, are not addressable through this type of specifically tailored guideline provision. For example, to the extent that crack is more addictive than powder cocaine, that concern may be addressable only through an enhanced ratio or penalty differential. Indeed, Congress has recognized, and appropriately so, that some drugs simply are more harmful than others, and it has accounted for those differences by establishing a different ratio or different quantity necessary to trigger a mandatory penalty. Accordingly, if the Commission ultimately concludes that some quantity ratio between powder and crack cocaine is necessary, that differential can be reflected by establishing appropriately different guideline base offense levels for offenses involving the two drugs.

Building on a review of the guidelines for drug trafficking offenses that is already well underway, the Commission expects that it can develop and submit to Congress one or more penalty scheme models of the general form described above no later than the 1995-96 amendment cycle.¹¹ Congress, of course, has the prerogative to address the 100-to-1 quantity ratio applicable to cocaine trafficking offenses at any time.

The Commission further recommends that Congress revisit the penalties uniquely applicable to crack simple possession penalties. Much of the rationale for reassessing the 100-to-1 quantity ratio applicable to cocaine trafficking offenses similarly applies to the penalties uniquely applicable to crack simple possession offenses. If Congress were to address the 100-to-1 quantity ratio applicable to trafficking offenses by increasing the amount of crack equating to the five- and ten-year mandatory minimums, some conforming modification in 21 U.S.C. § 844(a) would be necessary to ensure that the lesser-included offense of simple possession of crack is not punished more severely than the more serious trafficking offense.

The Commission is fully cognizant of Congress's ultimate authority over sentencing policy. It also recognizes that approaches other than the approach suggested here could address the fundamental need for a fairer, more effective cocaine sentencing policy. This said, having broadly delegated to the Sentencing Commission responsibility for developing a comprehensive and rational system of sentencing guidelines for all offenses, Congress should consider relying on the same approach to implement appropriate policy adjustments in this specific area. Among other advantages, this approach would permit the Commission, as an ongoing expert body charged with continually refining the guidelines system, greater flexibility to make adjustments reflecting advances in knowledge about cocaine and its societal problems. Most importantly, through the guidelines system, consistent, appropriately individualized, and substantially fairer sentencing results can be achieved that will effectively promote the purposes of sentencing.

¹¹ Under current law, the Commission is restricted in the timing of any submission of proposed guideline amendments to the limited timeframe between the convening of a session of Congress and May 1. See 28 U.S.C. § 994(p).

Appendix A

SUMMARY OF PUBLIC HEARING ON COCAINE SENTENCING POLICY

A. INTRODUCTION

On November 9, 1993, the Sentencing Commission convened a public hearing in Washington, D.C., on federal cocaine sentencing policy. The hearing, organized in conjunction with this special report to Congress, featured testimony by research scientists, scholars, law enforcement officers, an educator, a corrections official, an emergency room specialist, and a former cocaine abuser.

Representing the Sentencing Commission at the hearing were Chairman William W. Wilkins, Jr.; Commissioners Julie E. Carnes, Michael S. Gelacak, A. David Mazzone, and Ilene H. Nagel; and *ex-officio* Commissioners Janet Reno and Edward F. Reilly, Jr. The hearing was organized into four panels: law enforcement and community corrections, violence and gangs, pharmacology, and social institutions.

B. LAW ENFORCEMENT AND COMMUNITY CORRECTIONS

John J. Brennan, a sergeant in the Narcotics and Special Investigations Unit of the District of Columbia Metropolitan Police Department, opened the panel by recounting how the 1986 introduction of crack cocaine into the city increased the number of open-air drug markets from less than 20 (selling primarily phenmetrazine, dilaudid, heroin, and marijuana) to 80 markets selling crack cocaine. Sergeant Brennan said that the mandatory minimum drug laws have assisted law enforcement in infiltrating larger drug organizations by inducing defendants to cooperate with law enforcement. He believes, however, that the penalties for crack cocaine and powder cocaine should be the same. "[I]t takes fifteen minutes to turn powder cocaine into crack cocaine – a box of baking soda, a pot of water, and a microwave or a stove, and you have crack cocaine."

Jeff L. Tymony, Executive Director of Halfway House for Adults, Inc., in Wichita, Kansas, presented arrest statistics for the Wichita area by race, sex, and age. He noted that the amounts of

confiscated crack cocaine and powder cocaine did not differ significantly in 1993 in the Wichita metropolitan area. He reported that of 852 drug arrests for powder and crack cocaine offenses, 698 of the defendants were Black and 146 were White. He also said that he is "seriously concerned about what the violence associated with crack cocaine is specifically doing to the African-American community." Mr. Tymony added that young people seemingly have become tolerant of the use of narcotics "which means that we haven't done a very good job of educating them about the cost."

Special Agent Kevin M. Donnelly of the federal Drug Enforcement Administration office in Camden, New Jersey, provided details of crack cocaine investigations in which he was involved as a member of a "Weed and Seed" task force. He reported that the task force not only "weeds" out major defendants from the city, but also targets repeat and violent offenders for prosecution in federal court because of the stricter sentencing guidelines that apply. Agent Donnelly said that mandatory minimum penalties have had a favorable impact in the Trenton area because they lead to cooperation that assists subsequent investigations. When asked if the 100-to-1 quantity ratio of powder cocaine to crack cocaine was necessary, he said, "[s]peaking for myself as a DEA agent on the street, I think I need the [statutory] difference between crack cocaine and cocaine powder."

C. VIOLENCE AND GANGS

Dr. Steven Belenko, Deputy Director, New York Criminal Justice Agency, discussed the empirical evidence available on the relationship among crack cocaine use, the marketing of crack cocaine, and violent crime. He stated that while the crack cocaine subculture can be characterized as more violent and more involved in crime than previous or parallel drug subcultures, the reasons for this are complex and not necessarily a function of the psychopharmacological effects of crack cocaine. According to Dr. Belenko, media suggestion and public fear of a direct causal relationship between crack cocaine and non-drug crime does not seem to be confirmed by the data.

Rather, the levels of violence and crime associated with crack appear to reflect parallel and other interactive forces that are related to the relative immaturity and volatility of the crack markets, the ages and types of persons initially attracted to crack distribution, the increasing social and economic disorganization of the nation's innercities beginning in the 1980s, and the mounting proliferation of more powerful guns, as well as a spread of cheaper powder cocaine during the same period of time.

Dr. Paul J. Goldstein, Associate Professor of Epidemiology at the University of Illinois at Chicago Circle, testified that the primary association between cocaine and violence is systemic. While crack cocaine is a major contributor to drug-related violence, this occurs largely because crack is the newest and most prominent substance in violent, illicit street markets and not because of the psychopharmacological properties of crack. Dr. Goldstein said, "I have no evidence that crack

cocaine is more dangerous than powder cocaine. . . I have no evidence that crack is any more addictive than powder cocaine." However, he believes that the health risks from injecting cocaine are much greater than from smoking cocaine. Dr. Goldstein said that he supports the elimination of both the mandatory minimum penalties and the distinction between crack cocaine and powder cocaine.

Dr. Jerome H. Skolnick, Professor of Law at the University of California at Berkeley, attributes gang violence more to the underlying culture of a particular gang than to any other factor. Consequently, Dr. Skolnick does not believe that the present penalty distinction between crack cocaine and powder cocaine makes sense.

Crack is simply processed cocaine. In fact, the people who are probably the most violent are the people who are dealing in kilos because that is where the money is. A lot of the dealers . . . don't use the crack. They sell it. They are business people, and they are dealing in powder cocaine. So that distinction just is not a sensible distinction.

Dr. Skolnick testified that the social milieu affects why a drug is used differently in different communities. "[I]t takes you out of where you are and puts you where you want to be."

D. PHARMACOLOGY

Dr. Charles R. Schuster, Senior Research Scientist at the Addiction Research Center of the National Institute on Drug Abuse, focused his presentation on cocaine pharmacology, toxicology, and routes of administration. He testified that "cocaine is cocaine is cocaine, whether you take it intranasally, intravenously, or smoked." He noted, however, important differences associated with the manner in which the drug is administered. According to Dr. Schuster, both cocaine hydrochloride that is injected intravenously and crack cocaine that is smoked produce rapid effects in the user. Snorting cocaine, however, produces effects that "come on more slowly and last over a longer period of time."

Dr. Schuster recounted a study by the Addiction Research Center that examined whether the number of Black crack cocaine users is disproportionate to the number of White users. Controlling for neighborhood, the study revealed that "the odds ratios for whether the individual [crack user] is White, Black, or Hispanic are equal . . . [I]t is really neighborhood that we are talking about, not race specific[ally]." Dr. Schuster said that the potential public health consequences of crack cocaine are significant because the proportion of the population willing to smoke a drug is larger than "those who would be willing to put a needle in their arm."

Dr. Robert Byck, Professor of Psychiatric and Pharmacology at Yale University School of Medicine, testified that he believes the law uses drug weight as a metaphor for intent. Because the cost of cocaine is decreasing, Dr. Byck reasoned, "the absolute weight becomes relatively irrelevant." While weight is linked at times to dangerousness and degree of punishment, Dr. Byck did not feel that as a scientist he could speak to these issues. Rather, he said that he believes the most pertinent variable is marketing. Crack cocaine is easily made, it is sold in small quantities (single-dose packaging), and it can be taken using an acceptable route of administration (smoking).

Dr. Byck stated that while crack cocaine and powder cocaine have the same active ingredient, they have different melting points, chemical compositions, and solubilities, and "[c]rack is historically and pharmacologically a more threatening material." When asked if the 100-to-1 quantity ratio is correctly attributed to his 1986 testimony before Congress, Dr. Byck replied that the ratio could have been based on his comments contending that crack is much more dangerous than powder cocaine, but disclaimed responsibility for providing the ratio.

Frances D. Johnson, a former substance abuser, testified about her experiences with crack cocaine and powder cocaine. She spoke about the personality changes she underwent as she became an abuser and the effects her addiction had on her schooling, work, and life. Ms. Johnson detailed her recovery process and her efforts to share her experiences and hopes with other people. Ms. Johnson told the Commission that "coke is coke," and when asked if the laws should punish the crack dealer more severely than the cocaine dealer, she replied, "No . . . A pound is a pound. I don't care how you look at it. If I sold crack or I sold coke, I am selling the same kind of substance."

E. SOCIAL INSTITUTIONS

Dr. Ira J. Chasnoff, President of the National Association for Perinatal Addiction and Professor of Pediatrics at the University of Illinois, opened the hearing's final panel. In his remarks, Dr. Chasnoff listed four principles regarding prenatal exposure to cocaine:

- any drug taken by a woman during pregnancy will reach the fetus;
- crack cocaine has become a problem among women of child-bearing age because it is easily accessible and it does not require intravenous injection;
- "the pharmacology of cocaine and crack is identical. They are identical drugs, so any effect that you have on the fetus is similar, whether the woman uses crack or uses cocaine"; and

research has shown that the "single most important factor affecting the life of the child is the environment in the home in which he is being raised," not the drug the child was exposed to prenatally.

The deleterious effects upon an infant who has been exposed to cocaine *in utero* include difficulties in responding to parental interactions and erratic behaviors that are difficult to control. Dr. Chasnoff stated that "cocaine and crack exposure does not affect intellectual functioning . . . [but] does affect behavioral functioning." Dr. Chasnoff reports, however, that early intervention that includes physical, occupational, and speech therapy along with parenting interventions can help these children. Dr. Chasnoff stated that he could not speak to the issue of heavier penalties for crack cocaine offenses, but if the goal is to benefit the children, "then we are going to have to find other ways than taking their mothers away and putting them in jail."

Ms. Marguerite P. LaMotte, Principal of Washington Preparatory High School in Los Angeles, focused her remarks on her South Central Los Angeles high school, a school with 3,100 students, 75 percent of whom are Black and 25 percent of whom are Hispanic. Her school participates in a drug-free zone project to reduce drug and alcohol use among students. Ms. LaMotte reported that with cocaine use in her school "almost nonexistent," the school's major drug of abuse is marijuana, which is also the drug of choice in her school district. She spoke to the need for prevention efforts. Regarding the penalty distinction between crack cocaine and powder cocaine, Ms. LaMotte said: "Drugs are drugs. A student who gets hooked on cocaine, be it crack or powder, is still an addict and will suffer the same consequences. So the dope dealer should be subject to the same sentencing."

