U.S. Department of Justice
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*Issues and Practices*

# Identifying and Responding to New Forms of Drug Abuse:

## Lessons Learned from "Crack" and "Ice"

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# Identifying and Responding to New Forms of Drug Abuse:

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by
**Marcia R. Chaiken**
LINC

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*Issues and Practices in Criminal Justice* is a publication series of the National Institute of Justice. Each report presents the program options and management issues in a topic area, based on a review of research and evaluation findings, operational experience, and expert opinion on the subject. The intent is to provide information to make informed choices in planning, implementing and improving programs and practice in criminal justice.

# National Institute of Justice

Michael J. Russell
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# Foreword

Understanding how a specific drug begins to take hold and then proliferates within various segments of society can help law enforcement officials recognize new patterns of drug use and plan effective responses.

The National Institute of Justice (NIJ) is authorized by Congress to conduct research and development projects to curb and prevent drug abuse and crime and to inform the justice community of effective crime control policies and strategies.

This NIJ report outlines a useful approach to identifying and curtailing use of new drugs before they grow to epidemic proportions. The research, based on case studies of the emergence and spread of crack in Manhattan and Los Angeles and the introduction of "ice" in Hawaii, shows that frequent community monitoring, coupled with cooperation among law enforcement agencies, has the potential to dismantle drug markets before they are fully established.

Early recognition of emerging drug patterns *is* possible and is vital to the development of strategies to counter drug abuse. This report focuses on ways in which local officials and agencies can combine their efforts to stem drug epidemics in their communities.

Michael J. Russell
*Acting Director*
**National Institute of Justice**

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# Executive Summary

This report is written to help local policymakers and criminal justice and health officials respond to potential drug epidemics by recognizing the early signs of an incipient epidemic and taking appropriate action to counter them. Two fundamental questions are addressed: Can a new pattern of substance abuse be recognized locally before use becomes widespread? If a new pattern is recognized, what effective actions can be taken to prevent use from spreading? This report presents evidence that early recognition of emerging drug patterns is indeed possible and provides advice for identifying these emerging patterns and taking action.

The information presented is based on a study of the emergence of "crack" or "rock" (smokable base cocaine) use in north Manhattan and central Los Angeles and "ice" (smokable crystal methamphetamine) use on the island of Oahu, Hawaii. Recommendations are grounded in the experiences of a broad range of public-service professionals and researchers who were working in the study sites as the epidemics developed.

## Increases in Popularity of Smoking Cocaine and Methamphetamine

The media first reported on increased smoking of crack in Manhattan and rock in Los Angeles in late 1985. This was more than 5 years after smoking base cocaine (later called "crack" or "rock") became popular among specific groups in Harlem and south central Los Angeles. By 1980, in both Manhattan and Los Angeles, use of formerly sought-after drugs such as heroin and PCP had begun to decline, and the popularity of cocaine smoking was starting to spread locally. New smokers began to participate in base use at neighborhood parties and social clubs. Also around 1980 in south central Los Angeles, simple recipes using baking soda for "rocking up" cocaine (converting the acid powdered inhalant form to smokable base) circulated at local parties and began to spread by word of mouth through social circles to adjacent areas.

Beginning around 1983, neighborhood hustlers, including dealers who already sold various types of drugs, saw an opportunity to enhance their profits. They could market cocaine pre-prepared in a smokable form. By 1984, competition led to various marketing strategies, including selling base or rock in small, more affordable amounts and using catchy names like "crack." Base use started to rise precipitously between 1984 and 1985, and the needs of users began to overwhelm municipal and county agencies. Law enforcement agencies developed new tactics to close down street and indoor markets for crack or rock. More than six years later, various measures appeared to have somewhat reduced the prevalence of cocaine use in the study sites. However, cocaine smoking was still considered to be a serious problem.

Although not widely covered in news stories until 1988 and after, smoking crystal methamphetamines (known as "batu") was a typical form of drug use on Oahu among certain ethnic groups or communities before 1980. During the early 1980's, cocaine smoking began to increase in popularity, although most resident drug users preferred or could only afford to use pakkalolo (Hawaiian-grown marijuana). At the same time, batu smoking also increased in popularity, especially among industrious immigrants from the Far East who used the substance to stay awake while working both day and night. A shortage of pakkalolo about 1985 may have contributed to the popularity of smoking batu. As with base smoking in Manhattan and Los Angeles, smokable crystal methamphetamine preparations were originally home cooked, and the initial spread of recipes was primarily through overlapping social circles.

Enterprising dealers on Oahu, realizing that there were potentially high gains to be made by marketing prepared smokable crystal methamphetamines, developed the term "ice" as part of their marketing strategy. Although more costly per "hit" than base cocaine, smokable methamphetamine was nonetheless touted as a relatively inexpensive, pure, hard-to-detect, reusable drug that produced better and longer highs than cocaine.

In 1986, the Honolulu police began to investigate the drug and its use. Within months, by cooperating with other criminal justice agencies and with professionals, the police department cooperated in spreading the word that ice use

was a serious problem and a harmful practice. During 1987 and 1988, many agencies made comprehensive, coordinated efforts to curtail methamphetamine smoking and sales.

By 1989, organized ice dealing appeared to have been generally suppressed, and use was dropping rapidly on Oahu. In the years since, law enforcement, treatment, and drug prevention agencies have continued to closely monitor indicators of ice availability and to focus on areas and populations where smokable methamphetamine continues to be distributed and used.

Although on Oahu some hard-to-reach populations are still smoking ice and there are indicators of a slight rebound of ice supply in the early 1990's, the strategy implemented on the island in the late 1980's was followed by an immediate and remarkable decrease in both supply and demand for ice, and sales and use of ice appear to have remained at a much lower level than in the years before concerted action was taken.

The foregoing events took place in the sites for the most part before the present study began, but they form the background for the detailed data gathered for the case studies. The author contacted public-service professionals, epidemiologists, and researchers in local, State, and Federal agencies who supplied valuable information about trends in cocaine and crystal methamphetamine use in the study sites. Analysis of these data led to four basic findings about the patterns and responses in the sites:

- The spread in popularity of smokable base cocaine and smokable crystal methamphetamines occurred years before there was any substantial attention by the media.
- Local public-service professionals and researchers had numerous indicators of the emerging problems, but on the whole the information was not effectively collected from these multiple sources and combined to provide a clear picture of what was happening.
- With regard to smokable cocaine, identification of the problem and responses by public agencies to control the local supply and demand occurred too late to prevent a devastating ongoing epidemic.
- On Oahu where relatively early identification of ice marketing led to coordinated law enforcement, prevention, and treatment efforts, patterns of increasing use of crystal methamphetamines were generally interrupted.

## Stages in the Development of Drug Use Patterns

The development of a specific form of drug use takes place in the context of current local attitudes about drug use and substance abuse in general and about specific types of drugs. In examining the drug abuse context at any given time, it is important to keep several factors in mind. First, patterns in popular opinion about specific substances and their use are cyclical, with the result that "new" drugs may really be new forms of old drugs about which a good deal may already be known. Second, declines in popularity of one illegal substance are precursors to a rapid increase in the popularity of another substance. Third, ongoing experimentation is taking place with different forms and modes of administration of drugs, accompanied by the development of lore about the drug's supposed benefits. If the lore is actually more myth than reality, an opportunity for intervention exists. And finally, a drug's popularity stems from a grassroots movement at the community level followed by promotion by organized drug distributors.

The development of crack and rock followed very similar stages to that of ice use on Oahu. The following stages were identified:

- *Stage 1: Endemic use in small, isolated communities or subcultures.* This is the lowest level of use ever realistically achieved, even when the substance has been publicly condemned. Endemic use of cocaine in the 1970's was confined primarily to relatively well-to-do groups in the entertainment industries. Endemic use of methamphetamine (then called "speed") in the 1960's occurred among "flower children," "bikers," and other counterculture groups.
- *Stage 2: Grassroots switches to various types of drugs or preparations.* The drugs used by the most frequent consumers in a community are in a state of flux. Users of one drug experiment with another drug in endemic use among people in close geographic proximity. Some replace drugs formerly used that are no longer appealing or accessible. Various forms of preparations and modes of administration of a number of substances may typically be tried.
- *Stage 3: Local coalescence of opinion that a specific drug preparation was the favored one.* Frequent users of drugs discuss and justify the selection of a particular substance as the best available, resulting in an overlapping mix of explanations. A rich lore about a drug

increases its lure. Among frequent users of drugs, information and rumors about a "new" drug often spread faster than the substance itself.

- *Stage 4: Acceleration of distribution of the favored preparation by enterprising dealers.* Formal economic organization for distributing an increasingly popular substance takes place while informal drug distribution within social groups continues. The organization of local drug dealerships follows typical free enterprise patterns. People seeking to rapidly move up the economic ladder who think legitimate avenues are closed to them are the most likely participants, as are marginally employed residents of the drug-using communities. Violence among users may become evident, depending on the effects of the particular drug distributed.

- *Stage 5: Precipitous increases in use.* Typically, the sharp increase in use is propelled by ready availability, low cost, and a widespread notion that the substance is desirable. Stories about the drug become widespread through grassroots processes and marketing strategies. Entire groups or individuals who are influenced by these groups start to use the drug. As demand increases, more suppliers are drawn into the market. Competition among dealers leads to lower prices and innovative methods for marketing, including catchy names and distinctive packaging, that in turn help increase demand.

- *Stage 6: Epidemic use and system overload.* An upward spiral in the number of a drug's new users can be accompanied by increasing frequency of consumption by existing users. If the drug is physically addictive, there is a precipitous decline in the health and well-being of numerous users. Emergency rooms and other health services are overwhelmed. When pregnant women are users, added health services are needed for treating the perinatal effects on infants. Drugs that produce psychotic or violent episodes strain psychiatric facilities. Caretakers neglect children or others in need of care, placing an additional burden on social support services. Epidemic use of addictive drugs usually leads to rising crime to support expensive habits, taxing police and other criminal justice resources.

- *Stage 7: Media coverage.* Articles on specific drugs are not usually published until after drug use has reached an epidemic stage in at least a confined geographical area. Stories may suggest that the drug is new, increasing its desirability among some users. Even in the late 1980's, media stories on crack and ice often created the impression that these were new drugs. In Los Angeles base cocaine and rock had been around for a decade, but stories using a different term ("crack") seemed to increase the desirability of the substance among youngsters who wanted to impress peers. Although stories about the dangers of ice made some mainland drug consumers reluctant to use the substance, others actively searched out ice so they could try it.

## Signs and Symptoms of the Development of Drug Use Patterns

To be useful for monitoring the increasing popularity of a substance, available information needs to be collected, consolidated, and analyzed. In the course of data collection and analysis, several issues were found to be integral to obtaining and using necessary information:

- No single source of information appears adequate for monitoring the increasing popularity of an illegal substance.

- While many agencies record information potentially useful for identifying emerging use of specific forms of drugs, currently few can provide such information in a readily usable form.

- Agencies capable of providing information useful for monitoring the development of drug use patterns are not likely to coordinate such information unless one organization takes the lead and actively pursues information on an ongoing basis.

- Public-service professionals and researchers have reasons not to release "raw" numbers to outside agencies; these reasons need to be addressed before such information can be used to discover emerging patterns early.

- Once a specific form of substance abuse receives media attention, analysts in public agencies are often asked to provide information shaped more by political requirements than by scientific processes. When used as a basis for policy or practical decisions, such information can be misleading.

Different types of information are available to help determine if a particular form of drug use is developing in a small geographical area such as a city or county:

- *Anthropological and ethnographic information about isolated episodic use, lore, and local spread.* Proficient researchers conducting ethnographic or anthropological studies in a given community appear to have the

earliest and most detailed information about specific types of substances used by particular groups. They also document shifts in use and detailed lore about specific drugs. The information these researchers can provide is not only fruitful for identifying ongoing and emerging patterns of use but also for understanding the motivations and attitudes of groups using specific substances. This helps agencies respond appropriately.

- *Practical information about endemic use and local spread of specific substances from outreach workers and drug treatment counselors.* Many public-service professionals' jobs entail eliciting detailed information from members of hard-to-reach groups. These public-service professionals include outreach workers, caseworkers, school nurses and counselors, and drug treatment counselors. Although they were not especially looking for new forms of illegal substances in use, public-service professionals working in inner city areas were aware of the increasing popularity of smokable cocaine as early as 1980. They knew about simple recipes for preparing base cocaine in Los Angeles in 1980 and in New York in 1982.

  On Oahu, outreach workers in some of the most impoverished communities became aware of the increasing popularity of batu in 1983. Important information obtained by these public-service professionals is derived from "street talk"—a mixture of fact, fantasy, and conjecture on the part of drug users and dealers, their families, and close neighbors. To be at all useful, street information must be analyzed and consistent patterns determined. Only in retrospect did public-service professionals who had information about cocaine and methamphetamine smoking in the early 1980's realize the importance of their information. In the future, however, it may be possible for researchers to monitor drug use patterns on an ongoing basis by drawing on the extensive knowledge of outreach workers, drug counselors, and other public-service professionals.

- *Street research about use and sales of specific forms of drugs.* In New York City, the State Division of Substance Abuse Services has formed small teams of streetwise persons to gather information about drug use and drug sales in public places. Since the mid-1970's, teams have observed designated neighborhoods to discover the types of drugs being sold on specific blocks. They have also gathered information that could help capture new patterns of drug use, including shifts in street terms that can reflect changes in drugs used, groups using the drug, or methods of marketing or distribution.

- *Physical symptoms and medical evidence of substances being used.* Although not widely reported until cocaine and methamphetamine smoking had reached epidemic proportions, shifts in the physical symptoms of drug users in the study sites and results of laboratory tests of their bodily fluids provided early evidence of new patterns of use. Interviews with clients who showed new symptoms helped public-service professionals in New York and Los Angeles realize that the symptoms were caused by smoking cocaine and, on Oahu, by smoking methamphetamines. Urinalysis and blood tests confirmed cocaine and methamphetamines as the underlying cause of clients' symptoms, including some deaths.

- *Fragmentary law enforcement agency evidence of changes in use of specific substances.* In retrospect, law enforcement agencies in all three study sites received numerous early indicators of the growing use of smokable cocaine and, on Oahu, of smokable methamphetamines. However, since there was no concerted attempt to examine these indicators together, individual officers could only view such information as idiosyncratic and random rather than as part of a pattern. Types of indicators that might have been used to identify patterns of smoking cocaine and methamphetamines include (1) community complaints and other grassroots information, (2) changes in confiscated drug paraphernalia, (3) arrests and seizures involving specific substances, and (4) information about arrestees and modes of distribution.

- *Federal information on use of specific substances.* Several U.S. agencies carry out systematic methods for monitoring national trends in drug abuse. Most notable data collections include the National Household Survey on Drug Abuse, the High School Senior Survey, the Drug Abuse Warning Network, the Community Epidemiology Work Group of the National Institute on Drug Abuse, and the National Institute of Justice's Drug Use Forecasting system. However, local officials need to interpret national trends with caution because of large differences in patterns of use among regions and cities.

- *State and local survey data on increasing use of specific substances.* Surveys specifically designed to monitor local drug use trends and emerging patterns obviously can provide important information, but they tend to be underutilized by agencies other than those directly responsible for collecting the information. Several types of data could be shared among agencies, including results of urine tests for drug use among

arrestees conducted by the Drug Use Forecasting program of the National Institute of Justice. Self-report by students about use of specific drugs is also valuable, as are treatment program intake interview data.

- *Media reports.* News stories are among the least timely sources of information. They tend to focus on the most dramatic and least typical aspects of problems associated with widespread drug use and frequently present a distorted view of the problem. Fortunately, however, reporters who seek and incorporate information from knowledgeable public-service professionals and researchers do perform an important role in telling the public about the health hazards of specific substances.

## Official Responses to Emerging Patterns of Drug Use

A range of actions can be taken when a pattern of substance abuse has been identified. The first are the tactics recommended in the 1991 and 1992 National Drug Control Strategy. The 1991 strategy calls for "wide ranging, interdisciplinary data collection and evaluation." Similarly, the 1992 strategy concludes that a national funding priority for the coming years is to "improve and expand information and data collection systems."

The case studies carried out for this report provide examples of the need for local agencies to recognize emerging drug patterns by participating in interdisciplinary data collection efforts as suggested by these strategies. They further show the importance of cooperative implementation of these recommended tactics at an early stage in the development of a drug use pattern.

### *Tactics Used in Manhattan and Los Angeles County in Response to Cocaine Use*

Although the New York City Police Department carried out special operations in cooperation with other Federal, State, and local law enforcement agencies, in Manhattan and Los Angeles individual agencies independently implemented tactics to respond to the particular problems presented by the communities they served. Cooperative efforts among local agencies were mostly limited to sharing information about crack and incorporating it in primary prevention programs jointly implemented by law enforcement agencies and school administrations.

### *Tactics Used on Oahu in Response to Methamphetamine Use*

The Honolulu Police Department recognized the increasing popularity of crystal methamphetamine at an earlier stage than that at which New York and Los Angeles professionals recognized the spread of base cocaine use. As soon as methamphetamine use was recognized as an emerging problem, professionals in a range of agencies cooperated in carrying out a comprehensive problem reduction strategy that encompassed virtually all of the tactics presented in the 1991 National Drug Control Strategy. By 1988 the spread of ice appeared to have been contained, and by 1989 use appeared to be decreasing. Although there were indications of a slight rebound in ice use in the early 1990's, the following synthesizes what was done before the significant decrease in the late 1980's:

- Mechanisms for dealing with an emerging problem were established before ice could take hold. (Publicity about crack on the mainland had put Oahu agencies on alert.)
- A potential problem was identified soon after distribution became organized.
- Police divisions coordinated efforts to learn about local ice use.
- Interagency cooperative efforts were used to prevent use. The U.S. Attorney and the Honolulu Police Department, in cooperation with other agencies, coordinated prevention activities.
- Interagency cooperative efforts were used to arrest distribution. Contacts were also made with law enforcement agencies in other States and countries.
- A concerted effort was made to identify users and provide effective treatment.
- Public-service professionals requested help from researchers to create new monitoring systems.

This last action resulted in the implementation of several steps to improve monitoring of drug patterns:

- establishment of a Hawaii State Epidemiology Work Group
- more consistent entry and analysis of data about drugs used by treatment program clients before admission

- more distribution and use of results from surveys of drug use among students and household members
- preparation for collecting data about emergency room admissions involving drug abuse.

## Identifying and Responding to Specific Forms of Drug Use in Local Areas

Recommendations for identifying and responding to local changes in forms of drug use are based on advice provided by researchers and policymakers in Federal agencies, opinions of public-service professionals and researchers in Manhattan, Los Angeles, and Oahu, and findings of the case studies conducted for this report. Given their experiences with crack and ice and past drug epidemics, the public-service professionals and researchers offered fundamental steps that were characteristically proactive and cooperative. Basically, almost all agreed on the measures that should be taken and advised the following:

- To monitor local forms of a substance and identify changes, form a coalition of appropriate public-service professionals and researchers to meet and exchange relevant information regularly.
- Before initiating action in response to changes in substance use, find as many facts as possible about the properties of the drug, the method of distribution, and the appeal to users.
- To discourage initial or continued use of a particular drug, publicize factual information about symptoms of its use and its health hazards. Aim publicity especially at groups most likely to find the drug appealing.
- Be alert to initial indicators of businesslike marketing and act rapidly to disrupt organizations simultaneously at all levels of dealing.
- Mount a coordinated effort to identify frequent users and provide effective intervention.

The National Drug Control Strategy also recommends the following procedures:

- Keep the pressure on for preventing drug use, finding and providing effective treatment and sharpening the focus of the attack on drug trafficking organizations.
- Respond to changes in particular forms of drug use as part of a continuous, integrated community effort to reduce all forms of substance abuse.

Before these approaches can be implemented, a number of questions need to be addressed. Questions 1 through 8 below deal with issues and suggested practices for monitoring changes in local patterns of drug abuse. Questions 9 and 10 deal with information and actions needed before responding to the changes in drug use that have been identified. Finally, questions 11 through 18 deal with the responses themselves.

1. *The recommended strategy suggests the formation of a coalition for monitoring local drug abuse patterns. Who should be involved?* Participating professionals are best drawn from a spectrum of agencies dealing with a variety of populations, especially populations at high risk of experimenting with "new" drugs. Staff from locally based Federal agencies can also provide valuable information. All researchers involved in collecting and analyzing local information about drug use might also be asked to participate.

2. *Who should take overall responsibility for the coalition?* A team comprising a policy analyst, an epidemiologist (or other researcher familiar with epidemiologic techniques), and a well-connected agency head or CEO is recommended for spearheading the coalition. Together, these people possess the required political, analytical, and applied research skills needed for the viability and utility of the coalition.

3. *What types of locally collected data about drug use would be useful for researchers to analyze and provide to the coalition?* In addition to the consolidated observations of the types of professionals mentioned above, ethnographic/anthropologic and statistical data can also be informative. Other indicators of accelerating use in locally developing markets are police arrest data, increases in community complaints to police about newly forming markets, and data about shifts in the physical appearance of drugs, packaging, and paraphernalia seized and analyzed by law enforcement laboratories. Information from Federal agencies about growing interests of top-level drug dealers in a local area is also important intelligence. Other useful data include Drug Use Forecasting information on arrestees' drug use and health agency data on clients' symptoms or reports of drug use.

4. *If drug use patterns are often in flux, how can coalition participants decide when and if minor changes really indicate an emerging epidemic?* Two or more individual reports indicating a specific change in drugs used (or a specific change in methods of administering drugs) should signal a potential problem. In the absence of clear-cut corroborating evidence, multiple indicators of the increase or spread of a new form of drug use can serve as a signal to ask researchers trained in epidemiologic methods to conduct a proactive field investigation.

5. *Will all researchers and departmental analysts in a local area agree with an approach using functional indicators and epidemiologic field methods?* Some will need convincing. Some researchers believe that only peer-reviewed studies using standardized "clean" data and resulting in statistically significant findings should be used as a basis for policy decisions or practice. One conclusion of this report is that data potentially important for identifying shifts in drug use patterns should be used quickly to inform policy and practice. Analogous findings about new drug trends from multiple sources using "dirty" data and quick-turnaround field analyses should be given the same credence for policy or practice as a single source of polished research.

6. *How receptive are public-service professionals to participating in such a coalition?* If their participation is recognized as important, if meetings and materials are kept as short as possible, and if interactions are informative, receptiveness will probably not be an issue. However, the coalition members will have to work on developing common languages, mutual understanding, and avoiding turf issues.

7. *How often should the coalition meet?* The most useful format may be short but frequent meetings of representatives of public-service professionals and researchers who are in contact with substance abusers. Brief meetings conducted every few months can help ensure that an emerging pattern will not be missed. If two or more indicators signal a shift in patterns, coalition members could intensity efforts, including meeting more frequently, to determine if an epidemiologic field investigation needs to be undertaken.

8. *Where can we turn for technical assistance to organize a coalition?* If there is already a State Epidemiologic Work Group in the area, the administrator may be a valuable resource. Other resources include researchers and public-service professionals already engaged in cooperative anti-drug-abuse efforts listed in the appendix of this report.

9. *Should action be taken as soon as a new pattern of use is discovered?* The most sensible course of action in response to discoveries of "new" forms of endemic use among immigrants or visitors (or initial grassroots switches in a relatively small geographical area) seems to be to find out as much as possible about the drug and to feed facts about specific hazards to users through outreach workers, counselors, or other professionals. Providing information about symptoms of use can also make it easier to monitor such areas to determine whether use of the drug is spreading.

10. *Once a new pattern is discovered, what sources are available for learning more about the symptoms and longer term effects of using the drug?* In addition to information available from the National Institute of Justice, summaries and compilations of recent literature are available through various Federal agencies such as the National Institute on Drug Abuse, the Drug Enforcement Administration, and the Attorney General's Drug Prevention and Education Subcommittee of the U.S. Department of Justice.

11. *If an increase in popularity of a particular drug or specific mode of administration is discovered, how can local agencies decide what action to take?* The following factors should be taken into consideration: (1) the harm being caused by the substance or its mode of administration, (2) the stage of development, (3) the market structure, (4) characteristics of populations becoming involved, (5) the lore and allure of the substance, (6) availability of ongoing or past programs already found to be effective, and (7) the longer term effects of actions.

