COCAINE: A MAJOR DRUG ISSUE OF THE SEVENTIES

HEARINGS

BEFORE THE

SELECT COMMITTEE ON NARCOTICS ABUSE AND CONTROL HOUSE OF REPRESENTATIVES

NINETY-SIXTH CONGRESS

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CONTENTS

COCAINE: A MAJOR DRUG ISSUE OF THE SEVENTIES

TUESDAY, JULY 24, 1979

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE ON NARCOTICS ABUSE AND CONTROL,
Washington, D.C.

The Select Committee met, pursuant to notice, at 2.04 p.m., in room 2212, Rayburn House Office Building, Hon. Tennyson Guyer (acting chairman of the Select Committee) presiding.

Present: Representatives Lester L. Wolff, E de la Garza, Billy L. Evans, Tom Railsback, and Benjamin A. Gilman.

Staff present: Alma Bachrach, chief of staff, supply; Robert M. Hundley, chief of staff, demand; Toni Biaggi, Elliott Brown, Dr. Gerald Dubin, and Dr. Michael Backenheimer, professional staff members; Bonnie Robinson, executive assistant.

Mr. GUYER. With a little explanation, we will call the hearing of the Select Committee to order. As most of you are aware, we inherited a time slot that is in direct competition with floor action on the so-called forced busing amendment, which began around 10 o'clock and is in full swing right now.

So I think it would be only fair to go ahead and make good use of our time, since we have an assigned group here coming, and I want to thank all of those who are coming and also our staff.

Let me begin by making a statement.

"Snow," "Flake," "C," "White Girl," and "Coke." These are street names associated with the drug cocaine. Cocaine has become a primary target of investigation by the Select Committee with the hope of providing a solid base of information so the American public will fully understand the health implications of its use.

This is the first in a series of hearings dealing with the subject of cocaine. The committee will attempt to obtain a general overview of the drug, its abuse variables, and the Federal perspectives in terms of usage patterns and health consequences.

As chairman of the special task force on cocaine—and my name is Tennyson Guyer—recent devlopments concerning the state of cocaine have come to my attention which call for decisive and immediate action. The availability, abuse, and popularity of cocaine in the United States has reached pandemic proportions with 19 metric tons illegally entering the United States in 1978. This is a drug which, for the most part, has been ignored and its increased use in our society has caught us unprepared to cope effectively with this menace.

Although cocaine is not considered a physically addicting drug, it is not safe to conclude it is harmless. A recent study by Doctors

Charles V. Wetli and Ronald K. Wright of the Dade County, Fla., medical examiner's office, has sharply challenged the contention that cocaine is a relatively safe recreational drug. Their study disclosed significant numbers of deaths attributed to the use of cocaine, by itself or in combination with other drugs.

The media helped to glamorize cocaine as an exclusive drug, one whose use was prevalent among the elite and the intellectual classes. Its popularity has spread vastly, and during the last several years, it has become the drug of choice for millions of Americans.

The National Institute on Drug Abuse estimates that almost 10 million Americans have used cocaine, including 1 million under the age of 18. No longer is its use restricted to the so-called elite of society. Businessmen use it to get going in the morning, as do housewives, stockbrokers, and college students. Children indulge in it, and entertainers use it to keep going.

Since cocaine is a powerful stimulant with a high potential for abuse, it is our responsibility to see that its availability is minimized and that its use not be taken lightly.

Today, the committee will hear testimony from the following witnesses:

Lee I. Dogoloff, Associate Director, Domestic Policy Staff, The White House; Peter B. Bensinger, Administrator, Drug Enforcement Administration; and Dr. Robert Petersen, Associate Director, Division of Research, National Institute on Drug Abuse.

Gentlemen, we appreciate your taking time.

As you know, it is customary and mandatory we do have a swearing in. Would you please stand?

[The three witnesses were sworn by the chairman.]

Mr. GUYER. Thank you very much.

Again, I want to apologize for the sparsity of our members, but I know they are sitting there waiting for the first vote, after which I am sure they are going to be coming to visit us and sit on what I think is going to be a very important series of hearings.

We, as you know, will also be hearing on July 26 of this week, in room 2118 of this same office building, at 2 o'clock—we may not go until 5 in each instance, but we do have these two very important meetings scheduled for this week, at which time we will hear from Dr. Grinspoon, Dr. Wetli, and Dr. Byck, all very notable and authoritative experts in this field.

I think we will go right into our—here comes our chairman, Mr. Wolff. We will just wait a moment.

I might just say to the chairman that due to the critical issues on the floor, we went right into the hearing at the appointed time, and we have sworn the witnesses. I made my opening statement, and I would be happy to have you say a few words, Mr. Chairman.

Mr. WOLFF. I couldn't catch the bus; that's why I am late.

I think, Mr. Chairman, that this is a critical hearing for us. I am hopeful that this task force will examine in depth the question of cocaine, its true physical and psychological effects upon the individual.

There is too much confusion as to cocaine and its social acceptance. Not having the full facts, I believe, adds to the overall problem. I am hopeful that you and your task force will be able, with the aid of

the various people you have here today and the in-depth hearings that will be held in the future, to provide the American public with what are the true facts, so far as cocaine is concerned.

Mr. GUYER. I don't mean to sound like I am the echo chamber for the chairman, but I do want to be among the first to recognize the great contribution he has made, not only in the Congress itself, but internationally in this field of drug abuse and narcotics control. It is largely to Mr. Wolff's office that for the first time—I say this is an historic occasion because, in remembrance of Congress, there has never been a time when a chairman appointed a member of a minority party to head a task force, to my knowledge, or in committee.

I think this shows the bipartisan and unselfish nature of these hearings and the composition of the committee itself.

We are pleased now to have our first witness, Mr. Dogoloff, whom we have already introduced. If you will, sir, we will go right into your statement.

TESTIMONY OF LEE I. DOGOLOFF, ASSOCIATE DIRECTOR, DOMESTIC POLICY STAFF, THE WHITE HOUSE

Mr. DOGOLOFF. Thank you.

Mr. Chairman and members of the Select Committee, it is always a pleasure to appear before you, for I am convinced that focusing together on some of the most urgent problems in the drug field, we will be able to reduce the serious effects which drug abuse has had on our country.

As we stated in the 1979 Federal Strategy, "The abuse of cocaine and the expanding international traffic in cocaine continue to be of great concern to all of us."

Let me just give you some alarming statistics from our most recent line of survey. Approximately 10 million Americans have tried cocaine. There are today over 1.5 million current users of cocaine in the United States. Sixty-seven percent of these current users are between the ages of 18 and 25.

These statistics are not from today, but from 1977. The latest results of this biannual survey will be released in November of this year. The preliminary findings from that survey indicate that these figures will be much higher.

Unfortunately, cocaine's alleged reputation for safety has been grossly overstated. There are several serious health and social consequences of cocaine abuse, some of which have been described in the widely distributed 1978 Federal Strategy.

I rely on three pieces of information when I think about cocaine and its potential and real health impact, one having to do with animal experiments. When animals are given the wide range of drugs and the option to use the drug as frequently as they will, they tend to use cocaine more frequently than any other drug, and wind up finally killing themselves by the repeated injection of cocaine.

Second, as I have discussed with physicians, treatment personnel, in countries such as Peru and Bolivia where cocaine is much more available and easier to come by, its effects on the using population are quite devastating, relative to the physical effect, the psychological effect, the

number of people who have to be institutionalized for treatment, and so forth.

Third, the anecdotal information that we pick up in this country from those few, relatively few, people who can afford to use cocaine and have ready access to it seem to be getting into considerable difficulty with the drug, but don't often come to the attention of the usual public treatment system which would attract, give evidence of that difficulty.

So those three things say to me that the evidence is quite clear, particularly from a public policy standpoint, that there is sufficient proof of the potential and real health hazards of cocaine that we should have that as a priority in our efforts to reduce its availability and use in the United States.

The desire to continue using cocaine is remarkably strong if the drug is available. We have a three-part program in the Administration to deal with the problem.

One, to eradicate all coca products in excess of that needed by local Andean Indian consumption and for legitimate pharmaceutical export.

Second, to develop comprehensive income substitution and integrated rural development programs in the two main source countries of Peru and Bolivia.

Third, to insure a strong law enforcement effort toward cocaine which in itself maintains the drug's high price and limited availability.

Through the Principals' Group and the Strategy Council on Drug Abuse, we will insure that these objectives are met.

In addition to our supply reduction efforts, we must continue to pursue our research into the effects of cocaine and maintain our support of the prevention effort so that the American public is kept informed of the scientific findings and, hence, able to take decisive actions to reduce the abuse of cocaine.

We acknowledge that all of these efforts alone will not suffice. We must take every opportunity, as you gentlemen are doing here today at these hearings, to focus attention on the problem and to keep the American public informed of the health consequences of cocaine use.

Thank you.

Mr. GUYER. Thank you very much, Mr. Dogoloff.

I think we will go right ahead with our statements and reserve our question and answer period for the end of the panel, if your time permits that.

[Mr. Dogoloff's prepared statement appears on p. 34.]

Mr. GUYER. If there is any desire to summarize, we don't want to detract from your statement, but we do have a full copy here. But you may take any liberties you care to at your own discretion, Mr. Bensinger.

TESTIMONY OF PETER B. BENSINGER, ADMINISTRATOR, DRUG ENFORCEMENT ADMINISTRATION, U.S. DEPARTMENT OF JUSTICE

Mr. BENSINGER. Thank you very much, Chairman Guyer. I appreciate appearing before you and Chairman Wolff and Congressman Gilman and the Select Committee on Narcotics Control and Abuse. I salute this committee for holding hearings on this particular drug.

I feel the focus of congressional and national attention is needed and appropriate.

I also cannot let the occasion pass without making reference to the House's very successful passage of legislation sponsored by Congressman Biaggi, and endorsed by the Select Committee on Narcotics, having to do with the apprehension, investigation, prosecution of smugglers, couriers, and non-U.S. citizens who are presently operating far too often through loopholes in our law and not permitting prosecution of illegal aliens. I commend the House on the passage of that bill.

How much cocaine is coming into the United States? We estimate 19 to 23 metric tons. Seizures of cocaine are up substantially through intensified enforcement effort, I think because of an increased demand, because of increased supply, and increased commitment by our and other agencies on cocaine traffickers.

The seizures statistics are reflected in my testimony. Let me just summarize.

Total cooperative seizures overseas were almost 3,000 pounds in the first quarter of this year—first quarter. This is progressing at double the rate of 2 years ago.

The arrest statistics reflect a similar escalation.

Injury reports from the DAWN network gave quarterly injuries for cocaine in 1976 of 303, in 1977 of 374, in 1978 of 444, and the first quarter of 1979 is 506 cocaine-related injuries. So, we have seen an increased availability and an increase in production and an increase in injuries, increases in arrests, and significantly, an increase in the number of cocaine-related deaths.

The coca plant, as is reflected here, is first harvested relatively very easily in the growing areas of South America.

It grows particularly well in the Andes. The soil is good; the altitude is from 1,500 to 7,000 feet. The plants can be harvested when a plant is 2 to 3 years old, and it can be harvested for up to 20 to 40 years. It is unlike an opium poppy in many respects. It also can be harvested several times a year—from two to six. Our people feel that three would be an accurate estimate. So it is a plant that grows readily.

It grows in South America principally. It grows in altitudes from 1,500 to 7,000 feet. It can be grown over a long period of time, and the harvest from any one plant can be tripled.

There are a number of steps that need to be taken. First, of course, is the harvesting of the leaves themselves. And that is not a difficult task. The leaves are simply plucked off the plant.

And second, the cocaine is not actually developed into its finished product until the leaf is combined with kerosene, water, caustic soda, to speed up the process, and then forms coca paste. That is in turn transformed into cocaine base, and cocaine hydrochloride is the desired result.

The laboratory equipment is relatively simple. It can be set up within the confines of this table. It can be moved immediately. And most of the source countries involved in cocaine and coca paste production are involved in both the growth of the coca leaf as well as the processing of paste and base.

Peru is the world's largest coca cultivator, maker. It is one of two licit producers of coca. Cocaine in final form is produced in Peru, but most of the illicit activities are reflective of smuggling efforts out of Peru, Bolivia, Colombia, and Ecuador.

[The charts referred to follow:]

Principal Area of Cocaine Cultivation

Flow of Coca Paste and Cocaine Base to Processing Centers

Major Cocaine Smuggling Corridors from Various Source Countries

If I could share with the committee the growing areas first, and I will try to make this brief, and we can get into questions and answers. But these are the principle areas coca is grown from which you have to arrive at cocaine. You must have coca.

This initial growing area in Bolivia, in Peru, Ecuador, and two parts of Colombia, is the first step. From that arrives the coca paste and the cocaine base. This is a raw manufacturing or laboratory process. And the flow of coca paste goes out from Bolivia, from Peru, Ecuador, into Colombia, and into, at times, Brazil, Argentina, back through this area into Colombia until finally the cocaine trafficking routes which your committee, I think, very effectively was able to visit first hand, I think that visit increased the awareness, not only of the host country's

concerns about the U.S. attitude, but certainly gave a lift to our people in the field.

Here, we are talking about basically a route from Bolivia and Peru through Ecuador to Colombia up to Miami, up to New York, to Europe, to the west coast. There are a variety of trafficking routes. And the United States is not any longer the sole victim or using country for this large cocaine production, which may reach in excess of 60 metric tons.

Mr. WOLFF. Mr. Bensinger, if I might interrupt for a moment, what is cocaine selling for on the street today?

Mr. BENSINGER. 56 cents a milligram pure.

Mr. WOLFF. 56 cents a milligram?

Mr. BENSINGER. Yes, sir.

Mr. WOLFF. Translate that to a kilogram.

Mr. BENSINGER. $800,000.

Mr. WOLFF. What does the farmer get for producing that which produces a kilo, do you know?

Mr. BENSINGER. Yes, I do. South American farmers can sell 500 kilos of coca leaves for about $250 or about for 100 kilos, you could figure $50.

Those coca leaves are converted into 2.5 kilos of coca paste. And this coca paste extraction will sell for between $3,000 to $5,000. This paste then is processed into 1 kilo of cocaine base which is sold for anywhere from $8,000 to $11,000.

That cocaine base is converted into 1 kilo of cocaine hydrochloride which will sell from $15,000 to $20,000. That is then smuggled. We are still in this area. And it moves into the United States and sells for anywhere from $35,000 to $40,000 as 1 kilo of cocaine. The east coast wholesalers will cut it.