The final presenter at the hearing was Dr. Robert S. Hoffman, Senior Attending Physician, Department of Emergency Services at New York City's Bellevue Hospital Center. Dr. Hoffman offered his perspective as an emergency room physician, stating that "[a]s of 1986, crack surpassed all other causes of illicit drug presentations to the emergency department." He described the manifestations of acute cocaine intoxication in patients as severe agitation and uncontrollable violent behavior, accompanied by "life-threatening abnormalities of their vital signs."

Dr. Hoffman said that cocaine produces violence. To him, the real difference between crack cocaine and powder cocaine is the general population's easy accessibility to crack cocaine. Regarding the punishments for the two types of cocaine, Dr. Hoffman stated: "As a scientist and clinician, from my viewpoint, the issues need to be better clarified. Until they are, it doesn't make sense to punish a molecule with a little twist so much more severely than the same molecule in a different scenario."

Appendix B

SUMMARY OF PUBLIC COMMENT ON CRACK/POWDER COCAINE SENTENCING DIFFERENTIAL

On December 31, 1992, the Commission published in the Federal Register a notice of proposed amendments that, among other things, requested comment on whether the Commission should recommend that Congress modify or eliminate provisions distinguishing the penalties for powder cocaine offenses from crack offenses. Similarly, on December 21, 1993, the Commission published in the Register an invitation to the public to comment on whether the Commission should modify guideline provisions that distinguish between powder cocaine and crack cocaine offenses.

The Commission specifically solicited comment on cocaine sentencing issues from the American Bar Association, the American Civil Liberties Union, the U.S. Department of Justice, the Drug Enforcement Administration, Families Against Discriminative Crack Laws, Families Against Mandatory Minimums, the Federal Public Defenders, the National Association for the Advancement of Colored People, the National Association of Criminal Defense Lawyers, the Office of National Drug Control Policy, and the Sentencing Commission's Practitioners' Advisory Group (a group of criminal defense attorneys) and Probation Officers' Advisory Group.

The following is a summary of the comment received by the Commission:

1. U.S. Department of Justice

The Department of Justice (DOJ), in a position statement issued February 1, 1995, rejects any proposal to equate crack with powder cocaine. The DOJ believes that traffickers of crack cocaine should be subject to higher penalties than traffickers of like amounts of powder cocaine because of the differences in the manner in which the two drugs are ingested and marketed, and because the seller of crack is well aware of its addictive qualities and the familial and community devastation it engenders.

In its statement, the DOJ said crack is a more dangerous and harmful substance than powder cocaine for many reasons, including its greater abuse and dependency potential, its marketing in

inexpensive quantities that makes it accessible to youth and those in a lower socioeconomic status, its association with violent crime, and its contribution to the deterioration of neighborhoods and communities.

...Although we recognize, as a policy matter, that an adjustment in the current penalty structure may be appropriate, any such adjustment must reflect the greater dangers associated with crack as opposed to powder cocaine.

Furthermore, we do not believe that specific offender characteristics in the Sentencing Guidelines will be able to account for all of the differences in harms caused by the substances, both because of the systemic nature of some of those harms and because of the problems of proof in individual cases.

2. Office of National Drug Control Policy

Dr. Lee P. Brown, Director of the Office of National Drug Control Policy, expressed concern about current federal sentencing policy for crack and powder cocaine due to the "differential between the impact on 'low end' users and traffickers versus 'high end' users and kingpins, and the differential of the impact on African Americans versus others who use or traffick in narcotics." In a January 19, 1995, letter to the Commission, Dr. Brown said that research evidence does not support the 100-to-1 differential between crack and powder cocaine on which both the federal mandatory minimum penalties and the sentencing guidelines have been based.

In my opinion, one of the goals of sentencing policy in general should be to eliminate race-based differentials. However, the research does not clearly support elimination of the sentencing differential for powder versus crack cocaine. In fact, the greater availability of crack cocaine, the greater degree of addictiveness of crack cocaine, the impact on many inner city communities, and the greater systemic violence which surrounds the crack trade indicate that some differential may be warranted.

It appears that more time is warranted to further examine both the impact in differentials in sentencing which are less than 100-1, through "modeling" of sentencing guidelines which dictate a lesser statutory ratio; and to study the viability of utilizing the federal sentencing guidelines to punish based on offender characteristics involving violence.

3. Federal Public and Community Defenders

The Federal Defenders support elimination of the distinction between powder cocaine and crack cocaine. They cite disparate treatment, stating that crack cocaine offenses are committed overwhelmingly more by Blacks and that powder cocaine offenses are committed primarily by

Whites. They also note a lack of scientific data confirming that crack cocaine is more dangerous than powder cocaine.

An additional letter of support for congressional modification or elimination of this distinction came from an assistant federal defender.

4. Probation Officers' Advisory Group

The Probation Officers' Advisory Group reported that the majority of probation officers expressed opposition to the 100-to-1 quantity ratio. In general, they felt the ratio was unwarranted, arbitrary, and "too high." Probation officers were troubled that crack cocaine abusers, dealing to maintain their habit, receive equal if not greater penalties than the more sophisticated, powerful, and monetarily successful powder cocaine dealers. Many probation officers questioned the rationale behind these penalties.

The Commission was told that a DEA chemist advised one probation officer to use a .894 conversion figure to convert powder cocaine to crack cocaine. This conversion figure is the proportion of molecular weight of crack cocaine to that of powder cocaine (303/339).¹ One probation officer noted that under current drug laws, a defendant who sells 100 grams of pure powder cocaine will receive a lesser sentence than a defendant who sells 89.4 grams of crack cocaine, despite the fact that 100 grams of pure powder cocaine could easily be converted to 89.4 grams of crack cocaine.

Most probation officers suggested that the ratio be substantially reduced (perhaps ten-to-one) or eliminated altogether. However, due to its easy marketability, convenient route of administration, simple manufacture, low cost, powerful addictiveness, and social destructiveness, some probation officers consider crack cocaine a much more dangerous drug than powder cocaine. The probation officers who supported the 100-to-1 quantity ratio believed that the availability of crack cocaine bred violence and dependency. They argued that, through deterrence and incapacitation, the ratio reflected the amount of social and physical harm caused by the drug.

The Commission received a separate response from a deputy chief U.S. probation officer, responding on his own behalf, who said that the "ratio of 100-to-1 is the most unfair sentencing issue of which [he is] aware." He cites the lack of scientific evidence to conclude that crack cocaine is 100 times more potent or dangerous than powder cocaine. And he believes the ratio "more severely punishes the street level addicted dealer than the conspiratorial businessman who is higher on the chain of distribution." This is so, he says, because "the larger conspiratorial offenders tend to deal in large quantities of powder cocaine" that is later distributed to the street-level dealers and

¹ See *U.S. v. Paz*, 927 F.2d 176 (4th Cir. 1991). The court upheld use of this figure.

converted into crack cocaine. This probation officer allows that crack cocaine may be more addictive than powder cocaine and is probably more available due to its lesser cost.

5. U.S. District Court Judges

Two U.S. District Court judges wrote of their concern about the 100-to-1 quantity ratio. One said, "[t]he ratio is irrational and leads to unfair sentences. Quantity based sentencing involving crack cocaine produces sentences, in many cases, that are harsh, have no deterrent impact and are grossly disproportionate." The second judge urged the Commission to ask Congress to eliminate the existing quantity ratio, stating that "[t]he Draconian sentences required for crack offenders are unconscionable."

6. Foundations and Organizations

The Criminal Justice Policy Foundation urged the Sentencing Commission to request a review "of the drug quantity structure to determine dosages and quantify relative dangerousness or harmfulness." The Foundation suggested that this study be performed by the National Institute on Drug Abuse in consultation with the National Academy of Sciences. The Foundation views the ratio as "arbitrary," stating that it reflects "no actual calculation of the relative harmfulness to society or an individual of a given number of doses of an actual drug." Families Against Mandatory Minimums wrote that the ratio was "racially discriminatory," and urged a one-to-one ratio for powder cocaine and crack cocaine penalties to be implemented retroactively. And the National Association of Criminal Defense Lawyers characterized the current ratio between powder cocaine and crack cocaine penalties as "grossly unfair, illogical, and racially biased."

Citizens for the Rehabilitation of Errants (C.U.R.E.), citing discrimination against the mostly Black users of crack, urged the elimination of differences in the penalties for crack and powder cocaine. The Drug Policy Foundation stated that the 100-to-1 ratio should be modified so that crack cocaine and powder cocaine are treated equally. The Foundation said that there is "no scientific basis for treating one unit of crack as 100 units of powdered cocaine" and that "the differentiation . . . has a significantly racially disproportionate effect."

7. American Bar Association

The American Bar Association Criminal Justice Section's Committee on the U.S. Sentencing Guidelines urged publication of this Commission's report on cocaine. The ABA stated, "if, as we suspect, the report suggests that the current ratio is unjustified - or at least overstated - we would support amendments to rectify this error."

8. American Civil Liberties Union

The American Civil Liberties Union (ACLU) urged the Sentencing Commission to request Congress to eliminate the penalty provisions that distinguish crack cocaine from powder cocaine. In its written submission, the ACLU presented many of the findings of a panel of experts that participated in its 1993 national symposium, "Racial Bias in Cocaine Laws." The ACLU stated, "the overwhelming testimony of the expert's (sic) panel was that the mandatory minimum sentences for crack cocaine are not medically, scientifically or socially supportable, are highly inequitable against African Americans, and represent a national drug policy tinged with racism."

The ACLU disputed the arguments that stiffer penalties for crack cocaine are justified because of its alleged dangerousness, associated violence, or cheapness and accessibility. On the issue of dangerousness, the ACLU noted that it is irrational to distinguish between the two forms of the drug because powder cocaine easily can be transformed into crack cocaine. The ACLU also cited medical opinion stating that: 1) both forms of cocaine have the same effect on the body and temperament; 2) only the administration methods of the two forms of cocaine differ; and 3) no method of administration is more addictive than another.

The ACLU also cited an expert's finding that there is no difference in associated violence between crack cocaine users and powder cocaine users. This expert attributes any such violence to the dynamics of the drug marketplace.

Finally, to punish crack cocaine offenders more severely because of the drug's lesser cost or greater accessibility discriminates against those of lower socioeconomic status, the ACLU said.

9. Practitioners' Advisory Group

The Practitioners' Advisory Group strongly supported the modification or elimination of the 100-to-1 quantity ratio between powder cocaine and crack cocaine. The Group urged the Commission, at a minimum, to conduct a study focusing on whether the "ratio of 100 to 1 accurately reflects current scientific research and whether, in fact, the ratio should be reduced."

10. The National Rainbow Coalition

Reverend Jesse L. Jackson, President and Founder of the National Rainbow Coalition, voiced his concern over the disparity in crack cocaine and powder cocaine penalties. He cited statistics showing that while most crack cocaine users are white, most of those incarcerated in federal prison for crack use are black. Reverend Jackson stated that studies show that "there is no molecular difference in the two forms of the drug, and that powder may in fact be more addictive than crack." He attributes violence associated with crack to the nature of the drug trade rather than the drug itself.

11. Comments from an Assistant U.S. Attorney

An assistant U.S. attorney generally stated that the 100-to-1 quantity ratio was excessive. The prosecutor added two observations. First, he argued that the 100-to-1 ratio did not affect those Congress intended to target. He wrote, "in very few cases have the prosecutions in this district risen above the mid-level management level." Second, he noted that he could not identify any "deterrent impact, or positive social benefit resulting from federal prosecutions under the present penalty scheme."

12. Private Defense Attorneys

Three private defense attorneys voiced their concerns about the 100-to-1 quantity ratio, citing the lack of scientific support for the ratio and its disparate impact on black offenders.