12. *Collecting factual information about drugs is suggested as a first step. Is there any way factual information can be used to prevent grassroots increases in the popularity of a particular substance?* Facts alone are unlikely to prevent use of a particular drug among populations that already use other substances frequently. The direct experience of seeing family and friends seriously harmed when they use the particular substance is more likely to have an impact. Teens, especially, appear to respond more to direct experiences involving people they know than to abstract particulars. Among adult populations capable of absorbing more

abstract information, facts about health hazards and information that clearly runs counter to any myths about the drug can help prevent an increase in popularity.

13. *Should the press and other media publicize information about a drug's increasing popularity?* Media coverage can help prevent use if reporting is responsible and conducted in cooperation with knowledgeable public-service professionals and researchers. Media stories in Honolulu were part of a comprehensive community effort to provide factual information to different age and ethnic groups.

14. *Other than conducting routine law enforcement activities, what role can local law enforcement agencies play in responding to increasing popularization of a particular drug?* Local law enforcement agencies are positioned to play a central role in coordinating the identification of a drug's increasing popularity and carrying out a cross-agency cooperative response. The Honolulu Police Department and the U.S. Attorney on Oahu coordinated efforts between and within agencies to learn about local use of the particular drug; made national and international contacts to learn more about the drug; shared information with educators, health practitioners, and professionals in other agencies; and helped form a coalition to prevent substance abuse. They formed interagency task forces to concentrate on disrupting dealing at every level of distribution and providing alternatives to youngsters at high risk of being recruited into sales. They obtained the cooperation of all criminal justice system agencies in providing swift punishment and severe consequences for sales of methamphetamines.

15. *An obvious suggestion is to focus law enforcement efforts against developing local drug markets. What are some of the signs that organized markets are replacing local grassroots distribution?* Among the indicators are seizures of large supplies of drugs from wholesalers and financial information about "kingpins" in the development of the ice market. Also important are sales of large amounts of legal reagents used to convert drugs into smokable forms. On the streets, crucial indicators consist of anthropologic, ethnographic, and undercover police information about the recruitment of new distributors, the targeting of new users, and the coining of snappy, innovative terms for relatively old products. New forms of packaging and street sales of new paraphernalia also indicate more vigorous marketing attempts.

16. *What steps are needed to identify users more quickly and provide more effective intervention?* Public-service professionals and family members in contact with high-risk populations need to be given explicit details about symptoms users display while under the effect of the drug and during withdrawal. Public-service professionals and family members also need to have a direct and simple way to contact drug abuse counselors, outreach workers, case managers, or other professionals trained in intervention techniques. Hotlines seem to be a good way of providing this service.

17. *Although public-service professionals on Oahu responded quite rapidly to the use of methamphetamines, numerous youngsters and adults became addicted to crystal smoking before the problem was discovered. Other than the practices discussed previously, are there any responses that should be taken in a local area to ensure earlier identification and a more rapid response?* Yes. Don't wait for a new problem to crop up in your area. Organize now to monitor local patterns of substance abuse, deliver ongoing prevention programs, and provide treatment. Get the whole community involved, and keep up your guard. Don't be lulled into complacency by decreases in numbers of drug-involved persons in your area. If use has reached an epidemic stage, decreases simply indicate progress, not a solution.

18. *Are there any sources for more details about the coalitions and cooperative efforts described in this report?* Researchers and public-service professionals who provided information for this report are listed in the appendix. They will be glad to discuss their efforts and operations.

# Chapter 1

# Introduction

In 1986, policymakers and public-service professionals in major metropolitan areas around the country suddenly realized that they were faced with an overwhelming problem of widespread cocaine use. Determined to bring this problem under control and to prevent future epidemics from occurring, administrators of Federal, State, and local public agencies attempted to develop better anti-drug-abuse strategies. Two fundamental questions related to these efforts are addressed in this report: Before use becomes ubiquitous, can a new pattern of substance abuse be recognized locally? If a new pattern is recognized, what effective actions can be taken to prevent use from spreading?

This report presents evidence that early recognition of emerging drug patterns is possible and indicates why early recognition is an essential component of successful strategies for countering drug abuse. Based on case studies of three communities that experienced and responded to drug epidemics, the report provides advice for identifying emerging patterns of drug use and taking appropriate action. Suggestions are grounded in the experiences of a broad range of public-service professionals and researchers who were working in the study sites as the epidemics developed.

Written for people concerned about effectively dealing with drug abuse in their surrounding community, this document focuses on how local public-service professionals and researchers can combine efforts to curb increases in drug use. More specifically, the primary objective of this report is to provide concrete recommendations to local policymakers and administrators of criminal justice system agencies, health and mental health organizations, and other public and private associations dealing with substance abuse on how they can prevent future drug epidemics. Lessons learned the hard way from past experiences with "crack" and "ice" point to future steps communities can take to identify developing patterns of abuse and to take appropriate actions.

In particular, the report describes information that was locally available when use of "crack" and "ice" was increasing; the information could have been used to monitor newer substance abuse patterns in the community. Details about the damaging effects of "crack" and "ice" and the official responses to the developing epidemics are given so that communities can select effective ways to curtail the harms that occurred in the study sites. Measures that, in retrospect, professionals in the study sites believed they should have taken earlier are delineated in this report. They are neither examples of wishful thinking nor hard and fast recipes against drug abuse. Rather, they are suggestions born of experience that if implemented could prevent the spread of specific forms of drug use.

## The Case Studies and Basic Findings

The sites described in this report are north Manhattan, central Los Angeles and adjacent communities, and Oahu, Hawaii. The first two locales were selected because they experienced high levels of use and distribution of "crack" or "rock" (smokable base cocaine). Further, they were among the first places where base smoking became popular. This context provided an opportunity to explore how this form of drug abuse increased in popularity, who knew about it, and what actions were taken in response. Oahu provided a context for studying a different local pattern of substance abuse that threatened to increase to epidemic proportions, namely smoking of "ice" (smokable crystal methamphetamine).

In carrying out the case studies, the author interviewed and collected information from local researchers, criminal justice system agency staff, treatment personnel, and others who had been in frequent contact with drug users and dealers when the smoking of base cocaine (or crystal methamphetamine) began to increase. Newspaper stories about these substances were also searched and reviewed. Epidemiologists and researchers in State and Federal agen-

cies were contacted, and they supplied valuable quantitative information about trends in cocaine and crystal methamphetamine use in the study sites. Analysis of these data led to four basic findings about the patterns and responses in the study sites:

- The spread in popularity of smokable base cocaine and smokable crystal methamphetamines occurred years before there was any substantial attention by the media.
- Local public-service professionals and researchers had numerous indicators of the emerging problems, but on the whole the information was not effectively collected from these multiple sources and combined to provide a clear picture of what was happening.
- With regard to smokable cocaine, identification of the problem and responses by public agencies to control the local supply and demand occurred too late to prevent a devastating ongoing epidemic.
- On Oahu where relatively early identification of ice marketing led to coordinated law enforcement, prevention, and treatment efforts, patterns of increasing use of crystal methamphetamines were generally interrupted.

Actions taken on Oahu are not a panacea for eliminating drug use. Some people in hard-to-reach populations, such as adult offenders, are still smoking crystal methamphetamine. And police and other local agencies have had some indication that there may have been a slight increase in the availability of crystal methamphetamine between 1990 and 1991.[1] However, the strategy implemented on the island in the late 1980's was followed by an immediate and remarkable decrease in both supply and demand for ice, and sales and use of ice appear to have remained at a much lower level than in the years before concerted action was taken.

Analysis of the case study materials revealed that the development of crack and rock followed very similar stages in the study sites; on Oahu, ice use developed in a corresponding way. The following (described in more detail in the next chapter) are the stages that were identified:

- Stage 1: Endemic use in small, isolated communities or subcultures.
- Stage 2: Grassroots switches to various types of drugs or preparations.
- Stage 3: Local coalescence of opinion that a specific drug preparation was the favored one.
- Stage 4: Acceleration of distribution of the favored preparation by enterprising dealers.
- Stage 5: Precipitous increases in use.
- Stage 6: Epidemic use and system overload.
- Stage 7: Media coverage.

## An Overview of Increases in Popularity of Smoking Cocaine

The media first reported on increased smoking of crack in Manhattan and rock in Los Angeles in late 1985. This was more than 5 years after smoking base cocaine (later called "crack" or "rock") became popular among specific groups in Harlem and south central Los Angeles. Figures 1 and 2 summarize the history of base cocaine use in these areas. These timelines, beginning with 1980, briefly describe evidence of the increasing use of smokable cocaine, first giving the year the particular form of increase became apparent.

By 1980, in both Manhattan and Los Angeles, use of formerly sought-after drugs such as heroin and PCP had begun to decline, and the popularity of cocaine smoking was starting to spread locally. New smokers began to participate in base use at neighborhood parties and social clubs. Also around 1980 in south central Los Angeles, simple recipes using baking soda for "rocking up" cocaine (converting the acid powdered inhalant form to smokable base) circulated at local parties and began to spread by word of mouth through social circles to adjacent areas. Although these simple recipes for individually cooked base were not commonly known in Manhattan, local "kitchen chemists" in Manhattan mastered slightly more complicated formulas in enough numbers to supply smokable cocaine to more and more friends and relatives.

By 1982, a substantial number of drug users in both sites already considered smoking cocaine to be a very desirable way to get high; the drug had gained a reputation as "the best thing since sex" according to many. Beginning around 1983, neighborhood hustlers, including dealers who already sold various types of drugs, realized that the local popularity of base presented an opportunity to enhance their profits. They could market cocaine pre-prepared in a smokable form, and since the wholesale price of the precursor acid powder form of cocaine was beginning to drop, they could escalate their profits by holding street prices constant for

**Figure 1**

**BASE COCAINE USE TIMELINE: NORTH MANHATTAN**

| | |
|---|---|
| 1980 | Increasing number of people frequent after-hours clubs to have cocaine cooked into base. |
| 1981 | Simpler instructions for cooking base are available. Demand for base increases. Outpatient treatment facilities in Harlem report more clients. |
| 1982 | Harlem Hospital emergency room cases involving cocaine begin to appear. Cocaine use among residential treatment clients increases. |
| 1983 | Wholesale prices for cocaine drop; dealers make huge profits. More youth sell cocaine. Buyers demand pure "rock" and cook their own base using baking soda. Cocaine-related emergency admissions in areas surrounding Harlem begin to increase. More pregnant women use cocaine and transmit lore about benefits of smoking base during childbirth. |
| 1983—late | Prices for cocaine drop; small quantities are aggressively marketed to new users. Primary drug of abuse switches from PCP to cocaine in cases seen at Harlem Hospital. Citywide cocaine use, drug dependency, and homicide rates increase. Drug arrests involving cocaine rise slightly. The term "crack" is first used on the street around the end of the year. |
| 1984 | Cocaine street addicts replace heroin addicts. Crack is sold in vials. Crack is seized by the DEA. |
| 1985 | Young women's use of cocaine is prevalent. |
| 1985—mid | First of over 500 *New York Times* articles on cocaine base appears. |
| 1985—late | First *New York Times* article uses the term "crack." Vials/"crack pipes" are widely available throughout city. |
| 1986 | Public demands crack be driven from middle-class areas. Cocaine use among young women continues to increase. |
| 1986—May | NYPD forms new special anti-crack unit; street-level enforcement targeted to "crack" dealers. |

base. By 1984, the earnings of the original group of dealers induced other hustlers to set up shops for selling smokable cocaine. Competition led to various marketing strategies, including selling base or rock in small, more affordable amounts. In New York, intense competition led to other forms of advertising including packaging of base in small, distinctive vials and using catchy names like "crack."

Accelerated by the vigorous marketing, base use started to rise precipitously between 1984 and 1985, and the needs of users began to overwhelm municipal and county agencies. At that time, street and indoor markets for crack or rock became flagrant. Law enforcement agencies developed new tactics to close them down, and the media began to report on efforts to rid the areas of crack or rock. In reaction, outraged residents demanded more vigorous law enforcement, and public agencies began to report and adopt measures to respond to the epidemic. More than 6 years later, cocaine smoking was still at epidemic levels, although various

**Figure 2**

**BASE COCAINE USE TIMELINE: LOS ANGELES COUNTY**

| | |
|---|---|
| 1980 | More people using base at parties know about using baking soda to prepare base. Prostitutes learn to prepare cocaine for smoking. Police find cellophane packages containing base in central Los Angeles and receive complaints about "rock houses." Court cases in central Los Angeles reflect a shift from PCP to cocaine involvement. More clients entering drug treatment programs report cocaine use. |
| 1981 | Easy recipes for preparing base spread. Cocaine addictions become visible among regular drug users. Number of clients entering drug treatment who use cocaine increases once more. |
| 1982 | Rock cocaine is found in homes searched by police. Arrests involving cocaine begin to increase dramatically. |
| 1983 | Narcotics unit police officers note more youngsters involved in cocaine distribution. Other signs of hierarchical organization of cocaine distribution emerge. Cocaine use increases among patients requiring treatment for problems other than drug abuse. |
| 1984 | Cocaine use becomes prevalent among young adults; cocaine smoking addictions are prevalent among prostitutes. Paraphernalia for smoking cocaine are visible in central/west areas. Price for smokable cocaine drops to about $20/rock. Arrests and court cases involving cocaine increase dramatically again. |
| 1985 | School age youngsters in central/west areas know about cocaine smokers. Cocaine addictions among drug treatment clients increase. Price for smokable cocaine drops to $5/rock. Cases involving cocaine overwhelm police and courts. First *Los Angeles Times* article mentioning rock reports on battering ram used by police to enter rock house. |
| 1986 | Number of base users and addicts increases. Enforcement tactics and distribution tactics escalate. Public recognizes problems caused by cocaine. |

measures (described in the chapters that follow) appeared to have somewhat reduced its incidence in the study sites.

## An Overview of Increases in Popularity of Smoking Methamphetamine

Although not widely covered in news stories until 1988 and after, smoking crystal methamphetamines (known as "batu") was a typical form of drug use among certain ethnic groups or communities in Oahu before 1980. (For a brief chronological summary of smokable methamphetamine use after 1979, see the timeline presented in figure 3). During the early 1980's, as in the other two study sites, cocaine smoking began to increase in popularity on Oahu, although most resident drug users preferred or could only afford to use pakkalolo (Hawaiian-grown marijuana). At the same time, batu smoking also increased in popularity, especially among industrious immigrants from the Far East who used the substance to stay awake while working both day and night.

**Figure 3**

**METHAMPHETAMINE (AND COCAINE) USE TIMELINE: OAHU COUNTY**

| | |
|---|---|
| 1980 | Use of cocaine including base increases among Caucasians. More Caucasian clients entering drug treatment programs report cocaine involvement. "Batu" (crystal methamphetamine) is smoked by a small number of Filipino men. |
| 1981-82 | Base cocaine is used by non-Caucasian populations. Recipes for cooking base spread. |
| 1982 | Cocaine addictions become apparent among regular users of drugs. More clients entering drug treatment programs report cocaine involvement. Batu smoking continues among Filipino men. |
| 1983 | Outreach workers note increasing number of Filipino men who smoke batu. Small amounts of batu are distributed to non-Filipino students in Waikiki and East Oahu. DARE police officers hear about batu from youngsters in school classes. Cocaine base use continues to increase. |
| 1984 | Batu use continues to increase among Filipino males. Number of individuals making and distributing batu increases. DARE officers recognize how batu differs from cocaine. Cocaine use continues to increase. |
| 1985 | Destruction of marijuana crops takes place throughout Hawaii. Cocaine in small amounts is sold as "crack." School staff hear more about students' family members smoking crack and batu. More methamphetamines are imported. First of many deaths associated with methamphetamines occurs on Oahu. |
| 1986 | Cocaine use is common among treatment populations. Cocaine and methamphetamine sales are visible in some areas of Oahu. Glass batu pipes are seen more frequently. More young children are affected by family members' use of crack/batu. Honolulu Narcotics Division has first case involving "ice." |
| 1987 | Crystal methamphetamine use is relatively popular among youngsters. Number of adults addicted to methamphetamines increases. First teens addicted to batu enter treatment. Hotlines receive many calls from frightened methamphetamine smokers. Public agencies on Oahu organize to control "ice." |
| 1988 | Youth services are flooded with referrals of crystal methamphetamine users. *Honolulu Advertiser* publishes its first article on crystal methamphetamine use. Many agencies on Oahu take action to prevent methamphetamine sales and use. |
| 1989 | Arrests involving crystal methamphetamines increase. Prices of crystal methamphetamines begin to increase. Among students, all types of drug use decrease. Some adult users switch from crystal methamphetamines to cocaine. |

Shortly after a concerted effort in 1985 to eradicate marijuana crops on the neighbor islands of the State of Hawaii, a shortage of pakkalolo did occur on Oahu, and the popularity of smoking batu rose. As with base smoking in Manhattan and Los Angeles, smokable crystal methamphetamine preparations were originally home cooked, and the initial spread of recipes was primarily through overlapping social circles. This drug's favorable reputation, especially among figure-conscious young women and adolescent girls, was that it produced a "high" that lasted for hours and led to rapid weight loss.

According to some sources for this study, enterprising dealers on Oahu were inspired by stories of profits from crack and rock sales on the mainland. In any event, they realized that there were potentially high gains to be made by marketing prepared smokable crystal methamphetamines, so they developed the term "ice" as part of their marketing strategy. Although more costly per "hit" than base cocaine, smokable methamphetamine was nonetheless touted as a relatively inexpensive, pure, hard-to-detect, reusable drug that produced better and longer highs than cocaine.

In 1986, the Honolulu police, while investigating a homicide, inadvertently learned about an organization dealing ice and began to investigate the drug and its use. Within months, by cooperating with other criminal justice agencies and with professionals in many different public agencies on the island, the mainland, and in other countries, the police department recognized the increased popularity of smoking crystal methamphetamines and cooperated in spreading the word that it was a serious problem and a harmful practice. Especially problematic were the relatively large numbers of out-of-control youngsters smoking methamphetamine and the recruitment of youth into organized channels of distribution. In response, during 1987 and 1988, many agencies made comprehensive, coordinated efforts to curtail methamphetamine smoking and sales.

By 1989, organized ice dealing appeared to have been generally suppressed, and use was dropping rapidly on Oahu. In the years since, rather than letting up on their efforts, law enforcement, treatment, and drug prevention agencies have continued to closely monitor indicators of ice availability and to focus on areas and populations where smokable methamphetamine continues to be distributed and used.

## A Brief Look at Information Available To Detect Shifts in Local Drug Patterns

The initial stages in increasing popularity of smoking cocaine did not go totally unnoticed in Manhattan or Los Angeles. Many people had indications or even hard evidence that something different was happening. The early stages were also noted by epidemiologists and drug abuse researchers in Los Angeles and New York City known for their exemplary data collection efforts and research. Yet it seems in retrospect that the developing patterns were unapparent to most people because the kinds of data that were being analyzed on an ongoing basis were more appropriate for detecting wide-area changes rather than community trends. Information that would have been useful for identifying local patterns was fragmented and underutilized.

Later analysis of the multiple, fragmentary kinds of information provided by the sources for this report offered a coherent picture of the local drug use scene as it had changed over time in the study sites. Chapter 3 discusses how these same types of information could be used in the future for recognizing locally developing patterns of substance abuse. The following are sources of information that seem to be most useful for identifying different stages of developing patterns (see also figure 4):

- *Stage 1.* Information about isolated *endemic use* of base was captured by researchers and public-service professionals who had a trusting, ongoing relationship with people who used substances disapproved of by most of society. These researchers included anthropologists and ethnographers studying "deviant" groups or ethnic subcultural enclaves; as part of their research they collected voluminous details about the life-styles they were studying, including use of legal and illegal substances. Outreach workers and field case workers serving similar populations may not have taken such detailed notes on use of drugs, but their personal observations provided rich sources of information.
- *Stage 2.* Initial *grassroots switches in types of drugs* used in localities were also noted by anthropologists, ethnographers, and outreach workers. Additionally, street research teams that were specially trained to monitor open drug markets were able to provide valuable information. Researchers who regularly collect data about forms of drugs heard about on the streets (for example in the Drug Use Forecasting (DUF) program

**Figure 4**

**DEVELOPMENTAL STAGES AND KNOWLEDGEABLE SOURCES**

| | |
|---|---|
| Stage 1: | Isolated endemic use |
| | Anthropologists<br>Ethnographers<br>Outreach workers/field case workers |
| Stage 2: | Initial grassroots switches in types of drugs used |
| | Previous resources plus:<br>Street research teams<br>Individual police community patrol officers/narcotics officers |
| Stage 3: | Local coalescence of opinion and local spread of a specific preparation |
| | Previous resources plus:<br>Local drug treatment counselors/hotline staff<br>Local medical staff (psychiatric/obstetrics if women users)<br>School counselors<br>School-based prevention program staff |
| Stage 4: | The acceleration of grassroots dissemination by enterprising dealers |
| | Previous resources plus:<br>Police recipients of local complaints/calls for service<br>Narcotics units<br>Police laboratory statistics<br>Criminal justice system population urinalysis statistics |
| Stage 5: | Precipitous increases in use |
| | Previous resources plus:<br>Local surveys of treatment admissions<br>Local medical examiner/DAWN statistics<br>Local self-report surveys (school, household, criminal justice populations) |
| Stage 6: | Epidemic use and system overload |
| | Previous resources plus:<br>Administrators in health/mental health/law enforcement agencies |
| Stage 7: | Media coverage |

described later) also have relevant information; in particular, the DUF data indicate clearly that ice was not being marketed in Manhattan or Los Angeles in 1990. Individual community patrol officers, narcotics officers, and other criminal justice system agency officers who conduct street-level surveillance often are excellent sources of observations concerning happenings in their immediate locales.

- *Stage 3.* Information about *local coalescence of opinion around the superiority of a specific drug preparation* is also normally acquired by the same sources that have information during stage 2. Other professionals who are in contact with drug users hear about these users' often diverse reasons for using a particular drug during stage 3; these include drug treatment counselors, hotline staff, medical staff (especially emergency room psychiatrists), and, when young women are users, obstetric staff. School counselors and school-based prevention program staff also learn about drugs that youngsters use themselves or see their families or neighbors use.

- *Stage 4.* Indicators about the acceleration of grassroots *distribution of new forms of drugs by enterprising dealers* typically come to the attention of staff members in certain divisions of law enforcement agencies, including those who receive complaints or calls for service from local community members. Records normally maintained by narcotic unit officers and police laboratory analysts also incorporate vital data about shifts in the substances sold locally or changes in the marketing techniques used to increase sales. Statistics based on urinalysis of criminal justice system populations, especially those arrested for distribution of controlled substances, also seem to provide insights into local shifts in drug use—and could be used in the future to monitor types of substances used by dealers who are sampling their own wares.

- *Stage 5. Precipitous increases in use* are readily noted by professionals in contact with substance abusers as well as by local statistical series. These latter include local surveys of drugs used by persons admitted for drug treatment, local medical examiner reports on drug-related deaths, community emergency room statistics on cases involving particular drugs, and self-report surveys of populations from the area including students, household members, and criminal justice system populations. Field investigations conducted by epidemiologists are useful for quickly confirming an emerging epidemic.

- *Stage 6. Epidemic use and system overload* are readily observable by administrators and staff of agencies that deal with drug users, including schools and health, mental health, and law enforcement agencies.

In the early stages of an evolving pattern of illegal drug use, each type of information discussed merely suggests a potential problem, and sources will often conflict with each other. However, as shown in chapter 3, multiple sources considered together can provide powerful indications of an emerging problem. The collection and use of multiple local indicators is one of the primary recommendations of this report.

## Summary of Recommendations for Effectively Dealing With an Emerging Problem

The recommendations summarized below are drawn from the experience gained in this study. The first recommendation sets the goal of gathering and exchanging information before the first signs of a drug epidemic occur. More specific recommendations for accomplishing this goal are provided in chapter 5, which also contains recommendations for strategies to implement when a developing pattern is recognized.

The second recommendation concerns the importance of coordinated responses from agencies that span the continuum from prevention to enforcement to treatment. Since 1986 when the cocaine epidemic was publicly recognized in the study sites and other cities around the country, much has been learned about strategies that are and are not effective for diminishing substance abuse and curtailing sales. In large part, the apparently efficacious strategy carried out on Oahu described in chapter 4 was based on knowledge of the mainland's experience with crack. The basic lesson learned was that effective strategies cannot be carried out by a single agency or by using a single approach.