The average retail-level purity is about 12 percent. And it has been about that for a number of years.

It is now worth $75,000. And by the time the cocaine reaches the retail street market and has been cut down to a purity of 12 percent, it will be $800,000.

The summary on page 11 reflects the various pricing, but it is clear that the farmer getting $250 for the basic raw material is a long ways away from $800,000.

This is a sample, evidence sample, of cocaine taken on the 14th of June. And that is the Snow that Chairman Guyer referred to, the crystal you referred to.

Mr. WOLFF. The point I am trying to make is the fact that actually what is happening is the trafficker, if we can just crystalize it into that little vial that you have got there, is exploiting the people of Latin America in the same way that the Conquistadors did in their exploitation of the Latinos.

And what we are having is the farmer is getting very little. Therefore, it would seem to me that one aspect of this should be a very heavy emphasis upon our part to work with the governments of these countries to find some method of providing either a substitute crop or substitute income because the farmer is really getting nothing out of it.

Mr. BENSINGER. I agree with you.

Mr. GUYER. We are going to have to suspend right now. The vote is in progress. So if you will all make yourselves at home until we get

back—I think they would probably be happy to look at your chart, too, while we are gone if you care to. Thank you.

[Whereupon, a recess was taken.]

Mr. WOLFF. May I, in the absence of the chairman of the task force, but as chairman of the committee, use my prerogative by asking the gentlemen to remove their jackets if they want to? The air-conditioning is not of the best.

In the absence of Mr. Guyer, I will call the task force to order. And would you please proceed, Mr. Bensinger?

Mr. GILMAN. Mr. Chairman, would you be kind enough to yield?

Mr. WOLFF. Happily.

Mr. GILMAN. Thank you for yielding, Mr. Chairman.

Mr. Chairman, I would like to interrupt the proceedings to take the opportunity to talk for a few moments about a new pamphlet that has been produced by the National Institute on Drug Abuse, entitled, "Let's Talk About Drug Abuse." I am pleased to introduce the author of that pamphlet who is with us here today and happens to be one of my constituents, Rachel Weisman, who has been acquired by the National Institute on Drug Abuse and has been intensely interested in our hearings on cocaine.

If I can introduce Miss Rachel Weisman from our committee.

And, Rachel, I will ask you if you would stand a minute so the committee will know who you are.

Thank you, Mr. Chairman. [Applause.]

Mr. WOLFF. We are happy to see your constituents are so well informed, and are working on this problem.

Mr. BENSINGER. I will, Mr. Chairman. I left off my testimony with respect to the methods by which leaves of coca plants were processed, converted to paste, and then base, and then subsequently processed into cocaine hydrochloride. I would like to show you and the committee—and perhaps Mr. Dogoloff will join me—just how this is smuggled into the United States.

This particular piece of luggage in front of you was brought into the United States on an Avianca plane. U.S. custom inspector noticed that it was a very large piece of luggage. It was checked baggage and was retrieved on the carousel at JFK International Airport.

Customs' suspicions were aroused. The suspect was subject to private search. And the keys to that particular suitcase were found on that person.

The Custom Agent in Charge notified the DEA Special Agent at the JFK Airport. The individual defendant was subsequently found guilty on two counts and sentenced to 5 years in prison with 25 years of supervised and special parole.

There are 400 million pieces of luggage entering the United States each year. Some 276 million people—this is an example—and I don't know, Lee, if you have seen this bag—of how the suitcase comes into the United States. In effect, there is a false bottom. It can be covered with a formal flap which would appear right on that. Then, secreted below it would be a kilo——

Mr. GUYER. What does that weigh—about 2½ pounds?

Mr. BENSINGER. 2.2 pounds. This would be worth in excess of $800,000.

Mr. GUYER. That is simulated, I trust?

Mr. BENSINGER. When you consider, Mr. Chairman—No, that is actual coca. I am going to watch it.

Mr. WOLFF. We just had a bell. We have to leave.

Mr. BENSINGER. I am going to hang onto this.

Mr. GUYER. I can't believe you are holding almost $1 million there. We ought to have security in the hearing room.

Mr. BENSINGER. We have some Special Agents in the room, I assure you.

But the point I make is that you can move that raw material, which is subsequently processed, around in some 400 million pieces of luggage relatively easy.

Mr. WOLFF. Isn't it true they also strap this to their legs and pass through?

Mr. BENSINGER. It can be carried on one's person. Body carries are a frequent method. A kilo of cocaine, as you say, it could easily be hidden on a person. And unless that person was a suspect and created probable cause to really be given an in-depth search, the general procedure internationally, at all points of entry, except at some countries subject to a great deal of terrorism, you will not have body searches taking place.

Mr. GUYER. If you had no tipoff, a person with a talcum powder can could get the thing through.

Mr. BENSINGER. Many times, people leave these type of containers on an airplane that comes into the United States. And on a subsequent flight from Miami to New York, a new courier comes in, goes into a part of the plane, extracts this cocaine where it has been cleverly hidden. The person has subjected himself to a thorough search, but the cocaine was on the plane.

Mr. GUYER. An airline stewardess or somebody supposed to be cleaning the plane could do it.

Mr. BENSINGER. We have cases of pilots, stewardesses, maintenance personnel, members of the diplomatic corps and their families, a whole wide range of techniques used.

Probably 2 years ago, maybe one out of three of smuggling instances were by air. We think that has been doubled. We don't think people are bringing cocaine across the border to a large extent in a car from Mexico. For example, we think a great deal more utilization of commercial and private aircraft is taking place.

Mr. WOLFF. Mr. Bensinger, may I ask the perennial question? What percentage are you interdicting today?

Mr. BENSINGER. Certainly less than 10 percent; perhaps closer to 6. And I don't see a likelihood of having a substantial increase in the overall interdiction. It might increase considerably for marihuana interdiction with which the Coast Guard and U.S. Customs, I think, have done an excellent job. But with cocaine, you are dealing with such very valuable—$1,500 in 1 ounce—that cocaine and heroin can be put on people's persons, secreted in clothes, in various compartments.

So I don't think we are going to have with cocaine and heroin the major weapon through interdiction. We will get better plane surveillance, there will be better probable research and technical efforts

done; but, I agree with Chairman Wolff, the way to attack this problem is at the farmer level, in the country where it is grown.

And right now, nine times as much coca is grown in Bolivia and Peru, 25,000 to 30,000 hectares in each of those countries, as is required legally for legitimate use. We do import legally some coca and cocaine for ear, nose, and throat specialists and for doctors. And there are medical uses for it. It is a schedule II drug.

But there is 9 to 10 times as much produced worldwide as is needed. And in the principal countries of origin, in Bolivia and Peru, we feel 8 to 9 times as much production is taking place as would be legitimately required for export.

Mr. WOLFF. We are going to have to run again. Will you still be with us when we get back?

Mr. BENSINGER. I am at your disposal.

Mr. GUYER. Thank you.

[Whereupon, a recess was taken.]

Mr. GILMAN. The committee will come to order.

Mr. Bensinger, will you proceed please?

Mr. BENSINGER. Thank you, Chairman Gilman.

The other aspects of cocaine importation, aside from the illegal variety which occurs as we pointed out with disturbing regularity, is the licit importation. And we are pleased to report that diversion of cocaine from legitimate sources has been minimal. This procedure involves the importation of raw coca leaves. It is then sold to manufacturers under strict control who, in turn, distribute at the wholesale level that amount of cocaine which is required by hospitals and clinics.

We have not seen a diversion problem in imported licit cocaine. We have also no objection and our agency has not in any way interfered with the appropriate medical dispensation of cocaine as a licit pharmaceutical drug.

I would end my testimony, Chairman Gilman, with the comment that the 1979 Federal strategy reflects our conviction, my personal conviction, that control of any drug is most effective at the source; that solutions offered include crop eradication, crop substitution, and overall development programs that reflects recognition of the economics of this crop, both illegally and legally, in the Andes.

I think a long-term commitment effort is needed. I know the Principal's Group and Mr. Dogoloff principally are spearheading such a review at this time. I know the State Department has underway a number of pilot rural, financial, mountain programs in Latin and South America.

While that is going on, we, our agency, has got to continue to earmark enforcement efforts against the cocaine traffickers in the United States and to work cooperatively with the cocaine enforcement units in the South American countries that are focusing on illegal organization. But our enforcement efforts will be most productive when there is a concurrent in-country crop limitation and control program that would reduce the availability substantially.

Mr. GILMAN. Thank you, Mr. Bensinger. We will reserve questioning until the entire panel is completed.

[Mr. Bensinger's prepared statement appears on p. 35.]

Mr. GILMAN. Our next witness is Dr. Robert Petersen, associate director, Division of Research, National Institute on Drug Abuse.

Dr. Petersen, would you be kind enough to proceed?

TESTIMONY OF ROBERT C. PETERSEN, Ph.D., ASSISTANT DIRECTOR, DIVISION OF RESEARCH, NATIONAL INSTITUTE ON DRUG ABUSE, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Dr. PETERSEN. Chairman Gilman, members of the committee: I would like to thank you for this opportunity to give you an overview of cocaine abuse. Accompanying me today are Robert Willette, Ph. D., chief of the Research Technology Branch of the Division of Research, and Gene Barnett, Ph. D., research scientist in that division.

NIDA has published a rather detailed monograph entitled: Cocaine: 1977, which covers what is known through 1977. And so this statement will place primary emphasis on reviewing more recent developments in the cocaine picture.

Determining the extent of illicit drug use poses formidable problems. Cocaine use is no exception. Because the street drug is usually markedly adulterated with various "cuts" to increase the dealer's profit margin and sometimes utterly misrepresented, even self-reports of use given in good faith may be inaccurate. The more naive user in particular may believe he or she is using cocaine when, in fact, what is being taken is an amphetamine or cocaine extensively adulterated with other substances masquerading as the drug.

Nevertheless, figures from national surveys are of considerable interest not because the level of use indicated is necessarily absolutely accurate, but because the figures are likely to be useful indicators of trends. Individuals may sometimes minimize personal use because of anxities about honest responding, or perhaps less frequently, they may exaggerate their extent of use because of status conveyed by using an exotic or expensive recreational drug.

At a cost ranging as high as $100 a gram—about $3,000 per ounce—cocaine is regarded by users as the high status drug. Since there have been many newspaper accounts of sports, rock music, and show business celebrities having used the drug, this has also undoubtedly added to the glamour surrounding its use.

Although the National Survey statistics are only available through 1977—the National Household Survey is conducted every 2 years—reports through 1977 do indicate the percentages who have ever used cocaine had been fairly consistent.

Following an initial increase from 1.5 percent of youth who had ever used between 12 and 17 in 1972 to 3.6 percent in 1974, the percentages of those who had tried the drug in the subsequent surveys of 1976 and 1977 remained between 3 and 4 percent.

Current users—those who had used one or more times in the month preceding each of the surveys—remained constant at 1 percent or less for the years from 1972 to 1977. From 1976, however, to 1977, among the peak drug-using age group, young people between 18 and 25, a significant increase occurred in numbers currently using as well as among those who had ever used. The number of 18- to 25-year olds who had ever used cocaine increased by over 40 percent—42.5 percent—

from 1976 to 1977—13.4–19.1 percent. The number of current users nearly doubled.

An important bellwether group at a point of transition between adolescence and adulthood are high school seniors. Dr. Lloyd Johnston of the University of Michigan has been conducting an annual nationwide survey of drug use in this group since 1975. Use of cocaine by members of the 1975 and 1976 senior classes involved less than 10 percent of classes with 6 percent of each group reporting any use in the year preceding each survey.

Only about 1 in 50 seniors in 1975 and 1976 reported use in the month preceding the surveys. However there was a significant increase in reported cocaine use in all three categories between 1977 and 1978—those are our most recent figures—with the use by the 1977 senior class at an intermediate level.

Between 1977 and 1978, the number of seniors who had ever used jumped 20 percent. And the number who had used in the preceding year went up by 25 percent. One-third more seniors reported having used in the previous month in 1978 than in 1977. Moreover, the percentage of seniors indicating they would "probably" or "definitely" use cocaine in the future has more than doubled since 1975.

Overall, there are multiple indicators that the interest in cocaine use has definitely increased in recent years and that such interest is likely to increase still further. Nevertheless, most use can be more aptly described as "experimental" rather than habitual. Probably this is due to the high cost of the drug which makes regular use impractical for most users. Under conditions of greater availability, cocaine's reputation among users as a "safe" and very pleasurable drug might be expected to significantly increase use.

Probably because of its high cost, frequent or daily use of cocaine is rather uncommon in the United States. When used infrequently and in small amounts, the toxic effects of cocaine are unlikely. The immediate effect of snorting a small quantity is a brief, usually under 1 hour, feeling of unusual well-being, confidence, competence, and reduced fatigue.

In laboratory studies, an increase of 30 to 50 percent in heart rate accompanies use, together with a 10 to 15 percent increase in blood pressure during the contractile phase of the heart—that is, systolic blood pressure. Such changes are no greater than might be expected under conditions of mild physical exertion and in a healthy individual are not likely to be hazardous.

Two properties of cocaine are that it contracts local blood vessels of the mucous membrane to which it is applied while also acting as a local anesthetic. This vasoconstricting aspect is important in medical use. However, when used repeatedly, cocaine causes local tissue death from the decreased blood supply. This results in ulceration of the mucous membranes of the nose.

In mild cases, the symptoms resemble those of the common cold with stuffy or running nose. Continued use of over-the-counter nasal sprays often becomes necessary in order to permit breathing through the nose. Although quite uncommon among American users, heavy cocaine use can also sufficiently damage the nasal septum, the wall dividing the two halves of the nose, to perforate it or even sometimes to cause it to collapse,—"saddle nose."

The question of whether cocaine is "addictive" is still raised by many. If what is meant by this is that discontinuance of the drug produces physical symptoms of withdrawal, cocaine is not in that sense addictive. Although not physically addictive in the way that heroin is, there is good evidence in both animals and man that the desire to continue use if at all possible is powerful. Users having easy access to the drug almost invariably have difficulty in restraining their use.

Clinical reports dating back to the 1880's have described a range of adverse psychological responses to heavier, more prolonged, use of cocaine on a daily basis. Such reactions include feelings of persecution and other paranoid delusions and hallucinations. Hallucinations classically reported resemble those of the alcoholic experiencing so-called DT's.