13. Private Citizens

The Commission received approximately 1,900 letters supporting the discontinuation of the 100-to-1 penalty ratio for powder cocaine and crack cocaine offenses.

Appendix C

LEGAL CHALLENGES TO CRACK COCAINE PENALTIES

A. INTRODUCTION

This appendix outlines the constitutional challenges to the federal crack cocaine penalties brought by defendants since passage of the 1986 and 1988 Anti-Drug Abuse Acts and implementation of the sentencing guidelines. In appealing the constitutionality of their sentences for crack cocaine offenses, defendants have argued that the 100-to-1 quantity ratio (*i.e.*, treating one hundred grams of powder cocaine the same as one gram of crack cocaine) violates equal protection and due process guarantees, constitutes cruel and unusual punishment, and is based on a statute that is impermissibly vague. To date, none of these challenges has been successful at the appellate level.¹

¹ See, e.g., United States v. D'Anjou, 16 F.3d 604 (4th Cir.), *cert. denied*, 114 S. Ct. 2754 (1994)(equal protection); United States v. Harding, 971 F.2d 410, 412-14 (9th Cir. 1992), *cert. denied*, 113 S. Ct. 1025 (1993)(equal protection); United States v. Angulo-Lopez, 7 F.3d 1506 (10th Cir. 1993), *cert. denied*, 114 S. Ct. 1563 (1994)(equal protection, cruel and unusual punishment); United States v. Thurmond, 7 F.3d 947 (10th Cir. 1993), *cert. denied*, 114 S. Ct. 1311 (1994)(equal protection, due process); United States v. Frazier, 981 F.2d 92 (3d Cir. 1992)(*per curiam*), *cert. denied*, 113 S. Ct. 1661 (1993)(equal protection, cruel and unusual punishment, due process, vagueness); United States v. King, 972 F.2d 1259 (11th Cir. 1992)(equal protection); United States v. Jackson, 968 F.2d 158 (2d Cir.), *cert. denied*, 113 S. Ct. 664 (1992)(vagueness); United States v. Simmons, 964 F.2d 763 (8th Cir.), *cert. denied*, 113 S. Ct. 632 (1992)(due process, equal protection, cruel and unusual punishment); United States v. Williams, 962 F.2d 1218 (6th Cir.), *cert. denied*, 113 S. Ct. 264 (1992)(equal protection); United States v. Watson, 953 F.2d 895 (5th Cir.), *cert. denied*, 112 S. Ct. 1989 (1992) (due process, equal protection); United States v. Lawrence, 951 F.2d 751 (7th Cir. 1991); United States v. Pickett, 941 F.2d 411 (6th Cir. 1991)(due process, cruel and unusual punishment); United States v. Turner, 928 F.2d 956 (10th Cir.), *cert. denied*, 112 S. Ct. 230 (1991)(due process); United States v. Avant, 907 F.2d 623 (6th Cir. 1990) (cruel and unusual punishment); United States v. Levy, 904 F.2d 1026 (6th Cir. 1990), *cert. denied*, 498 U.S. 1091 (1991)(vagueness); United States v. Thomas, 900 F.2d 37 (4th Cir. 1990) (equal protection); United States v. Colbert, 894 F.2d 373 (10th Cir.), *cert. denied*, 496 U.S. 911 (1990)(cruel and unusual punishment); United States v. Buckner, 894 F.2d 975 (8th Cir. 1990) (cruel and unusual punishment); United States v. Cyrus, 890 F.2d 1245 (D.C. Cir. 1989) (equal protection, cruel and unusual punishment). *But see* United States v. Davis, No. 93-0234 (N.D. Ga. Aug. 26, 1994)(invalidating heightened statutory penalties for cocaine base as impermissibly vague based on lack of scientific distinction between "cocaine" and "cocaine base.").

These challenges have been directed at both the statutory mandatory minimums and the sentencing guidelines.²

In one state court case, however, the Minnesota Supreme Court invalidated that state's differential penalty structure for crack cocaine and powder cocaine based on equal protection principles in the Minnesota Constitution. That case is discussed briefly.

B. CONSTITUTIONAL CHALLENGES

Defendants challenging the 100-to-1 quantity ratio in the federal system have argued that both the statutes that direct the mandatory minimum sentences for crack offenses and the federal sentencing guidelines are unconstitutional because they deny equal protection or due process, because the mandated penalties constitute cruel and unusual punishment, or because the statutes are unconstitutionally vague. As of the date of this report, all challenges to the constitutionality of the 100-to-1 ratio have failed in the federal appellate courts.³

In contrast, the Minnesota Supreme Court, facing similar constitutional challenges to a state provision that enhanced crack cocaine penalties by a 10-to-3 ratio, struck down the enhancement based on the more expansive equal protection guarantees of its state constitution.⁴

1. Equal Protection

a. Federal Equal Protection

As discussed earlier in this report, empirical data show that a much higher percentage of Blacks than Whites are sentenced in federal court under the crack cocaine penalties. Based on these and similar statistics, defendants have argued that the 100-to-1 quantity ratio of powder cocaine to crack cocaine is racially discriminatory, thereby violating the equal protection guarantees of the U.S. Constitution.

² Compare United States v. Bynum, 3 F.3d 769, (4th Cir. 1993), *cert. denied*, 114 S. Ct. 1105 (1994) (discriminatory impact not proper basis for downward departure); and United States v. Haynes, 985 F.2d 65, 70 (2d Cir. 1993) (discriminatory impact affords no basis for downward departure) with United States v. Majied, No. 91-00038, 1993 WL 315987 (D. Neb. July 29, 1993), *aff'd*, United States v. Maxwell, 25 F.3d 1389 (8th Cir.), *cert. denied*, 115 S.Ct. 610 (1994) (discriminatory impact not considered by the Sentencing Commission and so affords a basis for downward departure).

³ See *supra* notes 1-2.

⁴ State v. Russell, 477 N.W. 2d 886 (Minn. 1991).

In the cases decided to date, most federal courts have refused to find racially discriminatory intent, and have applied "rational basis review" in deciding equal protection challenges to the crack cocaine penalties. In other words, courts applying this standard look only to whether Congress and the Commission had a legitimate purpose for the differential punishment accorded crack cocaine versus powder cocaine and a rational belief that the challenged classification promotes that purpose.

As one court explained, "[a]bsent a racially discriminatory purpose, explicit or inferable, on the part of the law maker or law enforcer, the statutory distinction is subject only to rational basis review."⁵ Even if the legislature were aware that the statute would have a racially disparate impact, the statute is not invalid if that awareness was not a causal factor in its enactment.⁶

Applying this standard, federal courts generally have upheld the 100-to-1 quantity ratio by holding that Congress and the Commission had a rational basis for the penalty distinction. In so doing, these courts found that the distinction drawn between crack cocaine and powder cocaine for penalty purposes was not motivated by racial animus or discriminatory intent. Rather, it was related to the legitimate congressional objective of protecting the public against a new and highly potent, addictive narcotic that could be distributed easily and sold cheaply.⁷

One exception is the federal district court case of United States v. Clary⁸ out of the Eastern District of Missouri. In that case, the court was constrained by prior Eighth Circuit precedent and found no overt racial discrimination on the part of Congress in adopting the 100-to-1 penalty ratio for crack cocaine. However, the court noted the background of racism in America generally, and specifically noted the history of racism inherent in America's attempt to control crime.⁹ It then found that equal protection analysis must consider unconscious racism by legislators and found that a crack sentencing law that burdens Blacks disproportionately is a "de facto suspect classification" that could

⁵ United States v. Frazier, 981 F.2d 92, 95 (3d Cir. 1992) (citing Personnel Administrator v. Feeney, 442 U.S. 256 (1979) and Washington v. Davis, 426 U.S. 229 (1976)), *cert. denied*, 113 S. Ct. 1661 (1993).

⁶ Frazier, 981 F.2d at 95; *see* Feeney, 442 U.S. at 279.

⁷ *See, e.g.*, United States v. King, 972 F.2d 1259, 1260 (11th Cir. 1992); United States v. Turner, 928 F.2d 956 (10th Cir.), *cert. denied*, 112 S. Ct. 230 (1991); United States v. Harding, 971 F.2d 410, 412-14 (9th Cir. 1992), *cert. denied*, 113 S. Ct. 1025 (1993); United States v. Simmons, 964 F.2d 763, 767 (8th Cir.), *cert. denied*, 113 S. Ct. 632 (1992); United States v. Lawrence, 951 F.2d 751, 755 (7th Cir. 1991); United States v. Williams, 962 F.2d 1218, 1227-28 (6th Cir.), *cert. denied*, 113 S. Ct. 264 (1992); United States v. Watson, 953 F.2d 895, 898 (5th Cir.), *cert. denied*, 112 S. Ct. 1989 (1992); United States v. Thomas, 900 F.2d 37, 39-40 (4th Cir. 1990); United States v. Frazier, 981 F.2d 92 (3d Cir. 1992), *cert. denied*, 113 S. Ct. 1661 (1993); United States v. Cyrus, 890 F.2d 1245, 1248 (D.C. Cir. 1989).

⁸ 846 F. Supp. 768 (E.D. Mo. 1994).

⁹ Clary, 846 F. Supp. at 774-77.

be traced to unconscious racism. Finding an unconsciously discriminatory classification, the court applied strict scrutiny, which requires a compelling government interest and a law narrowly tailored to address that interest. Under this higher level of scrutiny, it found the statute violated federal equal protection guarantees.

However, seven months later, the Eighth Circuit reversed the district court.¹⁰ The Circuit Court held that the court finding of unconscious racism simply did "not address the question whether Congress acted with a discriminatory purpose." Evaluating the evidence presented to the district court in Clary, the Eighth Circuit found that the evidence fell short of establishing that Congress acted with a discriminatory intent.¹¹

b. State Equal Protection

In contrast to the unsuccessful federal challenges, the Minnesota Supreme Court, in State v. Russell, held that a state law punishing crack cocaine at a 10-to-3 ratio to powder cocaine (*i.e.*, 30 grams crack cocaine punished equivalently to 100 grams powder cocaine) violated the equal protection guarantees of the Minnesota state constitution.¹² The court concluded that because crack cocaine users were predominately Black, the impact of an enhanced penalty would primarily affect them. Given the more generous equal protection interpretation afforded under Minnesota's constitution, actual discriminatory impact was sufficient to strike down the enhanced crack cocaine penalty.¹³

2. Due Process

Defendants have challenged crack cocaine penalties under the due process clause of the U.S. Constitution.¹⁴ In addition to reformulating the equal protection arguments as due process claims, the crux of the due process challenges has been that because crack cocaine and powder cocaine are chemically the same, Congress and the Commission enacted two different penalties for the same

¹⁰ United States v. Clary, 34 F.3d 709 (8th Cir. 1994).

¹¹ Clary, 34 F.3d at 713.

¹² 477 N.W. 2d 886.

¹³ The Minnesota State Legislature responded to the ruling in Russell by enacting legislation that deleted all separate mention of, and separate penalties for, offenses involving crack cocaine. 1992 Minn. Laws 359. Generally, the provisions raised the statutory maximum penalties for offenses involving cocaine powder to the level that had been proscribed for crack.

¹⁴ U.S. Const. amend. V.

drug. Courts have rejected these challenges, finding that even if crack and powder cocaine are two forms of the same drug, crack cocaine differs from the powder form in method of use, potency, purity, and ease of distribution.¹⁵ Some federal courts have rejected due process challenges on the basis that cocaine base is a different drug from cocaine powder.¹⁶

In rejecting these challenges, however, some courts have criticized the current system. In United States v. Singleterry, 29 F.3d 733, 741 (1st Cir. 1994), *cert. denied*, 115 S.Ct. 647 (1994), the First Circuit rejected a due process challenge to the crack distinction, but nevertheless urged the "proper" authorities to take appropriate action, stating "the absence of a constitutional command is not an invitation to government complacency." Although the court did not find a constitutional violation, it noted that the defendant had "raised important questions about the efficacy and fairness of our current sentencing policies for offenses involving cocaine substances." *Id.* at 741.