The specific steps for carrying out the second recommendation come from a broad range of public-service professionals and researchers including those in the study sites. The steps are based on lessons learned from past experiences, research, and outcomes, and are closely analogous to the 1991 and 1992 National Drug Control Strategy.[2] They are delineated in recommendations 3 through 7 below:

***Recommendation 1.*** To monitor local forms of substance abuse and identify changes, form a coalition of public-service professionals and researchers to meet and exchange relevant information on a regular basis.

***Recommendation 2.*** To effectively curb an incipient epidemic, involve a spectrum of agencies in a coordinated effort simultaneously focused on prevention, law enforcement, and treatment.

***Recommendation 3.*** Before initiating action in response to changes in substance abuse, find out as many facts as possible about the properties of the drug, the method of distribution, and the appeal to users.

***Recommendation 4.*** To help prevent initiation or continuation of use of a particular substance, publicize factual information about its symptoms of use and health hazards; target realistic publicity about hazards to groups most likely to find the drug appealing.

***Recommendation 5.*** Be alert to early indications of businesslike marketing and act rapidly to disrupt organizations at all levels of dealing.

***Recommendation 6.*** Mount a coordinated effort to identify frequent users and provide effective intervention.

***Recommendation 7.*** Realize that significant reductions in people who use or are dependent on drugs are forms of success, yet these positive results do not mean the problem has been solved. Maintain monitoring and prevention efforts, search for and provide effective treatment to people who are still frequent users, and continue to focus law enforcement efforts on drug trafficking organizations at every level of distribution.

***Recommendation 8.*** Carry out responses to changes in particular forms of drug use as part of a continuous, integrated community effort to reduce all forms of substance abuse.

## Organization of This Report

The remaining chapters describe the evidence from the study sites that underlies these recommendations and suggest materials to help communities implement similar strategies. The report is intended to help readers deal with future patterns of drug use, but it must be remembered that all of its evidence is drawn from after-the-fact examination of what was known about crack, rock, and ice use patterns in the 1980's.

To alert communities to conditions fostering substance abuse, chapter 2 describes the context in which drug use patterns evolve and provides details about the five pre-epidemic stages, illustrated with concrete examples from the case study sites. Chapter 3 describes the kinds of information and data that may help clarify signs and symptoms of developing drug use patterns; it also discusses issues that affect the usefulness of these types of data for monitoring future patterns. Chapter 4 describes the range of responses to an emerging pattern of substance abuse, illustrated with specific examples from the study sites. Chapter 5 presents in greater detail the policy conclusions and recommendations outlined above.

## Endnotes


1. Wood, D. William, and Christina Carlson. 1991. "Trends of Illicit Drug Use in Honolulu, Hawaii." In *Community Epidemiology Work Group Proceedings*. Rockville, Maryland: National Institute on Drug Abuse, pp. 122-138.

2. The White House. 1991. *National Drug Control Strategy*. Washington, D.C.: U.S. Government Printing Office. The White House. 1992. *National Drug Control Strategy*. Washington, D.C.: U.S. Government Printing Office.

# Chapter 2

# Stages of Development of Drug Use Patterns

This section describes how specific forms of drug use develop. The context of developing patterns is discussed first, followed by the way a drug use pattern develops, divided into seven stages. The developmental stages described here were derived by studying the chronology of the patterns of drug use that emerged in the three study sites (see figures 1, 2, and 3 in chapter 1). The stages are illustrated with examples from the development of the use of "ice" on Oahu and of "crack" in Manhattan and Los Angeles. While not definitive, the seven-stage framework is also intended to provide a guide for future assessments of whether a new pattern of abuse is emerging. The subsequent chapters give examples of applications of the seven-stage framework.

## The Context of Developing Drug Use Patterns

The development of a specific form of drug use takes place in the context of current local attitudes about drug use and substance abuse in general and about specific types of drugs. In examining the drug abuse context at any given time, it is important to keep in mind the following factors.

### *Patterns in Popular Opinion About Specific Substances and Their Use Are Cyclical*

The popularity of particular types of drugs, including coca products and amphetamines, has been cyclically rising and falling for longer than recorded history. For example, over a period as long as 50 centuries coca has been used in the form of dry leaves, coca extracted from the leaves, coca paste, cocaine hydrochloride, and cocaine base[1]. Various forms of amphetamines have been popularized off and on for at least as long.[2] Because of this long history of use, most drug use patterns that seem to be "new" actually involve growing popularity of "old" drugs. In such cases it is possible that a wealth of information about the drug was collected in a previous cycle of popularity.

### *Declines in Popularity of One Illegal Substance Are Precursors to a Rapid Increase in the Popularity of Another Substance*

Widespread use of a particular drug can be envisioned as a fad, which develops like other fads. Characteristically, fads include "a remarkable increase in the prevalence and the intensity with which people scattered over a fairly wide area engage in a type of behavior," and concern on the part of people not caught up in the fad that the "behavior is ridiculous, dangerous, or immoral."[3] After a fad reaches a peak, it drops off abruptly and is followed by a counter-obsession. Obviously, epidemics of substance abuse differ from other fads because of the potential for physical addiction and continued use, but addiction itself may help stimulate the next counterobsession.

The developing use of crack cocaine and ice crystal methamphetamine in the last decade—the focus of this report—can thus be seen in the context of the rapid decline in the popularity of other drugs. Heroin was going out of fashion in the 1970's, and PCP was rapidly losing its appeal by the end of 1979 and the beginning of 1980. Dramatic increases of crack and ice use on Oahu also took place soon after there was large-scale destruction of crops of the island's most favored drug at the time, marijuana.

### *Ongoing Experimentation Is Taking Place With Different Forms and Modes of Administration of Drugs*

Just as legal substances such as alcohol, tobacco, and caffeine are constantly prepared and manufactured by a

wide range of methods, with each brand and type having at least temporarily an ardent circle of admirers, so illegal substances are prepared from a variety of sources and cut, diluted, or distilled with various ingredients that are touted to "improve" the end product. People who use mind-altering substances are constantly appraising and comparing different drug preparations and ways to administer them. Typically, new forms of preparation and administration are given new names and are surrounded with lore about their supposed benefits. The spread of lore about a preparation may signal its increasing popularity, and if the lore is actually more myth than reality, an opportunity for intervention exists.

### *A Drug's Popularity Stems From Both a Grassroots Movement and Promotion by Organized Drug Distributors*

Among the many experimental preparations of illegal substances, most never gain popularity. As with other fads, in the initial stages of innovation it is difficult or impossible to predict exactly which specific preparation and mode of administration will become widely used. Our studies suggest that the increased popularity of crack cocaine and ice methamphetamine began at a community level. However, once the increasing popularity was noticed by hustlers, dealerships were formed to market the preparation, resulting in a deliberately accelerated increase in popularity.

The remainder of this chapter outlines in more detail these stages in increasingly popular use.

## Stage 1: Isolated Endemic Use

Stage 1 refers to isolated use in small areas and is the lowest level of use that is ever realistically achieved. (Even when a specific form of drug use is extremely unpopular and publicly condemned, a low level of endemic use continues to exist.)

### *The Example of Cocaine and Methamphetamines*

In the beginning of the 20th century, coca products were used by many people in the form of tonics, wines, and teas.[4] The benefits of coca products were extolled publicly until early in the 1920's, when the manufacture and distribution of coca products (and alcoholic beverages) were legislatively prohibited. Even though prohibition was effective in suppressing coca use, coca products, though no longer popular, continued to be used by relatively small numbers of people who belonged to specific subcultures.

For most of the 1970's, the decade before the years described in this report, cocaine use was confined primarily to relatively well-to-do groups. In the study sites, users were mainly people connected with the entertainment industries—in north Manhattan, musicians and audiences in after-hours clubs; in Los Angeles, actors, musicians, and other artists associated with the film industry; and on Oahu, entertainers and others working in the tourist hotels. Although periodically cocaine was used in combination with other drugs and occasionally smoked in its base form, most users snorted acid cocaine preparations. The few cases of cocaine addiction seen by physicians occurred primarily among cocaine snorters who entered private hospitals.

Methamphetamine use, too, had its earlier heydays. In its last incarnation, when it was called "speed," the substance was popular among "flower children" during the 1960's, bikers, and other counterculture groups. The drug received widespread public recognition as a dangerous substance, in part through public health announcements that "speed kills." Although its use decreased sharply, methamphetamine nevertheless continued to be used by some members of specific subcultures.

In the study sites, this endemic methamphetamine use was confined primarily to remnants of groups that had been users during previous periods of popularity. In Los Angeles and New York, a few "speed freaks" continued to use crystal methamphetamine. On Oahu, use was primarily confined to aging "hippies" and to immigrants from Asian countries where methamphetamine use had continued since the 1940's.

## Stage 2: Initial Grassroots Switches in Types of Drugs Used

Stage 2 refers to a period during which the types of drugs used by the most frequent consumers in a community are in a state of flux. Typically, users of one drug experiment with another drug that is in endemic use among people who are in close geographic proximity. Experimentation may occur as part of a search to replace drugs that were formerly used frequently, either because the previous drug is losing appeal or because it has become less accessible. During this stage, various forms of preparations and modes of administration of a number of substances may typically be tried.

### *The Example of Shifts From Opiates to Cocaine*

Aside from marijuana, which was ubiquitous during the 1960's and the first half of the 1970's, opiates appeared to be the type of controlled substance most widely used in urban areas in the United States. Frequent users of heroin were generally "between the ages of 21 and 30, poorly educated and unskilled, and members of a disadvantaged ethnic minority group"[5] such as young men residing in north Manhattan and in south central Los Angeles.

By the 1970's, heroin users and nonusers in Manhattan had become aware of the disastrous consequences of heroin use there. One out of every 20 babies delivered in Harlem Hospital was born addicted.[6] Crime rates increased as heroin users became entrenched in lifestyles of hustling and cons, and the most severely addicted turned to theft, burglary, and violent robbery to support their habits. Harlem, once a nighttime playground, was shunned by many potential visitors. And night or day, in north Manhattan as well as other parts of New York, slow-moving or sprawled-out nodding addicts were visible on the streets. Public opinion placed high priority on resolving the apparent problems, and in response millions of dollars were allocated to treating heroin addicts and arresting "dope" dealers.

Around this time, drug use in two study sites began to shift from heroin to a variety of other drugs, including cocaine. Some switching occurred among recovered addicts who steered clear of opiates but substituted cocaine.[7] Other drug users in the study sites who preferred nonopiates were youngsters who had witnessed the social and physical disintegration of heroin-addicted family members or neighbors. And still others were heroin users who combined opiate use with other classes of drugs.[8] By the late 1970's, in the inner city cocaine users greatly outnumbered heroin users.

At the same time, people who were involved in endemic use of cocaine, like those who frequented Harlem after-hours clubs, began to prefer smoking base to snorting acid powder. Yet at the end of the decade a variety of cocaine preparations were still being used in north Manhattan and Los Angeles inner city areas. Furthermore, cocaine had not emerged as a popular street drug among the most frequent consumers of drugs, in part because the drug was still expensive. In fact, health professionals in central Harlem called PCP "the poor man's cocaine."

During the same period, on Oahu, drug use was also in a state of flux. Oahu had largely escaped the heroin epidemic that ravaged the inner city areas of New York and Los Angeles, perhaps—as one outreach worker suggested—because Hawaiians do not like using needles. But the rich diversity of ethnic groups who had immigrated to the island or visited as tourists brought with them a mix of drugs that began to rival marijuana in popularity. Pertinent to our discussion here, Caucasians brought cocaine, both powder and base, and Filipinos brought "batu"—a relatively pure form of crystal methamphetamine.

> *"Local people [Hawaiians] do not like needles. We're a very oral society. They snort, smoke, or swallow, but they do not poke." –Outreach worker*

## Stage 3: Local Coalescence of Opinion about the Merit of a Specific Preparation

Stage 3 arises out of stage 2 when opinions begin to coalesce around one specific substance, giving it a most favored status. Frequent users of drugs discuss and justify the selection of a particular substance as the best available, resulting in an overlapping mix of explanations. A rich lore about a drug increases its lure. Among frequent users of drugs, information and rumors about a "new" drug often spread faster than the substance itself.

### *The Example of Local Coalescence of Opinion Around Cocaine, Especially Base Cocaine, and Methamphetamines*

By 1980 cocaine began to emerge as the most favored drug in all three study sites. PCP had been publicized as an extremely dangerous drug resulting in violent psychotic episodes, but cocaine was gaining a good reputation. Mass media portrayals of cocaine use among the upper class surrounded cocaine with an aura of high status, and among some groups cocaine was thought to increase enjoyment of sex.[9]

In both the inner city in Los Angeles and in north Manhattan, the base form of cocaine rapidly gained popularity. Local lore, a mixture of fact and fantasy, touted base as being healthier than the acid form.[10] Some users believed that base induced euphoria devoid of unpleasant side effects. Other users considered base to have the additional benefit of a

more instant "high" achieved from smoking rather than snorting. Some preferred smoking base to avoid snorting's adverse effects on the nasal passages. In addition, rumors then circulating attributed ill effects to diluents like lactose which were removed from cocaine in the preparation of base.[11]

In Los Angeles, inner city kitchen chemists had already figured out relatively simple ways of preparing base without using explosive solvents. Recipes for preparing base circulated at parties among people entrenched in the drug culture. Drug users involved in other deviant activities, including prostitutes and other central city arrestees, quickly learned to "rock up" base cocaine for their own use; they carried the "rocks" around in little cellophane bags. In New York, where the recipes for creating base were still relatively complicated and required scarce reagents, drug users who had never frequented after-hours clubs began to show up there in large numbers to have their cocaine converted into base.

On Oahu, opinions about cocaine differed among ethnic groups and subcultures. In the Waikiki area, cocaine was popular, especially among Caucasians. However, while gamblers and prostitutes were basing, snorting powder cocaine seemed to be preferred by street people, hotel service workers, and staff and patrons in bars. In Wai'anae and other impoverished areas, Hawaiian and part-Hawaiian residents preferred alcohol, marijuana, and cocaine—especially freebase cocaine. As in Los Angeles, Oahu users had reportedly learned to prepare base themselves from the hydrochloride form.

But among groups like the Filipinos who traditionally did not engage in drug use, neither the acid nor the base form of cocaine became popular. At the same time that base cocaine was increasing in popularity among other groups on Oahu, lore about batu was developing among Filipinos. Given the high cost of living on the island, many recent immigrants from the Philippines were literally working day and night to support their families. Smoking batu was a way they could stay alert while holding down several jobs. Additionally, the word went around that batu was an ideal drug to use on the job. Crystal methamphetamine does not have a strong characteristic odor when smoked and can be repeatedly heated and cooled down. Workers could therefore keep a pipe of batu with them; when they felt overwhelming fatigue, they could fire their pipes, inhale the vapor, and go back to work.

Word began circulating among Hawaiian and part-Hawaiian users who lived in the same communities as Filipino users that the crystal form of methamphetamine was stimulating, and stories abounded about the satisfactions of smoking the glass pipe. Hawaiian and part-Hawaiian users learned from their neighbors how to prepare relatively pure crystal methamphetamine. However, some suggested that they were as addicted to the pipe as to the drug. They reported that much of their enjoyment came from the ritual of adding the drug to the pipe, watching the vapor swirl around as it was heated, and watching the drug recrystallize. Getting a perfect blue flame that would produce enough heat to vaporize the crystals but would not crack the pipe was also a source of satisfaction. According to some frequent batu consumers, after prolonged periods of use they no longer got high but still enjoyed the rituals.

As grassroots dissemination of batu began to spread to younger members of the community, lore about the drug began to be shaped by other influences. Young users who also smoked cocaine spread the word that batu increased the length of a cocaine high. Once the drug reached the Caucasian minority group, young women users sowed the notion that batu use encouraged weight loss. (This is consistent with past lore about various forms of amphetamines.)

## Stage 4: The Acceleration of Distribution by Enterprising Dealers

In stages 1 to 3, drugs are distributed within social groups. Youngsters get substances from other youngsters, and friends and family members constitute the primary sources of illegal substances.[12] Stage 4, on the other hand, is characterized by a more formal economic organization for distributing a progressively popular substance; at the same time, informal drug distribution continues to take place.

Criminologists have long noted that the organization of local dealerships around an increasingly popular but illegal commodity follows typical patterns in a free enterprise economy. The most likely organizers of illegal markets are people who are seeking "paths from rags to riches" but find legitimate paths preempted.[13] In addition, people who participate in developing local markets for a popular illicit substance are also likely to be marginally employed residents of communities where favorable public opinion has coalesced around a particular substance.

Preparation and distribution of popularized substances begins to be co-opted by enterprising local individuals or groups. Often they are members of the same groups who were involved in stage 1 endemic use of the substance or who recently switched from another drug. Initial involvement in

distributing the drug may have more of a social than an economic purpose. However, once people realize profits from supplying users in their own communities, they seek to increase their profits by developing new markets in the same or adjacent areas.

### *The Example of Base Cocaine and Crystal Methamphetamine Dealerships*

In Los Angeles and New York, the first dealerships organized to market smokable base cocaine were respectively called "rock" houses or "base" houses. Although frequent users in Los Angeles already knew how to "rock up" cocaine, as early as 1980 businesses were created to prepare the base form. The prepared base seemed first to appeal to local residents and then to draw people from adjacent areas who carried away small amounts of rock or base in cellophane packages.

In north Manhattan, before the simple baking soda recipes for preparing base circulated around 1983, the after-hours clubs could not meet the demand of locals who came to have cocaine cooked into base. Base houses were established to meet this increasing demand. As in Los Angeles, the first customers appeared to be locals who were frequent users of cocaine. But as stories about base circulated in nearby neighborhoods, more and more new customers came to the base houses.

Organized "base" or "rock" houses did not appear on Oahu. They may not have been profitable because base did not become popular on the island until later, when simple recipes for cooking base became relatively widespread. Moreover, the absolute numbers of users in Oahu was much lower than in Manhattan and Los Angeles and may have been too low to support this form of enterprise in the early 1980's. By the time the demand was sufficiently high to make a base house economical, the Honolulu police were aware of the problem and on the lookout for such houses; they apparently shut down the few that were formed. However, demand on the island grew enough to encourage wholesalers to increase their supplies of cocaine.

Local women were among new users that hustlers in all three sites cultivated as customers for smokable cocaine. There is some indication that male dealers consciously marketed base cocaine and, on Oahu, crystal methamphetamine to women for various reasons—none altruistic. While some dealers simply saw women as a lucrative market, others bartered base for sexual favors. Still others reportedly believed that once committed to frequent use, women would become auxiliary distributors who would generate potentially more profit than men; if the women used the base they were supposed to distribute, they could be made to earn back the money through prostitution.

Whether or not male dealers consciously developed the female market, women who had previously used powder cocaine or PCP appeared to be promising constituencies for the base form. While heroin always appealed more to men than women, the use of other drugs (including cocaine) by young women had been steadily climbing for over a decade. As described in more detail under stage 5, women who were frequent users, like prostitutes, were told that base offered particular benefits to the female sex.

The increasing demand for base in the early 1980's coincided with a drop in wholesale prices for cocaine in South American countries in 1983. Retail street prices were not immediately reduced, and cocaine dealers who bought low and sold high realized enormous profits. The attraction of big profits and the availability of cocaine rapidly spurred inner city youth in both New York and Los Angeles to participate in the trade. Fierce competition among retail dealers created intensive marketing, including word-of-mouth advertising about the quality of cocaine a dealer had available. By the end of 1983, many cocaine users were sold on the importance of buying pure cocaine or rock[14] that they could independently cook into the base form.[15]

> Masterrap and Charlie [who were dealers] both noted the sudden change among their friends: "I had a female friend who came to me one day and asked if I knew anyone who sold coke," Masterrap remembers....I told her, "yeah"....She said, "We wanna get some rock, pure rock," in this squeaky little voice....Everyone all at once wanted rock. I talked to Chillie [a midlevel dealer] about it and he just said, "It's gonna cost'em," with this big smile on his face.[16]

As competition and large supplies drove street prices down, dealers tried to maintain their profits. They added fillers like lactose and compressed the mixture so that it resembled the relatively pure forms that contain little flakes and pebbles of the drug. When buyers became more sophisticated and could instantly spot adulterated cocaine, the dealers more often offered the precooked base form of the drug. And when prices continued to drop, around 1984, they aggressively sold small amounts of base for under $10 to populations that had not previously used cocaine.[17]

The sale of smokable methamphetamine on Oahu followed a similar course, although somewhat later than smokable cocaine. Batu use had been slowly increasing among Filipinos, Hawaiians, and part-Hawaiians who were living in the same communities. Youngsters from the communities most heavily involved in batu use began to distribute some of the drug to fellow students. The first economically motivated sales of batu outside the Filipino and Hawaiian communities reportedly took place in Waikiki. Filipino workers who initially used batu for its on-the-job stimulant properties sold small amounts to coworkers and others involved in the hotel and tourist industry in Waikiki.

Apparently inspired by the large profits mainland dealers were making by selling smokable base, Oahu residents who were entrenched in the drug culture considered intensively marketing smokable methamphetamine. However, although base cocaine use was also gaining acceptance, the most popular drug on the island among the ethnic groups most likely to use substances was "pakkalolo" (marijuana). Dealers had reasonable doubts that enough pakkalolo users would switch to batu to make sales profitable.

The economy of the drug market in Hawaii changed abruptly in the mid-1980's. Systematic destruction of marijuana crops by public agencies led to a sudden decrease in the availability of pakkalolo. Criminal justice system authorities took satisfaction in reports that for the first time in decades marijuana was no longer flowing out from Hawaii but rather was having to be imported. In the years that followed, the sale of batu in small amounts, or "hits," became profitable.

## Stage 5: Precipitous Increases in Use

In stage 5, the use of a substance spreads like wildfire. Typically, the sharp increase in use is propelled by ready availability, low cost, and a widespread notion that the substance is desirable. Rather than relatively slow diffusion from individual to individual within groups, stories about the drug become widespread through grassroots processes and marketing strategies. Entire groups or individuals who would like to be considered members of the groups start to use it.

As demand increases, more suppliers are drawn into the market. Competition among dealers leads to lower prices and innovative methods for marketing that in turn help increase demand. Catchy names for the substance may appear at this stage. And although different dealers and distributors may use essentially the same source materials and preparation methods, they adopt distinctive packaging and advertising to build a base of consumers.

### *The Example of Precipitous Increases in the Use of Base Cocaine and Crystal Methamphetamine*

Both in Los Angeles and Manhattan, a sharp increase in the numbers of cocaine base users began to occur between 1983 and 1984, about a year before the term "crack" was coined and several years before the media began to focus on users. Groups that smoked base cocaine developed all over the city. Although it is difficult in retrospect to sort out the chronological appearance of smokable base among specific social networks, some of the groups that seemed to take up base smoking earliest were already marginal: prostitutes, alcoholics, inner city poor, and affluent youngsters who had already been using illicit drugs including powder cocaine, women living in welfare hotels, and homeless people who frequented parks by day and shelters by night.

To meet the increasing demand for base, dealers in Manhattan and Los Angeles recruited youngsters to help them. The youngsters used their profits to buy expensive sports shoes and other stylish clothes. These signs of affluence in turn attracted other youngsters to the trade. In Manhattan, small dealerships began to spring up all over the city, and intense competition led to innovative marketing. Vials for peddling small amounts became commonplace. The vials were capped with plastic stoppers of different colors and stamped with different brand designs. Just as cola drinkers insist that one brand is much better than another, base cocaine smokers were convinced that their brand was the best. Late in 1983 or perhaps early in 1984, the term "crack" was used on the streets to refer to base. Prices were dropping to $10 for the smallest vial. Even smaller vials, "midgets," were produced, and prices dropped to $5.

Vials appeared to be an East Coast marketing device. In Los Angeles (and on Oahu) small plastic bags were used as containers for small amounts of rock or base. Or dealers would simply drop small amounts into the hands of purchasers. The term "crack" also appears to have been used mainly on the East Coast until the media began to publish stories about the drug (see stage 7 below). However, glass pipes for smoking base became common in all the study sites.

The precipitous increase of crystal methamphetamine smoking on Oahu occurred between 1985 and 1986 and followed a course similar to that of base cocaine smoking. The term "ice" was not used until the substance was relatively wide-

spread among particular groups, including Filipino girls who were not usually substance abusers. Other groups that started to smoke batu during that year tended to have been abusers of other substances who switched to smoking crystal methamphetamine. They included Caucasian and Hawaiian youngsters who had been using marijuana until the crop destruction program reduced the supply. Others, including some young Hawaiian women, started to smoke both base cocaine and crystal methamphetamine at the same time.