The user has the intense belief that bugs, snakes, or other animals are burrowing beneath the skin. Such visual and tactile sensations can be sufficiently vivid that the person afflicted tears at the skin in a futile effort to rid it of the imagined invaders. That these sensations are directly an effect of the drug is indicated by similar behavior in laboratory animals treated with cocaine.

Since cocaine is a stimulant, one of the effects of frequent use is a depression reactive to such use. Clinicians with extensive experience with users report that psychotic symptoms and depression, while uncommon among American users, do sometimes occur. Unfortunately, very little is known about the amount and frequency of use required to produce these more serious psychological symptoms.

Two clinicans in San Francisco, Drs. David Smith and Donald Wesson, who have had considerable contact with heavy users, report that "if the drug were available at substantially lower cost—more destructive patterns of abuse could develop." This is an opinion with which we concur.

Deaths from cocaine use, while also uncommon, do occasionally occur. Unlike marihuana, there is no question that cocaine can cause death as a direct result of its pharmacological action. A study of cocaine-related deaths occurring between 1971 and 1976 at 27 U.S. and Canadian locations found 26 such deaths involved cocaine entirely, 6 of which were suicides.

While in over 60 percent of these deaths cocaine was used intravenously and orally in an additional 15 percent, 2 of the 26 deaths, about 8 percent, occurred in people who had snorted the drug.

A second recently published study that you will be hearing more about later in the week done in the Miami area found 24 deaths involving cocaine alone had occurred, most since 1975. Again, oral and intravenous use predominated, although 21 percent snorted the drug.

In both studies, when death occurred from oral use, it was usually in connection with a suicide attempt, smuggling the drug in a swallowed rubber container which subsequently burst, or hastily swallowing cocaine to destroy evidence during an arrest. Despite the relatively low frequency of death, these studies and still earlier reports clearly demonstrate that, contrary to popular belief, cocaine use can and sometimes is fatal.

An important new development in the use of cocaine is smoking the drug or material containing it. In Peru, a material referred to as "coca paste," is an intermediate product in the production of cocaine, containing a wide variety of other chemicals and impurities including kerosene and sulfuric acid, as well as cocaine sulfate. It has been reported to be a major health problem in South America.

The paste is combined with tobacco or marihuana and smoked in a "joint." Smoking the drug in this form produces blood levels in a few minutes that would ordinarily require an hour to achieve by snorting. In Peru, psychoses, very rapid heart rates of up to 180 beats per minute and prolonged compulsive "runs" of drug use have been reported in connection with smoking coca paste.

The smoking of cocaine, originally confined to Latin America, has more recently been reported in the United States. Kits are now available through drug paraphernalia manufacturers advertising in commonly available drug culture magazines, enabling the user to convert street cocaine into so-called "cocaine base." According to one experienced researcher, this practice of smoking cocaine base, sometimes referred to as "free base," originally began in California and has now spread to Nevada, Colorado, New York, South Carolina, and Florida.

Unlike users snorting the drug, American cocaine smokers are reportedly less able or less willing to control the amounts used. As a result, dosage and frequency of use increase rapidly. After a "run" of continued use of anywhere from 24 to 96 hours, the user reaches exhaustion.

Smoking cocaine is much more serious than snorting because there is a much higher potential for overdose, development of psychological dependency, and more serious psychological symptoms. Some of the symptoms of cocaine smoking that have been reported include hyperactivity, insomnia, weight loss, and a psychological picture that may progress from a kind of agitated high spirits to depression and a toxic paranoid psychosis. We are, therefore, currently considering at NIDA the desirability of a vigorous multimedia prevention campaign to discourage cocaine smoking by acquainting users with the special hazards of the drug when it is used in this way.

If smoking of cocaine base is rapidly spreading and the effects are as disruptive as early clinical reports seem to indicate, cocaine may prove to be a more serious problem than has been true in the past. The recency of this new pattern has not yet permitted extensive investigation. Such research is now being planned.

Dr. Robert Byck, professor of psychiatry and pharmacology at Yale University, will be speaking to you later this week. Since he has just returned from an international conference on social and medical problems of cocaine in Peru at which cocaine smoking was extensively discussed, I will defer to him to describe for you those most recent developments.

It is important to recognize that cocaine has legitimate medical uses for which there is no adequate replacement drug in the opinion of those medical specialists who make use of it. Cocaine combines the properties of an excellent local anesthetic with those of a vasoconstrictor. That is, a drug which reduces blood circulation in the area to which it is applied.

These twin properties make it the anesthetic of choice for certain types of surgery involving the nose, throat, larynx and lower respiratory passages. Without such vasoconstricting, there would be considerable blood loss during surgery. Blood loss in these areas of the body rich in blood vessels would also make surgery difficult since it would tend to obscure the surgical field—that is the area in which the surgery is being performed.

When used under controlled medical conditions, cocaine has quite a good record of safety. In a recent report of use in approximately 93,000 operations, severe reactions to the drug occurred in only 14 patients; none of these were fatal.

Moreover, since there is little evidence that recreational cocaine is often diverted from legitimate medical supplies, there appears to be little justification for depriving physicians of an anesthetic with uniquely desirable properties for some purposes.

A second widespread medical use of cocaine has been as an ingredient in Brompton's mixture, a concoction of morphine, cocaine, alcohol, and other ingredients used as a combination drug to allay pain, decrease anxiety, and maintain alertness in terminal cancer patients. While for this purpose other drugs might possibly be substituted or the drug eliminated entirely, there is no imperative need to do so since there is little evidence of illicit diversion in this respect either.

There are many questions about cocaine abuse that are worth pursuing and in which the Institute is interested. They include a better understanding of the toxicity of the drug and especially at what doses and at what frequency of use serious psychological symptoms are likely to occur. We don't know to what extent such symptoms are a direct result of the pharmacological action of the drug as such or result from a personality predisposition in the user. The newly emerging pattern of cocaine-base smoking with its potentially much more serious consequences obviously demands investigation.

At present, we are confronted with a drug which has a moderately high potential for abuse, were it more readily available at much lower cost. Cocaine's present high cost and limited availability have undoubtedly contributed much to the relatively benign public health picture presently seen.

Because it has not posed a serious public health threat at current levels of use, NIDA's research investment has remained modest over the past 4 years, less than $1 million per year, to support about 40 projects per year investigating this drug.

Thank you.

[Dr. Petersen's prepared statement appears on p. 40.]

Mr. GUYER. Thank you, Doctor.

We have been interrupted twice now. I think maybe the group here would like to know who all are here.

We have Mr. Wolff, of course, our full committee chairman, and Mr. Gilman, Mr. Railsback, Mr. Evans, Mr. de la Garza. For purposes of courtesy, I would like for Mr. Gilman to just make an introduction, if you will.

Mr. GILMAN. We have already; thank you, Mr. Chairman.

Mr. GUYER. For the others, do you want to introduce the author of the booklet?

Mr. GILMAN. Thank you, Mr. Chairman. I previously introduced Miss Rachel Weisman who authored this pamphlet, which has recently been published by NIDA, entitled, "Let's Talk About Drug Abuse." The author is one of my constituents, and she is in the audience today. I was pleased to introduce here to the committee.

Mr. DE LA GARZA. Introduce her again.

Mr. GILMAN. I am going to ask Miss Weisman to stand up again.

Thank you, Mr. Chairman.

Mr. GUYER. Inasmuch as I had an opening statement, I am going to defer now to the chairman for the first question.

Mr. WOLFF. Thank you, Mr. Chairman.

I have before me this monograph that has been put out by NIDA. In the opening of the monograph, the foreword, it says:

> This volume summarizes our current understanding of cocaine. One of the most notable aspects of our knowledge is that so much is not yet known. We are still, to a large extent, ignorant of the actual and potential health hazard posed by this fascinating substance, even though it was used by two million Americans this past year.
>
> Despite obvious knowledge and limitations, we do know a few things that are important. We know, for example that cocaine can kill, not commonly but occasionally perhaps not predictably. Despite the street law to the contrary death sometimes occurs even when the drug is snorted rather than ingested.
>
> We also know that cocaine is among the most powerfully reinforcing of all abused drugs. Although not physically addictive in the sense that opiates are, there is good evidence that the desire to continue use when available is remarkably strong.
>
> The relatively benign picture presented by occasional use of small quantities might be remarkably altered with the single euphoric illicit dose now costing about $10 available at the licit cost of about 10 cents.

On that basis, I ask you two questions:

No. 1. What about decriminalizing cocaine?

No. 2. If the abuse or use of this substance is so widespread, why is it that a crash effort has not been initiated to give us the true facts of the health effects of this drug?

Mr. Dogoloff, do you want to lead off on that?

Mr. DOGOLOFF. Certainly, Mr. Chairman. First, your question about decriminalizing cocaine. That would be a mistake, and we would not be in favor of any move toward decriminalizing cocaine.

One of the reasons that we see the relatively benign health consequences has to do with current use patterns in the United States today.

Mr. WOLFF. What you are saying, then, is, somebody who is a little bit pregnant is OK.

Mr. DOGOLOFF. I am not saying it is OK at all from a legal standpoint. I want to be very clear it is not OK to use cocaine. We don't want to give any signal to the contrary.

What we are saying is from a health standpoint, not a legal standpoint, that how much you use and how frequently you use cocaine, just like lots of other drugs, really does have major impact on how much problem you are going to have as a result of that use.

I think that there are two levels of facts or proof, if you will. One has to do with scientific levels of proof in fact, which might talk about at what level we start having problems with it. To me, those are for public policy, from a public policy standpoint, somewhat esoteric. There is sufficient evidence, it seems to me, from the statement that you just read in the introduction of "Cocaine: 1977" to clearly point

out to the public policy of doing all we can to both discourage use in the United States as well as limit availability in the United States.

Mr. WOLFF. Thank you.

Dr. Petersen?

Dr. PETERSEN. Let me respond, Chairman Wolff, primarily to the question of, why hasn't a crash effort been launched to investigate the medical effects of this drug? We do know, for example, that, heavily used, it poses some of the problems which I previously outlined. Under the present conditions of use, it has not posed a very serious health problem for most. Rarely does it pose a problem. The number experiencing the difficulties I described are very few compared to the total number of people who are experimenting with cocaine.

As a result, it is a question of where you want to place your priorities. As you know, Chairman Wolff——

Mr. WOLFF. May I just come back to one point? How do you know how many people are using cocaine today.

Dr. PETERSEN. The best estimate you can base it on is things like the surveys I referred to, the National High School Survey, the data that Mr. Bensinger has referred to concerning confiscated supplies. None of these are perfect indicators, of course.

Mr. WOLFF. You don't have the same type of situation that you had with heroin where you tried to extrapolate from the number of people in treatment. You don't have the same number of emergency room cases, so it seems to me it's very difficult to make a determination.

When I questioned Mr. Bensinger on his remarks about the amount of cocaine that is coming into this country, we had heard it was 5 to 7 tons. It was raised to 11 tons. I believe that you said it was somewhere between 17 and 25 tons at one point. Yet, there are 100 tons available for trafficking into the United States.

If this is a high-cost drug, if it is something that is a high-profit item, why is it that there is not more coming into the United States? There are 100 tons that are available in that area that you showed us.

Mr. BENSINGER. We would estimate, and I think the figures are subject to interpretation, a total maximum production of 65 metric tons. That is the best estimate of the National Narcotic Intelligence Consumer Committee.

Mr. WOLFF. Is that 65 tons for export or total production?

Mr. BENSINGER. Total production. And we would also indicate to you that there is some diversion to Europe, there is some diversion as a result of spillage and wastage and local use, and that the United States, our best estimates are in the neighborhood of 19 to 25 tons out of a total 65 metric tons available.

I would also share with Mr. Dogoloff his comment on two respects. One on decriminalization. I think that would be a serious mistake.

And two, that keeping the price high—earlier testimony both from NIDA in the Office of Federal Drug Abuse Policy, and our own agency, indicate increase in price will restrict its overall availability.

Mr. WOLFF. My time is up.

Mr. GUYER. We will come back to each one if there are additional questions.

Mr. Gilman, I believe you are next.

Mr. GILMAN. Thank you, Mr. Chairman.

Dr. Petersen, I noted in your 1977 monograph that you talk about the need for more research. And you point out that the areas persuasively for expanding research effort should be in the following areas: Incidence, prevalence, and patterns, and factors, and popularity of the drug, characteristics of the high, the role of the personality factors, pharmacology of cocaine, the effects of cocaine on human performance, types of cocaine toxicity, et cetera.

Has the Institute pursued these areas? Have you assigned these areas for further research?

Dr. PETERSEN. Yes; I could submit for the record a list of all the current cocaine research projects. And the issue of incidence, prevalence, and patterns of cocaine abuse is also part of our surveys looking at the patterns of drug abuse more generally.

Mr. GILMAN. How much are we spending on cocaine research?

Dr. PETERSEN. About $1 million a year for about 40 projects a year.

Mr. GILMAN. $1 million per year. Yet, in your testimony, you talk about how the multiple indicators are that interest in cocaine is infinitely increased in recent years subject to 1977 when you talk about having a million-some users in the country. And now, we find that it is going up extensively.

Mr. Bensinger mentions that there are some 19 to 25 metric tons coming into the country. It is either a $12 to $20 billion industry or somewhere in that range. I estimated based on your figures, Mr. Bensinger, it would be about $16 billion if they cut it down to the way you cut down your figures.

One million dollars of research seems to be rather a pittance compared to the extensiveness of the use, abuse, and the extensiveness of the trafficking.

You and I had a colloquy on the budgeting for marihuana the other day. I feel that NIDA certainly is not doing what they should be doing in research in marihuana. The $3.7 million level for the past 3 years with the increasing trafficking and the problems that are developing from the extensive use of marihuana, they certainly can't justify a $1 million expenditure with a serious drug of that nature and the amount of use and abuse.

How do you rationalize that?

Dr. PETERSEN. Well, at the present time. the health problem it poses is modest. Whether that health problem will increase with the availability of smoking cocaine—the change of mode of use can make a difference in use of a drug—is not now known.

PCP is a good example. Taken orally, people found it a "bummer," a very unhappy drug to use, indeed. When they started snorting it and smoking it, it became a different ball game. And, in fact, PCP use "took off."