3. Cruel and Unusual Punishment

Some defendants have challenged the penalties for crack cocaine offenses claiming that the penalties are so disproportionate as to violate the Eighth Amendment's prohibition against cruel and unusual punishment.

In Solem v. Helm,¹⁷ the United States Supreme Court set out a three-prong test for evaluating whether punishment is cruel and unusual under the Eighth Amendment. The Solem Court looked to "(i) the gravity of the offense and the harshness of the penalty; (ii) the sentence imposed on other criminals in the same jurisdiction; (iii) the sentence imposed for the same crime in other jurisdictions."¹⁸

¹⁵ See, e.g., United States v. Simmons, 964 F.2d 763, 767 (8th Cir.), *cert. denied*, 113 S. Ct. 632 (1992); United States v. Watson, 953 F.2d 895, 898 (5th Cir.), *cert. denied*, 112 S. Ct. 1989 (1992); Pickett, 941 F.2d 411, 418 (6th Cir. 1991); United States v. Turner, 928 F.2d 956, 960 (10th Cir.), *cert. denied*, 112 S. Ct. 230 (1991).

¹⁶ See, e.g., United States v. Galloway, 951 F.2d 64 (5th Cir. 1992). *Accord*, United States v. Thomas, 932 F.2d 1085, 1090 (5th Cir.), *cert. denied*, 112 S. Ct. 887 (1991).

¹⁷ 463 U.S. 277, 292 (1983).

¹⁸ *Id.* The Solem analysis, however, has been sharply criticized by a plurality in Harmelin v. Michigan, 111 S. Ct. 2680, 2686 (1991) (plurality opinion), which stated that "Solem was simply wrong; the Eighth Amendment contains no proportionality guarantee." Justice Kennedy, however, counseled in a concurrence that *stare decisis* required "adherence to the narrow proportionality principle that has existed in our Eighth Amendment jurisprudence for 80 years." *Id.* at 2702 (Kennedy, J., concurring).

Generally, federal appellate courts employing the Solem analysis have found the enhanced penalties for offenses involving crack cocaine are rational and not disproportionate.¹⁹ As the Third Circuit wrote in United States v. Frazier:

There are reasonable grounds for imposing a greater punishment for offenses involving a particular weight of cocaine base than for comparable offenses involving the same weight of cocaine. These grounds include differences in the purity of the drugs, the dose size, the method of use, the effect on the user, and the collateral social effects of the traffic in the drug. Whether the ratio best reflecting these genuine differences should be calibrated at 5-to-1, 20-to-1, or 100-to-1 is a discretionary legislative judgment for Congress and the Sentencing Commission to make.²⁰

A recent federal district court opinion from the District of Columbia, United States v. Walls, 841 F.Supp. 24, 31 (D.D.C. 1994), found that application of the 100-to-1 ratio constituted cruel and unusual punishment. In that case, the court refused to apply the statutory mandatory minimum and guideline sentences for crack cocaine to two defendants who were "bit players" in a narcotics conspiracy and whose sentences would have been increased by five and nine times, respectively, over those for cocaine powder. However, the D.C. Circuit has recently rejected an Eighth Amendment challenge to the disparate penalty schemes in United States v. Thompson, 27 F.3d 671, 678 (D.C. Cir. 1994) (also rejecting challenge on Fifth Amendment grounds), *cert. denied*, 115 S.Ct. 650 (1994).²¹ An appeal in Walls is pending.

4. Vagueness

Crack cocaine, in the federal criminal code, is defined as "cocaine base." Cocaine base, however, can include cocaine derivatives and substances other than crack cocaine. Coca paste, for example, which is leached from coca leaves in order to process cocaine hydrochloride (cocaine powder), is also a base. Defendants have sought to exploit this difference along with other

¹⁹ Frazier, 981 F.2d at 95; Simmons, 964 F.2d at 667; Pickett, 941 F.2d at 418; United States v. Avant, 907 F.2d 623 (6th Cir. 1990); United States v. Colbert, 894 F.2d 373, 374-75 (10th Cir.), *cert. denied*, 496 U.S. 911 (1990); United States v. Buckner, 894 F.2d 975 (8th Cir. 1990); Cyrus, 890 F.2d at 1248.

²⁰ 981 F.2d at 96 (note omitted).

²¹ See Harmelin v. Michigan, 501 U.S. 957 (1991); Hutto v. Davis, 454 U.S. 370 (1982); United States v. Garrett, 959 F.2d 1005 (D.C. Cir. 1992); United States v. Cyrus, 890 F.2d 1245 (D.C. Cir. 1989).

vagueness issues in challenges to the crack cocaine statutes and to the federal sentencing guidelines implementing their mandated enhancements.²²

Effective November 1, 1993, the Sentencing Commission amended the sentencing guidelines to reflect its understanding of congressional intent: for purposes of the guidelines, cocaine base means crack cocaine.²³

Despite the differing interpretations concerning which forms of cocaine base should receive the enhanced sentence, no federal appellate court has found the statute (or the guidelines) so vague as to be constitutionally infirm.²⁴ However, a district court judge in the Northern District of Georgia recently found the statute prescribing penalties for offenses involving cocaine base is facially ambiguous and applied the rule of lenity to hold that the heightened penalties for cocaine base offenses must be ignored.²⁵ In Davis, the district court found that "cocaine" and "cocaine base" are "synonymous terms referring to the same substance having the same molecular structure, molecular weight, and melting point."²⁶ The criminal statutes establish one set of penalties for offenses

²² The federal appellate courts have differed in their definitions of "cocaine base." The Ninth Circuit, for example, has held that "cocaine base" means "crack." See United States v. Shaw, 936 F.2d 412, 415-6 (9th Cir. 1991).

Other federal circuits have held to the contrary, finding that cocaine base includes but is not limited to crack. See United States v. Rodriguez, 980 F.2d 1375, 1378 (11th Cir. 1992), *cert. denied*, 113 S. Ct. 3003 (1993); United States v. Jackson, 968 F.2d 158, 161-62 (2d Cir.), *cert. denied*, 113 S. Ct. 664 (1992); United States v. Williams, 962 F.2d 1218, 1227 (6th Cir.), *cert. denied*, 113 S. Ct. 264 (1992); United States v. Pinto, 905 F.2d 47, 49 (4th Cir. 1990); United States v. Metcalf, 898 F.2d 43, 46 (5th Cir. 1990); see also United States v. Jones, 979 F.2d 317, 319-20 (3d Cir. 1992) (crack is a cocaine base that is chemically created from cocaine and has a definable molecular structure different from cocaine salt).

²³ See United States Sentencing Commission, Guidelines Manual §2D1.1(c) (Nov. 1, 1993). The amended guideline reads: "'Cocaine base,' for the purpose of this guideline, means 'crack.' 'Crack' is the street name for a form of cocaine base, usually prepared by processing cocaine hydrochloride and sodium bicarbonate, and usually appearing in a lumpy, rocklike form."

²⁴ See Frazier, 981 F.2d at 94 (collecting cases); Jones, 979 F.2d at 319-20; Jackson, 968 F.2d at 161-64; United States v. Thomas, 932 F.2d 1085, 1090 (5th Cir.), *cert. denied*, 112 S. Ct. 264 (1991); Turner, 928 F.2d at 960; United States v. Levy, 904 F.2d 1026, 1032-33 (6th Cir. 1990), *cert. denied*, 498 U.S. 1091 (1991); United States v. Van Hawkins, 899 F.2d 852, 854 (9th Cir. 1990); United States v. Reed, 897 F.2d 351, 353 (8th Cir. 1990); United States v. Barnes, 890 F.2d 545, 552-53 (1st Cir. 1989), *cert. denied*, 494 U.S. 1019 (1990); United States v. Williams, 876 F.2d 1521, 1525 (11th Cir. 1989); United States v. Brown, 859 F.2d 974, 975-76 (D.C. Cir. 1988); see also United States v. Palacio, 4 F.3d 150 (2d Cir. 1993) (disagreement among circuits as to meaning of a statute does not deny equal protection).

²⁵ United States v. Davis, 864 F. Supp. 1303, 1309 (N.D. Ga. 1994)

²⁶ Id. at 1306.

involving "cocaine" and another, harsher set of penalties for offenses involving "cocaine base."²⁷ This, the court found, is a "scientifically meaningless distinction."²⁸ Therefore, the district court ordered that the heightened penalties for offenses involving cocaine base must be ignored by operation of the rule of lenity.²⁹

C. SPECIFIC SENTENCING GUIDELINE ISSUES

The same arguments underlying the constitutional challenges against the crack cocaine mandatory minimum statutes recently have been used to argue for departures from the sentencing guidelines. Generally, appellate courts have rejected downward departures on these bases.³⁰

In a successful challenge in the district court in the District of Columbia, United States v. Shepherd, 857 F. Supp. 105 (D. D.C. 1994), the Court found the statutory and guideline sentences for offenses involving crack cocaine unconstitutional as applied, and imposed the penalties required for violations involving cocaine powder. In that case, the court recognized the potential for the manipulation of the system not just by prosecutors, but by law enforcement agents. The court followed the line of cases discussing the notions of "sentencing entrapment" and "sentencing manipulation." *Id.* at 109 (citing cases). The Court specifically noted that the undercover agent in Shepherd previously testified that it was the standard operating procedure of his office to insist that any cocaine they agreed to purchase be cooked into crack – specifically because of the higher penalties. Finding that this process vests effective control of sentencing "not only to the realm of the prosecution but even further to that of the police," the court held the application of the higher crack penalties unconstitutional as a denial of due process. *Id.* at 406.

²⁷ 21 U.S.C. § 841.

²⁸ Davis, 864 F. Supp. at 1309.

²⁹ The court noted that if it had found that Congress intended to establish harsher penalties only for cocaine base manufactured by means of reaction with sodium bicarbonate (baking soda) and water, he would be forced to invalidate the provisions on equal protection grounds because "there is no rational basis for having heightened penalties for cocaine or cocaine base derived only by one means of manufacture." Davis, slip op. at 13-14.

³⁰ See Bynum, 3 F.3d 769 (4th Cir. 1993) (rejecting basis for departure); Haynes, 985 F.2d 65 (2d. Cir. 1993). But see Majied, No. 91-00038, (D. Neb. July 29, 1993)(granting such a departure).

BIBLIOGRAPHY

- Allen, D.F. and J.F. Jekel, Crack: The Broken Promise (1991).
- Ambre, J.J., S.M. Belknap, J. Nelson, T.I. Rho, S.G. Shin, and A.J. Atkinson, "Acute Tolerance to Cocaine in Humans" 44 Clinical Pharmacology and Therapeutics 1 (1988).
- American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders: DSM-III-R (1987).
- Bailey, D.N., "Plasma Cocaethylene Concentrations in Patients Treated in the Emergency Room or Trauma Unit," 99 American Journal of Clinical Pathology 123-127 (1993).
- Barnett, G., R. Hawks, and R. Resnick, "Cocaine Pharmacokinetics in Humans," 3 Journal of Ethnopharmacology 353 (1981).
- Barton, D., "The Kansas City Experience: 'Crack' Organized Crime Cooperative Task Force," 55 The Police Chief 28-31 (1988).
- Bateman, D.A., K. Stephen, A. Hansen, and M. Heagaty, "The Effects of Intrauterine Cocaine Exposure in Newborns," American Journal of Public Health 190-193 (Feb. 1993).
- Bauchner, H., B. Zuckerman, M. McClain, D. Frank, L. Fried, and H. Kayne, "Risk of Sudden Death Syndrome Among Infants With *In Utero* Exposure to Cocaine," 113 The Journal of Pediatrics 831-34 (Nov. 1988).
- Bays, J., "Substance Abuse and Child Abuse, Impact of Addiction on the Child," 37(4) Pediatric Clinics of North America 881-904 (Aug. 1990).
- Belenko, S.R., Crack and the Evolution of Anti-Drug Policy (1993).
- Belenko, S.R., J. Fagan and K. Chin, "Criminal Justice Responses to Crack," 28 Journal of Research in Crime and Delinquency 55 (1991).
- Belenko, S.R., J. Fagan and K. Chin, Typologies of Criminal Careers Among Crack Arrestees (Nov. 1989). [Paper presented at the Academy of Criminal Justice Sciences Annual Meetings in Reno, NV, Nov. 1989].
- Benda, B.B., " Crime, Drug Abuse and Mental Illness: A Comparison of Homeless Men and Women," Journal of Social Service Research 39 (1990).