## Stage 6: Epidemic Use and System Overload

While fads for things like hula hoops or citizen band radios usually die down as quickly as they arise, drug fads follow a different course. An upward spiral in the number of a drug's new users can be accompanied by increasing frequency of consumption by existing users. If the drug is addictive, such a precipitous increase in use inevitably produces a correspondingly precipitous decline in the health and well-being of numerous users. Health services including medical emergency rooms, psychiatric units, and treatment facilities are overwhelmed by the sheer numbers of patients who arrive with symptoms of pathologic results of use. When pregnant women are users, health services are also strained by having to treat the perinatal effects on infants.

Substances that radically affect people's behavior produce collateral problems for family members and friends. Drugs that produce psychotic or violent episodes strain psychiatric facilities, not only for dealing with the users but also with their intimates, who become targets. Addictive substances can result in caretakers' neglecting children or others in need of care, thereby placing an additional strain on social support services.

Even when prices are low, a person's frequent and addictive use of an illegal substance can result in a need for money that exceeds legitimate income. People who committed crimes before they started using drugs have to increase their criminal activity to pay for drugs.[18] Thus epidemic use of addictive drugs usually leads to rising crime rates and a strain on police and other criminal justice system resources.

Whether or not a specific substance is legally controlled or actually causes physical or social ills, drug epidemics also generate strong reactions among groups of people who do *not* use drugs and who define them as harmful.[19] They demand that police, prosecutors, other criminal justice system authorities, and human service agencies control the epidemic. If genuine harms are discovered, these agencies feel intense pressures to contain the problems. At the same time that resources are needed to contain supply and demand, agencies must expend even more resources to answer questions from constituents about how they intend to accomplish this mission and why no progress has been made.

The system overload produced by cocaine base smoking is well-known because of the media coverage that began to focus on crack and rock in 1986. Ice and associated problems on Oahu were headline news in 1990 as this project began. Media coverage is usually one of the last stages in a developmental pattern of increasing use of a specific substance.

## Stage 7: Media Coverage

During earlier stages the media may briefly mention a substance in conjunction with a story on an arrest or other police activity, but stage 7 is characterized by the appearance of articles that focus on the substance itself. The articles are not usually published until after drug use has reached an epidemic stage in at least a confined geographical area. Given their emphasis on "news," stories may implicitly or explicitly suggest that the drug is new. This increases its desirability among drug users who want to keep up with the latest trends. While media reports have the potential for presenting accurate information about a substance's health hazards, reports that recount popular stories about the drug may help extend its allure to more distant groups.

Even in the late 1980's, media stories on crack and ice often created the impression that these were new drugs. In Los Angeles base cocaine and rock had been around for a decade, but stories using a different term ("crack") seemed to increase the desirability of the substance among youngsters who wanted to impress peers with their ability to get their hands on the latest drug. And although stories about the dangers of ice appeared to make mainland drug consumers reluctant to use the substance, others actively searched out ice so they could try it. As one drug user said, "I'll try anything—so when I can get it, I'll try ice too."

## Implications

Fortunately, perhaps due to actions taken by criminal justice system professionals on Oahu and on the mainland, crystal methamphetamine—a long-time problem on the West Coast—was not marketed as ice or a new drug on the mainland. Furthermore, while demand for smokable meth-

amphetamine on Oahu did reach precipitously high stages, public agencies on Oahu made a concerted effort to contain the spread and seem to have prevented the systematic overload caused by crack. This suggests that early recognition of an emerging pattern of use can make it possible to curtail further development.

The stages described in this chapter represent "worst cases"—situations selected because use did pass through all seven stages. Fortunately, the use of many drugs does not progress past early states. Stage 1, endemic use, can persist for decades. Progression to one or more advanced stages does not necessarily presage an eventual epidemic. The next chapter discusses information that can be used to determine if the use of a specific substance is increasing. The last chapter focuses on steps to head off an epidemic if a specific substance appears to be increasing in popularity.

## Endnotes

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11. Based on the studies of Edward Preble as personally communicated by Bruce D. Johnson.
12. Chaiken, Marcia R., and Bruce Johnson. 1988. *Characteristics of Different Types of Drug Involved Offenders*. Washington, D.C.: National Institute of Justice.
13. Bell, Daniel. 1953. "Crime an American Way of Life." *The Antioch Review* 13:131-154.
14. "Rock" in New York in the early 1980's referred to relatively pure acid forms of cocaine; "rock" in Los Angeles referred to the base form prepared from the acid form.
15. Williams. 1989. *Op. cit.*
16. *Ibid.*, p. 40.
17. *Ibid.*
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# Chapter 3

# Signs and Symptoms of the Development of Drug Use Patterns

As in the previous chapter, the intent of this presentation is not simply to describe the situation in the study sites. Rather, it is to discuss sources and types of information that would be useful for monitoring the popularity of other illegal substances in the future.

## General Issues in Using Information about the Development of Drug Use Patterns

To be useful for monitoring the increasing popularity of a substance, available information needs to be collected, consolidated, and analyzed. In the course of our data collection and analysis, we found several issues to be integral to obtaining and using necessary information.

### *No Single Source of Information Appears Adequate for Monitoring the Increasing Popularity of an Illegal Substance*

Information about emerging patterns of drug use are available from diverse sources ranging from the experiences of outreach workers to the results of scientifically sound surveys. Each type of information provides an important but partial view of patterns of substance abuse occurring at a particular time. Any given source of information is limited by virtue of its focus on a particular population. For example, outreach workers may have considerable knowledge about the drug use of people with whom they are in contact, but only limited or even erroneous impressions of drug use among other people. Therefore, a comprehensive experiential view of drug use patterns in a given area can be assembled only from a range of outreach workers who serve different groups.

Household surveys and school surveys provide information from broad samples of people. However, respondents in such surveys tend to be persons who lead conventional lives. Groups of people known to have a high incidence of drug use, such as school dropouts and transients, are usually not represented. Most broad-based surveys have been administered only in selected languages, normally English and perhaps Spanish, so persons who speak other languages are not included in the data. Although subgroups that speak only languages other than English or Spanish may be numerically small, they can be highly relevant to emerging patterns of use. Even when numerically small subgroups are included in surveys, the sample size for them may be too small for any conclusions to be drawn.

In addition, some minority group members may be highly suspicious of government-sponsored surveys and unlikely, if asked, to provide any dependable information.[1] Important information not likely to be captured by surveys is data about forms of drugs used by new immigrants who have introduced illegal substances that are endemic in their countries of origin. While surveys can help monitor general drug use trends among mainstream populations, information from other sources, including anthropologists and ethnographers, appears essential for determining patterns of use among groups that are hard to reach.

Some information sources are also limited because they focus on particular social processes. Some sources focus on grassroots forms of drug dissemination, others on organized economic activities, and still others actually capture information about social responses rather than drug use patterns themselves. For example, law enforcement arrest data reflect agency priorities and resource allocations as well as actual patterns of drug use or drug sales.

In the study sites, during street-level crackdowns on cocaine sales, the count of arrests involving cocaine understandably

soared while information from emergency rooms in the same area suggested that cocaine users had temporarily switched to other drugs. Information from arrests and other criminal justice system processes can, however, be very useful in monitoring drug use patterns. For example, substances and paraphernalia discovered during arrests by law enforcement officers (including nondrug arrests) may accurately reflect local drug use patterns, and information gathered from informants by undercover officers can also be cumulatively very accurate.[2] Additionally, officers implementing prevention programs in schools hear about types of drugs being used in students' neighborhoods.

While some sources of information can shed light on early stages of developing patterns, others are more likely to become available at later stages. Figure 4 in chapter 1 presents the development stage during which various forms of useful information became available in the study sites.

### *While Many Agencies Record Information Potentially Useful for Identifying Emerging Use of Specific Forms of Drugs, Currently Few Can Provide Such Information in a Readily Usable Form*

Most agencies involved in collecting information useful for monitoring drug patterns collect such data for their own purposes—usually for decisions involving individual cases.[3] Typically the information is recorded in a format that allows a quick review of a particular case but not a comprehensive review across cases. The extra steps needed to compile information across cases are burdensome and are rightly considered by public-service professionals as nuisances having little to do with the business at hand. While busy law enforcement officers, prosecutors, doctors, and welfare workers generally take copious notes on each case, including information about use or possession of specific illegal substances, they cannot be expected to have an inherent interest in tallying such information across cases. Even researchers who have collected detailed data about types of drugs used by their subjects may not devote the time or resources to extrapolate the data into a format useful for monitoring changes in drug use patterns, especially if this line of inquiry is tangential to their study.

Realistically, readily usable information is not likely to be provided by an agency unless an individual or unit is assigned the task of compiling it across cases, or unless a data entry system can be established that simultaneously satisfies the needs of busy public-service professionals and researchers and permits analysis by those monitoring drug use patterns. In the study sites, many agencies had recently assigned staff to collect drug use data across cases, and in a small number of agencies computer systems to enhance data collection were being designed and implemented. However, assignments and implementation occurred for the most part after smoking of base cocaine or crystal methamphetamine had already reached epidemic proportions.

Fiscal limitations also restrict the collection and preparation of information that agencies can provide. The research units of many agencies were short on the staff and equipment needed to systemize data and conduct analyses for internal needs, not to mention external needs. Several units were anticipating further reduction in staffing and resources due to general agency budget cuts.

### *Agencies Capable of Providing Information Useful for Monitoring the Development of Drug Use Patterns Are Not Likely To Coordinate Such Information Unless One Organization Takes the Lead and Actively Pursues Information on an Ongoing Basis*

Lack of coordination of information from multiple sources appeared to be one of the primary reasons why the increasing popularity of smokable cocaine and methamphetamine was not noticed until use had reached epidemic proportions. With the exception of information about crystal methamphetamine use on Oahu, useful data were rarely shared across agencies. Even within a single public agency, information independently obtained by different departments was usually not shared with other departments, much less combined and analyzed.

Several agencies in the study sites had at one time or another received funds for analyzing cross-agency information about drug use patterns. While some had set up files for data to be obtained from a relatively large number of agencies, the files were for the most part inactive or empty. Most agencies limited their analyses to information collected on an ongoing basis by two or three agencies. Some supplemented this information with survey data collected annually or less frequently, information from "busybody" systems of informal networks, and data derived from sporadically convened meetings with other knowledgeable agencies. Sources utilized for the most part provided only a partial picture of drug use and essentially missed the developing patterns.

In a recent study sponsored by the National Institute of Justice, one site studied for this report, New York, was judged to be one of the best State and local government sites in the United States in terms of methods used to estimate drug abuse levels.[4] However, even in this exemplary site, information collected and analyzed on an ongoing basis was limited to data from emergency rooms previously selected as part of a national sample, vital statistics including information about drugs used by birth mothers, the FBI's *Uniform Crime Reports*, and information on clients in drug treatment. As discussed below, while these sources are important and can be highly recommended for use in all sites, additional types of useful data are not being routinely obtained or analyzed.

### *Public-Service Professionals and Researchers Have Compelling Reasons Not To Release "Raw" Numbers to Outside Agencies; These Reasons Need To Be Addressed Before Such Information Can Be Used To Discover Emerging Patterns Early*

Information about forms of substances being used by specific subgroups needs to be quickly collected and analyzed to be most useful for determining whether the use of a specific substance is increasing. When this was done in the study sites, the resulting data were generally not made accessible to other agencies for months or years. Delays were usually due to routine procedures that were imposed for the following compelling reasons:

- *To ensure confidentiality.* Time was taken to strip individual or institutional identifiers from data files or to collapse data across categories.
- *To prepare statistically reliable estimates.* Response analyses were carried out so that samples could be weighted to more accurately represent well-defined population samples.
- *To maintain quality control.* Presentations of information were sometimes subject to institutional reviews, and publications required signoff from several levels of management before release.
- *To avoid compromising strategies and plans.* Information collected in a specific neighborhood was not released because it might have signaled the existence of an ongoing criminal investigation.
- *To protect future access to information.* Some health professionals or ethnographers refused to give the police information they collected about drug users, since their informants might in turn have stopped providing information.

While these procedures may traditionally be integral to sound research and organizational practice, quicker turnaround based on "dirty" data appears to be needed to spot an emerging drug use pattern before epidemic proportions are reached. Some of these obstacles could be circumvented by common cross-agency agreements. For example, to avoid delays while data files are being stripped of personal identifiers, a neutral coordinating agency might be set up with strict procedures for protecting human subjects. Other procedures may need to be abandoned. For example, in our study sites there were requirements to keep confidential the identity of emergency rooms participating in the Drug Abuse Warning Network (DAWN). This confidentiality made it difficult to pinpoint areas where shifts to cocaine use were occurring and where intensive action was needed.

Most researchers who analyze drug use patterns usually balk at drawing any conclusions from data until years of analyses of a large number of cases have been conducted and statistically significant patterns and trends have been well established. But many of the types of information discussed below (used to prepare the descriptions in the previous chapter) involve observational data about a small numbers of cases. While each source cannot provide information about drug use patterns that most researchers would characterize as sufficient for guiding policy or practice, in combination the sources provide multiple indications of an emerging problem and reasonable evidence of a need for a rapid, coordinated response. Most policymakers are accustomed to the need to make decisions or take action based on information that researchers consider preliminary or inadequate.

### *Once a Specific Form of Substance Abuse Receives Media Attention, Analysts in Public Agencies Are Often Asked To Provide Information Shaped More by Political Requirements Than by Scientific Processes; When Used as a Basis for Policy or Practical Decisions, Such Information Can Be Misleading*

Many of the public-service professionals interviewed in agencies in the study sites were analysts with many years of experience, recognized by their colleagues as experts in their disciplines. Many voiced frustration at the demands made on their departments to produce reports that omitted major trends or provided information based on unscientific distinctions.

For example, although there is no chemical basis for distinguishing between crack and other forms of cocaine, or between ice and other forms of crystal methamphetamine, some laboratories were required to produce reports incorporating such distinctions.

> *"It's a problem to classify something in such a cloudy area. I'm sure there have been many misclassifications. The term [crack] really upsets me terribly. The term crack is a street term—not a technical term—not a legal term. Technically, it's very difficult to distinguish between HCl [acid] and the base form [of cocaine]."–Law enforcement agency chemist*

Other analysts were equally frustrated by orders to limit information in their reports to particular substances rather than producing reports about overall patterns of substance abuse. Some suggested that even in the epidemic stage, the incidence of cocaine and methamphetamine use was much smaller than alcohol abuse and was implicated in far fewer harmful outcomes such as motor vehicle fatalities. They were dismayed that their findings about increasing rates of alcohol abuse were being ignored while findings about cocaine or methamphetamine were being blown out of proportion. The most experienced analysts realized that political realities rather than statistical findings shaped the reports issued externally by their departments. However, several hoped that by establishing a flow of information that was relatively free of politics, at least inside their own organization, they could bring about policy decisions or practices having a more scientific basis.

The rest of this chapter describes the different types of information available to help determine if a particular form of drug use is developing in a small geographical area such as a city or county. The types of information are illustrated with the general and specific signs and symptoms of increasing use of smokable cocaine and methamphetamine that occurred in the study sites. The types of researchers and public-service professionals who had the pertinent information, and when they had it, are also described.

## Anthropological and Ethnographic Information about Isolated Episodic Use, Lore, and Local Spread

Although usually not called on to provide information until an epidemic occurs, proficient researchers conducting ethnographic or anthropological studies in a given community appear to have the earliest and most detailed information about specific types of substances used by particular groups. They also document shifts in use and detailed lore about specific drugs. Anthropologists and ethnographers have received years of training in developing rapport with members of groups under study, carefully documenting field observations and conversations, and keeping close to a group under study while not "going native" and crossing the line between observer and participant. They are also well prepared to sift through masses of often conflicting and more or less reliable data to discover important patterns. The information about drug use patterns these academics can provide is not only fruitful for identifying ongoing and emerging patterns of use but also for understanding the motivations and attitudes of groups using specific substances. This helps agencies respond appropriately.

As part of his studies of social networks, the late anthropologist Edward Preble was one of the first people to note the shift from heroin to cocaine in north Manhattan, to document the increasing number of new base users frequenting the after-hours clubs, and to pick up the lore about smoking base being more healthful than snorting powder cocaine. Until his death in 1982, he was recognized by colleagues conducting studies of drug use as one of their richest sources of information about patterns of use in the city.[5] Continuing in the same tradition, anthropologist Terry Williams closely monitored the development of cocaine dealerships and patterns for recruiting users and sellers in north Manhattan beginning in 1983.[6]

Also using anthropologic and ethnographic methods, other researchers such as Kathleen Boyle and Michele Shedlin closely studied different groups in the study sites. Both Boyle and Shedlin collected information about the recruitment of women into base use and cocaine dealerships. They also documented the lore that developed around use and described the life-style of persons addicted to base cocaine. For example, Boyle interviewed Los Angeles "strawberries" (prostitutes and other women who trade sex for cocaine) and learned

> Many started smoking cocaine in the late 1970's and reported "rocking it up ourselves." At first

> people were buying rocks but then they realized how easy it was to prepare themselves. Most people who were attracted to smoking cocaine were those who previously liked 'drugs that hit you in the face' like PCP not 'wimpy drugs' like powder [cocaine]. Some people came into crack without strong backgrounds in drugs, some from downers. A lot of women reported being introduced to smoking cocaine by cousins, boyfriends, brothers, or fathers.[7]

Shedlin carefully documented the lore that drug users passed on about smoking cocaine, especially stories and myths about cocaine being a woman's drug and the presumed benefits of smoking cocaine rather than injecting drugs, including, after AIDS was recognized, smoking as a way of avoiding AIDS transmission.

> In street term they call dope (heroin) 'boy' and cocaine 'girl.'[8]

> When it comes to women, women are bottomless pits when it comes to that (cocaine)...as a matter of fact, they can do much more cocaine than a man and can handle it better.[9]

> Coke takes dope (heroin) out of the system.... They work well together.... They are not habit forming when together....[10]

> I had to smoke [during labor]...to get the baby out. [After smoking cocaine] the baby comes out fast...no pain...whoom![11]

> Smoking was said to be preferable to other methods in terms of...ease of concealment. As one of the men said, "If the cops come, you can go into a hallway...just smash [the pipe] in the corner." Smoking was believed to be much more socially acceptable than other methods of drug use, especially injecting which was not seen as acceptable. Many...comment that AIDS was responsible for a changeover to smoking because of the fear of transmission by needles.[12]

Because they are skilled at gaining the confidence of extremely hard-to-reach populations, anthropologists and ethnographers can also document primary and secondary signs and symptoms of drug use often concealed from other researchers and public-service professionals but vital for understanding the social costs associated with use of specific substances. For example, Shedlin documented rampant child abuse and neglect among cocaine-smoking mothers living in welfare hotels, including infants sodomized by dealers who provided their mothers with drugs.[13]

## Practical Information about Endemic Use and Local Spread of Specific Substances: Outreach Workers and Drug Treatment Counselors

Many public-service professionals' jobs entail eliciting detailed information from members of hard-to-reach groups. These include outreach workers trained in gaining the confidence of such individuals, caseworkers dealing with families engaging in self-destructive behavior, school nurses and counselors, and drug treatment counselors.

Although they were not especially looking for new forms of illegal substances in use, according to their retrospective accounts, public-service professionals working in inner city areas were aware of the increasing popularity of smokable cocaine as early as 1980. They knew about simple recipes for preparing base cocaine in Los Angeles in 1980 and in New York in 1982. On Oahu, outreach workers in some of the most impoverished communities became aware of the increasing popularity of batu in 1983.

Important information about use of specific substances obtained by these public-service professionals is derived from "street talk"—a mixture of fact, fantasy, and conjecture on the part of drug users and dealers, their families, and close neighbors. For example:

- In 1981, while conducting group sessions, drug treatment counselors in north Manhattan heard several clients talking about using both freebase (the base form of cocaine) and PCP while others talked about "space basing" and using alcohol to help "level off." The counselors also began to hear lore about smoking cocaine such as reports about base "making you go crazy and develop lung problems."
- Guidance and substance abuse counselors in schools in north Manhattan remember first hearing about crack in 1984 from children in elementary school.
- In 1983, in the Wai'inae area of Oahu, according to an outreach worker, a part-Hawaiian former drug user heard marijuana dealers discuss possible markets for methamphetamine and potential profits.
- On Oahu in 1984 outreach workers in the Kalihi area of Honolulu heard stories from recovering heroin addicts about a new form of drug, "batu," being made and sold by Filipinos. They also reported that batu was being used by workers in the restaurant world in Waikiki.

- In 1987, school-based counselors in Pearl City on Oahu found out about ice from high school students who had been absent frequently. "We'd ask them point blank, 'Are you using anything?' At first we thought it was cocaine—but they said no it was ice. A lot of them were experimenting with ice in 1987. They told us they pay $50 for a small amount, light up, inhale, and get high. We'd say—'isn't that a lot to pay to get high?' And they told us, 'no—you put it out and reuse it—you can get high for 3 days.' We were more likely to see them [the ice experimenters] than the cocaine users because the cocaine users usually didn't come to school at all."

Street information consists of a mixture of reliable and unreliable information. To be at all useful for monitoring emerging patterns of drug needs, it must be analyzed and consistent patterns determined. Unlike the anthropologists who had the training and motivation to carry out such analysis and noted new patterns as or soon after they occurred, only in retrospect did public-service professionals who had information about cocaine and methamphetamine smoking in the early 1980's realize that they had important information about how the epidemic developed.

In the future, however, it may be possible for researchers to monitor drug use patterns on an ongoing basis by drawing on the extensive knowledge of outreach workers, drug counselors, and other public-service professionals. One potential forum for doing so consists of regular staff meetings of outreach workers, school counselors, drug counselors, and other public-service professionals where information about cases is exchanged. In the study sites, such staff meetings appeared to be a rich source of information about the types of substances being used and sold in specific communities. For example, in late 1990, a chart review attended by outreach workers, drug counselors, and other health professionals working with runaway youth in the Hollywood area of Los Angeles revealed the following types of drug use in just a single case under discussion:

> X is a 19-year-old woman who came to the Los Angeles Free Clinic to see a physician because she wanted medication for acne. She reported previously using LSD, crystal, cocaine, PCP, crack, heroin (just at parties), marijuana, downers, and alcohol. She had strong ties to a group who were dealing drugs and using LSD; she reported being scared about using LSD and previously had admitted herself for substance abuse treatment after using LSD for 2 weeks straight. She said she was no longer using LSD but was shooting up crystal and using alcohol. Her mother also used acid and marijuana.
>
> She had dropped out of school after the ninth grade. Her primary source of income came from dealing drugs. She reported buying drugs and then selling them to "rich, stupid kids" for more money.

According to the staff and based on other cases discussed, X is typical of many of the runaway and homeless youth with whom youth workers are dealing. Regular attendance at such chart reviews by researchers could help monitor such patterns in the future.

## Street Research about Use and Sales of Specific Forms of Drugs

In New York City, for more than 20 years, the State Division of Substance Abuse Services has formed small teams of streetwise persons to gather information about drug use and drug sales in public places. Since the mid-1970's, teams have covertly infiltrated designated neighborhoods to observe the types of drugs being sold on specific blocks. The New York team members meet on a weekly basis to be debriefed by their supervisor.

During 1980 and 1981, team members reported that simpler recipes for making base were being sold in "head shops" and were circulating on the streets. By 1982, the team members said that prices for freebase had "gone very high" and recipes for using baking soda to make "pure cocaine" were spreading from the Bronx and Brooklyn. In late 1983, the term "crack" was first used at a debriefing. The team's supervisor asked what "crack" was and was told that it was a new drug being sold in Brooklyn. Over the following three months, information gathered by the field staff clarified that "crack" was cocaine and that the term was being used by more people on the streets.

Over the following months, as part of their ongoing data collection efforts, the ethnographic street teams continued to learn more about areas in which crack was being distributed and methods for distribution. In addition to visually sighting drug transactions, the team collected information that could help capture the new pattern. The information consisted of shifts in street terms. Many street terms are used interchangeably. For example, cocaine can be called crack, rock, coke, base, snow, nose candy, blow, powder, toot, and white Christmas. Other terms reflect changes in drugs used, groups who are using the drug, or methods of marketing or

distribution. For example, when the street teams began to hear the term "crack house" on the streets, their supervisor was not sure how or if a "crack house" differed from a "base house." Information supplied by team members helped clarify that

> A base house is where the activity [smoking cocaine] usually takes place...a location where people go to smoke their crack. A crack house in street terms is a place where you buy...[it can be] an abandoned building...a candy store...a grocery store and the owner is selling it right out in the open.[14]

This difference indicated that use was becoming more dispersed. In addition to use in "traditional" places such as after-hours clubs, groups were buying base and smoking it elsewhere.