That is certainly a possibility with smoked cocaine, probably somewhat less likely because of the extremely high cost, limit availability.

By contrast, marihuana is relatively cheaply available. As you pointed out. Mr. Gilman, it is a very much more serious problem since young people are frequently using it on a daily basis. By contrast, daily cocaine use is extremely uncommon, simply because of the high cost.

Mr. GILMAN. But you do indicate there are some possible serious problems. We had a number of deaths resulting from the use of

cocaine. You talk about some of the physical aspects of it. And then, you go on to say that we really don't have enough medical evidence to make a qualitative determination with regard to generally what the problems are with the extensive use.

What I am saying to you is that we apparently have a drug that could be characterized to be somewhat dangerous. We have extensive use, and we are only spending—and you agree that we should have more research, and yet you recommend only $1 million. How do you justify that?

Dr. PETERSEN. The amount you spend on a drug is partly related to the public health risk at a given point and the number of research scientists who could be interested in this as a problem area.

Mr. GILMAN. You talk about an extensive number of young people using it.

Dr. PETERSEN. Mostly, sir, it is very experimental use, it is important, trendish, fadish, "I used it once, aha, I have tried cocaine," that sort of thing, as opposed to the real use of it.

Mr. GILMAN. Just the figures of injury show from 1976, there were 300 injuries reported; in 1978, 400 injuries reported. You talked about the high school usage going up at least one-third in the last 2 years. It would seem to me that those are indicative, those statistics are indicative, of an increasing amount of use and an increasing amount of problems as a result of this drug. Don't you think that NIDA should have an increased amount of research to dig in and find out just what the problems are?

Dr. PETERSEN. I think you are perfectly right if the problem proves to be a more serious public health problem. Obviously, a larger investment would then be well justified.

Mr. GILMAN. I don't know what more we need to show that it is a serious problem and something we should be concerned about. Again, I would hope that NIDA would give more serious attention to the need for the kind of research that you yourself recommend in your last report.

And certainly, this committee, I am sure, would be supportive of trying to get some reasonable dollars expended for the research. We need to make some meaningful determinations in the kind of legislation and enforcement and the kind of regulation that is needed in this area.

I have probably exceeded my time, Mr. Chairman.

Mr. GUYER. Mr. Dogoloff?

Mr. DOGOLOFF. I might add in terms of research, the administration's budget this year, the major increase in the NIDA budget was in research, and that was deleted by the Congress.

Mr. GUYER. One of the reasons why, Mr. Dogoloff, we do not have a final or definitive position on the thing itself—Mr. Wolff and I were just talking here—the cost of crime is in excess of $20 billion a year. Total cost to the individual, cost of recovery, hospitalization, treatment, and so forth, comes closer to $60 billion, cost of purchase and all. Here, we are talking about something which we now have out in the open as being used by 10 million people. You are spending $1 million to investigate, which is less than 10 cents per patient, if we call that.

So maybe it is our fault in not recommending to the Congress, but maybe somebody else is at fault, if we are not talking about the severity of what we are talking about.

Mr. GILMAN. Would the chairman yield?

Mr. GUYER. I would be happy to.

Mr. GILMAN. Are you recommending an increase over last year for cocaine research, an increase for marihuana research?

Dr. PETERSEN. I think the institute did recommend both, an increase in both of those.

Mr. GILMAN. Were those cut down by Congress, an increase in marihuana and cocaine research? Your figures that you gave us at the last hearing indicated that you recommended smaller amounts for research in marihuana. Now I ask you what your recommendation was for cocaine research, and you tell me it is $1 million. What did you recommend last year?

Dr. PETERSEN. I would have to obtain those figures for you, Mr. Gilman.

Mr. GILMAN. I would like to ask you to produce those figures, of what you recommended for marihuana research in the last 3 years and what you recommended for cocaine research in your budget, including this year.

Mr. Chairman, with your permission, I would like to have those figures included at this portion in the record.

Mr. GUYER. That will be.

[The information referred to was not received at time of printing.]

Mr. DOGOLOFF. If I might add, I wasn't looking to cast blame on one side or another; I was just trying to underline the fact that the administration clearly agrees with you, the priority that research ought to take in the NIDA budget and expressed that in the budget that was submitted.

Mr. GILMAN. I am pleased to hear that, but it is my impression, and that is why I am critical, that NIDA has not asked for the additional funds that it should be utilizing for this kind of research. I know that most of the members on this committee would be highly supportive of those kinds of requests if they are brought to our attention.

Mr. WOLFF. Would the gentleman yield?

Mr. GUYER. Yes.

Mr. WOLFF. I think we ought to indicate for the record that the Congress did not cut down the funds for NIDA research. The Congress cut down the funds for overall HEW research.

Am I correct in that?

Mr. DOGOLOFF. I am not sure. Let me provide it for the record.

[The information referred to follows:]

THE WHITE HOUSE,
Washington, D.C., October 26, 1979.

Chairman LESTER L. WOLFF,
Select Committee on Narcotic Abuse and Control,
House Office Annex 2, Washington, D.C.

DEAR CHAIRMAN WOLFF: During the recent hearing on the Federal Strategy for Prevention and Treatment of Drug Abuse held by the Select Committee on Narcotic Abuse and Control I was asked to supply for the record the details on why the National Institute on Drug Abuse's budget request for research for FY80 was reduced.

I have checked with the Institute and learned that the Congress voted to reduce the amount requested by NIDA by $4.304 million.

If I can be of further assistance, please let me know.

Sincerely,

LEE I. DOGOLOFF,
Associate Director for Drug Policy and Domestic Policy.

Mr. WOLFF. I think that is correct. One of the things that we wanted to do was to try to cut out the experimentation on the sex life of the frogs and the perspiration rate of the aborigines. I think that is the area where we cut back on the funding, not on the question of whether or not we should fund for drug-related items or drug abuse.

One very important problem is the image that is created by those in authority relative to the hazards that are present in the use or abuse of these substances. When you call something an entertainment drug, then you are coming to Congress and saying, "We want you to provide funds for entertainments and for drugs."

You know, there is total misconception here. I think one of the responsibilities is to change the image that exists. The reason we have great faith in the American people is we are confident that if the people know the hazards that they are facing, there will be less abuse of these substances.

If you don't come up with the information and you don't alert the American people to the hazards and you tell us that, well, since there are small numbers of present-day users, they don't present a health hazard to us, then Congress is going to cut back on the funds. There is no question of that.

I think the situation so far as the American people are concerned is that they are entitled to know what it is that they are facing when they use these substances. I assure you that if many people in the entertainment industry knew the hazards that they were facing, they wouldn't be snorting the amount of cocaine that they are.

Mr. GUYER. That is a point well taken because I said at the outset if we are going to have people testify that these things are benign and harmless, there is no point having hearings. And during our marihuana hearings, we brought out the point that even the Surgeon General has to say the cigarette smoking is injurious to your health, but then they were also saying marihuana, if taken properly, et cetera—and all we are really doing is telling them how to take it, where to get it, and what to do about it, and not telling them it is harmful.

We don't want to be dishonest, but we do want to tell the hardcore facts. We can go back, as Mr. Wolff said, we have a record of spending $200,000 telling why kids fell off tricycles. Maybe that is great for people to know, but it didn't help us make decisive recommendations for the budget.

I believe Mr. de la Garza was the next to arrive.

Mr. DE LA GARZA. I have no questions. I yield my time to the chairman.

Mr. GUYER. You have done a very good job if he has no questions.

I believe, then, Mr. Railsback was here next.

Mr. RAILSBACK. Thank you, Mr. Chairman.

I think I would like to ask Mr. Bensinger about the cutoff point for which the U.S. attorneys will decline to prosecute.

Mr. BENSINGER. This varies, Congressman Railsback. It could be 1 or 2 ounces in certain jurisdictions. Generally, though, the type of cocaine cases that we would present would lead to a large source of supply, case development on an ounce case. But there are instances on record of 1 to 2 to 3 ounces and quantities below that, too.

We are not encouraged to take that to Federal court for jurisdiction unless we can work our way to a major source of supply.

Mr. RAILSBACK. Is this similar to what has happened, say, with respect to some other drugs that are under your responsibility to investigate? In other words, do we by necessity have a policy of concentrating only on the larger drug traffickers, and if so, should we be increasing the enforcement personnel? What is your feeling about that?

Mr. BENSINGER. I think it is similar to the posture we in the Criminal Division are taking in the investigation and development for prosecution of narcotic offenses. And in this regard, we are spending more time on the more significant cases which are source of supply, continuous distribution cases. I think we—and I have discussed this with the Deputy Attorney General—will be increasing our number of task force operations working jointly with State and local jurisdictions.

We have 25 of them now which can target a class III level generally when we are targeting at classes I and II principally with our own investigative force.

I think also where we are able to work cases domestically that tie into international source of supplies, we are concentrating on that. We have seen where this has happened in the case of heroin, a major enforcement target at the top levels. We have had reduced availability, reduced purity, reduced injuries, reduced deaths.

We think in cocaine, we are going to be going after multiple investigations, as well as in marihuana cases to a much greater extent. So we might look at a case which would not be large in seizure quantity, but have major violators and would tie up large sums of money.

Mr. RAILSBACK. Let me ask you about the conviction rate and also the sentencing policies of the judiciary. How do you feel about the current sentencing policies of judges relative to drug traffickers, specifically cocaine?

Mr. BENSINGER. I think the Attorney General's recommendations for sentencing guidelines would be helpful. Our conviction rate is 96 percent for class I violators, 97 across the board. The average length of a prison sentence for cocaine for class I violators is 83 months. The average sentence, pardon me, is 86 months for class I violators, 7 years and some. That has shown some improvement over the last 2 years.

I am more concerned, Congressman Railsback, I think, with our present bail problems with cocaine violators in which many of the individual offenders are arrested and flee the jurisdiction of the court, post a bond, which can be met out of pocket change by them.

Mr. RAILSBACK. May I interrupt you?

Mr. BENSINGER. I can make this available for the record, Congressman.

Mr. RAILSBACK. That is what I wondered. Can you supply us figures for that?

Mr. BENSINGER. We do have that, Congressman Railsback, for heroin, cocaine, dangerous drugs, cannabis, both by conviction rate and average length of sentence and disposal.

[The information referred to follows:]

DEA CALENDAR YEAR 1978 DISPOSITIONS

[Dispositions in months]

Drugs	Federal court violator class					State court violator class				
	I	II	III	IV	Total	I	II	III	IV	Total
Heroin:										
Conviction rate (percent)	(94)	(95)	(95)	(98)	(96)	(100)	(100)	(98)	(97)	(98)
Disposition:										
Prison	147	190	881	263	1,481	9	18	259	266	552
Probation	2	13	162	90	267	3	6	74	119	202
YCA/indefinite	5	1	62	31	99	1	(1)	6	15	22
NARA addict rehabilitation	(1)	(1)	9	4	13	(1)	(1)	1	2	3
Fine	(1)	(1)	1	(1)	1	(1)	(1)	(1)	3	3
Acquitted	10	10	54	10	84	(1)	(1)	7	11	18
Dismissed	10	11	81	60	162	(1)	2	33	38	73
Declined	(1)	1	(1)	1	2	(1)	(1)	1	1	2
Suspended sentence	1	1	7	1	10	(1)	1	8	9	18
Other narcotics:										
Disposition:										
Prison	(1)	2	9	1	12	(1)	(1)	(1)	(1)	(1)
Probation	(1)	1	6	6	13	(1)	(1)	2	6	8
YCA/indefinite	(1)	(1)	1	(1)	1	(1)	(1)	(1)	(1)	(1)
Acquitted	(1)	1	(1)	(1)	1	(1)	(1)	(1)	(1)	(1)
Dismissed	(1)	(1)	2	1	3	(1)	(1)	(1)	1	1
Cocaine:										
Conviction rate (percent)	(96)	(98)	(97)	(97)	(97)	(100)	(88)	(96)	(98)	(97)
Disposition:										
Prison	83	112	548	103	846	8	11	153	105	277
Probation	13	22	188	75	298	4	3	119	120	246
YCA/indefinite	1	4	69	16	90	(1)	(1)	8	3	11
NARA addict rehabilitation	(1)	(1)	6	(1)	6	(1)	(1)	(1)	(1)	(1)
Fine	(1)	(1)	2	1	3	(1)	(1)	2	4	6
Acquitted	4	3	23	6	36	(1)	2	11	4	17
Dismissed	4	7	37	22	70	(1)	3	18	24	45
Declined	(1)	(1)	2	1	3	(1)	(1)	(1)	(1)	(1)
Suspended sentence	(1)	1	10	(1)	11	(1)	(1)	5	5	10
Dangerous drugs:										
Disposition:										
Prison	108	62	223	88	481	14	10	63	88	175
Probation	23	19	97	66	205	3	3	58	127	191
YCA/indefinite	6	1	24	29	60	(1)	(1)	2	5	7
Fine	(1)	1	2	1	4	(1)	(1)	1	9	10
Acquitted	3	3	23	4	33	(1)	(1)	1	4	5
Dismissed	6	7	20	12	45	2	3	18	18	41
Declined	(1)	(1)	1	(1)	1	(1)	(1)	(1)	(1)	(1)
Suspended sentence	1	(1)	4	2	7	4	1	8	9	22
Cannabis:										
Conviction rate (percent)	(75)	(97)	(83)	(95)	(90)	(88)	(88)	(99)	(94)	(94)
Disposition:										
Prison	111	64	520	425	1,120	17	17	112	119	265
Probation	16	24	177	289	506	8	4	89	219	320
YCA/indefinite	4	4	29	88	125	2	(1)	16	6	24
NARA addict rehabilitation	(1)	(1)	2	1	3	(1)	(1)	(1)	(1)	(1)
Fine	(1)	2	4	6	12	2	1	6	60	69
Acquitted	7	1	44	20	72	1	1	4	21	27
Dismissed	15	8	111	110	244	2	(1)	16	34	52
Declined	(1)	(1)	2	(1)	2	(1)	1	(1)	2	3
Suspended sentence	1	1	5	22	29	1	1	4	18	24
Other drugs:										
Disposition:										
Prison	9	4	40	37	90	(1)	(1)	6	11	17
Probation	1	4	26	19	50	(1)	(1)	13	31	44
YCA/indefinite	1	(1)	7	1	9	(1)	(1)	2	(1)	2
NARA addict rehabilitation	(1)	(1)	1	(1)	1	(1)	(1)	(1)	(1)	(1)
Fine	(1)	(1)	(1)	2	2	(1)	(1)	1	1	2
Acquitted	3	2	1	1	7	(1)	1	(1)	2	3
Dismissed	1	(1)	1	5	7	(1)	(1)	10	3	13
Declined	(1)	(1)	(1)	1	1	(1)	(1)	(1)	(1)	(1)
Suspended sentence	(1)	(1)	1	(1)	1	(1)	(1)	(1)	2	2

See footnote at end of table.