United States Sentencing Commission

- Benowitz, N.L., "Clinical Pharmacology and Toxicology of Cocaine," 72 Pharmacology and Toxicology 3-12 (1993).
- Benowitz, N.L., "Clinical Pharmacology of Inhaled Drugs of Abuse: Implications in Understanding Nicotine Dependence," 99 National Institute on Drug Abuse Research Monograph Series 12 (1990).
- Benuck, M., A. Lajtha, and M.E. Reith, "Pharmacokinetics of Systemically Administered Cocaine and Locomotor Stimulation in Mice," 243(1) Journal of Pharmacology and Experimental Therapeutics 144-149 (1987).
- Berk, R., "Preliminary Data on Race and Crack Charging Practices in Los Angeles," 6 Federal Sentencing Reporter 36-38 (1993).
- Blum, K., Handbook of Abusable Drugs (1984).
- Boni, J.F., W.H. Barr, and B.R. Martin, "Cocaine Inhalation in the Rat: Pharmacokinetics and Cardiovascular Response," 257(1) Journal of Pharmacology and Experimental Therapeutics 307-315 (1991).
- Booth, R.E., J.K. Watters, and D.D. Chitwood, "HIV-Related Sex Behaviors Among Injection Drug Users, Crack Smokers, and Injections Drug Users Who Smoke Crack," 83 American Journal of Public Health 1144 (1993).
- Bourgois, P., "In Search of Horatio Alger: Culture and Ideology in the Crack Economy," 16 Contemporary Drug Problems 619 (1989).
- Bowser, B.P., M.T. Fullilove, and R.E. Fullilove, "African-American Youth and AIDS High-Risk Behavior: The Social Context and Barriers to Prevention," 22 Youth and Society 54 (Sept. 1990).
- Bozarth, M.A. and R.A. Wise, "Toxicity Associated with Long-term Intravenous Heroin and Cocaine Self-Administration in the Rat," 254 Journal of the American Medical Association 81-83 (1985).
- Breakey, W.R. and P.J. Fischer, "Homelessness: The Extent of the Problem," 46 Journal of Social Issues 40 (1990).
- Brody, S.L., "Violence Associated With Acute Cocaine Use in Patients Admitted to a Medical Emergency Department," in M. De La Rosa, E.Y. Lambert and B. Gropper (Eds.), Drugs and Violence: Causes, Correlates, and Consequences 44-59 (1990).

- Budavari, S., M.J. O'Neil, A. Smith and P.E. Heckelman (Eds.), The Merck Index: An Encyclopedia of Chemicals, Drugs, and Biologicals (1989).
- Burkett, G., S. Yasin, and D. Palow, "Perinatal Implications of Cocaine Exposure," 35(1) Journal of Reproductive Medicine 35-42 (Jan. 1990).
- Centers for Disease Control, "Alternative Case-Finding Methods in a Crack-Related Syphilis Epidemic - Philadelphia," 40 Morbidity and Mortality Weekly Report 77 (Feb. 8, 1991).
- Centers for Disease Control, "Selective Screening to Augment Syphilis Case-Finding-Dallas 1991," 42 Morbidity and Mortality Weekly Report 424 (June 11, 1993).
- Chaisson, M.A., R.L. Stoneburner, D.S. Hildebrandt, W.E. Ewing, E.E. Telzak, and J.A. Jaffe, "Heterosexual Transmission of HIV-1 Associated with the Use of Smokable Freebase Cocaine," 5 AIDS 1121-1126 (1991).
- Chasnoff, I. J., "Hope for a 'Lost Generation,'" School Safety 4-6, 17 (Winter 1992).
- Chavkin, W., "Treatment Programs Shun Addicted Pregnant Women," Alcoholism & Drug Abuse Week, (Apr. 18, 1990).
- Chin, K.L. and J. Fagan, The Impact of Crack on Criminal Careers: Crime and Drug Involvement Following Initiation Into Cocaine Smoking (Aug. 1992) (unpublished manuscript, on file with Rutgers University School of Criminal Justice).
- Chin, K.L. and J. Fagan, "Violence as Regulation and Social Control in the Distribution of Crack," in M. de la Rosa, E.Y. Lambert and B. Gropper (Eds.), Drugs and Violence: Causes, Correlates, and Consequences 36 (1990).
- Chow, M.J., J.J. Ambre, T.I. Atkinson, D.J. Banshen, and M.V. Fischman, "Kinetics of Cocaine Distribution, Elimination, and Chronotropic Effects," 38 Clinical Pharmacology and Therapeutics 318-324 (1985).
- Chychula, N.M. and C. Okore, "The Cocaine Epidemic: A Comprehensive Review of Use, Abuse, and Dependence," 15(7) Nurse Practitioner 31-39 (1990).
- Collins, J.J., "Summary Thoughts About Drugs and Violence," in M. de la Rosa, E.Y. Lambert and B. Gropper (Eds.), Drugs and Violence: Causes, Correlates, and Consequences 265-275 (1990).

United States Sentencing Commission

- Comer, G.M., M.K. Mittal, S.S. Donelson, and T. Lee, "Cluster of Fulminant Hepatitis B in Crack Users," 86 The American Journal of Gastroenterology 331 (1991).
- Cook, C.E., and A.R. Jeffcoat, "Pyrolytic Degradation of Heroin, Phencyclidine and Cocaine: Identification of Products and Some Observations on their Metabolism," 99 National Institute on Drug Abuse Research Monograph Series 97-120 (1990).
- de la Rosa, M., "Introduction: Exploring the Substance Abuse-Violence Connection," in M. de la Rosa, E.Y. Lambert and B. Gropper (Eds.), Drugs and Violence: Causes, Correlates, and Consequences 1 (1990).
- Das, G., "Cocaine Use in North America," 33 Journal of Clinical Pharmacology 296-310 (1993).
- Dembo, R., L. Williams, W. Wothke, J. Schmeidler, A. Getreu, E. Berry, E.D. Wish and C. Christensen, "The Relationship Between Cocaine Use, Drug Sales, and Other Delinquency Among a Cohort of High-Risk Youths Over Time," in M. De La Rosa, E.Y. Lambert and B. Gropper (Eds.), Drugs and Violence: Causes, Correlates, and Consequences 112-135 (1990).
- Dunlap, E., Inner-City Crisis and Drug Dealing: Portrait of a Drug Dealer and His Household (Jan. 1991) (copy of file with Sentencing Commission). [Paper presented at the Michael Harring Center Conference, Birkbeck College, University of London, Jan. 27, 1991.]
- Dunlap, E. and B.D. Johnson, "The Setting for the Crack Era: Macro Forces, Micro Consequences (1960-1992)," 24(4) Journal of Psychoactive Drugs 307-321 (1992).
- Dunlap, E., B. Johnson, and A. Manwar, A., "A Successful Female Crack Dealer: Case Study of a Deviant Career," 14(4) Deviant Behavior: An Interdisciplinary Journal 1-25 (1994).
- Dupont, R., "Research Into Drug Abuse," reprinted in Proceedings on the Inaugural Symposium on Crime and Punishment in the United States 69 (June 1993). [Presentation made at the U.S. Sentencing Commission Symposium on Drugs and Violence in America, June 17, 1993.]
- Edlin, B.R., K.L. Irwin, S. Faruque, C.B. McCoy, C. Word, Y. Serrano, J.A. Inciardi, B. Bowser, R.F. Schilling, S.D. Holmberg, and the Multicenter Crack Cocaine and HIV Infection Study Team, "Intersecting Epidemics -- Crack Cocaine Use and HIV Infection Among Inner-City Young Adults," 331(21) The New England Journal of Medicine 1422-1427 (Nov. 24, 1994).
- Ellenhorn, M.J. and D.G. Barceloux, Medical Toxicology: Diagnosis and Treatment of Homeless Persons (1988).

- Ellerbrock, T. V., S. Lieb, P.E. Harrington, T.J. Bush, S.A. Schoenfisch, M.J. Oxtoby, J.T. Howell, M.F. Rogers, and J.J. Witte, "Heterosexually Transmitted Human Immunodeficiency Virus Infection Among Pregnant Women in a Rural Florida Community," 327(4) The New England Journal of Medicine 1704-1709 (Dec. 10, 1992).
- Ellis, J.E., L.D. Byrd, W.R. Sexson, and C.A. Patterson-Barnett, "In Utero Exposure to Cocaine: A Review," 86(7) Southern Medical Journal, 725-731 (July 1993).
- Fackelmann, K., "The Crack-Baby Myth," Washington City Paper 25 (Dec. 13, 1991).
- Fagan, J., "Do Criminal Sanctions Deter Crimes?," in D.L. MacKenzie and C.D. Uchida (Eds.), Drugs and Crime 188-214 (1994).
- Fagan, J., "Drug Selling and Licit Income in Distressed Neighborhoods: The Economic Lives of Street-Level Drug Users and Dealers.," in A.V. Harrell and G.E. Peterson (Eds.), Drugs, Crime, and Social Isolation: Barriers to Urban Opportunity 99-146 (1992).
- Fagan, J., "Editor's Introduction: Myths and Realities About Crack," 17(1) Contemporary Drug Problems 1-7 (Spring 1990).
- Fagan, J., "Intoxication and Aggression" in M. Tonry and J.Q. Wilson (Eds.), Drugs and Crime 241-320 (1990).
- Fagan, J., "The Social Organization of Drug Use and Drug Dealing Among Urban Gangs," 27 Criminology 633-667 (1989).
- Fagan, J., "Violent Delinquents and Urban Youths," 24 Criminology 439 (1986).
- Fagan, J. and K.L. Chin, "Initiation Into Crack and Cocaine: A Tale of Two Epidemics," 16(4) Contemporary Drug Problems 579-618 (Winter 1989).
- Fagan, J., and K.L. Chin, "Social Processes of Initiation Into Crack," 21(2) Journal of Drug Issues 313-343 (1991).
- Fagan, J. and K.L. Chin, "Violence as Regulation and Social Control in the Distribution of Crack," in M. de la Rosa, E. Lambert, and B. Gropper (Eds.), Drugs and Violence: Causes, Correlates, and Consequences 8-43 (1990).
- Fink, J.R., "Effects of Crack and Cocaine on Infants: A Brief Review of the Literature," Clearinghouse Review 463 (special issue 1990).

United States Sentencing Commission

- Fischer, P.J., "Estimating the Prevalence of Alcohol, Drug, and Mental Health Problems in the Contemporary Homeless Population: A Review of the Literature," 16 Contemporary Drug Problems 333-390 (1989).
- Fischman, M., "Behavioral Pharmacology of Cocaine," 49 Journal of Clinical Psychiatry 7-10 (Supp. 1988).
- Fischman, M., "The Behavioral Pharmacology of Cocaine in Humans," 50 National Institute on Drug Abuse Monograph Series 71-91 (1984).
- Foltin, R.W. and M.W. Fischman, "Self-Administration of Cocaine in Humans: Choices Between Smoking and Intravenous Cocaine," 261 Journal of Pharmacology and Experimental Therapeutics 841-849 (1992).
- Foltin, R.W. and M.W. Fischman, "Smoked and Intravenous Cocaine in Humans: Acute Tolerance, Cardiovascular and Subjective Effects," 257 Journal of Pharmacology, Experimental Therapeutics 247-261 (1991).
- Fontaine, N., "Unveiling the Myths About Substance-Exposed Children," Southeast Sun 3 (Winter 1993).
- Forrester, J.M., A.W. Steele, J.A. Waldron, and P.E. Parsons, "Crack Lung: An Acute Pulmonary Syndrome with a Spectrum of Clinical and Histopathologic Findings," 142(2) American Review of Respiratory Diseases 462-467 (1990).
- Frank, D.A., H. Bauchner, S. Parker, A.M. Huber, K. Kyei-Aboagye, H. Cabral, and B. Zuckerman, "Neonatal Body Proportionality and Body Composition After In Utero Exposure to Cocaine and Marijuana," 117(4) The Journal of Pediatrics 622-626 (Oct. 1990).
- Fullilove, M.T., "Perceptions and Misperceptions of Race and Drug Use," 269(8) Journal of the American Medical Association 1034 (Feb. 24, 1993).
- Gawin, F.H., "Cocaine Abuse and Addiction," 29(2) Journal of Family Practice 193-197 (1989).
- Gawin, F.H. and E.H. Ellinwood, "Cocaine and Other Stimulants: Actions, Abuse and Treatment," 318(18) New England Journal of Medicine 1173 (1988).
- Gawin, F.H., C. Riordan, and H. Kleber, "Methylphenidate Treatment of Cocaine Abusers Without Attention Deficit Disorder," 11(3-4) American Journal of Drug and Alcohol Abuse 193-197 (1985).