In 1986, the street team was asked to assess the extent of crack sales in New York City, including 10 locations in Manhattan. At Manhattan locations an average of 12 sales an hour were made during peak activity. Manhattan dealers were primarily Hispanic, and buyers, unlike those in most other boroughs, were primarily white. Purchases were made on the street, in automobiles, in hallways, in apartments, or in stores.[15]

More recently, in 1989, reports from street team members led to the issuance of a "street research advisory" on ice and "crank...the street term for Crystal Methedrine."[16] The report on ice concluded that

> As of November 1989, the Street Research Unit has not found any evidence to suggest that ice is a problem...However...more and more street people are beginning to show interest in the substance...also...pipes used to smoke ice are readily available in headshops.

The unit's report on crank, however, suggests that its pattern of increasing popularity is progressing through the developmental stages described in chapter 2. Moreover, while the report distinguishes between crank and ice based on the street terminology, in fact crank is very similar to ice in its chemistry and pharmacological effects. Following are some comments about crank that parallel the early stages of the development of batu and ice on Oahu.

> Currently, [crank]... is being used more and more by a variety of ethnic groups.
>
> ..."[K]itchen chemists" are producing crank for distribution.
>
> In comparison to cocaine, crank is relatively inexpensive and the effects last longer. In addition, street hustlers are selling crank as cocaine to buyers who are not "street smart." The substitution of crank for cocaine is extremely profitable.
>
> ...[I]n addition to getting high, individuals use crank for other purposes...truck drivers use it to stay awake while driving...females use it as an appetite suppressant and diet aid.
>
> Recently sellers of cocaine, crack, and heroin report being approached by an increasing number of...potential buyers...described as white, middle-class, and from out of the city.

At the same time, team observations and interviews continued to document the high rates of crack use among particular populations such as male residents of specific shelters for the homeless.

> ...[A]s much as half the resident population may be using cocaine in this form. This based on...a large number of empty crack vials discarded...near the shelter. Crack was the illicit substance most frequently heard hawked...several dozen individuals...shelter residents were observed blatantly smoking crack on the street.[17]

## Physical Symptoms and Medical Evidence of Substances Being Used

Although not widely reported until cocaine and methamphetamine smoking had reached epidemic proportions, shifts in the physical symptoms of drug users in the study sites and results of laboratory tests of their bodily fluids provided early evidence of these patterns of use.

> *"Crack heads. They are a mess. Their eyes are wide open. They are skinny. They're very active, jittery people who never keep still. They are the busiest people in the world, but they're never doing anything."*[18]

Symptoms of cocaine or methamphetamine smoking, especially frequent smoking, were remarkably different from

symptoms drug users had displayed previously and were some of the first indicators noted by psychiatric emergency room staff and other medical and treatment professionals. For example:

- In 1981, the director of an outpatient treatment center in north Manhattan noticed an increase in the number of clients who were suicidal and hyperactive.
- In 1983, Los Angeles patients admitted for alcohol detoxification and rehabilitation exhibited anomalous symptoms that in retrospect were recognizable as signs of withdrawal from cocaine.
- At Harlem Hospital in 1983, the behavior and toxicological symptoms displayed by emergency room admissions began to change. Patients were less violent and more in control. They were admitted as inpatients less frequently and, if admitted, stayed shorter periods of time, but they returned more frequently. The average age of patients with drug involvement began to drop. Walk-in patients were feeling very depressed although few had psychiatric histories involving depression.
- Also in 1983, staff on Manhattan maternity wards began to notice "bizarre" behavior among some birth mothers, and their babies tended to be underweight, more irritable than usual, and difficult to pacify.
- In 1984 and 1985, psychiatrists and drug counselors in Los Angeles realized their patients were experiencing shorter intervals between the onset of base cocaine smoking and addictive use; two- to three-year intervals were typical compared to five or more years of snorting powder cocaine without experiencing addiction.
- During 1987, an Oahu adolescent treatment facility began to receive numerous calls from parents whose children had been "high all weekend." The staff realized that the euphoric states were lasting longer than "highs" typically experienced by clients. Some new clients included Filipino girls, a group rarely seen before. Behavior was notably different among clients entering the facility in 1987. "They appeared to be totally out of control. They were losing weight rapidly; they were unusually belligerent."
- Also in 1987 the Drug Addiction Services of Hawaii (DAS[illegible] outpatient clinic began to receive numerous phone c[illegible]s from young adults who were experiencing heart palpitations and paranoia ultimately attributed to their repeated smoking of methamphetamine.
- Also on Oahu, around 1988, maternity staff began to notice similar symptoms among some birth mothers, primarily those from the Wai'inae area.

Interviews with clients demonstrating behaviors and symptoms that had been atypical in previous periods helped health practitioners in New York and Los Angeles realize that the symptoms were caused by smoking cocaine and, on Oahu, by smoking methamphetamine. (See also the discussion below on surveys of treatment program clients.) Urinalysis and blood tests confirmed cocaine and methamphetamine as the underlying cause of clients' symptoms, including some deaths. For example:

- By late 1983 in Harlem Hospital, urinalysis routinely administered for diagnostic purposes to all psychiatric emergency room admissions demonstrated that the primary drug used by patients was shifting from PCP to cocaine.
- The New York City Department of Health reported seven deaths due to cocaine abuse in 1983, 91 in 1984, and 153 in 1985.[19]
- For the northern half of Manhattan, routine tests of infants born in New York City showed that in 1984, 204 mothers had been using drugs; in 1985, 206 mothers; in 1986, 384 mothers; and in 1987, 482 mothers.[20]
- The Hawaii Department of the Medical Examiner reported a growing number of methamphetamine-related deaths from 1985 to 1989. In 1985, one methamphetamine-related death was reported; in 1986, no related deaths; in 1987, 7 deaths; in 1988, 12 deaths; and in 1989, 12 deaths.[21]
- In Los Angeles, no information on methamphetamine-related deaths was collected until 1987 when 18 deaths were reported. Eighteen methamphetamine-related deaths were also reported in 1988, and for 1989, 24 deaths were estimated. Cocaine-related deaths totaled 131 in 1985, 317 in 1986, 447 in 1987, and 450 in 1988.[22]
- In 1989, one Honolulu hospital's tests of infants whose mothers were suspected of using drugs resulted in findings of prenatal exposure to methamphetamine among 25 percent of the tested infants.[23] At the same hospital, Child Protective Services Medical Team assessments of 108 infants discovered to be prenatally exposed to drugs found that 53 percent of these infants were exposed to methamphetamine and 33 percent to cocaine. A retrospective study that reviewed charts of

mothers admitted in labor between 1987 and 1989 found that "*identified* drug users tended to be Caucasian or Native Hawaiian, in their 20's, and receiving Medicaid. Their infants exhibited evidence of low birth weight, intrauterine growth retardation, and neonatal complications."[24]

## Fragmentary Law Enforcement Agency Evidence of Changes in Use of Specific Substances

In retrospect, law enforcement agencies in all three study sites received numerous early indicators of the growing use of smokable cocaine and, on Oahu, of smokable methamphetamine. However, since there was no concerted attempt to examine these indicators together, individual officers who received information that might point to such drug activity could only view such information as idiosyncratic and random rather than as part of a pattern. Types of indicators that might have been used to identify patterns of smoking cocaine and methamphetamine are discussed below. They constitute the types of sources analysts could profitably explore to monitor future patterns.

### *Community Complaints and Observations and Other Grassroots Information*

Some of the earliest information that came to the attention of law enforcement agencies about smokable cocaine and methamphetamine was provided by community members. Undercover narcotics officers of course often gather information from their informants about drugs being sold. However, other community members provided voluntary information:

- As early as 1980 in Los Angeles and shortly after in New York, police reported receiving sporadic calls involving complaints about rock houses and base houses. They were not the fortified, heavily armed locations portrayed by the media; in fact, few drug sale locations met this description. Rather, neighbors seemed to object to the increased comings and goings of disreputable strangers in their apartment houses or blocks.
- Youngsters who lived in neighborhoods where base cocaine or methamphetamine use was increasing either asked questions or talked about use in the drug prevention classes police officers were conducting in schools. By 1984, New York City police officers in the department's new SPECDA (School Program to Educate and Control Drug Abuse) program heard the term "crack" used by their elementary school students.
- On Oahu in late 1983 and early 1984, police officers in prevention programs began to hear youngsters use the terms "crystal" and "ice." According to the officers, students who were most likely to know about ice were not the younger children in DARE but rather "the kids in intermediate schools or high schools in the experimental stage." At first, the officers assumed they were hearing new terms for cocaine, but the students explained that "... it's not cocaine; it's 'shabu' or 'batu.'"
- Shifts in problems associated with substance abuse were also retrospectively apparent to police officers in the study sites. For example, around 1984, New York City officers began to notice a growing number of abused and neglected children.
- The changed behavior of people with whom police come in contact, including arrestees, also appears to indicate new patterns of substance abuse. On Oahu, police in the Gang Division noticed in the mid-1980's that violence appeared to be more common among youngsters involved in using and distributing methamphetamine. For example, in 1987 an officer first saw "a kid come into a cell block having violent episodes. He had been picked up for theft from parking meters and was found to be in possession of crystal methamphetamine. He called it 'ice.'"

### *Changes in Drug Paraphernalia*

As described in the previous chapter, part of the allure of specific substances seems to be the equipment used to administer the drug and the packaging used to market it. The increasing appearance of distinctive paraphernalia, such as glass pipes for smoking cocaine or methamphetamine, is a good indicator of an emerging pattern of use. New forms of packaging, such as glass vials used to sell crack in New York, show emerging patterns in marketing.

At the study sites, arrestee possession of glass pipes indicated the growing popularity of smoking cocaine and crystal methamphetamine. Officers at each site said they began to see more glass pipes on or around arrestees in the early 1980's. (Records of evidence and of property taken from arrestees could be used in the future to quantify these types of impressions.)

The appearance of vials in New York became an important way for officers to recognize the increased marketing of cocaine. For example:

- The first time the Commanding Officer of the Narcotics Bureau, Manhattan North, remembered seeing a vial to market "crack" was in 1984. While he was on assignment in the Bronx, the officer saw a uniformed officer lock up a drug dealer who had a vial in his possession. The vial was sent to the lab for analysis, and the laboratory report described the contents as cocaine; at the time the mode of packaging seemed unremarkable.
- In 1985 New York police officers reportedly found "lots of vials" and "knew it was going to be a problem."
- Information recorded on forms used by New York Police Department property clerks in 1985 indicated that about once a week vials were being discovered among the possessions of persons arrested for distributing drugs.
- In Los Angeles, where the use of vials never caught on, officers who were on narcotics or patrol duty in 1980 remember suddenly seeing greater numbers of arrestees in possession of cellophane packages. "At first," one officer reported, "no one knew what they were." But over the next few months officers realized that the packages were used as containers for base cocaine.
- On Oahu at the end of 1986, officers in the Narcotics Division gave other Honolulu police officers a briefing on ice and showed them glass "bongs" with a bubble at the end for smoking crystal methamphetamine. As the officers recalled, "Pipes had been sold in head shops all over the island. Bongs were available a long time ago. But the glass pipes came in with crystal."
- Late in the school year in 1988, Oahu prevention officers began to see glass pipes for the first time on school campuses.

### *Arrests and Seizures Involving Specific Substances*

As discussed above, special law enforcement efforts targeting on cocaine or methamphetamine sales obviously led to increases in arrests and seizures of those substances. In this sense the arrests reflected stepped-up police operations more than increasing use. However, observations of officers and changes in statistics *can* indicate a growing problem even when no focused enforcement is taking place. And even after targeted enforcement is under way, arrest and seizure statistics can demonstrate that police departments have discovered a substantial pattern of use. For example:

- It was in 1982 that Narcotics Division officers in Inglewood, a community in central Los Angeles County, recalled first seeing rock. While searching a house, "We found what looked like popcorn in the oven. We had no idea of what is was. We sent it to the sheriff's lab [for analysis] and found out it was rock cocaine."
- In 1982 in Los Angeles, 6 percent of the drug samples analyzed by the police department laboratory were found to be cocaine. By the fourth quarter of 1983, 15 percent contained cocaine, and in 1984, it was close to 60 percent (59.2 percent).
- Between 1983 and 1985 (based on subsequent analysis by researchers at the University of Southern California) there was a dramatic increase in the cocaine-specific charges recorded by the Los Angeles police and sheriff's departments in south central Los Angeles. In three police and two sheriff's stations in this relatively small geographic area, logs showed 380 cocaine-related arrests in 1983; 820 in 1984; and 2,123 in 1985.[25]
- By 1985, Los Angeles Narcotics Unit police officers report that rock distribution became highly visible and "became more than law enforcement could handle. The arrest teams would be out of commission and the dealers could be replaced faster than the police teams. The customers knew about alternative sites [for buying cocaine] and business continued."
- In 1982 in New York City, around 20 percent of samples of drugs seized and analyzed by the police were found to contain cocaine. In the following year the figure was closer to 30 percent. The chief chemist cautioned that these numbers were approximate and unadjusted. Yet even assuming a large margin of error, cocaine seems to have been involved in a relatively large number of cases in those years.
- During 1983 and 1984, intensive policing of street sales of drugs in New York (called Operation Pressure Point) led to 10,746 cocaine arrests, as recorded in the police department's computerized online booking system (NYPD/OLBS).[26]
- During focused street-level enforcement in New York City between August 1, 1986 and October 31, 1986, 4,321 cocaine-related arrests were conducted and entered in the NYPD/OLBS.[27]

- During the first three months of 1987, while an undercover New York City Police Department team concentrated on breaking up crack houses, 55 percent of the Narcotic Division's arrests involved cocaine and, of these, 71 percent were reported as crack.[28]

- On Oahu, during a 1986 homicide investigation, a task force was formed to look into the activities of "gang members including those of Filipino extraction." The task force officers learned that members were dealing ice.

- During the first nine months of 1988, the Honolulu Police Department recorded 203 arrests on Oahu for possession or sale of crystal methamphetamine. During the first nine months of 1989, arrests increased to 451. The total amounts seized also increased from 2,029 grams to 3,269 grams.[29]

If, in the future, departmental analysts separated their data for arrests on special crackdowns, the remaining arrest data could be even more informative.

Information about the amount and price of drugs seized also provides important indicators of how much the substance is being marketed to less-than-affluent, otherwise law-abiding people. It is clear that people whose life-styles include frequent drug use and crime often buy their drugs with illegally obtained income or barter illicit services for drugs. Yet most drug users commit few or no crimes other than possessing illegal substances. Drugs available in small amounts at low prices therefore increase the number of relatively law-abiding persons who can buy the substances.

In Los Angeles in 1984, a rock of cocaine approximately one cubic centimeter in size cost $20. In the following year the size of the rock shrank and the price went down to $5.[30] In New York, small amounts of base cocaine went for $10 in 1984.[31] In 1989 crack on Oahu was $5 to $15 dollars a "hit." The street price of the smallest amount of crystal methamphetamine on Oahu in 1989 was $50;[32] however, since the drug can be repeatedly vaporized and cooled, each hit actually cost $17 to $40.[33]

Information about wholesalers' profits in the area also helps monitor the viability of the market. Evidence collected from informants by the Honolulu Police Department indicated that one of the major kingpins on Oahu had conducted $7 million of crystal methamphetamine business between 1985 and 1987.

### *Information About Arrestees and Modes of Distribution*

Data about characteristics of arrestees, although they partially reflect police operations, can provide some insights into the primary populations being recruited into use or sales. For example:

- According to the retrospective reports of Los Angeles narcotics unit officers, a noticeable increase in the number of women using cocaine took place as early as 1980. Prostitutes were a group especially noted to be cocaine involved..."[they] were no good as far as the pimps observed."

- By 1983, Los Angeles Narcotics Division officers began to see a greater entry of youngsters in the drug distribution network. They functioned primarily as "hawkers," steering people to houses to buy cocaine. The police learned that frequently, as rewards for these roles, "[the dealers] started giving them [the kids] a portion of the drugs—four or five rocks to sell for resale."

- In New York City, police officers reported that in 1985 it seemed that many more women, as well as young minority group members, were getting involved in cocaine use and sales.

Although not analyzed until relatively recently, New York City computerized arrest data for 1986 supported the officers' observations about the growing involvement of minority group members, especially young blacks, in using and selling cocaine marketed as crack. For example, NYPD/OLBS data for 1986 showed that over half[34] of arrestees charged with offenses involving powdered cocaine were Hispanic, and about one-third[35] were black; recorded cases involving crack had a reverse pattern, with more blacks arrested.[36]

Arrestees in powdered cocaine cases were on average older than those in cases involving cocaine sold as crack.[37] About three-fourths of arrestees in cases involving either powdered cocaine or crack had been arrested previously.[38]

Information collected and analyzed by the Honolulu Police Department also helped define the groups most likely to use crystal methamphetamine. They ranged in age from "late teens to early 30's...[including] young women and house-

wives ...predominantly from the middle to the lower socio-economic level...[also] manual and blue-collar workers...particularly those who do physical or repetitive jobs."[39]

Arrest data can also provide important information about modes of distribution, including specific types of dealers and the locations they use. As previously noted, police became aware in 1983 that youngsters acting as hawkers were in turn becoming minor distributors. Arrest information recorded in south central Los Angeles between 1983 and 1985 indicated that twice as many cases involved sales on the street or in cars as in buildings. Mentions of rock houses were made in under 6 percent of all cocaine cases.[40] And contrary to media reports, although south central Los Angeles is home to many gang members, the arrest data demonstrate that less than 10 percent[41] of cocaine cases in 1983 involved a gang member, and in 1984 and 1985 less than 25 percent.[42] Moreover, although gang members who were arrested in cocaine-related incidents were more likely than nongang members to have had a prior arrest for a violent crime, cocaine arrest incidents were unlikely to entail violence whether or not they were gang related.[43]

## Federal Survey Information on Use of Specific Substances

Several United States agencies carry out systematic methods for monitoring national trends in drug abuse. Most notably:

- *The National Household Survey on Drug Abuse* has since 1972 provided data useful for estimating the prevalence of specific forms of substance abuse among United States residents over the age of 12 and for monitoring trends in substance abuse among the general population.[44]
- *The High School Senior Survey* has produced valuable information since 1975 for monitoring trends in the prevalence and frequency of substance abuse among American youth.[45]
- *The Drug Abuse Warning Network (DAWN)* has since 1976 provided data on drug abuse resulting in medical emergencies. DAWN data gathered from 62 medical examiners and emergency room admissions in 564 metropolitan hospitals have helped determine the characteristics of patients in drug-related medical episodes, trends in their patterns of multiple drug use, and trends in rates of specific types of episodes in participating hospitals.[46]
- *The Community Epidemiology Work Group (CEWG)*, established in 1976 by the National Institute on Drug Abuse, meets at different sites twice each year to monitor national drug use patterns including emerging drugs of abuse. CEWG participants are usually State and local researchers who provide information from a broad range of sources including many discussed in this report. In addition to a core group representing about 20 localities, special presenters are drawn from the locale where the group meets.[47]
- *The Drug Use Forecasting System* implemented in 1987 by the National Institute of Justice includes both self-report information collected in anonymous interviews with detained arrestees in 24 locations and, for arrestee respondents who agree to provide a urine sample, results of urinalysis tests for specific drugs. Initially only adult male arrestees were included in DUF interviews; later adult female arrestees were added, and then juvenile males and females. Some DUF sites are still in the process of adding some types of detained arrestees. The first DUF site was Manhattan and was the outgrowth of a pilot project also involving urinalysis for Manhattan arrestees.

Data from these sources, especially in combination, have been valuable for monitoring national trends in the prevalence and frequency of abuse of specific substances.[48] Information about substances that are increasing in popularity in the Nation as a whole can serve to alert local public-service professionals to check for similar trends in their own areas. For example, the High School Senior Survey showed a steady increase in use of cocaine among high school seniors from 1976 to 1981 (5.6 percent to 12.4 percent); this information might have alerted city and county officials to an incipient epidemic.[49]

However, local officials need to interpret national trends with caution because of large differences in patterns of use among regions and cities. For example, the student surveys also indicated that in 1983 cocaine use was reported by 8 percent of seniors in the north central and south regions of the country; among seniors in the Northeast, 15 percent reported cocaine use, and in the West, 19 percent. Cocaine use also differed between nonmetropolitan areas (7 percent) and large metropolitan areas (17 percent). Moreover, the slight national decrease in cocaine use reported by students between 1981 and 1982 (a drop from 12.4 percent to 11.5 percent) might have given professionals a false sense of confidence.[50]

Professionals in cities participating in the DAWN data collection effort can have greater confidence that the statistics generated for their city reflect more relevant trends. However, one of the overriding obstacles to using these data is the loss of specificity when the data are compiled. Data for wide geographical areas are grouped together to preserve the anonymity of participating hospitals and other data collection sites. Significant changes in one area can therefore be "washed out" by the data added from hospitals in areas where changes have not taken place. For example, although Harlem Hospital statistics indicated a clear switch from PCP to cocaine among residents between 1982 and 1983, DAWN statistics for the same period for the metropolitan area as a whole led State epidemiologists to conclude that "cocaine-involved emergency room reports for...New York SMSA hospitals showed little change between 1982 and 1983."[51] Moreover, statistics reported by the Federal Government for New York show numbers of cocaine cases decreased from 1982 to 1983 (1,536 compared to 1,297).[52]

Over the following years, however, both State and Federal DAWN data reports showed a significant increase in cocaine involvement of emergency admissions in the New York area as a whole. According to New York State data from 1983 to 1984, cases increased from 2,300 to 3,017, and in the following year there were 3,146 cases.[53] Federal reports on DAWN data for the Los Angeles area showed steady increases in cocaine-involved admissions from 1976 (34 cases) to 1985 (626 cases).[54] DAWN data from Los Angeles also showed a change in mode of administration over the early 1980's from sniffing to smoking; in 1980, 52.2 percent sniffed and 1.9 percent smoked, compared to 1985 when 11.5 percent sniffed and 17.7 percent smoked. But a similar pattern did not appear to be captured by the New York data, where 1.1 percent reported smoking in 1980 and 3.3 percent in 1985. It is also notable that a primary mode of administering cocaine reported in both sites has been injecting; in 1985, 41.8 percent of Los Angeles and 39.7 percent of New York City cases involved injecting.[55]

Since the Community Epidemiology Work Group findings are based on a relatively broad spectrum of data, State and local participants at each meeting often present important descriptions of patterns of abuse in their areas. For example, at the December 1986 CEWG meeting, New York State epidemiologists presented results of the street studies and a number of indirect indicators that "...show cocaine activity in New York City to be at exceedingly high levels."[56] However, since the group meets only twice a year and usually includes a different set of State and local researchers at each meeting, the meetings are generally more useful for informing NIDA staff and subsequently researchers than for informing local policy and practice. To further the interests of policymakers and public-service professionals at the State and local levels, NIDA has encouraged the formation of State Epidemiology Work Groups and Community-Based Drug Epidemiology Networks (DEN's).[57] The formation of DEN-like organizations for monitoring locally emerging patterns of drug use is congruent with the findings of this report and is discussed in more detail in the final chapter.

The High School Senior Survey, DAWN, and most other Federal data collection activities have been geared to providing information appropriate for determining *national* trends and policies. The DUF program, on the other hand, has from its inception been conceived and developed to yield information to inform *local* policy or practice in the jurisdictions from which the tested arrestees are drawn. To ensure that DUF statistics are not simply a function of police operations against specific drugs, the DUF program selects samples to represent primarily people booked for crimes other than drug sales or possession. In addition to determining site-specific trends in drug use among arrestees, DUF also obtains quarterly information about new drugs arrestees have heard about even if they have not used them. And by adding specific questions about drugs that appear to be gaining popularity in one or more cities, DUF helps determine if a similar pattern is occurring in other areas:

- Although DUF was implemented after the use of base reached epidemic proportions, a 1984 pilot study carried out in Manhattan's central booking facility, which obtained urine samples from approximately 5,000 arrestees, found that 42 percent tested positive for cocaine.[58] By 1986, the ongoing pilot study found that over 80 percent of male arrestees tested positive for cocaine use.[59]

- More recently, specific questions about ice were added to the DUF questionnaires to monitor patterns of marketing crystal methamphetamine as ice. A review of the questionnaires completed in Manhattan and Los Angeles revealed that although most interviewed arrestees had heard about ice from media reports, very few reported having used it or even having seen it. Moreover, several who reported having seen ice described a substance other than the crystal form of methamphetamine.