DEA CALENDAR YEAR 1978 DISPOSITIONS—Continued

[Dispositions in months]

Drugs	Federal court violator class					State court violator class				
	I	II	III	IV	Total	I	II	III	IV	Total
Total, all drugs:										
Conviction rate (percent)	(95)	(96)	(96)	(98)	(96)	(99)	(95)	(98)	(97)	(97)
Disposition:										
Prison	458	434	2,221	917	4,030	48	56	593	589	1,286
Probation	55	83	656	545	1,339	18	16	355	622	1,011
YCA/indefinite	17	10	192	165	384	3	(1)	34	29	66
NRA addict rehabilitation	(1)	(1)	18	5	23	(1)	(1)	1	2	3
Fine	(1)	3	9	10	22	2	1	10	77	90
Acquitted	27	20	145	41	233	1	4	23	42	70
Dismissed	36	33	252	210	513	4	8	95	118	225
Declined	(1)	1	5	3	9	(1)	1	1	3	5
Suspended sentence	3	3	27	25	58	5	3	25	43	76

[1] Data not available.

DEA CALENDAR YEAR 1978 PRISON TERMS [1]

[Sentences in months]

Drugs	Federal court violator class					State court violator class				
	I	II	III	IV	Total	I	II	III	IV	Total
Heroin:										
Prison sentence	147	190	881	263	1,481	9	18	259	266	552
Average sentence	152	84	64	45	72	255	167	84	59	78
Other narcotics:										
Prison sentence	(1)	2	9	1	12	(1)	(1)	(1)	(1)	(1)
Average sentence	(1)	152	44	60	63	(1)	(1)	(1)	(1)	(1)
Cocaine:										
Prison sentence	83	112	548	103	846	8	11	153	105	277
Average sentence	86	60	38	40	46	81	110	52	35	49
Dangerous drugs:										
Prison sentence	108	62	223	88	481	14	10	63	88	175
Average sentence	40	27	27	27	30	52	41	33	26	31
Cannabis:										
Prison sentence	111	64	520	425	1,120	17	17	112	119	265
Average sentence	54	42	33	25	33	74	45	37	21	33
Other drugs:										
Prison sentence	9	4	40	37	90	(1)	(1)	6	11	17
Average sentence	64	141	36	26	40	(1)	(1)	38	36	37
Total, all drugs:										
Prison sentence	458	434	2,221	197	4,030	48	56	593	589	1,286
Average sentence	88	64	46	33	50	103	96	61	42	55

[1] Data not available.

Mr. RAILSBACK. OK. Thank you very much.

Thank you, Mr. Chairman.

Mr. GUYER. I think, Mr. Evans, probably you were here first. I am sorry.

Mr. EVANS. No problem.

Mr. GUYER. It is your turn.

Mr. EVANS. Thank you, Mr. Chairman.

Mr. Bensinger, the health hazards of cocaine seem to be described as light because we don't have enough for everybody to use what they want to use, and it costs too much. You have been commended before for the efforts in the heroin area, and I would like to repeat those commendations. And I think that those efforts have been successful.

In the area of marihuana and cocaine, however, we are seeing a constant increase. I want to ask a series of questions which I think that you can touch on in one answer.

No. 1. I want to know if you have got enough people in DEA and the proper type of equipment to reduce substantially the flow of illegal cocaine and marihuana into the United States?

No. 2. If you don't have them, why haven't you asked for it? And why haven't all of the people involved in drug control in this country made those recommendations? I want to know where the drug is coming from and by what methods it is coming into this country. I want to know if you have the authority within your own department to move your people around to deal with the problems in the area that they exist; that is, smuggling.

For instance, my home down in Macon, Ga., has just broken up a multimillion-dollar drug operation. I have the news clipping here—basically cocaine, marihuana, and Quaaludes. We continue to see millions of dollars spent in advising the public about the harmful effects of tobacco, and I think it has been pointed out by other members of the committee that we are talking about less than $4 million on marihuana and less than $1 million on cocaine.

Where do we get the hard facts, the information, that we need to convince our colleagues that we are going to have to spend money in order to deal with this problem?

And I would like to mention again the $16 million that we are talking about in helping crime by dealing with the cocaine problem is really insignificant when we talk about the billions of dollars for health recovery for these people who are hooked. We are pennywise and pound foolish, in my opinion.

And I would like your reaction to that and those questions.

Mr. BENSINGER. Very good, Congressman Evans. I will answer those five questions as I have written them down.

The first was do we have enough people and equipment to stop particularly cocaine coming into the United States? I will respond, although the principal parties responsible for interdiction are U.S. Customs Service. I think they will tell you as would, I think, Jack Hayes, the Commandant of the Coast Guard, and I will tell you the place the people do the most good is in the source country. And if I had my options, it would be, too, in the source country, in Peru, Bolivia, Colombia. That is where the people in my opinion are most needed.

Mr. EVANS. Would you discuss in that connection the amount of money that we are giving to these source countries to help deal with the problem? How does that tie in with the number of people we have?

Mr. BENSINGER. I think in part, the effectiveness of U.S. employees in those countries is a partial, a very important, catalytic representation. We have 13 people in DEA in Colombia. And that is a greatly expanded operation.

Mr. EVANS. Is that actual agents in the field?

Mr. BENSINGER. That is field agents. Two of those I am including in the 13 are U.S. Customs Officers reporting to our Special Agent in Charge. But I don't think our country has invested in long-term funded programs—Congressman Gilman. Tennyson Guyer, and Chairman Wolff were inquiring about that—that arrived at the economic, political and social history of coca development in those countries.

And we could add another 100 customs agents. We could add another 200 Immigration or 200 Coast Guard or 100 DEA agents. And if the raw-source production countries aren't moving really dramatically to limit the source of supply, I don't think it will have an impact.

I think we need to put our money, and this could be State Department funding, at the source. And it could be not only through State Department, but through the U.N. and other Andes Pact, international opportunities.

And Mr. Dogoloff may want to carry that further.

But in answer to No. 1, I think an increase in presence would be helpful, but I think the real increase in presence that is needed is on the part of the Peruvian Investigative Police, on the part of the DNSB in Bolivia, on the part of the Colombian judicial employees, and a political commitment by the Presidents of those countries that they will not allow coca to be grown 8 to 9 times greater than what is legally needed.

If that commitment is made, we will reduce cocaine into the United States. If it isn't, an increase in personnel and equipment is not going to have a significant impact.

Mr. EVANS. In that connection, I know you want to go on to the other questions, but I think it is relevant. What is the situation in those countries, and what is the political commitment to deal with this? And if we were to provide the money and the other paraphernalia, whatever is needed, if we were to help with that or the international community were to help with that, could we get the commitments?

Mr. BENSINGER. I think that is exactly what is needed. And I appreciate being a part of this panel to address your select committee's special task force on cocaine because hearing the widespread availability, the dollar retail value, and the health hazards as Dr. Petersen pointed out, I think would underscore the need for additional resources.

Mr. Dogoloff could address the overall political and State Department aspects of this.

Mr. DOGOLOFF. I think that we are talking about four primary countries of concern—Peru, Bolivia, Ecuador, and Colombia. I was recently visiting both Peru, Ecuador, and Colombia and was very encouraged by the commitment on the part of the top government officials and in some cases the heads of government relative to wanting to deal with this problem.

The issue is a very difficult one. Those of us who have traveled together to look at the issue understand that the fields are remote. It is going to take a two-pronged effort, one having to do with increased enforcement; and second, having to do with giving reasonable options to farmers.

As the chairman indicated before, it is clearly the farmers and the users in effect who are being taken advantage of economically and many other ways in this whole process. There is a study team right now from the State Department doing a feasibility study looking at what the options might be in both Peru and Bolivia to try to discern not only what kinds of substitute crops might be offered, but more importantly, the kinds of substitute crops that cannot be perishable

because there are inadequate road systems to get perishable crops out in time for marketing—to do a whole marketing study.

Basic rural and economic development is what is needed. And I think it has only been fairly recently that we have come to grips with that realization and faced up to the difficulty that that is going to pose.

I am looking forward to those feasibility studies coming back for the two-prong countries to be able to evaluate what needs to be done, what the costs might be. The countries themselves, particularly Peru, are very much interested in doing all they can, both to limit production as well as to provide alternative crops. The same is true in Ecuador.

Recently, in my visit to Ecuador, there was grave concern not only on trafficking, but on the impact of drug use on the youth of Ecuador themselves. In recent conversation just this past week when the new President-elect of Ecuador was visiting the United States, he evidenced real concern about the drug problem and a commitment to do something about it.

The involvement in commitment on the part of the President of Colombia, it is obvious in what he has done in the area and the commitment of the Federal military forces to deal with drug trafficking.

So I think that the political picture in some ways is brighter than it has been in quite a while. And there is a real willingness and desire on the part of the producing countries to work together. They recognize it is not a U.S. problem; it is a problem they share in. And they also share in the negative consequences of that problem.

And I am hopeful in the next several years, we are really going to have some breakthroughs, but it is not going to be easy. The problem is quite difficult. The terrain is remote; there aren't good roads; we have to figure out what can grow there and give the kinds of inducements in a carrot-and-stick way to get farmers to do that.

Mr. WOLFF. If the chairman would yield just for one point because for some reason, it has not been addressed here. That is the question of local corruption which is a very important ingredient in this whole picture.

No matter what the President of an individual country wants to do, no matter how much we give to the farmers, unless we eliminate the area of corruption and get cooperation from those people in eliminating the corruption, we are not going to stop the exportation of those products to this country.

With all of the treaties, with all of the agreements reached and everything else, the time has come for them to prosecute their own people who are corrupt. We have from time to time. I know the efforts of the Drug Enforcement Administration. We are aware of the principal traffickers in a variety of areas. The government of those countries are aware of the traffickers in their areas. But they are not doing a damn thing about it. And I think that is where it is at. I think that we as a committee, we as a Government, have a responsibility to unmask those people for what they are.

We did achieve great success in Thailand when we printed in the Record the name of the principal traffickers who had not surfaced. Maybe that is about the best use we can ever put the Congressional Record to. Perhaps we ought to start using it a little bit more fre-

quently to help solve some of that area of the problem. That really is one of the principal ingredients of this entire situation.

Mr. DOGOLOFF. Mr. Chairman, you are absolutely correct. And in my recent visits, I was very much impressed with the candor at very high levels in those governments regarding the issue of corruption. And in fact, the Government of Ecuador has just in the past few months passed a special law to create a special police force to deal with that, specifically with the issue of corruption, and to have an elite force which would be less likely to be corrupted by the vast amounts of money that narcotics trafficking produces to really come down hard on it.

I think that is true elsewhere as well. There is tremendous amounts of money involved in drug trafficking, particularly in cocaine trafficking. And that is going to be corrupting.

And I think I have yet to run into a government that says, no; it doesn't exist. And I think more and more governments are willing to come to grips with it and try to deal with what is in some cases a problem of epidemic proportions.

Mr. EVANS. Thank you, Mr. Chairman. If I might, I know I am about out of time——

Mr. GUYER. Do you have another question?

Mr. EVANS. I would like to continue this particular line. And that is that Mr. Dogoloff, we have gone a number of places, and we have talked to governments, and we have made encouraging statements. And I would like to ask whether you agree or disagree that when we do all those things, if we don't back up our commitment with the kind of dollars it takes to really make an impact, are we really doing anything?

Because we seem to be telling these people one thing. We are talking, but we are not backing it up. And I personally don't think that the money that we spend overseas in the drug effort when it is properly monitored by having enough people who have the stature of the DEA people, and I think we have got the top, I just don't believe that those people believe us when we don't back up what we say with the kind of help that is necessary to really do the job.

I recognize the problems with the remote areas and so forth. But we have got to get the message to the administration to come back and make recommendations to make an all-out effort on the drug situation.

Mr. DOGOLOFF. I think it is absolutely correct.

Mr. WOLFF. Mr. Chairman?

Mr. GUYER. Mr. Wolff.

Mr. WOLFF. Just following that for a moment, if, Mr. Dogoloff, you as the lead individual in the overall effort by this Government today can prevail upon our Ambassadors to put a little bit of their diplomatic techniques behind them and put more of their efforts toward aiding our law enforcement people in getting at the traffickers, that would be a major step forward. What is unfortunate is the direction that this country has taken in attempting to penalize the abuser more than we are the trafficker.

If we concentrate on the traffic, I think we would do an awful lot better. I think that is basically where we are at today. I think education is needed in order to alert the public to the dangers that they face and then exert a greater portion of our effort on the traffickers.

I want to echo the statements that were made in congratulating the DEA on its work in the field. The number of class I traffickers that have been apprehended is really outstanding. And I hope that you will continue in that effort.

And I would say that if we can only filter down a little bit further to people in the field, to give our enforcement people a greater opportunity to do their work, I think everything will turn out a bit better than it is now.

Mr. GUYER. Thank you, Mr. Chairman.

I think we are just about ready to wrap up. Rather than go to 5 o'clock, we will come closer to 4. We were not going by the 5-minute rule today because we wanted to be sure everybody here had a chance to at least get in a couple of questions because of the interruptions.

I had one or two before we conclude. And going back to this publication—and I am delighted that it has been published—I was going to ask the question before I saw this: When was the last time you published something like this? But now, I am going to change the question. How available are these? And how are you getting them out, Dr. Petersen?

Dr. PETERSEN. I think someone is here from the Clearing House. Could you address that?

Miss WEISMAN. I can tell you about a million have been printed.

Mr. GUYER. Are they available to schools?

Miss WEISMAN. We have sent them to the Single-State Agency for Drug Abuse Prevention, one for each State. And they are responsible for passing them out.

Mr. GUYER. Could you see that our entire committee is provided with an ample number so that we might put them out to points we think would be the most good?

Miss WEISMAN. Yes. They are also available to the public through the National Clearing House on Drug Abuse.

Mr. GUYER. I noticed it was published in 1979. So it is very recent.