- Gelberg, L., L.S. Linn, and B.D. Leake, "Mental Health, Alcohol and Drug Use, and Criminal History Among Homeless Adults," 145(2) American Journal of Psychiatry 191-196 (1988).
- Giacoa, G.P., "Cocaine in the Cradle: A Hidden Epidemic," 83(8) Southern Medical Journal 947-951 (1990).
- Goldfrank, L.R. and R.S. Hoffman, "The Cardiovascular Effects of Cocaine," 20 Annals of Emergency Medicine 165-175 (1991).
- Goldstein, P.J., Drug Abuse and Violence (June 1993). [Presentation made at the U.S. Sentencing Commission Symposium on Drugs and Violence in America, June 17, 1993; Reprinted in Proceedings on the Inaugural Symposium on Crime and Punishment in the United States 87 (1993).]
- Goldstein, P.J., "Drugs and Violent Crime," in N.A. Weiner and M.E. Wolfgang (Eds.), Pathways to Criminal Violence 16-48 (1989).
- Goldstein, P.J., "The Drugs/Violence Nexus: A Tripartite Conceptual Framework," 14 Journal of Drug Issues 493 (Fall 1985).
- Goldstein, P.J., "Targeting Interventions at Substance Abuse Problems — Impact of Drug-Related Violence," 102(6) Public Health Reports 625-627 (1987).
- Goldstein, P.J., P.A. Bellucci, B.J. Spunt, and T. Miller, "Volume of Cocaine Use and Violence: A Comparison Between Men and Women," 21(2) Journal of Drug Issues 345-367 (1991),
- Goldstein, P.J., H.H. Brownstein, P.J. Ryan, and P.A. Bellucci, "Crack and Homicide in New York City, 1988: A Conceptually Based Event Analysis," 16 Contemporary Drug Problems 651-687 (Winter 1989).
- Goldstein, P.J., H.H. Brownstein, and P.J. Ryan, "Drug Related Homicide in New York: 1984 and 1988," 38(4) Crime and Delinquency 459-476 (Oct. 1992).
- Goldstein, P.J., H.H. Brownstein, H.R. Shiledar Baxi, and P.J. Ryan, "The Relationship of Drugs, Drug Trafficking, and Drug Traffickers to Homicide," 15 Journal of Crime and Justice 25 (1992).
- Golub, A. and B.D. Johnson, Drug Eras: A Conceptual Model for the Dynamics of Change in the Popularity of a Particular Drug (Aug. 1993) (on file with the Sentencing Commission). [Paper presented at the Annual Meeting of the Society for the Study of Social Problems, Aug. 11, 1993].

United States Sentencing Commission

- Gomby, D. and P. Shiono, "Estimating the Number of Substance-Exposed Infants," The Future of Children 22 (Spring 1991).
- Gorney, B., "Domestic Violence and Chemical Dependency: Dual Problems, Dual Interventions," 21(2) Journal of Psychoactive Drugs 229-238 (April-June 1989).
- Haaga, J., R. Scott, J. Hawes-Dawson, E. McGlynn, and K. Russell, Drug Use in the Detroit Metropolitan Area (RAND) (1992).
- Hale, S.L., K.J. Allker, S. Rezkalla, G. Figures, and R.A. Klonsler, "Adverse Effects of Cocaine on Cardiovascular Dynamics Myocardial Blood Flow, and Coronary Artery Diameter in an Experimental Model," 118(5 Pt. 1) American Heart Journal 927-933 (1989).
- Hamid, A., "The Developmental Cycle of a Drug Epidemic: The Cocaine Smoking Epidemic of 1981-1991," 24(4) Journal of Psychoactive Drugs 337-48 (1992).
- Hamid, A., "The Political Economy of Crack-Related Violence," 17 Contemporary Drug Problems 31-78 (Spring 1990).
- Hearn, W.L., D.D. Flynn, G. Himes, S. Rose, E. Mariero-Atienea, J. Cofino, C. Weiti, and D.C. Mash, "Cocaethylene: A Unique Cocaine Metabolite Displays High Affinity for the Dopamine Transporter," 56 Journal of Neurochemistry 698-701 (1991).
- Hearn, W.L., S. Rose, J. Wagner, A. Ciarleglio, and D.C. Mash, "Cocaethylene is More Potent than Cocaine in Mediating Lethality," 39(2) Pharmacology and Biochemistry and Behavior 531-533 (1991).
- Henningfield, J.E., C. Cohen, and J. Slade, "Is Nicotine More Addictive Than Cocaine?," 86(5) British Journal of Addiction 565-569 (May 1991).
- Henningfield, J.E., K. Miyasato, and D.R. Jasinski, "Abuse Liability and Pharmacodynamic Characteristics of Intravenous and Inhaled Nicotine," 234(1) Journal of Pharmacology 1-12 (July 1985).
- Hibbs, J.R. and R.A. Gunn, "Public Health Intervention in a Cocaine-Related Syphilis Outbreak," 81(10) American Journal of Public Health 1259-1262 (Oct. 1991).
- Holden, C., "Street-Wise Crack Research," 246(4936) Science 1376-1381 (1989).
- Hunt, D.E. and W. Rhodes, Office of National Drug Control Policy, Characteristics of Heavy Cocaine Users Including Polydrug Use, Criminal Activity and Health Risks (Dec. 1992).

- Hurt, H., "Medical Controversies in Evaluation and Management of Cocaine-Exposed Infants," in K.V. Sproat (Ed.), Healthcare Executive Currents 3-4 (1990).
- Inciardi, J.A. "Beyond Cocaine: Basuco, Crack, and Other Coca Products," 14 Contemporary Drug Problems 461-492 (1987).
- Inciardi, J.A., "The Crack-Violence Connection Within a Population of Hard-Core Adolescent Offenders," in M. de la Rosa, E. Lambert, and B. Gropper (Eds.), Drugs and Violence: Causes, Correlates, and Consequences 92-111 (1990).
- Inciardi, J.A., "Trading Sex for Crack Among Juvenile Drug Users: A Research Note," 16 Contemporary Drug Problems 689-700 (1989).
- Inciardi, J.A., D. Lockwood, and A.E. Pottieger, Women and Crack Cocaine (1993).
- Inciardi, J.A. and A.E. Pottieger, "Crack-Cocaine Use and Street Crime," Journal of Drug Issues (forthcoming 1994) (on file with University of Delaware Center for Drug and Alcohol Studies).
- Inciardi, J.A. and A.E. Pottieger, "Kids, Crack, and Crime," 21(2) Journal of Drug Issues 257-270 (1991).
- Inciardi, J.A., A.E. Pottieger, M.F. Forney, D.D. Chitwood, and D.C. McBride, "Prostitution, IV Drug Use, and Sex-for-Crack Exchanges Among Serious Delinquents: Risks for HIV Infection," 29 Criminology 230 (1991).
- Jatlow, P.I., "Drug Abuse Profile: Cocaine," 33 Clinical Chemistry 66-71 (1987).
- Jatlow, P.I., J.D. Ellsworth, and C.W. Bradbury, "Cocaethylene: A Neuro Pharmacologically Active Metabolite Associated with Concurrent Cocaine - Ethanol Ingestion," 48 Life Sciences 1787-1794 (1991).
- Javaid, J., M.W. Fischman, C.R. Schuster, H. Dekirmejian, and J.M. Davis, "Cocaine Plasma Concentrations: Relation to Physiological and Subjective Effects in Humans," 202 Science 227-229 (1978).
- Javaid, J., M.N. Musa, M.W. Fischman, C.R. Schuster, and J.M. Davis, "Kinetics of Cocaine in Humans After Intravenous and Intranasal Administration," 4(1) Biopharmaceutics and Drug Disposition 9-18 (1983).

United States Sentencing Commission

- Jeffcoat, A.R., M. Perez-Reyes, J.M. Hill, B.M. Sadler, and C.E. Cook, "Cocaine Disposition in Humans After Intravenous Injection, Nasal Insufflation (Snorting), or Smoking," 17(2) Drug Metabolism and Disposition 153-159 (1989).
- Jekel, J.F., D.F. Allen, H. Podlewski, N. Clarke, S. Dean-Patterson, and P. Cartwright, "Epidemic Free-Base Cocaine Abuse," (8479) Lancet 459-462 (Mar. 1, 1986).
- Johanson, C.E., "Behavioral Studies of the Reinforcing Properties of Cocaine," Series 107-124, 88 National Institute on Drug Abuse Research Monograph (1988).
- Johnson, B.D., "Changes in New York City's Crack Distribution Scene," in P. Vamos and P.J. Corriveau (Eds.), Drugs and Society to the Year 2000 360-364 (1992) (proceedings of the XIV World Conference of Therapeutic Communities).
- Johnson, B.D., Crack Distribution Networks and Distributor Lifestyles (Apr. 2, 1992) (report from the Natural History of Crack Distribution Project).
- Johnson, B.D., Critical Dimensions of Crack Distribution (1987). [Paper presented at the Annual Conference of the American Society of Criminology, Montreal, Quebec].
- Johnson, B.D., "Emerging Models of Crack Distribution," in T. Mieczkowski (Ed.), Drugs, Crime, and Social Policy: Research, Issues, and Concerns 56-78 (1992).
- Johnson, B.D., Varieties of Free-Lance Selling in New York City (Nov. 1992) (on file with the Sentencing Commission). [Paper presented at the American Criminology Society, New Orleans, LA, Nov. 5, 1992].
- Johnson, B., and E. Dunlap, "The Setting for the Crack Era: Macro Forces, Micro Consequences (1960-1992)," 24(4) Journal of Psychoactive Drugs 307-321 (1992).
- Johnson, B., E. Dunlap, and A. Hamid, "Changes in New York's Crack Distribution Scene," in P. Vamos and P. Corriveau (Eds.), Drugs and Society to the Year 2000: Proceedings of the Fourteenth World Conference of Therapeutic Communities 360-364 (1992).
- Johnson, B., E. Dunlap, A. Hamid, and A. Manwar, Crack Distribution Networks and Distributor Lifestyles (1992). [Paper presented at the City University of New York, and at City Hall, New York City, 1992].
- Johnson, B., E. Dunlap, A. Hamid and A. Manwar, Variations in Freelance Selling of Crack Cocaine (1992). [Paper presented at the American Criminology Society, New Orleans, LA, 1992].