- Urinalysis conducted as part of DUF in Los Angeles and Manhattan in 1987, 1988, and 1989 also indicates that arrestees in these sites were not part of any rapidly evolving pattern of use of crystal methamphetamine

(or any form of amphetamine). In Manhattan, less than 1 percent of arrestees who tested positive for any drug tested positive for amphetamines during that period. In Los Angeles, among arrestees who tested positive for drugs, 4.7 percent tested positive for amphetamines in 1987, 4.0 percent in 1988, and 5.0 percent in 1989.[60]

In some participating DUF sites, the data have been found so useful for informing State and local practice that locally funded DUF spinoffs have been established to monitor drug use patterns among other criminal justice populations.

## State and Local Survey Data on Increasing Use of Specific Substances

Surveys specifically designed to monitor local drug use trends and emerging patterns obviously can provide important information for identifying emerging patterns of drug use. For reasons discussed at the beginning of this chapter, they tend to be underutilized by agencies other than those directly responsible for collecting the information. Several types of data could be shared among agencies; examples from the study sites follow.

### *DUF-like Data*

As previously noted, urinalysis for criminal justice system populations can provide information about populations at high risk of using drugs. In 1984 in New York City, urinalysis was used for research purposes to monitor drug use among arrestees placed on probation and to determine the effect of drug use on subsequent behavior. Since the study was conducted in Brooklyn, results do not apply directly to this report's study site (Manhattan). However, it is important to note that while probation officers estimated that 23 percent of their probationers were drug users, urinalysis showed that 68 percent were actively using drugs; 53 percent were using cocaine.[61] Following the pilot project, in March 1989 the New York City Probation Department instituted a urinalysis drug testing program for probationers in the Bronx and extended the program to Brooklyn and Staten Island in June 1989. Cumulative results for the year showed that among all probationers who tested positive for drug use (44.8 percent of those with usable results), 86.3 percent tested positive for cocaine.[62]

### *Student Surveys*

Self-report information on students' use of specific drugs were collected by a number of public and private agencies in the three study sites. Results of these studies seemed to be strong indicators of growing patterns of cocaine use and, in Los Angeles and on Oahu, use of stimulants including methamphetamine.

A longitudinal survey of students in Los Angeles schools beginning in 1976 revealed that compared to students throughout the country, Los Angeles youth were no more likely to use "hallucinogens, heroin, sedatives, analgesics or cigarettes;" but Los Angeles youth were significantly more likely to use "marijuana, cocaine, stimulants, tranquilizers, alcohol, and any nonmedical drug."[63] In 1984, approximately one-third of the respondents reported using cocaine in the six months before the survey; 18 percent reported nonmedical use of stimulants.[64] A survey of students in Hawaii conducted in 1987 revealed that close to 15 percent of high school seniors reported having used cocaine or crack. Although not specifically asked about the use of methamphetamine, over 12 percent of high school seniors reported using some form of stimulant including methamphetamine.[65]

### *Treatment Program Intake Interview Data*

Compilations of drug use reported by clients entering local treatment facilities can also provide strong indicators of emerging patterns of substance abuse. In New York, among clients admitted to State-funded treatment programs in 1982, 1,804 (7 percent of all admissions) said that cocaine was their primary drug problem. In the years that followed, the numbers reporting cocaine as a primary problem notably increased: 1,936 (9 percent of all admissions) in 1983; 3,156 (15 percent of all admissions) in 1984; 4,348 (20 percent of all admissions) in 1985; and in the first half of 1986, 3,615 (31 percent of all admissions).[66] In Los Angeles County in 1985, 3,858 clients admitted for treatment reported cocaine as a primary problem; in 1989, the number increased by 61.8 percent to 6,241 admissions for cocaine.[67]

On Oahu, systematic data on treatment admissions were not collected in a readily retrievable form until recently. However, interviews with directors of treatment programs show that in 1987 a large increase occurred in the number of clients admitted with methamphetamine as a primary prob-

lem. During the first half of 1990, among clients admitted for primary problems other than alcohol, 38 percent reported marijuana as a primary problem; 24 percent, amphetamines, and 22 percent, cocaine.[68]

## Media Reports

News stories on the use of specific substances seem to provide one of the least timely sources of information. They tend to focus on the most dramatic and least typical aspects of problems associated with widespread drug use and frequently present a distorted view of the problem. One perception news stories are likely to foster is that the substance now in use is a new form of drug, unlike any ever used before in that area. Drug users then respond by searching for this "new" drug. Fortunately, however, reporters who seek and incorporate information from knowledgeable public-service professionals and researchers do perform an important role in telling the public about the health hazards of specific substances. In the study sites, the earliest stories that mentioned smokable cocaine appeared in 1985; smokable methamphetamine was first mentioned in 1988.

Although most sales of base occurred on the streets rather than in rock houses, the first of over 350 *Los Angeles Times* news stories about the sale or use of rock cocaine was prompted by a shootout on February 13, 1985, between sheriff's deputies and a cocaine dealer working out of a "fortified" house.[69] According to the reporter, the deputies were investigating an earlier homicide. Slightly over 2 months later, on April 27, 1985, another *Los Angeles Times* article described the Los Angeles police's use of a battering ram to break into a storefront cocaine distribution center, which the police had learned was a busy rock house.[70] Over the following months one news report after another publicized the violence associated with some of the populations involved in using and selling rock—notably gangs, prostitutes, and the homeless.

On November 29, 1985, *The New York Times* published the first of more than 500 news stories on the "new purified form of cocaine."[71] Although the article presented some information about the health hazards of cocaine use, other descriptions helped sensationalize crack. For example:

> "...crack houses are the scene of 'uncontrollable, outrageous' sexual activity."
>
> "...crack should not be considered merely a slight variation of the cocaine that is being snorted....It is unmatched in its euphoria and exhilaration."

Over the next few years, the plethora of articles on crack helped both glamorize cocaine base and galvanize public opinion against drug abuse and drug dealers.

Media stories about smokable methamphetamine were first published during the fall of 1988, when *The Honolulu Advertiser* ran a news article on a Drug Enforcement Administration seizure. An agent involved in seizing a shipment of the drug was quoted as saying, "I've only seen it before, on the mainland, in powder form, which is sometimes called 'crack' or 'speed.' This is the first time I've seen it in Hawaii in 'ice' form."[72] Over the following months, the *Advertiser* staff reporting on "ice" worked closely with law enforcement and other professionals on Oahu to inform residents about the health risks of using the substance. Rather than glamorizing ice, the message they conveyed was clear: "'Speed kills,' and it's back to wreck lives."[73]

As discussed in the next chapter, a coordinated effort to reduce both supply and demand of ice in Oahu included this public information campaign. Although cocaine use remains unabated in all three study sites, methamphetamine use declined sharply on Oahu.

## Endnotes

1. For example, minority group respondents in high school surveys are more likely than white students to admit that they had underreported drug use.

2. In other words, patterns observed across cases under investigation can be informative even if evidence is not adequate for arrest or prosecution in some of the cases.

3. For a detailed discussion of problems with using police records for studying drug use, see Ryan, Patrick J., Paul Goldstein, Henry H. Brownstein, and Patricia A. Belluci. 1990. "Who's Right: Different Outcomes When Police and Scientists View the Same Set of Homicide Events, New York City, 1988." In Mario DelaRosa, Elizabeth Y. Lambert, and Bernard Gropper, eds. *Drugs and Violence: Causes, Correlates and Consequences.* Rockville, Maryland: National Institute on Drug Abuse, NIDA Research Monograph 103, pp. 239-263.

4. Milkman, Raymond, Erin McDevitt, Roberta Feldman, and Nancy Landson. 1990. *Assessment of Methods Used by State and Local Governments To Estimate Drug Abuse Levels.* Prepared for the National Institute of Justice. McLean, Virginia: The Lazar Institute.

5. The descriptions of the earliest stages of development of smokable cocaine in New York City are based in large part on Preble's findings, which were graciously provided by his colleague, Dr. Bruce Johnson, Narcotic and Drug Research Incorporated.

6. Williams, Terry. 1989. *Op. cit.*

7 Boyle, Kathleen. 1990. Private communication.

8. Shedlin, Michele. 1990. Draft working paper, p. 9.

9. *Ibid.*, p. 10.

10. Shedlin, Michele. 1989. *The Health Care of Homeless Mothers and Children: Impact of a Welfare Hotel.* New York, New York: Medical and Health Research Association of New York, Inc., p. 23.

11. *Ibid.*, p. 25.

12. Shedlin, Michele. 1990. *Op. cit.*, p. 16.

13. Shedlin, Michele. 1990. Personal communication.

14. Wright, Michael T. 1987. "Interview With William Hopkins." In *The Trooper.* New York State Police Public Information Office, 25(2):8.

15. Frank, Blanche, Gregory Rainone, Michael Maranda, William Hopkins, Edmundo Morales, and Alan Kott. 1987. *A Psycho-Social View of "Crack" in New York City.* Presented at the American Psychological Association Convention. New York, New York.

16. Galea, John. (Undated.) "Street Research Advisory: CRANK," in *Street Drug Alert: Current Drug Trends from A Street Perspective.* New York: Street Research Unit, Bureau of Research and Evaluation, Division of Substance Abuse Services, State of New York. Please note that while the term "crank" is used to refer to crystal methedrine in New York, in other cities the term is used to refer to drugs other than methedrine.

17. Hopkins, William. *The Assessment of Heroin Abuse Among Residents of the Third Street Men's Shelter: A Needs Assessment Study.* New York, New York: Ethnography Section, Bureau of Research and Evaluation, Division of Substance Abuse Services, State of New York.

18. Dunlap, Eloise. 1990. Personal communication.

19. Frank, Blanche, William Hopkins, and Douglas Lipton. 1986. "Current Drug Use Trends in New York City." In *Community Epidemiological Work Group Proceedings, December 1986.* Rockville, Maryland: National Institute on Drug Abuse, pp. II124-II136.

20. Frank, Blanche, Rozanne Marel, Michael Maranda, Gregory Rainone, and Norman Williams. 1989. *The Northern Half of Manhattan: An Assessment of the Drug Abuse Problem.* New York: Bureau of Research and Evaluation, New York State Division of Substance Abuse Services.

21. Stetser, Merle. 1990. "Issue Paper: Substance Abuse Patterns." In Hawaii State Epidemiology Work Group. *Meeting Summary, Honolulu, Hawaii, February 14, 1990*, Attachment M. Silver Spring, Maryland: Johnson, Bassin & Shaw. In the same attachment, Stetser pointed out that medical examiner reports and Hawaii Criminal Justice Data Center reports on methamphetamine-related deaths do not correspond. The latter present statistics showing that only 10 methamphetamine-related deaths could have occurred during 1988.

22. Ventura, Rochelle, and Donald R. McAllister. 1990. *Update on Drug Abuse in Los Angeles County.* Los Angeles, California: Alcohol and Drug Program Administration, County of Los Angeles.

23. Shimabukuro, Alan. 1990. "Hawaii State Epidemiology Work Group Meeting." In Hawaii State Epidemiology Work Group. *Meeting Summary, Honolulu, Hawaii, February 14, 1990*, Attachment O. Silver Spring, Maryland: Johnson, Bassin & Shaw.

24. Simpson, Lisa. 1990. "Perinatal Addiction in Hawaii," in Hawaii State Epidemiology Work Group. *Meeting Summary, Honolulu, Hawaii, February 14, 1990*, Attachment F. Silver Spring, Maryland: Johnson, Bassin & Shaw, p. 2.

25. Klein, Malcolm, Cheryl L. Maxson, with Lea C. Cunningham. 1988. *Gang Involvement in Cocaine "Rock" Trafficking.* Final Report. Washington, D.C.: National Institute of Justice, NIJ #85-IJ-LX-0057, p. 9. Based on incidents rather than arrests; the numbers for the same years are 233, 542, and 1,114.

26. Fagan, Jeffrey, Steven Belenko, Bruce D. Johnson, Kolin Chin, and Eloise Dunlap. 1990. *Changing Patterns of Drug Abuse and Criminality Among Crack Cocaine Users.* Summary Final Report submitted to the National Institute of Justice. New York, New York: New York City Criminal Justice Agency.

27. *Ibid.*

28. Frank, Blanche, Gregory Rainone, Michael Maranda, William Hopkins, Edmundo Morales, and Alan Kott. 1987. *Op. cit.*

29. Shimabukuro, Alan. 1990. *Op. cit.*

30. Chernow, Eli. 1990. Personal communication.

31. Williams, Terry. 1989. *Op. cit.*

32. Stetser, Merle. 1990. *Op. cit.*

33. The Honolulu Police Department reported the cost of a gram of crystal methamphetamine ranging from $250 to $400 (Stetser, Merle; 1990; *op. cit.*) and the number of hits from one gram ranging from 10 to 15 (Shimabukuro, Alan; 1990; *op. cit.*).

34. 54.1 percent.

35. 37.5 percent.

36. Blacks accounted for 50.8; 44.4 percent were Hispanic. Belenko, Steven, Gary W. Nickerson, and Tina Rubenstein. 1990. *Coping With Crack: Judicial Responses and Attitudes.* Presented at the 1990 Annual Meeting of the Law and Society Association. Berkeley, California.

37. Among arrestees in powdered cocaine cases, 54.8 percent were over age 24; in cases involving cocaine sold as "crack," 51.2 percent were over age 24.

38. A total of 73.3 percent of arrestees in cases involving powdered cocaine and 74.7 percent in crack cases had been arrested previously. Belenko, Steven, Gary W. Nickerson, and Tina Rubenstein. 1990. *Op. cit.*

39. Shimabukuro, Alan. 1990. *Op. cit.*

40. Klein, Malcolm, Cheryl L. Maxson, with Lea C. Cunningham. 1988. *Op. cit.*, p. 9. Based on incidents rather than arrests; the numbers for the same years are 233, 542, and 1,114.

41. 8.5 percent.

42. 20.8 percent in 1984 and 24.9 percent in 1985.

43. Klein, Malcolm, Cheryl L. Maxson, with Lea C. Cunningham. 1988. *Op. cit.*

44. See for example: National Institute on Drug Abuse. 1985. *NIDA Capsules: National Household Survey on Drug Abuse.* Rockville, Maryland: Department of Health and Human Services. Cox, Brenda, and Sara C. Wheeless. 1988. *Sample Design Plan for The 1988 National Household Survey on Drug Abuse..* Research Triangle Park, North Carolina: Research Triangle Institute (RTI/4181/03-01I).

45. See for example: Johnston, Lloyd D., Patrick M. O'Malley, and Jerald G. Bachman. 1986. *Drug Use Among American High School Students, College Students, and Other Young Adults, National Trends Through 1985.* Rockville, Maryland: National Institute on Drug Abuse. Johnston, Lloyd D., Patrick M. O'Malley, and Jerald G. Bachman. 1985. *Use of Licit and Illicit Drugs by America's High School Students, 1975-1984.* Rockville, Maryland: National Institute on Drug Abuse.

46. See for example National Institute on Drug Abuse. 1987. *Statistical Series Trends in Drug Abuse Related Hospital Emergency Room Episodes and Medical Examiner Cases for Selected Drugs 1976-1985: Topical Data From the Drug Abuse Warning Network (DAWN).* Rockville, Maryland: U.S. Department of Health and Human Services, Series H, No. 3.

47. See for example National Institute on Drug Abuse. 1986. *Drug Abuse Trends and Research Issues; Community Epidemiology Work Group Proceedings.* Rockville, Maryland: U.S. Department of Health and Human Services.

48. Chaiken , Marcia R., and Bruce D. Johnson. 1988. *Op. cit.*

49. Johnston, Lloyd D., Patrick M. O'Malley, and Jerald G. Bachman. 1985. *Op. cit.*

50. *Ibid.*

51. Frank, Blanche, William Hopkins, and Douglas Lipton. 1986. *Op. cit.*, p. II128.

52. The Federal Government includes data only from facilities consistently reporting for a 10-year period (1976 to 1985). See for example National Institute on Drug Abuse. 1987, *Op. cit.*

53. Frank, Blanche, William Hopkins, and Douglas Lipton. 1986. *Op. cit.*

54. See for example National Institute on Drug Abuse. 1987. *Op. cit.*

55. *Ibid*, pp. 54-55.

56. Frank, Blanche, William Hopkins, and Douglas S. Lipton. 1986. *Op. cit.*, p. II128.

57. See for example Hall, James N. 1990. *The Community-Based Drug Epidemiology Network: The Drug Abuse Epidemiology Work Group of Mexico.* Miami, Florida: Up Front Drug Information Center.

58. Wish, Eric D., E. Brady, and Mary Cuadrado. 1986. *Urine Testing of Arrestees: Findings From Manhattan.* Presented at the conference Drugs and Crime: Detecting Use and Reducing Risk. Washington, D.C.: National Institute of Justice.

59. National Institute of Justice. 1990. *DUF 1988: Drug Use Forecasting Annual Report.* Washington, D.C.: U.S. Department of Justice.

60. Poulin, Robert. 1991. Unpublished statistics generated at LINC specifically for this report.

61. Wish, Eric D., Mary Cuadrado, and John Martorana. 1986. *Estimates of Drug Use in Intensive Supervision Probationers: Results From a Pilot Study.* New York, New York: Narcotic and Drug Research Incorporated.

62. Mancuso, Theresa. 1990. *Urinalysis Report: Drug Testing Program First Year 1989.* New York, New York: New York City Department of Probation.

63. Newcomb, Michael D., and Peter M. Bentler. 1988. *Consequences of Adolescent Drug Use.* Beverly Hills, California: Sage Publications, p. 48.

64. *Ibid*, p. 52. As adolescents, 18 percent had reported using cocaine in the previous six months. This increase does not appear to be attributable to respondents' more likely use of drugs as they grew older, since analysis of the survey results demonstrated that "...significant decreases in use were evident for use of marijuana, hashish, minor tranquilizers, barbiturates, sedatives, LSD, inhalants, and PCP."

65. Deck, Dennis D., and Phillip R. Nickel. 1989. *Substance Use Among Public School Students in Hawaii.* Portland, Oregon: Northwest Regional Educational Laboratory.

66. Frank, Blanche, William Hopkins, and Douglas S. Lipton. 1986. *Op. cit.*, p. II128.

67. Ventura, Rochelle, and Donald R. McAllister. 1990. *Op. cit.*

68. Calculated from CODAP data supplied by the Alcohol and Drug Abuse Division, Hawaii State Department of Health.

69. Furillo, Andy. 1985. "Man Killed as Deputies Smash Into Two Houses." *The Los Angeles Times.* February 13. Metro, part 2, p. 1, col. 6.

70. Furillo, Andy. 1985. "Police Knock Down Wall and Pick Up 16 Drug Suspects." *The Los Angeles Times.* April 27, Metro, part 2, p. 1, col. 1.

71. Gross, Jane. 1985. *The New York Times.* April 27, Metropolitan Desk, section A, p. 1, col. 1.

72. Kaser, Thomas. 1988. "3 Arrested, 2 Charged With Methamphetamine Shipments." *The Honolulu Advertiser.* September 13.

73. Hastings, Barbara. 1989. "'Speed Kills,' and It's Back To Wreck Lives." *The Honolulu Advertiser.* February 5.

# Chapter 4

# Official Responses to Emerging Patterns of Drug Use

A range of actions can be taken when a pattern of substance abuse has been identified. This chapter presents first the tactics recommended in the 1991 and 1992 National Drug Control Strategy. Then a brief description is given of actions taken in New York and Los Angeles in response to widespread epidemic use of smokable cocaine in those cities. Finally, the tactics implemented in Oahu in response to smokable methamphetamine are described in some detail, because these measures may have helped stem precipitous increase in "ice" use.

## Responses Recommended in the 1991 and 1992 National Drug Control Strategy

The substance of the 1991 and 1992 National Drug Control Strategy is in large part based on knowledge about drug use and sales accumulated since 1986—after public recognition of widespread epidemic use of base cocaine in the study sites and other cities. Recognizing that careful monitoring of substance abuse patterns is needed for effective policy, the 1991 strategy calls for "wide ranging, interdisciplinary data collection and evaluation."[1] Similarly, the 1992 strategy concludes that a national funding priority for the coming years is to "improve and expand information and data collection systems."[2] Reaffirming the description of drug use as a "broad epidemiologic phenomenon" resulting from a combustible mix of "demand" of drug buyers and "supply" of drug sellers, the 1991 National Drug Control Strategy recommends a comprehensive approach including the following measures:

- Taking actions to prevent people from using drugs in the first place.
- Providing effective treatment for those who need it and benefit from it.
- Holding users accountable for their actions and thereby deterring others from using drugs.
- Prosecuting dealers and traffickers.
- Punishing those convicted of drug crimes.
- Disrupting the flow of drugs, drug money, and related chemicals.
- Engaging other nations in efforts to reduce growth, production, and distribution of drugs.
- Supporting basic and applied research in behavior, medicine, and technology.
- Improving intelligence capabilities in order to attack drug trafficking organizations more effectively.

In sum, the 1991 strategy states, "No single tactic by itself is sufficient. All of these must be employed."[3] The 1992 strategy provides more definitive and focused actions in these areas and reattests that "...if we are to be successful in our fight against illegal drug use, we must view the drug control problem as an integrated system that will be most effective when all aspects are receiving proper and balanced attention."[4]

The case studies carried out for this report provide examples of the need for local agencies to recognize emerging drug patterns by participating in interdisciplinary data collection efforts as suggested by these strategies. They further show the importance of cooperative implementation of these recommended tactics at an early stage in the development of a drug use pattern. This chapter describes the relatively early

recognition and interagency cooperation on Oahu. Actions were immediately followed by indications that the availability and popularity of smokable methamphetamine had gone down. In New York and Los Angeles, although individual researchers and public-service professionals recognized the spread of cocaine use in the early 1980's, it was not until 1985 that base use was acknowledged to be a common cross-agency problem. Concerted responses occurred around 1986 when the media began to report on the widespread epidemic. By that time, because of the sheer volume of crack users and sellers, agencies had a difficult time providing expected services, much less implementing innovative practices coordinated across agencies.

For example, school administrators and educators in north Manhattan and south central Los Angeles recognized the value of primary prevention after they were immersed in a crack and rock epidemic, but they had to devote their time and scarce resources to the deluge of youngsters already using and selling drugs. Resources were also inadequate for helping children who were abused or neglected by drug-using family members or who had suffered drug-induced prenatal neurological damage.

Criminal justice agencies, too, were overwhelmed by cocaine cases. When law enforcement officers arrested buyers and dealers on one block, markets moved to adjacent blocks. Jailed dealers were quickly replaced by other dealers. When police used battering rams to gain entry to some of the more flagrant indoor crack and rock markets, dealers built stronger fortifications. In response, the police used more destructive equipment. Dealers built still stronger fortifications. Responding to media coverage and public outrage, many judges sentenced convicted crack dealers to unusually long periods of incarceration.[5] Correctional resources were severely taxed.

While New York and Los Angeles public-service professionals to whom we talked were professionally and personally committed to "taking back the streets" and providing a safe and drug-free environment for a new generation of youth, they were fighting the omnipresent cocaine inch by inch. According to anthropologists and ethnographers in Manhattan, crack use has been reduced and crack sales have been relegated to smaller and smaller areas.

Several reports in Los Angeles are not as encouraging. Anthropologists have suggested that rock use is still rampant among prostitutes, homeless people, and other economically disadvantaged populations. Rather than being contained in small areas, cocaine distribution has become even more dispersed. Cocaine-related deaths in Los Angeles County increased 6.6 percent from 1986 to 1988; emergency room cocaine cases climbed 135.5 percent between 1986 and 1989; and between 1986 and 1989, cocaine treatment admissions rose 25.0 percent.[6] However, primary prevention program staff in Los Angeles suggested that although alcohol abuse may be increasing, young adolescents are more likely to disapprove of the use of cocaine and other drugs than youngsters several years ago.