Miss WEISMAN. Yes.

Mr. GUYER. One or two questions because I sort of held back my questions to give the others a chance. Does anybody know what is a fatal dose of cocaine? Has this ever been brought out?

Dr. PETERSEN. It is somewhat variable. Let's see if I can find it for you somewhat quickly.

Mr. GUYER. While you are looking it up——

Dr. PETERSEN. About a gram and a half orally, as I recall, sounds right.

Mr. GUYER. As I understand the testimony, cocaine has not been established as physically addictive, but psychologically, yes. Is that true?

Dr. PETERSEN. It isn't addictive in the sense that there is a withdrawal syndrome. The distinction between physical and psychological dependency is a much overrated distinction. You can be extremely dependent on a drug even though it is not clearly addictive. Tobacco may not be clearly addictive, but millions of Americans have great difficulty giving it up.

Mr. GUYER. Some of the evidence we have had with cocaine is with alcohol and some of the ingredients you mentioned; it does create interdependency between more than two ingredients.

Dr. PETERSEN. In this case, between cocaine and alcohol, not that I know of.

Mr. GUYER. Not there.

One last question, then. Why is the smoking of cocaine more hazardous than snorting? And do we have any kind of an educational program in that field?

Dr. PETERSEN. That is what we are considering. With a public education program, Chairman Guyer, you are in a very awkward position in one sense. If you mount an educational program and the use is modest, you may have the paradoxical effect of inspiring more people to use by making them aware of this as a potential way of doing it.

Mr. GUYER. You don't want to teach anything to everybody.

Dr. PETERSEN. That is one of the real problems. Why is it more hazardous? It is more hazardous because you get very, very high blood levels very quickly because it is a very direct route from lung to brain. It is a very much more efficient means of getting the cocaine into your system.

Mr. DOGOLOFF. I might add, the issue of physical addiction per se has been used by many to substantiate the notion that it is not a harmful drug. The important issue is that it is probably the most highly reinforcing drug that we know.

In other words, when given the option to use an unlimited quantity of it in animal experiments, at least the animal will administer more cocaine more frequently to itself than any other drug including heroin and morphine and any others that we try. So because of that, you can translate into human terms, given the ready availability, people were likely to use it, and it has the greatest potential for abuse probably than any other drug we know.

And so the issue of actual physical addiction, meaning when you withdraw the drug, do you come on with a certain group of physical symptoms, that is, nausea, sweating, and so forth and so on, is absolutely immaterial. The real critical issue is it is psychologically, if you will, addicting. And that is what brings people to use it more and more.

Mr. GUYER. We are planning after September to bring people in personally to testify what was done to them. It may not be clinical, but I think it will be very instructive.

Mr. BENSINGER. Chairman Guyer, if I could just indicate to Congressman Evans, I do have a submission in the National Narcotic Intelligence Consumer Committee, a report that will address the questions you asked on routes and smuggling techniques. We do have authority to move people. And I think that the NIDA brochure and some of the health research which you and the Congress have inquired about where we could get the facts would be the place I would point.

Mr. GUYER. I think Mr. Evans, too, probably missed some of your testimony on how it was brought into the country.

He produced just a little while ago—if you would like to show it again—a packet of cocaine worth about $800,000 right in that suitcase.

Mr. EVANS. I thank the gentleman. I saw enough over in Thailand. I saw several trillion dollars worth there.

Mr. GUYER. I don't know whether the congratulations are in order, but I mean, Mr. Bensinger, you had a lot to do. Arrests were made in the last couple of days in the area here. Do you want to comment on that?

Mr. BENSINGER. I think we do see, and Congressman Evans made reference to, a program that linked the St. Louis, Georgia, and Florida, one of the most major cocaine-marihuana-Quaalude drug conspiracies we have ever looked at.

I would only say, Congressman Guyer, that you and Congressman Wolff, Congressman Gilman and Congressman Evans, Congressman de la Garza and Congressman Railsback, have commented. All the comments to our agents are very helpful and encouraging. And this large cocaine ring that was broken in today's paper, we expect to see successfully prosecuted and convicted.

Mr. GUYER. I personally feel this panel has been very productive. And we appreciate your testimony, your patience, and we are going to conclude now unless you have a further word. Do you want to say something further?

Mr. GILMAN. Just one question of the panel. I note that Mr. Bensinger talked about the regional problems in Latin America with the few countries that were involved in cocaine. Have we established that some sort of a regional interdiction approach to that area—could you tell us just a bit about that?

Mr. BENSINGER. Yes; it has. I think that has been one of the big benefits, Congressman Gilman. We had a meeting in Lima, Peru, last year of the heads of the law enforcement agencies of the principal Andean countries under an international drug enforcement association sponsorship funded by State in Lima.

I met personally with the heads of those agencies. We will be having a followup meeting in Venezuela in November. The heads of the Andean countries have signed a number of mutual intelligence and exchange type of information programs.

I think you and the committee get back to the bottom line on proper control, but in terms of interdiction, the amount of interdiction handled outside the United States was 10 percent in 1971. I am pleased to tell you that it is 90 percent last year. The seizures have just escalated dramatically in foreign countries. And that is, I think, a result of a lot of good work by a lot of our agents and Customs and our Ambassadors, and an accelerated growth in professionalism in law enforcement.

Mr. GILMAN. Does the Principals' Group get involved in this research addiction effort?

Mr. DOGOLOFF. Absolutely.

Mr. GUYER. Mr. Wolff has the final question.

Mr. WOLFF. We have seen a marked increase in the use and abuse of heroin in Europe. We never saw very much in the way of cocaine use in Europe. I understand that there is a large increase now in cocaine abuse in Europe. Am I correct?

Mr. DOGOLOFF. About a year ago, I traveled to seven European countries. And almost invariably in each country, I was told about increased seizures and increased availability of cocaine that go along hand in hand with the increased availability of some of the other substances. So the indications were very clear.

Mr. WOLFF. Thank you.

Mr. GUYER. I want to say in conclusion, I want to thank the staff members who assembled the background research material, put to-

gether the agenda for today, and we will adjourn. But we will reconvene at 2 o'clock Thursday this week in room 2118.

Thank you very much.

[Whereupon, at 4:10 p.m., the meeting was recessed, to reconvene on Thursday, July 26, 1979, at 2 p.m.]

PREPARED STATEMENTS

Prepared Statement of Lee I. Dogoloff, Associate Director, Domestic Policy Staff, the White House

Mr. Chairman and members of the select committee, it is always a pleasure to appear before you for I am convinced that focusing together on some of the most urgent problems in the drug abuse field, we will be able to reduce the serious effects which drug abuse has had on our country. The White House and the Congress, working together in partnership, will in effect enable the American people to live satisfying lives without drugs such as cocaine.

As we stated in the 1979 Federal Strategy, "The abuse of cocaine and the expanding international traffic in cocaine continue to be of great concern to the Federal Government." Approximately ten million Americans tried cocaine during the past year. As you know, virtually all of the cocaine produced in the world comes from coca bushes grown in Peru (25,000 hectares under cultivation) and Bolivia (20,000 hectares) where they have been cultivated for centuries to satisfy the leaf chewing needs of the Indians. Most of the cocaine is transshipped through Ecuador and Colombia, and is destined primarily for the United States and secondarily for Europe. Approximately 19 to 23 tons of cocaine hydrochlorida, worth from $137.9 to $312.9 million at the border, enter the U.S. market each year.[1]

It is difficult to determine the exact amount of cocaine consumed in the United States because the frequency of use is dictated by individual preference rather than by predictable addictive need to prevent the convulsions of withdrawal. However, based on use patterns and prevalence surveys we estimate that there are 5.1 million regular abusers of cocaine in the United States. Cocaine use in the United States occurs primarily among young people aged 12 to 34. Three percent of this population, or 5 million, use cocaine. Use patterns though vary among age groupings, change with length of use, and involve different purities of the drug. Younger users, for example, probably use less cocaine, while older users, who tend to have more income, may use cocaine of higher quality. Current research suggests that cocaine is usually administered at least three consecutive times in one session and that the average amount of material used for each of these three administrations is 50 mg. of cut cocaine.

I have addressed the cocaine use in the United States in some detail for three reasons:

1. In contrast to heroin, there is a trend toward increasing use in the United States, although the exact dimensions of this increase are not yet known.[2]
2. There are serious health and social consequences of cocaine abuse.
3. Cocaine abuse is now one of our most important problems that we in the United States drug abuse prevention field share with our neighbors in Latin America.

As we stated in the 1979 Federal Strategy, there are several important things we do know about the health consequences of cocaine use. We know, for example, that cocaine can kill—not commonly, but occasionally and not predictably. Despite the street lore to the contrary, death can occur even when the drug is snorted rather than injected.

There is also good evidence that cocaine, even in moderate doses (10–25 mg. i.v. and 100 mg. intranasally), significantly increases both heart rate and blood pressure. Large doses of cocaine, particularly when taken frequently, can cause mental and psychological aberrations and destruction of the nasal linings.

We also know that cocaine is the most powerfully reinforcing or habit-forming of all abused drugs. Although not physically addictive in the sense that opiates are, studies, such as those undertaken by the University of Chicago, show that the desire to continue using cocaine is remarkably strong if the drug is available.

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[1] Narcotics Intelligence Estimates of the National Narcotics Intelligence Consumers Committee, December 1978.

[2] National surveys showed, however, that in 1976, 7 million Americans had used cocaine at least once, while in 1978 this figure rose to 10 million Americans.

It is this last point regarding the availability of cocaine which I would like to briefly discuss since the Administration's position on cocaine stems, in large part, on the effects of a widespread availability of cocaine. It is our assumption that the current relatively low level of health problems associated with cocaine use reflects the relatively high price and relatively low availability of the substance. Were cocaine to be substantially more available at a much lower price, I am convinced that the level of health problems would be far higher than is the case today.

Consequently, the Federal Strategy, developed by the Strategy Council on Drug Abuse, is to support all efforts to reduce the availability of illicit cocaine. I see this as a threefold objective which can be realized in conjunction with the governments of Peru and Bolivia.

1. To eradicate all coca production in excess of that needed for local Andean Indian consumption and for legitimate pharmaceutical export;
2. To develop comprehensive income substitution and integrated rural development programs in the two main source countries—Peru and Bolivia; and
3. To ensure a strong law enforcement effort toward cocaine which in itself maintains the drug's high price and limited availability.

Through the Principals' Group and the Strategy Council we will ensure that these objectives are met and that resources are reallocated, if necessary, to meet this commitment. To further stimulate this program, we must make it clear that the concern over illicit coca production is truly a global concern—and not just that of the United States. We must obtain explicit support from European nations and from other Western Hemisphere countries. We must make it clear that the use of coca leaves for chewing in Bolivia and Peru is a domestic issue within those countries and not the principal concern of the United States and the international community. We and other nations are, however, concerned with the global problem; that is, the explosive increase in Bolivia and Peru of the cultivation of coca in areas which are not traditionally growing areas and in quantities which vastly exceed local needs for leaf chewing or for legitimate export requirements. It is this excess cultivation which should be discouraged and, ultimately eradicated.

In addition to our supply reduction efforts, we must continue to pursue our research into the effects of cocaine and maintain our support of the prevention effort so that the American public is kept informed of the scientific findings and, hence, able to take decisive actions to reduce the abuse of cocaine.

In conclusion Mr. Chairman and Members of the Committee, we consider cocaine to be a priority drug exceeded only by the two most lethal drugs, heroin and barbiturates. We maintain that the effort to reduce coca cultivation and cocaine trafficking in the source and processing countries is the most effective way to prevent an increase in cocaine-related deaths and injuries at home. We also acknowledge, however, that these efforts alone will not suffice and that we must take every opportunity, as you gentlemen are doing today in these hearings, to focus attention on the problem and keep the American public informed of the health and social consequences of cocaine use. Thank you.

PREPARED STATEMENT OF PETER B. BENSINGER, ADMINISTRATOR, DRUG ENFORCEMENT ADMINISTRATOR, U.S. DEPARTMENT OF JUSTICE

Good afternoon, gentlemen. Increased national attention has been focused on the abuse and trafficking of cocaine. Yet, misconceptions and inaccuracies regarding this drug abound and many myths are perpetuated by sheer repetition. I think it significant that the Select Committee on Narcotics Abuse and Control has established a separate task force to examine the cocaine situation and make current, accurate information available to the public. I appreciate the opportunity to appear before the Select Committee to discuss the enforcement perspective relative to cocaine.

"How much cocaine is coming into the United States?" is a question often put to me. The National Narcotics Intelligence Consumers Committee, which DEA chairs, has constructed an estimate for 1977 based on: (1) Estimates of the total maximum cocaine hydrochloride production based on coca leaf production; and (2) the total quantity of cocaine seized in worldwide enforcement actions. Thus, by examining those factors we estimate that, in 1978, approximately 60–65 metric tons of cocaine were available for the worldwide market and approximately 19–23 metric tons of that amount were imported into this country.

The amount of cocaine seized in the last two years is as follows:

[In pounds]

	Cooperative seizures	
	Total Federal and domestic	Total overseas
1977	1,623	6,246
1978	2,485	5,955
1979, 1st quarter	684	2,933

The amount of cocaine seized domestically in the first quarter of this year is one of the highest on record. These seizures can be seen as both a reflection of the intensified efforts to intercept drugs, as well as an indication of the magnitude of the cocaine smuggling problem.

The arrest statistics over this same time frame reflect a similar trend.

	Cooperative arrests	
	DEA/DEA domestic	DEA/foreign
1977	2,674	560
1978	2,794	568
1979, 1st quarter	785	219

Enforcement statistics are not the only guage of the accelerating cocaine problem. Just as with heroin, PCP, and other dangerous drugs, abuse indicators such as the number of deaths and injuries, are important measurement tools of the effectiveness of enforcement programs. Cocaine continues to be widely abused and the long-range trend forecasts increased abuse. Emergency room injuries, drug treatment reports and intelligence data all point to consistent increases in the abuse of cocaine over the last several years. In the first quarter of 1979, the Drug Abuse Warning Network (DAWN) reported 506 cocaine-related injuries nationwide, with every geographic area reporting increases over the previous quarter. Quarterly averages for injuries over the last several years are as follows: 1976, 303; 1977, 374; 1978, 444.