- Johnson, B., E. Elmoghazy, and E. Dunlap, Crack Abusers and Noncrack Drug Abusers: A Comparison of Drug Use, Drug Sales, and Nondrug Criminality (Nov. 1990) (unpublished, on file with the Sentencing Commission). [Paper presented at the annual meeting of the American Criminology Society, Baltimore, Maryland, Nov. 1990].
- Johnson, B., A. Hamid, E. Morales, and H. Sanabria, Critical Dimensions of Crack Distribution (1987) (paper presented at Annual Conference of the American Society of Criminology, Montreal, Canada).
- Johnson, B., A. Hamid, and H. Sanabria, "Emerging Models of Crack Distribution," in T. Mieczkowski (Ed.), Drugs and Crime: A Reader 56-78 (1991).
- Johnson, B.D. and A. Manwar, Towards a Paradigm of Drug Eras (Nov. 21, 1991) (paper presented at American Society of Criminology, San Francisco, CA, on file with Sentencing Commission).
- Johnson, B., M. Natarajan, E. Dunlap, and E. Elmoghazy, "Crack Abusers and Noncrack Abusers: Profiles of Drug Use, Drug Sales, and Nondrug Criminality," 24 Journal of Drug Issues 117-141 (1994).
- Johnson, B., T. Williams, K. Dei, and H. Sanabria, "Drug Abuse in the Inner City: Impact of Hard-Drug Use and Sales on Low Income Communities," in J.Q. Wilson and M. Tonry (Eds.), 13 Crime and Justice: An Annual Review of Research 9-68 (1990).
- Jones, R.T., "The Pharmacology of Cocaine," 50 National Institute on Drug Abuse Research Monograph Series 34-53 (1984).
- Jones, R.T., "The Pharmacology of Cocaine Smoking in Humans," 99 National Institute on Drug Abuse Research Monograph Series 30-41 (1990).
- Julien, R., A Primer of Drug Action (5th ed. 1988).
- Katz, J.L., J.W. Griffiths, L.G. Sharpe, E.B. DeSouza, and J.M. Witkin, "Cocaine Tolerance and Cross-Tolerance," 264(1) Journal of Pharmacology and Experimental Therapeutics 183-192 (1993).
- Keltner, L. and D.G. Folks, Psychotropic Drugs (1993).
- Khalsa, H., M. Kowalewski, M. Anglin, and J. Wang, "HIV Related Risk Behavior among Cocaine Users," 4(1) AIDS Education and Prevention 71-83 (Spring 1992).

United States Sentencing Commission

- Klein, M.W. Gang Involvement in Cocaine 'Rock' Trafficking (May 1988) (unpublished draft, on file with the Sentencing Commission).
- Klein, M.W. and C.L. Maxson, "'Rock' Sales in South Los Angeles," 69 Sociology and Social Research 561 (1985).
- Klein, M., C. Maxson, and L. Cunningham, "'Crack,' Street Gangs, and Violence," 29(4) Criminology 623-650 (1991).
- Klein, M., C. Maxson, and L. Cunningham, Street Gang Involvement in Rock Cocaine Selling (1988) (final report to the National Institute of Justice, Washington, D.C.).
- Kleinman, P.H., A.B. Miller, R.B. Millman, and G.E. Woody, "Psychopathy Among Cocaine Abusers Entering Treatment," 178 Journal of Nervous and Mental Diseases 442-447 (1990).
- Kloner, R.A., S. Hale, K. Alker, and S. Rezkalla, "The Effects of Acute and Chronic Cocaine Use on the Heart," Circulation 407 (1992).
- Koegel, P., A. Burnam, and R.K. Farr, "The Prevalence of Specific Psychiatric Disorders Among Homeless Individuals in the Inner City of Los Angeles," 45(12) Archives of General Psychiatry 1085-1092 (1988).
- Lenke, L. "Alcohol and Crimes of Violence: A Causal Analysis," Contemporary Drug Problems 355 (1982).
- Leonard, K.E. and T. Jacob, "Alcohol, Alcoholism, and Family Violence," in V.B. Van Hasselt (Ed.), Handbook of Family Violence 383-406 (1988).
- Levine, R.R., Pharmacology: Drug Actions and Reactions (1983).
- Levy, A.J. and J.S. Brekek, "Spouse Battering and Chemical Dependency: Dynamics, Treatment, and Service Delivery," in R.T. Potter-Efron and P. S. Potter-Efron (Eds.), Aggression, Family Violence and Chemical Dependency 81-97 (1990).
- Levy, S. and J. Pierce, "Predicting Intention to Use Cocaine in Teenagers in Sydney, Australia," 14(2) Addictive Behavior 105-11 (1989).
- Lille-Blanton, M., J.C. Anthony, and C.R. Schuster, "Probing the Meaning of Racial/Ethnic Group Comparisons in Crack Cocaine Smoking," 269 Journal of the American Medical Association 993 (Feb. 24, 1993).

- Lindquist, C.U. "Battered Women As Coalcoholics: Treatment Implications and Case Study," 23 Psychotherapy 622-628 (Nov. 4, 1986).
- Little, B., L. Snell, L.D. Gilstrap III, and W.L. Johnston, "Patterns of Multiple Substance Abuse During Pregnancy: Implications for Mother and Fetus," 83 Southern Medical Journal 507 (1990).
- Lockwood, D., A. Pottieger, and J. Inciardi, Cocaine and Street Crime: The Relevance of Cocaine Type, Demographics, and Street/Treatment Sample (1993). [Paper presented at the annual meeting of the Academy of Criminal Justice Sciences, Kansas City, MO, 1993]
- Lockwood, D., A. Pottieger, and J. Inciardi, Crack Use, Crime By Crack Users, and Ethnicity (1994).
- Longshore, D., and M. Anglin, HIV Transmission and Risk Behavior Among Drug Users in Los Angeles County 1991 Update (1991). [Paper prepared for the AIDS Program Office, Los Angeles County, CA].
- Lynch, M., and V.A. McKeon, "Cocaine Use During Pregnancy. Research Findings and Clinical Implications," 19(4) Journal of Obstetrical Gynecological Nursing 285-292 (July/Aug. 1990).
- MacCoun, R. and P. Reuter, "Are the Wages of Sin .30 an Hour: Economic Aspects of Street-Level Drug Dealing," 38 Crime and Delinquency 477-491 (1992).
- Mac Gregor, S.N., L.G. Keith, J.A. Bachicha, and I.J. Chasnoff, "Cocaine Abuse During Pregnancy — Care and Perinatal Outcome," 74(6) Obstetrics and Gynecology 882-885 (Dec. 1989).
- McBride, D.C. and J.A. Swartz, "Drugs and Violence in the Age of Crack Cocaine," in R. Weisheit, (Ed.), Drugs, Crime, and the Criminal Justice System 141 (1990).
- McGlothlin, W., "Drugs and Crime," in R. Dupont and A. Goldstein (Eds.), Handbook on Drug Abuse 357 (1979) (publication produced by the National Institute on Drug Abuse, Rockville, MD).
- McGuire, P.C. "Jamaican Posses: A Call for Cooperation Among Law Enforcement Agencies," 55 The Police Chief 20-28 (1988).
- Mehta, S.K., R. Finkelhor, R. Anderson, R. Harar-Sercik, T. Wasser, and R. Bahler, "Transient Myocardial Ischemia in Infants Prenatally Exposed To Cocaine," The Journal of Pediatrics 945-949 (June 1993).

United States Sentencing Commission

- Mieczkowski, T., Crack Dealing on the Street: An Exploration of the YBI Hypothesis and the Detroit Crack Trade (1990). [Paper presented at Annual Conference of the American Society of Criminology, Baltimore, MD, 1990.]
- Mieczkowski, T., "Crack Distribution in Detroit," 17 Contemporary Drug Problems 9-30 (Spring 1990).
- Mieczkowski, T., "The Operational Styles of Crack Houses in Detroit," in M. de la Rosa, E. Lambert and B. Gropper (Eds.), Drugs and Violence: Causes, Correlates, and Consequences 60-91 (1990).
- Miller, B.A., "The Interrelationships Between Alcohol and Drugs and Family Violence," 103 Drugs and Violence: Causes, Correlates, and Consequences 177-179 (1990) (National Institute on Drug Abuse Monograph).
- Miller, B.A., T.H. Nochajski, K.E. Leonard, H.T. Blance, D.M. Gondoli, and P.M. Bowers, "Spousal Violence and Alcohol/Drug Problems Among Parolees and Their Spouses," 1 Women and Criminal Justice 55-72 (1990).
- Miller, M., and R. Potter-Efron, "Aggression and Violence Associated with Substance Abuse," in R.T. Potter-Efron and P.S. Potter-Efron (Eds.), Aggression, Family Violence and Chemical Dependency 1 (1990).
- Monahan, J., Causes of Violence, reprinted in Proceedings on the Inaugural Symposium on Crime and Punishment in the United States 77 (1993). [Presentation made at the U.S. Sentencing Commission Symposium on Drugs and Violence in America, June 17, 1993.]
- Monahan, J., "Causes of Violence in America," Proceedings of the U.S. Sentencing Commission Symposium on Drugs and Violence in America 81-83 (1993).
- Moore, J., "Gangs, Drugs, and Violence," in M. de la Rosa, E. Lambert and B. Gropper (Eds.), Drugs and Violence: Causes, Correlates, and Consequences 160-176 (1990).
- Morganthau, T., "Crack and Crime," Newsweek 16-20, 22 (June 16, 1986).
- Murray, J.B., "An Overview of Cocaine Use and Abuse," 59 Psychological Reports 243-264 (1986).
- Musto, D.F., The American Disease: Origins of Narcotic Control (1973).
- Musto, D.F., "Opium, Cocaine and Marijuana in American History," 265 Scientific American 44 (1991).

National Drug Information Center of Families in Action, "Drug Abuse Linked to Sudden Infant Death Syndrome," 5 Drug Abuse Update (Fall 1991).

National Institute on Drug Abuse, *see also*, U.S. Department of Health and Human Services.

National Institute on Drug Abuse, "Developmental Effects of Prenatal Drug Exposure May Be Overcome," NIDA Notes (Jan./Feb. 1992).

National Institute on Drug Abuse, Maternal Drug Abuse and Drug Exposed Children: Understanding the Problem (Sept. 1992).

National Institute on Drug Abuse, "Research on Drugs and the Workplace," NIDA Capsules 1 (1990).

National Institute on Drug Abuse, National Household Survey on Drug Abuse: 1990 (1991).

National Institute on Drug Abuse, Annual Medical Examiner Data 1991 (1992).

National Narcotics Intelligence Consumers Committee, The NNICC Report 1992: The Supply of Illicit Drugs to the United States (Sept. 1993).

"New Evidence Links Cocaine and HIV," 30 Journal of Psychosocial Nursing 45 (1992).

Nurco, D.N., T.E. Hanlon, T.W. Kinlock, and K.R. Duszynski, "Differential Criminal Patterns of Narcotic Addicts Over an Addiction Career," 26 Criminology 407 (1988).

Paly, D., P.I. Jatlow, C. Van Dyke, F.P. Jeri, and R. Byck, "Plasma Cocaine Concentrations During Coca Paste Smoking," 30 Life Sciences 731-738 (1982).

Perez-Reyes, M., S. Di Guiseppi, G. Ondrusek, A.R. Jeffcoat, and C.E. Cook, "Free-Base Cocaine Smoking," 32(4) Clinical Pharmacology and Therapeutics 459-465 (1982).

Phibbs, C.S., "The Economic Implication of Prenatal Substance Abuse," The Future of Children 113-120 (Spring 1991).

Phibbs, C.S., D.A. Bateman, and R.M. Schwartz, "The Neonatal Costs of Maternal Cocaine Use," 266(11) Journal of the American Medical Association 1521-1526 (Sept. 18, 1991).

Powers, R.J. and I.L. Kutash, "Alcohol, Drugs, and Partner Abuse," The Abusive Partner: An Analysis of Domestic Battering 39-40 (1982).