## Tactics Used in Manhattan and Los Angeles in Response to Cocaine Use

Although the New York City Police Department carried out special operations in cooperation with other Federal, State, and local law enforcement agencies, in Manhattan and Los Angeles individual agencies independently implemented tactics to respond to the particular problems presented by the communities they served. Cooperative efforts among local agencies were mostly limited to sharing information about crack and incorporating it in primary prevention programs jointly implemented by law enforcement agencies and school administrations.

### *Information Sharing*

After the use of cocaine base reached epidemic proportions, local agencies in Manhattan and Los Angeles began to share information they had previously accumulated. For example, beginning in 1985, the New York Police Department began briefing treatment staff and probation department officers about crack. In 1986, treatment centers and other community organizations in Manhattan invited police, local politicians, and citizen groups to discuss the spread of crack. And in 1987 at a criminal justice retreat sponsored by the Association of the Bar of the City of New York, participants discussed the response to crack, including "the need for better management and planning...a better early warning capacity."[7]

After the rock and crack problem was publicized by the media, the New York State Department of Substance Abuse Services (DSAS) and the Los Angeles County Alcohol and Drug Program Administration's Information Management Services were increasingly called on to provide information about cocaine use. Research analysts and epidemiologists in both agencies combined substantial amounts of information to keep administrators in many organizations informed about trends in base use. Epidemiologists at DSAS carried out "half-borough" analyses to provide professionals with

statistics for their own relatively small areas of New York City.[8] And as part of Federal or State epidemiologic work groups, researchers and analysts provided rich information about cocaine use, which was integrated and published. However, although several administrators in local agencies said they were recipients of these types of analytical reports, many administrators and most "hands-on" public-service professionals did not seem to know about them and continued to rely on information generated by the media, individual colleagues, or clients.

### *Prevention*

Prevention programs designed and implemented by law enforcement agencies in partnership with school administrations were already in place in New York and Los Angeles when dealers began to actively market smokable cocaine. For example, the New York City Police Department cooperates with the New York City elementary schools in delivering the SPECDA (School Program to Educate and Control Drug Abuse) program. In Los Angeles County schools, DARE (Drug Abuse Resistance Education) is implemented by police officers and SANE (Substance Abuse Narcotics Education) by sheriff's deputies. Los Angeles County also encompasses small separate municipalities that have formed their own school-based law enforcement efforts. As an example, the Inglewood Police Department works in partnership with the Inglewood Board of Education on several prevention programs including alternatives to gang activities.

Additional prevention programs were designed and implemented independently by other school administrations. New York City high schools are administered separately from elementary schools and have their own prevention program, SPARK. Additionally, in both Manhattan and Los Angeles, separate school districts also implement their own programs for both primary and secondary substance abuse prevention.

Although details of content vary, most prevention programs do not exclusively focus on preventing use of cocaine or any other specific substance, but rather seek to educate youngsters about the harm caused by substance abuse and to provide them with skills to resist peer pressure to experiment with any harmful substances. However, as part of the curriculum, information is provided for debunking myths about specific drugs. When the youngsters in prevention classes first started talking about crack (around 1984), prevention program staff had little or no idea what the drug was. The Federal and State agencies that prevention program staff normally used as information sources did not have readily available materials to describe what crack really was. Eventually, prevention officers were briefed about crack by officers in their own department's narcotics unit, but this was done only on a routine annual or semiannual basis.

By 1985, epidemiologists in the New York Department of Substance Abuse Services (DSAS) started to provide information to school-based substance abuse program staff. In 1986, the New York City Board of Education began a massive citywide training program with the support of DSAS for teachers and substance abuse program staff. Since 1987, school staff were able to get information on crack from Federal agencies like the Drug Enforcement Administration. These materials were also used for training sessions for school-based educators, intervention specialists, and peer counselors. Information about crack was also incorporated into the prevention curriculum. More recently, program staff report that youngsters seem to be getting the message about using crack. But, sellers may keep on dealing crack even if they stop using the drug.

> *"Messages have gotten through to kids that crack is not an OK kind of a thing. We're still hearing about making $300 a day with [selling] crack. We haven't turned that around very much [haven't reduced the amount of dealing crack] because of the money. [Even kids who have stopped using crack still think] it's OK to be a dealer."–Prevention program specialist*

### *Treatment and Other Health Services*

For treatment staff in Los Angeles and Manhattan, an adjustment in clinical approach was the primary response to increasing numbers of admissions involving cocaine smoking. In 1984, Harlem Hospital added a special assessment for suicide risk to its DSM-III diagnostic schedule. The treatment approach was also shifted because cocaine cases involved different psychiatric needs. For example, in 1988 Harlem Hospital and two other sites established a comprehensive psychiatric program that allows for 3 days of intensive workup.

Around 1985 in Los Angeles, psychiatrists and drug abuse counselors found that shifts in treatment approaches were needed because their rock-involved clients were younger than those who had been using cocaine. Because addictions developed rapidly, clients appeared unwilling to attribute the difficulties they were experiencing to their frequent smoking of cocaine.

> *"...people would come in desperate for help—but then they would think, 'It's not addiction, it's just my bad luck.' The smokers were much younger. They wouldn't believe it was their addiction [that was the basis of their referral for treatment]; what they thought was, 'My boss is an [idiot].'"–Psychiatrist*

In 1988, to more closely monitor the frequency of live births in which the mother was using cocaine, New York City changed its birth certificates to include a checklist of drugs used or not used. The sources for determining these data include urinalysis involving the mother or newborn, self-reports of the mothers at time of delivery, other documentation on the mother's drug use such as blood tests, enrollment in treatment, or prior emergency room admission for drug-related reasons. However, Health Department staff caution that cuts in funding for almost all city services mean there are fewer staff members available to fill out detailed records of drug involvement. Moreover, they point out that birth data on substances are confined to live births; a better measure would be all births.

In 1990, special programs were being implemented to recognize and deal with the first waves of "crack babies" (children born of crack-using mothers)[9] now entering schools. According to substance abuse counselors, these children have many learning disabilities and cannot be effectively educated using traditional teaching methods. Since identification of such children is not easy, training sessions to recognize youngsters affected by prenatal exposure to cocaine are being developed for teachers and other school staff.

### *Law Enforcement and Other Criminal Justice System Agency Responses*

The responses of criminal justice agencies in New York and Los Angeles have involved relatively different approaches to dealing with increased sales and use of cocaine base. Los Angeles agencies have responded by renewing efforts to curtail street and midlevel distribution of controlled substances in general. Although narcotics units have employed special equipment to enter fortified rock houses, specific enforcement units that focus on cocaine do not appear to have been used. New York agencies, however, have formed special units explicitly or implicitly assigned to target crack distributors and users:

- In May 1986, a new special anti-crack unit was formed within the Narcotics Division of the New York City Police Department (NYPD). The unit began operations with 100 officers, but 100 more officers were added the next month. Police department chemists analyzing evidence were required to keep separate statistics for crack, cocaine, and other drugs.
- In 1986, a special car seizure unit was also formed within NYPD to focus on drivers coming into the city to buy cocaine and other drugs. One major focal point was the Washington Heights area of north Manhattan which had become an active distribution point serving cocaine users from New Jersey, Connecticut, and New York State. In one 10-hour crackdown period, 17 cars were seized.
- In 1987 NYPD set up a "drug busters" hotline; callers can report a problem anonymously. They receive an ID number and can call back to receive information about actions taken in response to their call. In the three years following its establishment, the hotline received approximately 12,000 calls. (The Los Angeles Police Department also has a hotline, WETIP "we turn in pushers"; however, the information flows in just one direction.)
- In 1988, an NYPD Tactical Narcotics Team (TNT) was formed to crack down on street-level drug sales in four boroughs including Manhattan.
- In 1989, the New York City Probation Department initiated the SAVE project to focus on people under their supervision who are crack users. The program regularly conducts urinalysis to monitor probationers identified as crack users and provides intensive surveillance by specially trained Community Contact Unit probation officers.
- During the summer months of 1990, TNT and SPECDA (prevention program) officers targeted blocks known to be infested with dealers and provided concentrated surveillance and enforcement to create safe areas for neighborhood children to play in.

Both Los Angeles and New York City criminal justice agencies have implemented new computer systems or extended the use of older systems for more methodic monitoring of patterns of drug use, drug sales, and enforcement procedures:

- The New York City Probation Department initiated a urinalysis drug testing program in 1989. Primarily used for classification and case management for its project SAVE, the program analyzes results of tests for six drugs to determine drug use trends.
- By 1990, the New York City Police Department had implemented the N.I.T.R.O. system for collecting detailed information about all felony drug arrests in Manhattan. Plans were to implement the system as a network in all other boroughs. Details collected for each arrest include defendant data, arrest facts, "buy and bust" information, reports about properly seized substances, and information about associates.
- The primary systematic data collection effort used by the Los Angeles Police Department for tracking narcotics information is NIN—the Narcotic Information Network. NIN is a multiagency information network for tracking narcotics cases. Originally implemented for protecting the safety of undercover narcotics officers and preventing duplication of effort on narcotics cases, NIN is currently also used for tracking gang crackdown activities. Until recently, access to information on the network was limited to eight law enforcement agencies; as of November 1990, information was shared with all law enforcement agencies on a "need-to-know" basis. Approximately 58 agencies have been using the information.

As already discussed, law enforcement agencies in both Manhattan and Los Angeles participate in the Drug Use Forecasting program sponsored by the National Institute of Justice. In addition to providing data for monitoring types of substances used by arrestees, DUF also collects information about the marketing of new drugs. While DUF was not instituted in time for professionals to realize that base cocaine was being marketed as crack, future data can provide early warnings of new developments.

## Tactics Used on Oahu in Response to Methamphetamine Use

The Honolulu Police Department recognized the increasing popularity of crystal methamphetamine at an earlier stage than that at which New York and Los Angeles professionals recognized the spread of base cocaine use. Moreover, as soon as methamphetamine use was recognized as an emerging problem on Oahu in 1986, professionals in a range of agencies cooperated in carrying out a comprehensive problem reduction strategy.[10] Spearheaded by the U.S. Attorney's Office in conjunction with the Honolulu Police Department, the effort encompassed virtually all of the tactics presented in the 1991 National Drug Control Strategy. By 1988 the spread of ice appeared to have been contained, and by 1989 use appeared to be decreasing. Here is what was done.

### *Mechanisms for Dealing With an Emerging Problem Were Established Before Ice*

Criminal justice system agencies and other organizations addressing substance abuse on Oahu were already cooperating to deal with a potential crack problem. Extensive publicity about crack on the mainland in 1986 led police, educators, treatment staff, and Federal agencies located on Oahu to maintain frequent contact to identify and curtail the aggressive marketing and increasing use of base cocaine. Although by that year rock and crack smoking was a dominant form of substance abuse on the island, police had shut down the few dealerships that organized to prepare and market the substance. Base cocaine used by residents was mainly "cooked" at home. Still, authorities who were concerned that mainland hustlers might attempt to establish Hawaiian markets remained vigilant and in close communication; by the time crystal methamphetamine began to increase in popularity, they were already on the lookout for an emerging pattern.

> *"At first we thought it [ice] was crack. The police had been telling us, 'crack is coming, crack is coming'—so we thought 'crack is here.'" – Treatment program staff member*

### *A Potential Problem Was Identified Soon After Distribution Became Organized*

The first case involving ice dealerships inadvertently came to the attention of the Honolulu Police Department during the 1986 investigation of a murder in a small town about 16 miles from downtown Honolulu. As part of the investigation, a departmental task force was following the activities

of gangs, including those of Filipino extraction; they learned that the gang members were dealing something called ice. The Narcotics Division was immediately assigned to follow up on this information.

Undercover narcotics agents began to make ice buys and concentrated on learning more about the distribution of the substance. Although discovery was complicated by the closeness of members of the Filipino community and their suspicion of outsiders, the officers learned from informants that methamphetamine had been coming in from the Philippines and Korea since 1985 and use and sales were increasing in particular areas such as Kahlihi. They also learned that the drug was typically smoked in distinctively shaped glass "bongs." Although these were a variant of glass pipes that had been used on the island for decades, the narcotics officers learned that they were marketed as a new type of paraphernalia. Chemical analysis of seized ice samples and paraphernalia residues revealed that ice was a relatively pure crystal form of methamphetamine.

### *Police Divisions Coordinated Efforts To Learn About Local Ice Use*

The narcotics officers held a series of meetings and briefings with officers in other divisions to pass on the information they had discovered and to elicit more information. DARE officers had previously heard about ice, shabu, and batu from their students, and, prompted by the findings of the Narcotics Division, the community relations officers including the DARE officers began to seek additional information. They contacted a spectrum of sources, networking with parents and teachers, talking with kids involved in DARE and other prevention programs such as PAL (Police Activities League) and Explorer Scouts, talking with residents involved in Neighborhood Watch, reading the results of the student surveys, and the health department surveys, talking with treatment people, and talking to outreach staff. From their community sources they learned that the drug was being marketed as a "safe drug—not dangerous like crack," but a "clean, odorless drug that could be safely used to get a great high."

Teachers and treatment staff suggested that use was associated with abuse of children and other forms of violence. Officers responding to domestic disputes in homes where crystal was discovered also had that impression. They reported that although family altercations always have a high potential for violence, far more brutality seemed to occur when crystal was involved.

Surveys indicated that use of stimulants in general was increasing on Oahu. The increase specifically in methamphetamine use was reported by officers conducting routine patrol stops who found more people in possession of crystal. Together the information gathered by the department indicated that ice was being vigorously marketed in blue-collar areas. While some sources reported that the drug was not harmful, violence associated with use was reported by police officers and Crisis Team psychologists and social workers. Additional evidence from the Honolulu Medical Examiner's Office that violent deaths were associated with crystal methamphetamine showed a need to take rapid measures to control future distribution. By the end of 1986, recognizing that it could not effectively control drugs alone, the Honolulu Police Department turned for help to other agencies.

One of the first agencies the police turned to was the Office of the U.S. Attorney. The U.S. Attorney recommended a comprehensive, coordinated approach involving education, prevention, law enforcement, prosecution, and treatment. Soon after being briefed by the police, he formed task forces both within his own office and in coalition with other agencies to concentrate on these areas.

### *Interagency Cooperative Efforts Were Used To Prevent Use*

The U.S. Attorney and the Honolulu Police Department, in cooperation with other agencies, used several tactics to prevent the spread of ice and to discourage its existing use. Cooperating agencies included the Hawaii Department of Education, the Hawaii State Department of Health, and private associations organized specifically to provide prevention programs such as the Coalition for a Drug-Free Hawaii and the Western Center for Drug-Free Schools and Communities. Together these agencies coordinated their activities:

- Reputable national and international sources were contacted to learn more facts about smoking crystal methamphetamine. Medical sources in the Philippines, Korea, and Japan provided information about the effects of smoking methamphetamine; they advised that ice was far from safe and could result in drug-induced psychosis lasting for a year or more. Korean officials also cautioned that youngsters were using the drug to stay awake and study.
- Factual information about the long-term health hazards and immediate effects of smoking crystal metham-

phetamine was given out to educators and health professionals who deal with youngsters. For example, the Honolulu Police Department provided information to the Hawaii Department of Education Drug Advisory Committee; the committee in turn notified teachers, school administrators, and the manager of nursing services who alerted school nurses.

- An association was formed to provide a comprehensive education and prevention effort. Several noteworthy projects such as DARE and programs of the Western Center for Drug-Free Schools and Communities were already in place when the emerging pattern of ice use was discovered. However, public-service professionals across agencies dealing with substance abuse realized that no single organization was taking responsibility for coordinating and carrying out persuasive education among the many ethnic groups in Hawaii's diverse population.

  The Coalition for a Drug-Free Hawaii was formed in 1987. Its goal was to carry out an "educational campaign to reduce, and ultimately prevent, drug use and to increase capacities to create drug-free environments in schools, homes, and workplaces".[11] The coalition's methods involve training "impactors" (people most likely to have an impact on community attitudes and behavior) including youth leaders; fostering networks and collaborations among community members in forums such as community action workshops; training parents, educators, and workplace personnel to create drug-free environments; and distributing factual, accurate information in conferences and through newsletters.

  Within months of its formation, the coalition cosponsored a conference with the U.S. Attorney's Office to share information about ice. A task force was formed to facilitate the conference and put together factual details. The task force soon realized that most information about ice use and other forms of substance abuse on Oahu was observational and anecdotal; it recommended that more systematic data collection be implemented.

- Public and private agencies cooperated with the media to ensure that publicity about ice would result in preventing rather than promoting use. One of the key participants in the coalition was also the influential editor of Oahu's major newspaper. He worked closely with the police, the U.S. Attorney, the coalition staff, and administrators in other agencies to present accurate, realistic information about ice and its dangers.

In addition to their instrumental role in preventing the use of crystal methamphetamine, the Honolulu Police Department and the U.S. Attorney also coordinated efforts to curb the distribution of ice.

### *Interagency Cooperative Efforts Were Used To Arrest Distribution*

The tactics used to curb the marketing of crystal methamphetamine were also comprehensive and involved virtually all criminal justice and related agencies located on Oahu. Additionally, contacts were made with law enforcement agencies in other States and countries. Generally, law enforcement and prosecution focused on all levels of distribution including street-level, midlevel, and wholesale distribution and importation of methamphetamine. In addition to the use of traditional law enforcement and prosecution tactics against users and dealers, many specific actions were undertaken:

- In 1987 the Honolulu Police Narcotics/Vice Division formed a "crystal ball" task force in cooperation with Federal agencies including the Drug Enforcement Administration, the Internal Revenue Service, U.S. Customs, and the Immigration and Naturalization Service. This task force concentrated on tracing the networks importing crystal methamphetamine into the country and worked closely with narcotics officers in several countries in Asia.

- Agencies cooperating in the crystal ball task force and the U.S. Attorney's Office coordinated efforts to gather sufficient evidence to successfully prosecute major dealers involved in ice distribution, such as one importer/wholesaler who had apparently conducted $7 million of ice business in two years.

- In 1988 an airport task force was formed to increase interdiction. It included a canine unit whose dogs were trained to sniff out methamphetamine as well as cocaine and marijuana.

- Juvenile Crime Prevention Division police officers focused on deterring youth from becoming involved in illegal enterprises. They worked with parents and teachers to identify and get treatment for youngsters who were exhibiting symptoms of ice smoking. In 1987, they also organized a task force to study youth involvement in drug distribution.

  Members of the task force realized that out of the many youth gangs on Oahu, one in particular was responsible for many crimes and was heavily involved in ice

distribution.[12] Although this gang was targeted for immediate intervention, the division also put together a panel composed of a social worker, a police officer, and a community outreach worker to draft a plan for keeping other youth gangs from becoming involved in criminal activities. Over the next couple of years numerous measures were implemented including a comprehensive program to offer youngsters alternatives to illicit activities.

- To send out a clear message to persons that marketing ice would have real consequences, prosecutors requested and judges delivered relatively long sentences for convicted dealers, especially top-level dealers.

> *"[The word is out that] if the feds get you, you have a big problem. [The dealers] now say, 'I don't mess with ice,' because the feds are focusing on ice." –U.S. Attorney*

- Law enforcement agencies on the mainland were alerted about ice. Police and prosecutors on Oahu said their ability to curtail crack distribution on the island had been facilitated by warnings from the mainland. Returning the favor, Oahu officials provided congressional testimony, interviews to mainland news reporters, and communications about their knowledge about ice to a host of colleagues throughout the continental States.

As mentioned above, Honolulu Police Department officers were committed to helping ice users get into treatment, so were many other agencies.

### *A Concerted Effort Was Made To Identify Users and Provide Effective Treatment*

Many types of agencies became involved in identification, referral, and provision of appropriate treatment for frequent users of ice. One of the agencies contacted for more information about symptoms and appropriate treatment was the National Institute on Drug Abuse (NIDA). Although when first contacted in 1987 NIDA did not have readily available information about methamphetamine smoking, they were able to supply Oahu professionals with valuable generic information on methamphetamine use. Moreover, the agency quickly began its own search for materials particular to the pattern on Oahu and by 1988 took an active role in providing appropriate information. Professionals implemented the following primary approaches to identify ice users, based on information they received from NIDA and other international, national, and local sources:

- The Honolulu Police Department's Juvenile Crime Prevention Division, in conjunction with school-based counselors, spearheaded identification of young ice users. The division is headed by an officer whose young son died as a result of drug use; his mission is to identify youngsters who are using drugs and make sure they receive effective treatment. He and his fellow officers have worked diligently both personally and professionally to inform teachers, parents, and others in contact with youth about the symptoms of substance abuse. In the case of ice they realized that because smoking results in hyperactivity, many youngsters would be unlikely to attend class when high. They therefore also recommended that school counselors pay careful attention to students with sudden increases in absences.

- Using confrontational techniques, school-based counselors in Pearl City and other areas were able to identify youngsters who used ice among students sent to them for problems including poor attendance. They received a growing number of referrals and concluded that parents, too, now understood that the behavior of ice-using teens was atypical and drug-induced.

- To help identify and refer adults who were ice users, Drug Addiction Services of Hawaii (DASH) established "INFO," a crystal/cocaine hotline maintained by interns from a local hospital. When users who were experiencing frightening symptoms called the hotline, the interns gave them NIDA information about methamphetamine and its effects.

- Kapiolani Hospital, a major medical facility in Honolulu, began to test the body fluids of birth mothers suspected of being on drugs for methamphetamine.

Rapid identification of ice users resulted in a sharp increase of referrals for treatment. The primary response of treatment staff was to adapt their clinical approach to the needs of clients addicted to methamphetamine. As with patients in New York and Los Angeles addicted to smoking base cocaine, treatment for persons addicted to smoking methamphetamine required very different techniques from those previously developed for heroin addicts. Information provided by NIDA on treatment of crystal methamphetamine users was germane for making these adaptations.

Clinicians on Oahu in different agencies also compared notes on ice cases as they developed new treatment approaches. For example, the Clinical Director of the Drug Addiction Services of Hawaii conferred with the Executive Director of the Salvation Army Addiction Treatment Services; both were also in contact with the Administrative Director of YMCA Outreach Services. And a pediatric psychiatrist in a rural clinic in the easternmost part of the island reported ongoing dialogues with colleagues in a major hospital in Honolulu about how to treat ice users.

The realization of perinatal effects of smoking methamphetamine led to new ways of dealing with addicted mothers and babies. One controversial approach was to place the babies with foster families geographically distant from their mothers. However, a more acclaimed response was a residential program established by the Salvation Army that treated the mothers and babies simultaneously. Since clinical staff found that ice-using birth mothers were also likely to be using cocaine, information from the mainland about dealing with "crack babies" was also important for treating and teaching the mothers how to care for these infants.[13]

### *Public-Service Professionals Requested Help From Researchers To Create New Monitoring Systems*

Although Oahu public-service professionals responded quickly and cooperatively to deal with the spread of ice use, they were in universal agreement that more systematic networking and data collection efforts could have led to earlier detection and should be established to monitor future patterns. To further this objective, researchers from the National Institute on Drug Abuse were asked to visit Oahu and provide advice about better methods for monitoring drug patterns. A number of steps have been implemented, based on the researchers' recommendations and the discussions they stimulated. These include the following:

- *The establishment of a Hawaii State Epidemiology Work Group in early 1990.* Consisting of local researchers and public-service professionals, one of the first tasks of the work group was to look at the strengths and weaknesses of existing data collection systems and recommend improvements. The group also decided to meet on a regular basis, frequently enough to maintain momentum but at intervals long enough to generate sufficient new data; the first interval was six months. The group also decided that its initial focus would be on "drug use patterns, trends, and data comparability," later turning to "specialized topics and standardizing data."[14]
- *More consistent entry and analysis of data about drugs used by treatment program clients before admission.* Although such data had been collected in 18 treatment facilities and sent to the Alcohol and Drug Abuse Division of the Hawaii Department of Health for a number of years, the lack of staff for entering and analyzing data virtually prevented practical uses of the data. By August 1990 State funds had been allocated for appropriate research staff.
- *More distribution and use of results from surveys of drug use among students and household members.* At the end of 1990, the data collected from a recent student survey were being analyzed and a report drafted for publication. A new household survey was being designed.
- *Preparation for collecting data about emergency room admissions involving drug abuse.* Although the data are similar to the DAWN data described in the previous chapter, researchers involved in this project are considering how to design the system for monitoring State and local rather than national patterns.
- *Consideration of a Drug Use Forecasting system.* DUF urinalysis data were recognized by law enforcement administrators and analysts in the Honolulu Police Department as a good source for monitoring emerging patterns of drug use. However, given the lack of space in arrestee detention areas, DUF implementation was not considered to be a viable option until a planned new facility was in operation.