Since 1974, cocaine-related injuries have tripled. Drug treatment admissions for cocaine abuse have also risen steadily over the last three years. Admissions in 1978 totaled 5,433, representing a 44 percent increase over 1977 admissions and an 86 percent increase over 1976.

The DAWN system also records the drug-related deaths as reported by medical examiners. Since 1974, there has been a significant increase in the number of cocaine-related deaths. At that time, 14 deaths were mentioned in the DAWN system. In subsequent years there were: 1975, 16; 1976, 16; 1977, 27; 1978, 41.[1]

As you know, all the cocaine in the United States emanates from South American nations. The coca plant, from which cocaine is derived, grows easily and with little care required. It fares best at altitudes of 1,500–7,100 feet and can be grown in poor soil. The leaves are first harvested when the plant is two to three years old and can continue to be harvested from two to six times annually for a period of 20 to 40 years. Coca is normally grown in vertical terraces. The Andes mountains provide the moderate temperatures and good rainfall which enable the coca bush to survive. Although there is sporadic wild or semi-organized growth in many countries in South America, Peru and Bolivia are the principal and only legal producers, with approximately 25,000 and 20,000 hectares under cultivation, respectively.

Prior to discussing the specific roles of the various South American nations, I think it important to digress for a moment to explain the process by which cocaine is extracted from the coca leaf. Briefly, a three-step process is involved. Once the coca leaf is harvested, it is then combined with kerosene, water, caustic soda (to speed the process) and other chemicals to form coca paste, the first step in processing. The next step is conversion of coca paste to cocaine base. Cocaine hydrochloride is the desired end result, or third step.

[1] Number subject to change.

The needed equipment is relatively simple and the entire extraction process, compared to heroin for example, is far less complex. In fact, it is easily learned by the layman. The laboratories themselves require readily obtainable materials; many can be dismantled quickly and are highly mobile, thus making detection and destruction difficult.

The countries of Peru, Bolivia, Colombia, and Ecuador are the most deeply involved in either the growing of coca or processing of paste, base or cocaine. Peru is considered the world's largest coca cultivator and is one of two licit producers of coca. Increasingly, cocaine in final form is produced here; however, most illicit activities center on the production of coca base and paste which is smuggled north to Ecuador or Colombia for further processing.

Bolivia is the other South American country where coca production is legal. Here, however, there is a long history of transporting the finished product, cocaine hydrochloride, out of the country. Ecuador at times serves as an alternative staging point for the conversion of Bolivian and Peruvian paste into base and cocaine hydrochloride.

In Colombia, coca cultivation is traditional in the Andean region. Recently received intelligence indicates that cultivation of coca may be spreading to other non-traditional sections of the country. Throughout Colombia there are a large number of clandestine laboratories which are capable of processing paste or base into a final product. The criminal elements in Colombia are the most sophisticated and organized of any in South America. They have the necessary international contacts and expertise needed to move significant quantities of cocaine to the world market.

Other South American nations are also involved in the cocaine trade. These countries are used as transit and transshipment sites. Brazil, Argentina and Chile serve as processing centers for moderate amounts of cocaine.

According to the National Narcotics Intelligence Consumers Committee, in 1977 approximately 35 percent of the cocaine smuggling into the United States is done via aircraft. The preferred smuggling routes tend to follow established patterns with direct routes from source countries to market areas, which are principally in the United States. Miami is apparently the primary port of entry, followed by Los Angeles and San Juan, Puerto Rico. Additionally, there is indirect travel through Central America, Mexico and the Caribbean. We have noted an increase in the incidence of travel to Europe directly from source countries, substantiating our information that Europe continues to develop as a consumer market for cocaine. Of course, there are an infinite variety of routes and modes of smuggling.

When smuggling via commerical aircraft, several methods of concealment are preferred by the couriers. Most preferred are the false-bottom suitcases; the body carry, where the cocaine is taped to a part of the body or is carried in the lining of clothing worn by the traveler; and the conveyance of declared or undeclared articles which have been altered to conceal the cocaine.

Some of the more common articles used are: shoes, toilet article containers, food items, wigs, metal ornaments, wooden artifacts and coat hangars. Only Americans seem to favor the use of body cavities to hide cocaine.

Several other smuggling modes are encountered with enough frequency to merit note. The Bolivians were the first to have devised a method whereby the cocaine is impregnated in cloth. Detection in this case is difficult. Cocaine has also been encountered dissolved in alcohol and concealed in liquor bottles. These bottles appear to be authentically sealed and are difficult to detect because of color. In other cases aboard commercial aircraft, the cocaine is transported by crewmembers or is left in a predesignated area, such as under a seat, for later retrieval by employees with access to the aircraft.

Although the above avenues of cocaine smuggling are most often employed, there are other patterns which are being utilized with increasing frequency. In order of significance, they are:

1. Concealed within the cabin or cargo area of private aircraft to be retrieved later or to be dropped in the sea at a pre-arranged retrieval point.
2. Secreted in legitimate cargo, left aboard for later retrieval or carried by crew or in their personal effects aboard cargo aircraft.
3. Carried aboard vessels by crewmembers, stored within legitimate cargoes, dumped at sea for retrieval or switched from a mothership to a second vessel.
4. Contained in letters or rolled magazines to be sent in international mail. Larger shipments are mailed in packages.

The smugglers themselves are most often American, Colombian, and Mexican. Americans tend to be males in their late twenties traveling alone aboard commercial airliners. Colombians also tend to be males in their late 20's; however, they tend to travel in groups aboard commercial airlines. For the most part, Mexican cocaine smugglers are in their early thirties, and cross the U.S. border by private vehicle.

All the individuals along the cocaine distribution chain, with perhaps the exception of the peasant farmer, realize enormous profits for their endeavors. I can best illustrate this for you by tracing the transactions in the course of the production of one kilo (2.2 pounds) of pure cocaine:

	Dollars
1. The South American farmer sells 500 kilos of coca leaves for about	250
2. The coca leaves are converted into approximately 2.5 kilos of coca paste which sells for	3,000–5,000
3. The 2.5 kilos of coca paste are processed into 1 kilo of cocaine base which is sold for	8,000–11,000
4. The 1 kilo of cocaine base is converted into 1 kilo of cocaine hydrochloride which sells for	15,000–20,000
5. Smuggled into the U.S. east coast, that same 1 kilo of cocaine nets	38,000–40,000
6. East coast wholesalers cut the cocaine, yielding twice the amount. Therefore, the kilo (formerly 100 percent pure, now 50 percent pure) is now worth	76,000–80,000
7. By the time the cocaine reaches the retail (street-level) market, the original 1 kilo of 100 percent pure cocaine has been cut to an average purity of 12 percent which would now sell for	800,000

What does this mean for the cocaine user? Based on current reporting from DEA field elements, the current price for one gram of cocaine with street level purity of about 12 percent is between $75 and $100. The current price of an ounce at this level continues to remain constant at $1,200 to $1,500. An ounce of marihuana, on the other hand, retails for about $40.00. NNICC estimates that in 1977 the retail value of the cocaine purchased in the United States was between $12 and $15 billion.

On the whole, the price and purity of cocaine have remained relatively stable since the second quarter of 1977. However, for the most recent quarter for which data is available (March 1979), the price declined from an average $0.65 per pure milligram to $0.57 per pure milligram, the lowest price recorded in about two years. By way of contrast, the national retail price per milligram of pure heroin is $2.23.

In comparing these prices, I referred to "cutting" the cocaine. At the street level, cocaine is diluted or cut with a variety of substances, some of which could be lethal if mixed disproportionately. Among the substances found in street-level cocaine are: mannitol, cornstarch, boric acid, lidocaine, inositol, dextrose, antipyrine, sodium bicarbonate, and lactose. Amphetamines and other drugs with stimulant properties are also sometimes used to cut cocaine.

Thus far, I have addressed myself only to the illicit aspects of cocaine trafficking. Cocaine does have legitimate, recognized medical uses. It has traditionally been used as a surface anesthetic. Recently, growing numbers of physicians have started to use cocaine as part of their treatment of terminally ill patients.

DEA, through its Office of Compliance and Regulatory Affairs, is responsible for reducing the diversion of legitimately manufactured controlled substances into illegitimate channels. One important function performed by this office is the establishment of production quotas, which limit the amount of Schedule II controlled substances, such as cocaine, which may be produced in any one year. As such, DEA has the responsibility for monitoring the importation of coca leaves into the United States and reviewing all import/export activities. The importing of coca leaves, processing to achieve the final product, exporting and distribution are all done in accordance with the terms of the Single Convention on Narcotic Drugs. Cocaine, the finished product, is not imported for medical use. Very small (gram) quantities may be imported for research or analytical purposes.

Aggregate and procurement allocations are based on estimated medical, scientific, research and industrial needs. They are also granted for lawful export

requirements and the establishment and maintenance of reserve stocks. Aggregate production quotas, actual production and exports for the past four years are as follows:

[In kilograms]

	1975	1976	1977	1978	1979
Quota	749	1,213	1,249	1,478	1,482
Production	702	654	683	1,005	----------
Exports	616	332	286	284	----------
Coca leaf importation	612,966	528,907	481,789	650,723	----------

Stepan Chemical Co. (Maywood, N.J.) is the sole legitimate importer/extractor of coca leaves in the United States. After Stepan imports the coca leaves, a portion, for which quota allocations have been set, is sold to Merck, Inc., and the remainder, also produced under quota, is exported to France, England, and Germany. Merck is the primary distributor at the manufacturing level; that is, the cocaine processed by Merck is distributed to Eli Lilly Co. and Mallinckrodt, Inc., for further processing into dosage units and distribution to hospitals and clinics. The remainder of Merck's allocation is sold to other distribution houses.

Diversion of cocaine from legitimate sources has been minimal. In fact, the only cases documented have been at the retail level. This involves pharmacists and physicians who divert cocaine for either profit or personal use.

The coca leaves imported by Stepan are grown in Peru or Bolivia where coca is legally cultivated. However, the situation in these two countries varies considerably. In Peru, the government technically has a monopoly over the cultivation of coca. Its agent, the National Coca Enterprise, ENACO, is charged with the responsibility of controlling all phases of coca production, distribution and export. ENACO is also responsible for administering the collection of taxes on licensed production. In doing so, ENACO requires that all growers keep detailed records of plantings, acreage, yields and sales, all of which are subject to verification by corps of inspectors. ENACO also requires that all coca shipments must pass through highway checkpoints, where records can be examined and additional taxes collected. There are State-licensed coca leaf dealers, wholesalers, and retailers. Farmers are licensed to grow specified amounts, but often surreptitiously expand their farms. ENACO inspectors are supposed to confiscate coca plants which are cultivated illegally. To date, Peru has been unable to enforce all provisions of the ENACO monopoly, but is making efforts to improve its control.

There is no comparable organization in Bolivia. The coca industry is conducted in a manner similar to that of other agricultural crops: Produce is put up for sale on the open market.

As of March 2, 1978, the date when Peru's new comprehensive drug law went into effect, no new plots of coca were to be brought under cultivation anywhere within the country. The law also specifies that the cultivation of coca was to be performed only for industrial, medicinal or research purposes. Violations of the law make the responsible parties subject to arrest and their property subject to seizure. The Government of Bolivia enacted a similar statute in November 1977.

Strict enforcement of these laws is hampered by the Andean people's deep-rooted traditions and economic dependence on the coca bush. The Peruvian and Bolivian Governments are faced squarely with the dilemma of balancing, on the one hand, the sensitivity of socio-economic-political issues surrounding consumption and cultivation of coca by their people and, on the other, their international agreements with respect to coca control.

The international community has a large stake in assisting the Governments of Peru and Bolivia in resolving this dilemma. The 1979 Federal Strategy, developed by the Strategy Council on Drug Abuse, reinforces my conviction that control of any drug is most effective closest to the source. Of paramount concern to me is the control of illicit coca cultivation and the prevention of its harvest.

Solutions offered include crop eradication, crop substitution and income substitution. Remember that coca production is one economic mainstay of the Andean peoples. Additionally, coca leaf is chewed for religious, recreational, and therapeutic reasons, and has been for thousands of years. Thus, its eradication would be as popular as a prohibition against tobacco would be in this country. Consequently, crop and income substitution programs should be considered as alternatives to crop destruction.

The Department of State is currently funding a feasibility study regarding crop substitution for coca in Bolivia. The Study Team is approaching this problem from several perspectives to better assess the social, political, and economic impacts of such a program. These findings are expected soon. A similar, although not as detailed, study is being conducted in Peru. I believe that a U.S.-financed rural development program, one which incorporates the entire spectrum of developing a substitute crop and plans for its marketing, and education and health programs would be most effective.

In the interim, while these programs are being developed, DEA has several immediate goals. Within the confines of our resources, I look forward to increased effectiveness of a worldwide interdiction program. For example, as reflected in just one days activity in the DEA Enforcement Report, there were six significant cases made, each of which involved cocaine. We hope to increase interdiction effectiveness in Colombia, Bolivia, Peru, and Ecuador by providing technical training, resources and support to host countries. The DEA commitment to our South American operations is substantial, and rightfully so. In FY 1978, these operating costs were $3.9 million; for FY 1979 and FY 1980, the estimated expenditures are $4.4 million.

Diplomatic relationships and initiatives are another important component of our overall international narcotics control strategy. For example, extradition and mutual assistance treaties between the United States and Colombia are being negotiated and will be signed imminently. From a law enforcement perspective, in order to immobilize major international trafficking networks, treaties such as these are of enormous value.

I consider cocaine to be a priority drug. The incredible profits, such as I detailed earlier, are a tremendous incentive for criminal enterprises. The profits realized from the trafficking of cocaine support and insulate organized crime, not only in this country, but also abroad. We have seen injuries and deaths increase as cocaine has become "socially acceptable." I want that trend reversed.

DEA will continue to commit its resources to this problem. We support the State Department's initiatives with respect to reducing coca cultivation. I commend the direction of the South American nations.

The time has come for the American people to recognize the seriousness of the cocaine problem. Mr. Chairman, I applaud your efforts in bringing the facts about the trafficking and abuse of cocaine out in the open and away from the realm of hearsay. I look forward to working with you in this endeavor.