United States Sentencing Commission

- Pratsinak, G. and R. Alexander, (Eds.), Understanding Substance Abuse and Treatment (1992) (publication produced by American Correctional Association, Laurel, MD).
- Raczkowski, U.C., Y.M. Hernandez, H.K. Erzouki, and T.P. Abrahams, "Cocaine Acts in the Central Nervous System to Inhibit Sympathetic Neural Activity," 258 Journal of Pharmacology and Experimental Therapeutics 511 (1991).
- Randall, T., "Cocaine, Alcohol Mix in Body to Form Even Longer-Lasting, More Lethal High," 267 Journal of the American Medical Association 1043-1045 (1991).
- Rawson, R.A., "Cut the Crack: The Policymaker's Guide to Cocaine Treatment," 51 Policy Review 11 (Winter 1990).
- Reinarman, C. and H. Levine, "The Crack Attack: Politics and Media in America's Latest Drug Scare," in J. Best (Ed.), Images Typifying Contemporary Social Problems 117 (1989).
- Reinarman, C. and H.G. Levine, "Crack in Context: Politics and Media in the Making of a Drug Scare," 16 Contemporary Drug Problems 535-577 (Winter 1989).
- Reiss, A.J. and J.A. Roth, (Eds.) Understanding and Preventing Violence (1993).
- Reiss, A.J. and J.A. Roth, "Alcohol, Other Psychoactive Drugs, and Violence," in Reiss, A.J. and J.A. Roth, (Eds.) Understanding and Preventing Violence (1993).
- Reuter, P., "Can the Borders Be Sealed?", 56 The Public Interest (1988).
- Reuter, P., J. Haaga, P. Murphy, and A. Praskac, Drug Use and Drug Programs in the Washington Metropolitan Area (1988) (RAND Corporation).
- Reuter, P., R. MacCoun, P. Murphy, A. Abrahamse, and B. Simon, Money from Crime--A Study of the Economics of Drug Dealing in Washington, D.C. (1990) (RAND Corporation).
- Roberts, A.R., "Psychosocial Characteristics of Batterers: A Study of 234 Men Charged with Domestic Violence Offenses," 2 Journal of Family Violence 81-82 (1987).
- Rosen, T.H., "Identification of Substance Abusers in the Workplace," 16 Public Personnel Management 197 (1987).
- Rydell, C. P. and S.S. Everingham, Drug Policy Research Center, Modeling the Demand for Cocaine (1994).

- Schulhofer, S.J., "Assessing the Federal Sentencing Process: the Problem is Uniformity, Not Disparity," 29 American Crim. Law Rev. 833 (1992).
- Siegel, R.K., "Cocaine Smoking," 14(4) Journal of Psychoactive Drugs 271-359 (1982).
- Siegel, R.K., "New Patterns of Cocaine Use: Changing Doses and Routes," 61 National Institute on Drug Abuse Research Monograph Series 204-222 (1985).
- Skolnick, J.H., T. Correl, E. Navarro, and R. Rabb, "The Social Structure of Street Drug Dealing," IX(1) American Journal of Police 1-41 (1990).
- Smarr, S.L., "The Dope on Drugs in the Workplace," 31 Bobbin 100 (1989).
- Speckart, G. and M.D. Anglin, "Narcotics Use and Crime: An Overview of Recent Research Advances," 13 Contemporary Drug Problems 741 (1986).
- Spotts, J.V. and F.C. Shontz, "Drug-Induced Ego States: I. Cocaine Phenomenology and Implications," 19(2) International Journal of the Addictions 119-151 (1984).
- Sterk, C.E. and K.W. Elifison, "Drug-Related Violence and Street Prostitution," in M. de la Rosa, E. Lambert and B. Gropper (Eds.), Drugs and Violence: Causes, Correlates, and Consequences 208-221 (1990).
- Tashkin, D.R., M.E. Khlasa, D. Gorelick, P. Chang, M.S. Simmons, A.H. Coulson, and H. Gong, Jr., "Pulmonary Status of Habitual Cocaine Smokers," 145(1) American Review of Respiratory Diseases 92-100 (Jan. 1992).
- Tonry, M. and J.Q. Wilson (Eds.) Drugs and Crime (1990).
- U.S. Department of Health and Human Services, Alcohol, Drug Abuse, and Mental Health Administration, Center for Substance Abuse Prevention, "Preventing the Alcohol and Other Drug Problem of HIV/AIDS," 5 Prevention Pipeline 4 (Sept./Oct. 1992).
- U.S. Department of Health and Human Services, National Institute on Drug Abuse, "Research on Drugs and the Workplace," NIDA Capsules 1 (1990).
- U.S. Department of Health and Human Services, Public Health Service, National Institute on Drug Abuse, "Drugged in the Womb: What Harm to Babies?" NIDA Notes (Winter 1987).
- U.S. Department of Health and Human Services, Public Health Service, National Institute On Drug Abuse, Monitoring the Future Study (Dec. 1994).

United States Sentencing Commission

- U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Epidemiologic Trends in Drug Abuse, Volume II: Proceedings (Dec. 1993).
- U.S. Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, Advance Report Number 3: Preliminary Estimates from the 1992 National Household Survey on Drug Abuse (June 1993).
- U.S. Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, Series I, Number 12-A, Annual Emergency Room Data 1992 (Mar. 1994).
- U.S. Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, Estimates from the Drug Abuse Warning Network: 1992 Estimates of Drug-Related Emergency Room Episodes (Sept. 1993).
- U.S. Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, Series I, Number 11-A, Annual Emergency Room Data 1991 (1992).
- U.S. Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, Series I, Number 11-B Annual Medical Examiner Data 1991 (1992).
- U.S. Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, National Household Survey on Drug Abuse: Main Findings 1991 (May 1993).
- U.S. Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, National Household Survey on Drug Abuse: Population Estimates 1992 (Oct. 1993).
- U.S. Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, Series I, Number 12-B, Annual Medical Examiner Data 1992 (1994).
- U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies, Estimates from the Drug Abuse Warning Network: Advance Report Number 4 (Sept. 1993).
- U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, An Analysis of Non-Violent Drug Offenders with Minimal Criminal Histories (1994).

- U.S. Department of Justice, "Crime in the United States 1992," Uniform Crime Reports (1992).
- U.S. Department of Justice, Sourcebook of Criminal Justice Statistics - 1990 (1990).
- U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Comparing Federal and State Prison Inmates, 1991 (Sept. 1994).
- U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Drugs, Crime, and the Justice System (Dec. 1992).
- U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Sentencing in the Federal Courts: Does Race Matter? (Nov. 1993).
- U.S. Department of Justice, Drug Enforcement Administration, Coca Cultivation and Cocaine Processing (Sept. 1993).
- U.S. Department of Justice, Drug Enforcement Administration, Cocaine: Cultivation and Cocaine Processing: An Overview (1991).
- U.S. Department of Justice, Drug Enforcement Administration, Crack Cocaine (Apr. 1994).
- U.S. Department of Justice, Drug Enforcement Administration, Crack Cocaine: An Overview (1989).
- U.S. Department of Justice, Drug Enforcement Administration, DEA Drug Situation Report: Crack Cocaine (Nov. 4, 1993) (draft copy on file with Sentencing Commission).
- U.S. Department of Justice, Drug Enforcement Administration, Drugs of Abuse (1989).
- U.S. Department of Justice, Drug Enforcement Administration, Illegal Drug Price and Purity Report (1992).
- U.S. Department of Justice, Drug Enforcement Administration, Illegal Drug Price and Purity Report: United States January 1990 - March 1993 (July 1993).
- U.S. Department of Justice, Drug Enforcement Administration, Source to the Street: Mid-1993 Prices for Cannabis, Cocaine, Heroin (Sept. 1993).
- U.S. Department of Justice, Drug Enforcement Administration, Strategic Management System: FY 1994 (Nov. 1993).

United States Sentencing Commission

- U.S. Department of Justice, Drug Enforcement Administration, U.S. Drug Threat Assessment (1993) (Sept. 1993).
- U.S. Department of Justice, Drug Enforcement Administration, Worldwide Cocaine Situation (Oct. 1993).
- U.S. Department of Justice, Office of Justice Programs, National Institute of Justice, Drug Use Forecasting 1991 Annual Report (Dec. 1992).
- U.S. Department of Justice, Office of Justice Programs, National Institute of Justice, Drug Use Forecasting 1992 Annual Report (Oct. 1993).
- U.S. Department of Justice, Office of Justice Programs, National Institute of Justice, Drug Use Forecasting 1993 Annual Report (Nov. 1994).
- U.S. Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms, I Caribbean Based Organized Crime (June 1993).
- U.S. Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms, VII Jamaican Organized Crime (June 1992).
- U.S. General Accounting Office, The Crack Cocaine Epidemic: Health Consequences and Treatment (Jan. 1991).
- U.S. Sentencing Commission, The Federal Sentencing Guidelines: A Report on the Operation of the Guidelines System and Short-Term Impacts on Disparity in Sentencing, Use of Incarceration and Prosecutorial Discretion and Plea Bargaining (Dec. 1991).
- U.S. Sentencing Commission, Guidelines Manual (1994).
- U.S. Sentencing Commission, Hearing on Crack Cocaine (Nov. 1993).
- U.S. Sentencing Commission, 1992 Annual Report (1992).
- U.S. Sentencing Commission, 1993 Annual Report (1993).
- U.S. Sentencing Commission, Special Report to Congress: Mandatory Minimum Penalties in the Federal Criminal Justice System (Aug. 1991).

- "Urogenital Anomalies in the Offspring of Women Using Cocaine During Early Pregnancy-Atlanta, 1968-1980," Morbidity and Mortality Weekly Report, Centers for Disease Control 540-542 (Aug, 11, 1989).
- Van Dyke, C., P.I. Jatlow, P.G. Barash, and R. Byck, "Oral Cocaine: Plasma Concentrations and Central Effects," 200(4338) Science 211-213 (1978).
- Wallace, B.C., "Crack Addiction: Treatment and Recovery Issues," Contemporary Drug Problems 74 (Spring 1990).
- Wallace, B.C., Crack Cocaine: A Practical Treatment Approach for the Chemically Dependent (1991).
- Wallace, M.E., M. Galanter, H. Lifshutz, and K. Krasinski, "Women at High Risk of HIV Infection from Drug Use," 12(2) Journal of Addictive Diseases 77-86 (1993).
- Walsh, E., "Chicago Street Gang Study Shows Fearful Toll of Powerful Weapons," Washington Post A4 (Nov. 29, 1993).
- Warner, E.A., "Cocaine Abuse," 119(3) Annals of Internal Medicine 226-235 (Aug. 1, 1993).
- Washton, A.M., "Outpatient Treatment Techniques," in A.M. Washton and M.S. Gold (Eds.), Cocaine: A Clinician's Handbook 117 (1987).
- Watters, J.K., C. Reinerman, and J. Fagan, "Causality, Context, and Contingency: Relationships Between Drug Abuse and Delinquency," 12 Contemporary Drug Problems 351 (1985).
- Wesson, D.R. and P. Washburn, "Current Patterns of Drug Abuse That Involve Smoking," 99 National Institute on Drug Abuse Research Monograph Series 5-11 (1990).
- The White House, National Drug Control Strategy: Reclaiming Our Communities from Drugs and Violence (Feb. 1994).
- The White House, Office of National Drug Control Policy, Understanding Drug Treatment (June 1990).
- Wilkerson, I., "Crack's Legacy of Guns and Death Lives On," The New York Times A1 (Dec. 13, 1994).
- Wilkinson, P., C. Van Dyck, P.I. Jatlow, P. Barash, and R. Byck, "Intranasal and Oral Cocaine Kinetics," 27(3) Clinical Pharmacology and Therapeutics 386-394 (1980).

United States Sentencing Commission

Williams, T., The Cocaine Kids (1989).

Williams, T., The Crack House (1991).

Willwerth, J., "Should We Take Away Their Kids? Often the Best Way To Save The Child Is To Save the Mother As Well," 137 Time (May 13, 1991).

Wise, R.A., "Neural Mechanisms of the Reinforcing Action of Cocaine," 50 National Institute on Drug Abuse Research Monograph Series 15-33 (1984).

Witkin, G., M. Guttman, A. Moncreiff, K. Glastris, B. Burgower, and A. Stern, "The Men Who Created Crack," U.S. News & World Report 44-53 (Aug. 19, 1991).

Zuckerman, B., "Drug-Exposed Infants: Understanding the Medical Risk," The Future of Children 26-27 (1991).

Zuckerman, B., D.A. Frank, R. Hingson, H. Amaro, S.m. Levenson, H. Kayne, S. Parker, R. Vinci, K. Aboagye, L.E. Fried, *et al.*, "Effects of Maternal Marijuana And Cocaine Use on Fetal Growth," 320(12) The New England Journal of Medicine 762-768 (Mar. 23, 1989).