Several public-service professionals and researchers expressed concern that the apparent decrease in ice use might result in diminishing the enthusiasm of colleagues and funders for continued cooperation and innovation. However, virtually all voiced their personal and professional commitment to early identification and effective response to future emerging patterns of substance abuse.

## Endnotes


1. The White House. 1991. *National Drug Control Strategy.* Washington, D.C.: U.S. Government Printing Office, p. 107.
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8. See for example Frank, Blanche, Rozanne Marel, Michael Maranda, Gregory Rainone, and Norman Williams. 1989. *The Northern Half of Manhattan: An Assessment of the Drug Abuse Problem.* New York, New York: Bureau of Research and Evaluation, New York State Division of Substance Abuse Services.

9. Although the programs nominally focus on youngsters affected by their mothers' perinatal smoking of cocaine, researchers generally recognize that many mothers who used crack also used other harmful substances including alcohol while pregnant. Moreover, the problems experienced by the youngsters may also be due to factors other than substance abuse, such as poor nutrition and lack of adequate health care.

10. For a detailed discussion of comprehensive problem reduction strategies, see Chaiken, Jan, Marcia Chaiken, and Clifford Karchmer. 1990. *Multijurisdictional Drug Law Enforcement Strategies: Reducing Supply and Demand.* Washington, D.C.: National Institute of Justice.

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# Chapter 5

# Identifying and Responding to Specific Forms of Drug Use in Local Areas

This chapter provides recommendations for identifying and responding to local changes in forms of drug use. Suggestions are based on advice provided by researchers and policymakers in Federal agencies, opinions of public-service professionals and researchers in Manhattan, Los Angeles, and Oahu, and findings of the case studies conducted for this report. Although the vast majority of researchers and public-service professionals agreed on general approaches needed in the future, there was some disagreement about specific measures to be taken. These too are discussed and possible resolutions presented.

Given their experiences with crack and ice and past drug epidemics, public-service professionals and researchers in the study sites and staff in Federal agencies offered fundamental steps that were characteristically proactive and cooperative. Most realized that changing entrenched forms of substance abuse requires long-range commitment of resources and incremental goals for evaluating success. Almost everyone agreed that by implementing more efficient means for identifying rises in the popularity of particular drugs and responding with swifter coordinated action, widespread epidemics and system overload could be quelled. All were committed to taking such steps.

The counsel of researchers and public-service professionals for this report was generally synonymous with the 1991 and 1992 National Drug Control Strategy.[1] Basically, almost all agreed on the measures that should be taken and advised the following:

- To monitor local forms of a substance and identify changes, form a coalition of appropriate public-service professionals and researchers to meet and exchange relevant information regularly.
- Before initiating action in response to changes in substance use, find as many facts as possible about the properties of the drug, the method of distribution, and the appeal to users.
- To discourage initial or continued use of a particular drug, publicize factual information about symptoms of its use and its health hazards. Aim publicity especially at groups most likely to find the drug appealing.
- Be alert to initial indicators of businesslike marketing and act rapidly to disrupt organizations simultaneously at all levels of dealing.
- Mount a coordinated effort to identify frequent users and provide effective intervention.

Recognizing that effective intervention resulting in a "significant improvement in the drug problem...is not to say that the problem is behind us," and recognizing also that "the levels of drug use and drug crime are still much too high,"[2] the National Drug Control Strategy also recommends the following procedures:

- Keep the pressure on for preventing drug use, finding and providing effective treatment, and sharpening the focus of the attack on drug trafficking organizations.
- Respond to changes in particular forms of drug use as part of a continuous, integrated community effort to reduce all forms of substance abuse.

The rest of this report presents questions that need to be addressed before implementing these approaches and offers answers based on this study.

## Issues and Suggested Practices for Monitoring Changes in Local Patterns of Drug Abuse

### *The Recommended Strategy Suggests the Formation of a Coalition for Monitoring Local Drug Abuse Patterns. Who Should Be Involved?*

Generally, a broad-based coalition will be most likely to identify changes including early development stages of new patterns. Participating professionals are best drawn from a spectrum of agencies dealing with a variety of populations, especially populations at high risk of experimenting with "new" drugs. Within police departments, these include narcotics officers, patrol officers, and prevention program officers operating in different neighborhoods. Recommended school staff also include prevention program staff in addition to counselors from an assortment of schools. Outreach workers, psychiatric emergency room staff, and treatment program staff working with different populations are also excellent sources of information.

In addition to representatives from local agencies, staff from locally based Federal agencies can also provide valuable information; these include members of the U.S. Attorney's Office and the Drug Enforcement Administration, and Federal Bureau of Investigation agents who are targeting nearby drug cases. All researchers involved in collecting and analyzing local information about drug use might also be asked to participate. To facilitate the flow of information, professionals from each type of agency might appoint a representative who would take responsibility for collecting relevant information from colleagues and reporting to the coalition.

More information about forming anti-drug-abuse coalitions and carrying out joint ventures is provided in another recent National Institute of Justice *Issues and Practices* report.[3] Although the approach recommended in this report is more action-oriented than analogous efforts by Community Epidemiology Work Groups (CEWG's) or local Drug Epidemiology Networks (DEN's) sponsored by the National Institute on Drug Abuse (NIDA), detailed NIDA information about CEWG's and DEN's may be useful for establishing a coalition.[4]

Some communities may already have a DEN or other interagency task force that can carry out the recommendations discussed below. However, it is important to recognize that the types of participants suggested for monitoring new forms of drug abuse are not usually found on existing committees. Rather, they are typically "hands-on" public-service professionals and researchers who are genuinely valuable for this effort because they spend most work hours dealing with populations likely to be using drugs.

### *Who Should Take Overall Responsibility for the Coalition?*

The viability and utility of a coalition seems to be require three types of skills:

- Political skill to gain the participation of a broad base of agencies and to mobilize them to take recommended action.
- Analytical skill to compile, organize, and make sense of the many sources of information public-service professionals and researchers can provide.
- Applied research skills to translate findings into recommendations including the ability to understand the jargon, practices, and priorities of all agencies represented.

Few individuals combine these skills. Therefore, a team comprising a policy analyst, an epidemiologist (or other researcher familiar with epidemiologic techniques), and a well-connected agency head or CEO is recommended for spearheading the coalition.

### *What Types of Locally Collected Data about Drug Use Would Be Useful for Researchers To Analyze and Provide to the Coalition?*

In addition to the consolidated observations of the types of professionals mentioned above, ethnographic/anthropologic and statistical data can also be informative. The former qualitative data are more likely to uncover developing patterns in early stages including isolated endemic use (stage 1), initial grassroots switches in types of drugs used (stage 2), and local coalescence of opinion about the merit of a specific preparation (stage 3). Observations of ethnographers and anthropologists can also be used to pinpoint the acceleration of distribution by enterprising dealers (stage 4).

Other indicators of accelerating use in locally developing markets are police arrest data demonstrating a shift in the numbers and characteristics of arrestees charged with distribution or possession of significant amounts of the substance (i.e., amounts that exceed levels for personal use).

Increases in community complaints to police about newly forming markets can also be meaningful signs. Other manifestations can be captured by data about shifts in the physical appearance of drugs, packaging, and paraphernalia seized and analyzed by law enforcement laboratories. Information from Federal agencies about growing interests of top-level drug dealers in a local area is also important intelligence.

DUF data also provide important information for identifying both grassroots switches in types of drugs and the formation of local organizations of dealers. Arrestees interviewed by DUF staff are asked about "new drugs out on the street that you have heard are being used" and are queried about "street names, characteristics, route of use, how sold, effects, and cost."[5] In addition, since local drug market organizers often recruit dealers who can be depended on because they are not themselves frequent drug users,[6] another indicator of a developing market may be DUF data demonstrating that a growing number of arrestees charged with possession or distribution of a substance are personally "clean."

Signs of a local grassroots shift (stage 2) or precipitous increase in the use of a drug (stage 5) can be found by analyzing local psychiatric emergency room data, medical examiners' reports, routine urinalysis conducted for specific populations like arrestees or birth mothers, and information about drugs used by clients admitted for treatment. Data from these sources that are indicative of a grassroots shift rather than a precipitous increase are likely to consist of relatively small numbers of anomalous cases. Analytically the numbers of cases may not be statistically significant; however, in combination with qualitative information discussed above, they are important.

Since drug use patterns are cyclical, household surveys, student surveys, and surveys of special populations—if designed and analyzed to inform local policy and practice—can provide bellweathers of general changes and warnings to pay close attention to more specific patterns of use.

## *If Drug Use Patterns Are Often in Flux, How Can Coalition Participants Decide When and If Minor Changes Really Indicate an Emerging Epidemic?*

Two or more individual reports indicating a specific change in drugs used (or a specific change in methods of administering drugs) should signal a potential problem. Coalition participants should pay close attention to information they are personally receiving; they need to talk with colleagues or examine other information in their home agencies to look for other indications of an emerging pattern. In the absence of clear-cut corroborating evidence, they can use *multiple indicators* of the increase or spread of a new form of drug use as a signal to ask researchers trained in epidemiologic methods to conduct a *proactive field investigation.*

Field investigations are commonly carried out to study situations in which unknown agents are producing difficult-to-diagnosis symptoms or death in a local area. Using well-developed methods, field investigations can quickly determine if a specific drug preparation or administration is responsible for observed indications of a new pattern. Epidemiologists for the most part provide information to other people in the health field and are rarely trained to translate their results into lay terms. Therefore, field investigation results need to be reported back to the coalition in lay terms.

## *Will All Researchers and Departmental Analysts in a Local Area Agree with an Approach Using Functional Indicators and Epidemiologic Field Methods?*

Some will need convincing. While many researchers interviewed for this report suggested using all available information to monitor shifts in drug use, others believed that only peer- reviewed studies using standardized "clean" data and resulting in statistically significant findings should be used as a basis for policy decisions or practice. For example, some considered any increase in deaths involving a particular drug as a reason for concern; others considered such increases as unremarkable "noise." In addition, researchers who are trained in abstract forms of quantitative analysis often insist on refined models for predicting drug use patterns. Yet another tenet of epidemiologic practice is that "elegance in programming should always take second place to getting accurate results in a field investigation."[7]

One conclusion of this report, based on the experiences with crack and ice, is that data potentially important for identifying shifts in drug use patterns should be used quickly to inform policy and practice. Although results need not be published in professional formats before analysis has been completed and reviewed, indications of shifts in patterns of use or marketing should be made known to local colleagues and professionals to alert them to be on the lookout for similar changes. Analogous findings about new drug trends

from multiple sources using "dirty" data and quick-turn-around field analyses should be given the same credence for policy or practice as a single source of polished research.

### *How Receptive Are Public-Service Professionals to Participating in Such a Coalition?*

If their participation is recognized as important, if meeting and materials are kept as short as possible, and if interactions are informative, receptiveness will probably not be an issue. However, as with all multiagency efforts, the coalition members will have to work on developing common languages, mutual understanding, and avoiding turf issues. Especially important to ongoing participation by public-service professionals is the understanding that researcher members of the coalition must serve the pragmatic needs of the community; public-service professionals need not serve the academic needs of researchers.

### *How Often Should the Coalition Meet?*

Given the rapidity of the grassroots development of new patterns, the most useful format may be short but frequent meetings of representatives of public-service professionals and researchers who are in contact with substance abusers. Meetings lasting under an hour conducted every two or three months can help ensure that an emerging pattern will not be missed. Researchers who analyze statistical data might meet less frequently, unless their findings or the findings of the less quantitative information indicate a possible shift in use. If two or more indicators signal a shift in patterns, coalition members could intensity efforts, including meeting more frequently, to determine if an epidemiologic field investigation needs to be undertaken. Since a decline in the use of one type of drug is often followed by an increase in another, such a shift also indicates a need for close scrutiny.

Coalition meetings can be supplemented by other means of sharing information. For instance, information about new forms of drug use can be posted on electronic bulletin boards in areas where agency staff have ready access to personal computers. Similarly, coalition reports can be transmitted electronically in communities with shared interagency E-mail systems. However, these extra channels merely enhance but do not replace meetings. Informal personal interaction is more likely to lead to effective communication of new findings than formal, systematic presentations.[8]

### *Where Can We Turn for Technical Assistance To Organize a Coalition?*

If there is already a state epidemiologic work group in the area, the administrator may be a valuable resource for forming a local coalition—providing that a local, politically influential public-service professional also gives guidance and that a coalition member is involved who can translate epidemiologic language into lay terms. Other resources include researchers and public-service professionals already engaged in cooperative anti-drug-abuse efforts listed in the appendix of this report and those listed in the appendix of an earlier National Institute of Justice report on multijurisdictional cooperation for drug law enforcement.[9]

## Issues and Suggested Practices Before Responding to Changes in Local Patterns of Drug Abuse

### *Should Action Be Taken As Soon As a New Pattern of Use Is Discovered?*

Committing extensive resources to dealing with every new grassroots variant of substance abuse would not be cost-effective or even possible. As discussed in chapter 2, frequent users of drugs include "kitchen chemists" who like to test "new" forms of old drugs. And in areas with a large concentration of immigrants or tourists, forms of drug use common in transients' countries of origin are often introduced. Most variants quickly come and go or remain endemic in use.

However, the experience with smokable cocaine in Manhattan and Los Angeles demonstrates the need to take more rapid action to prevent epidemic use. The most sensible course of action in response to discoveries of "new" forms of endemic use among immigrants or visitors (or initial grassroots switches in a relatively small geographical area) seems to be to find out as much as possible about the drug and to feed facts about specific hazards to users through outreach workers, counselors, or other professionals. Giving out information about symptoms of use can also make it easier to monitor such areas to determine whether use of the drug is spreading.

### *Once a New Pattern Is Discovered, What Sources Are Available for Learning More about the Symptoms and Longer Term Effects of Using the Drug?*

Other than relatively rare increases in popularity of synthetic "designer" drugs, as discussed in chapter 2, shifts in substance abuse usually involve a variant of one of a limited number of classes of drugs including opiates, coca products, amphetamines, barbiturates, alcohol, tobacco, and cannabis. The symptoms of use and short- and long-term effects of these drugs have been studied extensively and reported in numerous professional journals. In addition to information available from the National Institute of Justice, summaries and compilations of recent literature are available through various Federal agencies such as the National Institute on Drug Abuse, the Drug Enforcement Administration, and the Attorney General's Drug Prevention and Education Subcommittee of the U.S. Department of Justice.

Similarly, there are a limited number of ways users administer drugs including injecting, ingesting, and inhaling (powder, smoke, or vapor). The actual and relative hazards of each form of administration have also been studied. Factual and detailed information compiled about the effects and risks of various forms of administration of drugs is also available from Federal agencies.

## Issues and Suggested Practices for Responding to Changes in Local Patterns of Drug Abuse

### *If an Increase in Popularity of a Particular Drug or Specific Mode of Administration Is Discovered, How Can Local Agencies Decide What Action To Take?*

The following factors should be taken into consideration:

- *The harm being caused by the substance or its mode of administration.* A substance or form of administration that has serious health implications obviously merits a more rapid and concerted response than a substance being administered with relatively innocuous short- and long-term effects. For example, increases in injection of any substances obviously require immediate and concerted actions to prevent the spread of AIDS and would probably take priority over actions to deal with ingestion of weak solutions of substances such as coca tea.
- *The stage of development.* Different stages call for different actions. As discussed above, if use is endemic, agencies might simply continue monitoring use. If grassroots use is increasing, they should consider implementing a concerted public education and prevention campaign combined with identifying and treating addicted users. If an organized market is developing, they need to act very rapidly to prevent recruitment.
- *The market structure.* If an organized market has already developed, effective tactics depend on the type of organizational structure.[10] For example, although simultaneous enforcement of street-level to top-level dealers on Oahu seemed to effectively constrain the relatively small, tightly hierarchical organization of ice dealers, similar tactics aimed at loose confederations of crack dealers in New York and Los Angeles appeared to result in displacing the dealers to different geographical locations within the same communities. An enforcement effort focused on base cocaine dealing among homeless people in a park seems to have resulted in a more diffuse market in the blocks surrounding the park.
- *Characteristics of populations becoming involved.* Effective prevention and intervention depends on addressing the specific attitudes, behaviors, and values of users or those at risk of becoming users. For example, prevention programs that are effective for adolescent boys have been found to be less effective for adolescent girls.[11] And although intensive treatment may be necessary for some addicts, others seem to need only an initial form of motivation.[12]
- *The lore and allure of the substance.* Realizing why certain populations are using a particular substance can help guide prevention and referral to treatment. For example, publicizing the rapid loss of weight that results from the use of methamphetamine is more likely to be an incentive than an impediment to figure-conscious teen women.
- *Availability of ongoing or past programs already found to be effective.* While prevention and treatment programs and other forms of innovation may need fine-tuning to meet the needs of specific populations or specific effects of the drug, their successful experience in reducing use can be valuable. Moreover, since drug use is cyclical, older effective programs that have been

discontinued because they were no longer needed can serve as a template for new efforts.

- *The longer term effects of actions.* Although some actions may result in immediate desired outcomes, longer term outcomes may be worse. For example, suppressing the use of a particular substance may result in the use of an already available and more harmful drug. Similarly, placing infants of all substance abusing mothers in foster care may keep some children from being neglected or even abused, but the long-term developmental consequences may be detrimental to all.

The principles of effective public warnings are important when involving the media or other communication channels in the provision of public information about the dangers of a new drug form or method of administration. Public communication about risks is more likely to be believed and acted on if the information is specific, consistent, certain, provided by official sources, repeated frequently, and then confirmed.[13] Overstating the dangers or extent of use is likely to result in public disbelief rather than prevention or reduction of use. Alerting the public about "new epidemics" that do not actually take place may attenuate the effect of future warnings.

### *You Suggest Collecting Factual Information about Drugs as a First Step. Is There Any Way Factual Information Can Be Used To Prevent Grassroots Increases in Popularity of a Particular Substance?*

Although factual information appears integral to effective prevention tactics,[14] facts alone are unlikely to prevent use of a particular drug among populations who already use other substances frequently. The direct experience of seeing family and friends seriously harmed when they use the particular substance is more likely to have an impact. Teens, too, especially early adolescents who have not developed the capacity to generalize information, appear to respond more to direct experiences involving people they know than to abstract particulars. Thus teens and frequent users will benefit from discussions with informed peers or counselors about concrete examples of the drug's harmful effects; they should also be shown alternative ways to deal with peer pressure and day-to-day stress.

Among adult populations capable of absorbing more abstract information, facts about health hazards and information that clearly runs counter to any myths about the drug can help prevent an increase in popularity. Methods for presenting facts even to this population seem to be important, especially to people who have tried the drug and enjoy its effects. Recent writings suggest that a factual presentation that appeals to people's sense of self-determination rather than to external authorities is more likely to result in future avoidance of harmful substances.[15]

### *Should the Press and Other Media Publicize Information about a Drug's Increasing Popularity?*

Media reports presenting sensational publicity about drugs may help increase the desirability of a substance. Therefore, many public-service professionals and researchers object to releasing information to news reporters about an increase in use. However, as on Oahu, media coverage can also help prevent use if reporting is responsible and conducted in cooperation with knowledgeable public-service professionals and researchers. Media stories in Honolulu were part of a comprehensive community effort to provide factual information to different age and ethnic groups. This valuable contribution was facilitated by having a high-ranking media representative participate in the coalition. Replication of this type of cooperation seems highly advisable.

### *Other Than Conducting Routine Law Enforcement Activities, What Role Can Local Law Enforcement Agencies Play in Responding to Increasing Popularization of a Particular Drug?*

Local law enforcement agencies are positioned to play a central role in coordinating the identification of a drug's increasing popularity and carrying out a cross-agency, cooperative response. The Honolulu Police Department and the U.S. Attorney on Oahu played an exemplary role in identifying and dealing with the spread of crystal methamphetamine, as described earlier. The steps they took included coordinating efforts between divisions within agencies and between agencies to learn about local use of the particular drug; making national and international contacts to learn more about the drug; sharing information with educators, health professionals, and professionals in other agencies; and helping form a coalition to prevent substance abuse.

Several practices appeared to be especially important in disrupting crystal methamphetamine sales before markets became entrenched. These included forming interagency task forces to concentrate on disrupting dealing at every

level of distribution and providing alternatives to youngsters at high risk of being recruited into sales. Other meaningful steps entailed the cooperation of all criminal justice system agencies in providing swift punishment and severe consequences for sales of methamphetamine. To supply practical information about ice use and ice markets to mainland States, criminal justice system administrators from Oahu also provided congressional testimony and information to mainland public-service professionals and researchers, including information for this report.

### *You Obviously Suggest Focusing Law Enforcement Efforts Against Developing Local Drug Markets. What Are Some of the Signs That Organized Markets Are Replacing Local Grassroots Distribution?*

In addition to the data sources discussed above, Federal agents provided obvious indicators such as seizures of large supplies of drugs from wholesalers and financial information about "kingpins" in the development of the ice market. Also important were sales of large amounts of legal reagents used to convert drugs into smokable forms. On the streets, crucial indicators consisted of anthropologic, ethnographic, and undercover police information about the recruitment of new distributors, the targeting of new users, and the coining of snappy, innovative terms for relatively old products, such as "crack" for base cocaine and "ice" for crystal methamphetamine. New forms of packaging, like crack vials, and street sales of new paraphernalia, like ice pipes, also seemed to indicate more vigorous marketing attempts. Arrests of persons who were distributing but not personally using base or ice and the apprehension of persons carrying out auxiliary drug selling activities such as steering, touting, or running[16] clearly demonstrated the shift from grassroots spread among users to a more businesslike form of distribution.

### *What Steps Are Needed To Identify Users More Quickly and To Provide More Effective Intervention?*

Public-service professionals and family members in contact with high-risk populations need to be given explicit details about symptoms users display while high and during withdrawal. It is also important to recognize that many users consume several types of harmful substances and that their symptoms may vary from time to time. Public-service professionals and family members who have identified a substance abuse problem also need to have a direct and simple way to contact drug abuse counselors, outreach workers, case managers, or other professionals trained in intervention techniques. Hotlines seem to be a good way of providing this service.

### *Although Public-Service Professionals on Oahu Responded Quite Rapidly to the Use of Methamphetamine, Numerous Youngsters and Adults Became Addicted to Crystal Smoking before the Problem Was Discovered. Other Than the Practices Discussed Previously, Are There Any Responses That Should Be Taken in a Local Area To Ensure Earlier Identification and More Rapid Response?*

Yes. The following practices should be considered:

- Don't wait for a new problem to crop up in your area. Organize now to monitor local patterns of substance abuse, deliver ongoing prevention programs, and provide treatment.
- Get the whole community involved. Realize that increasing popularity of a drug reflects a host of factors including community attitudes toward the use of harmful substances in general—both legal and illegal ones. Clamping down on one particular drug is likely to lead to increased use of another, unless the community as a whole coordinates efforts to reduce all forms of substance abuse.
- Keep up your guard. Substance abuse will probably never be entirely eradicated. Although the numbers of substance abusers can be greatly reduced and addicted users treated, endemic use is likely to continue. Don't be lulled into complacency by decreases in numbers of drug-involved persons in your area. If use has reached an epidemic stage, decreases simply indicate progress, not a solution. Even if numbers of users decrease to an endemic level, and monitoring and prevention programs are disbanded, a community can be overwhelmed by a drug epidemic before a new cycle of increasing substance abuse has been noticed.

### *Are There Any Sources for More Details about the Coalitions and Cooperative Efforts Described in This Report?*

Researchers and public-service professionals who provided information for this report are listed in the appendix. They will be glad to discuss their efforts and operations.

## Endnotes


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2. The White House. 1992. *Op. cit.*, p. 13.

3. Chaiken, Jan, Marcia Chaiken, and Clifford Karchmer. 1990. *Multijurisdictional Drug Law Enforcement Strategies: Reducing Supply and Demand.* Washington, D.C.: National Institute of Justice.

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16. For a description of auxiliary roles see for example Johnson, Bruce, Paul L. Goldstein, Edward Preble, James Schmeidler, Douglas S. Lipton, Barry Spunt, and Thomas Miller. 1985. *Taking Care of Business: The Economics of Crime by Heroin Users.* Lexington, Massachusetts: Lexington Books.

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