PREPARED STATEMENT OF ROBERT C. PETERSEN, PH. D., ASSISTANT DIRECTOR, DIVISION OF RESEARCH, NATIONAL INSTITUTE ON DRUG ABUSE, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

I would like to thank you for this opportunity to give you an overview of cocaine abuse. Accompanying me today are Robert Willette, Ph. D., Chief of the Research Technology Branch of the Division of Research and Gene Barnett, Ph. D., Research Scientist. NIDA has published a rather detailed monograph entitled "Cocaine: 1977," which covers what is known through 1977, and so this statement will place primary emphasis on reviewing more recent developments in the cocaine picture.

EXTENT OF COCAINE USE

Determining the extent of illicit drug use poses formidable problems. Cocaine use is no exception. Because the street drug is usually markedly adulterated with various "cuts" to increase the dealer's profit margin and sometimes utterly misrepresented, even self-reports of use given in good faith may be inaccurate. The more naive user, in particular, may believe he or she is using cocaine when, in fact, what is being taken is an amphetamine or cocaine extensively adulterated with other substances masquerading as the drug. Nevertheless, figures from national surveys are of considerable interest not because the level of use indicated is necessarily absolutely accurate, but because the figures are likely to be useful indicators of trends. Individuals may sometimes minimize personal use because of anxieties about honest responding, or perhaps less frequently, they may exaggerate their extent of use because of status conveyed by using an exotic or expensive recreational drug.

At a cost ranging as high as one hundred dollars a gram—about $3,000 per ounce—cocaine is regarded by users as the high status drug. Since there have been many newspaper accounts of sports, rock music and show business celebrities having used the drug, this has also undoubtedly added to the glamor surrounding use.

Although the National Survey statistics are only available through 1977—the National Household Survey is conducted every two years—reports through 1977 do indicate the percentages who have ever used cocaine had been fairly consistent. Following an initial increase from 1.5 percent of youth who had ever used in 1972 to 3.6 percent in 1974, the percentages of those who had tried the drug in the subsequent surveys of 1976 and 1977 remained between 3 and 4 percent (3.4 percent in 1976; 4.0 percent in 1977). Current users—those who had used one or more times in the month preceding each of the surveys—remained constant at 1 percent or less for the years from 1972 to 1977. From 1976 to 1977 among the peak drug-using age group, young people between 18 and 25, a significant increase occurred in numbers currently using as well as who had ever used. The number of 18- to 25-year-olds who had ever used cocaine increased by over 40 percent (42.5 percent) from 1976 to 1977; the number of current users nearly doubled (from 2.0 percent in 1976 to 3.7 percent in 1977).

An important bellwether group at a point of transition between adolescence and adulthood are high school seniors. Dr. Lloyd Johnston of the University of Michigan has been conducting an annual nationwide survey of drug use in this group since 1975. Use of cocaine by members of the 1975 and 1976 senior classes involved less than 10 percent with 6 percent of each group reporting any use in the year preceding each survey. Only about one in fifty seniors in 1975 and 1976 reported use in the month preceding the surveys. However, there was a significant increase in reported cocaine use in all three categories between 1977 and 1978, with the use by the 1977 senior class at an intermediate level. Between 1977 and 1978 the number of seniors who had ever used jumped 20 percent and the number who had used in the preceding year went up by 25 percent. A third more seniors reported having used in the previous month in 1978 than in 1977. Moreover, the percentage of seniors indicating they would "probably" or "definitely" use cocaine in the future has more than doubled since 1975.

Overall, there are multiple indicators that the interest in cocaine use has definitely increased in recent years and that such interest is likely to increase still further. Nevertheless, most use can be more aptly described as "experimental" rather than habitual. Probably this is due to the high cost of the drug which makes regular use impractical for most users. Under conditions of greater availability, cocaine's reputation among users as a "safe" and very pleasurable drug might be expected to significantly increase use.

HEALTH HAZARDS OF COCAINE USE

Probably because of its high cost, frequent or daily use of cocaine is rather uncommon in the United States. When used infrequently and in small amounts, toxic effects of cocaine are unlikely. The immediate effect of snorting a small quantity is brief (under one hour) feeling of unusual well-being, confidence, competence, and reduced fatigue. In laboratory studies an increase of 30 to 50 percent in heart rate accompanies use, together with a 10 to 15 percent increase in blood pressure during the contractile phase of the heart (systolic blood pressure). Such changes are no greater than might be expected under conditions of mild physical exertion and in a healthy individual are not likely to be hazardous. Two properties of cocaine are that it contracts local blood vessels of the mucous membrane to which it is applied while also acting as a local anesthetic. The vaseoconstricting aspect is important in medical use. However, when used repeatedly, cocaine causes local tissue death from the decreased blood supply. This results in ulceration of the mucous membrane of the nose. In mild cases the symptoms resemble those of the common cold with stuffy or running nose. Continued use of over-the-counter nasal sprays often becomes necessary in order to permit breathing through the nose. Although quite uncommon among American users, heavy cocaine use can also sufficiently damage the nasal septum—the wall dividing the two halves of the nose—to perforate it or even sometimes to cause it to collapse (saddle nose).

The question of whether cocaine is "addictive" is still raised by many. If what is meant by this is that discontinuance of the drug produces physical symptoms of withdrawal, cocaine is not addictive. Although not physically addictive in the

sense that heroin is, there is good evidence in both animals and man that the desire to continue use if at all possible is powerful. Users having easy access to the drug almost invariably have difficulty in restraining their use.

Clinical reports dating back to the 1880's have described a range of adverse psychological responses to heavier, more prolonged use of cocaine on a daily basis. Such reactions include feelings of persecution and other paranoid delusions and hallucinations. Hallucinations classically reported resemble those of the alcoholic experiencing "DT's." The user has the intense belief that bugs, snakes, or other animals are burrowing beneath the skin. Such visual and tactile sensations can be sufficiently vivid that the person afflicted tears at the skin in a futile effort to rid it of the imagined invaders. That these sensations are directly an effect of the drug is indicated by similar behavior in laboratory animals treated with cocaine.

Since cocaine is a stimulant, one of the effects of frequent use is a depression reactive to such use. Clinicians with extensive experience with users report that psychotic symptoms and depression, while uncommon among American users, do sometimes occur. Unfortunately, very little is known about the amount and frequency of use required to produce these more serious psychological symptoms. Two clinicians in San Francisco, Drs. David Smith and Donald Wesson, who have had considerable contact with heavy users, report that "if the drug were available at substantially lower cost . . . more destructive patterns of abuse could develop." This is an opinion with which we concur.

Deaths from cocaine use, while also uncommon, do occasionally occur. Unlike marijuana, there is no question that cocaine can cause death as a direct effect of its pharmacological action. A study of cocaine-related deaths occurring between 1971 and 1976 at 27 United States and Canadian locations found 26 such deaths involved cocaine entirely, six of which were suicides. While in over 60 percent of these deaths cocaine was used intravenously, and orally in an additional 15 percent, two of the 26 deaths (about 8 percent) occurred in people who had snorted the drug. A second recently published study done in the Miami area found 24 deaths involving cocaine alone had occurred, most since 1975. Again, oral and intravenous use predominated, although 21 percent snorted the drug. In both studies, when death occurred from oral use, it was usually in connection with a suicide attempt, smuggling the drug in a swallowed rubber container which subsequently burst, or hastily swallowing cocaine to destroy evidence during an arrest. Despite the relatively low frequency of death, these studies and still earlier reports clearly demonstrate that, contrary to popular belief, cocaine use can and sometimes is fatal.

An important new development in the use of cocaine is smoking the drug or material containing it. In Peru a material, referred to as "coca-paste," is an intermediate product in the production of cocaine, containing a wide variety of other chemicals and impurities including kerosene and sulfuric acid, as well as cocaine sulfate. It has been reported to be a major health problem in South America. The paste is combined with tobacco or marijuana and smoked in a joint. Smoking the drug in this form producing blood levels in a few minutes that would ordinarily require an hour to achieve by snorting. In Peru, psychoses very rapid heart rates (up to 180/minutes), and prolonged compulsive "runs" of drug use have been reported in connection with smoking coca paste.

The smoking of cocaine, originally confined to Latin America, has more recently been reported in the United States. Kits are now available through drug paraphernalia manufacturers advertising in commonly available drug culture magazines, enabling the user to convert street cocaine into "cocaine base." According to one experienced researcher, this practice of smoking cocaine base, sometimes referred to as "free base," originally began in California and has now spread to Nevada, Colorado, New York, South Carolina, and Florida. Unlike users snorting the drug, American cocaine smokers are reportedly less able or willing to control the amounts used. As a result, dosage and frequency of use increase rapidly. After a "run" of continued use of anywhere from 24 to 96 hours, the user reaches exhaustion. Smoking cocaine is much more serious than snorting because there is a much higher potential for overdose, development of psychological dependency, and more serious psychological symptoms. Some of the symptoms of cocaine smoking that have been reported include hyperactivity, insomnia, weight loss, and a psychological picture that may progress from a kind of agitated high spirits to depression and a toxic paranoid psychosis. We are, therefore, currently considering the desirability of a vigorous multimedia prevention campaign to discourage cocaine smoking by acquainting users with the special hazards of the drug when it is used in this way.

If smoking of cocaine base is rapidly spreading and the effects are as disruptive as early clinical reports seem to indicate, cocaine may prove to be a more serious problem than has been true in the past. The recency of this new pattern has not yet permitted extensive investigation. Such research is now being planned.

Dr. Robert Byck, Professor of Psychiatry and Pharmacology at Yale University, will be speaking to you later this week. Since he has just returned from an international conference on social and medical problems of cocaine in Peru at which cocaine smoking was extensively discussed, I will defer to him to describe for you those most recent developments.

LEGITIMATE MEDICAL USES FOR COCAINE

It is important to recognize that cocaine has legitimate medical uses for which there is no adequate replacement drug in the opinion of those medical specialists who make use of it. Cocaine combines the properties of an excellent local anesthetic with those of a vasoconstrictor—that is, a drug which reduces blood circulation in the area to which it is applied. These twin properties make it the anesthetic of choice for certain types of surgery involving the nose, throat, larynx and lower respiratory passages. Without such vasoconstricting, there would be considerable blood loss during surgery. Blood loss in these areas of the body rich in blood vessels would also make surgery difficult since it would tend to obscure the surgical field. When used under controlled medical conditions, cocaine has quite a good record of safety. In a recent report of use in approximately 93,000 operations, severe reactions to the drug occurred in only 14 patients; none were fatal. Moreover, since there is little evidence that recreational cocaine is often diverted from legitimate medical supplies, there appears to be little justification for depriving physicians of an anesthetic with uniquely desirable properties for some purposes.

A second widespread medical use of cocaine has been as an ingredient in Brompton's Mixture, a concoction of morphine, cocaine, alcohol, and other ingredients used as a combination drug to allay pain, decrease anxiety, and maintain alertness in terminal cancer patients. While for this purpose other drugs might possibly be substituted or the drug eliminated, there is no imperative need to do so since there is little evidence of illicit diversion.

FUTURE RESEARCH DIRECTIONS

There are many questions about cocaine abuse that are worth pursuing and in which the Institute is interested. They include a better understanding of the toxicity of the drug and especially at what doses and at what frequency serious psychological symptoms are likely to occur. We don't know to what extent such symptoms are a direct result of the pharmacological action of the drug as such or result from a personality predisposition in the user. The newly emerging pattern of cocaine base smoking with its potentially much more serious consequences obviously demands investigation.

At present we are confronted with a drug which has a moderately high potential for abuse, were it more readily available at much lower cost. Cocaine's present high cost and limited availability have undoubtedly contributed much to the relatively benign picture presently seen. Because it has not posed a serious public health threat at current levels of use, NIDA's research investment has remained modest over the past 4 years, less than a million dollars per year to support about 40 projects per year. Whether the newly emerging pattern of smoking the drug will justify a more intensive and higher priority emphasis has not yet been determined.

I would be pleased to answer any questions the committee might have at this time.

COCAINE: A MAJOR DRUG ISSUE OF THE SEVENTIES

THURSDAY, JULY 26, 1979

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE ON NARCOTICS
ABUSE AND CONTROL,
Washington, D.C.

The Select Committee met, pursuant to notice, at 2:20 p.m. in room 2118, Rayburn House Office Building, Hon. Tennyson Guyer (acting chairman of the Select Committee) presiding.

Present: Representatives Billy L. Evans, Benjamin A. Gilman, and Robert K. Dornan.

Staff present: Alma Bachrach, chief of staff—supply; Robert M. Hundley, chief of staff—demand; David Pickens, project officer; James Marotta, staff: counsel; Toni Biaggi, Elliott Brown, and Dr. Gerald Dubin, professional staff members; and Bonnie Robinson, executive assistant.

Mr. GUYER. We want to welcome all of you here today for the hearings. And due to the fact that so many of our committee members are on other committees that meet at the same time and others are on the floor, we felt, in deference to our guests and testifiers today, we should go right ahead because if they do come in late they can catch up with the testimony. We have a printed record of all of it.

We know that several have to get away to catch airplanes, so we will go right ahead.

At this time, I would ask that Dr. Grinspoon and Dr. Wetli and Dr. Byck would stand. And if you will raise your right hand——

[Dr. Grinspoon, Dr. Wetli, and Dr. Byck are sworn.]

Mr. GUYER. Thank you.

Today's hearing is the second in a series focusing on the drug cocaine. Although there is a great deal of information available to the public concerning cocaine, unfortunately this has come from magazine and newspaper articles, which tend to glamorize the drug and not address the health hazards.

It is our intent to dispel the general belief, especially among users, that cocaine is a safe and risk-free substance. Furthermore, we are concerned by the reports from the National Institute on Drug Abuse which indicate a dramatic increase in the use of cocaine among individuals in the 18- to 25-year-old age group.

Though there has been considerable research on the effects of cocaine on people, it has been viewed as inconclusive. As a result, the inconclusiveness of present research is frequently interpreted as meaning the drug is safe, when actually it is a subject which merits deep concern, much precaution, and continued research.

55-723—80——4

The distinguished gentlemen appearing before us today, by virtue of their familiarity and experience in this field, are here to share with us their medical evidence and description of cocaine's effects on humans. I would like to introduce the witnesses as they are seated.

Dr. Grinspoon.

Dr. GRINSPOON. Thank you, Mr. Chairman.

Mr. GUYER. And Dr. Robert Byck, Yale University School of Medicine, Department of Pharmacology.

Dr. BYCK. Thank you.

Mr. GUYER. And our other witness is Dr. Charles Wetli, who is the medical examiner of Dade County, Fla., in that office.

Dr. WETLI. Thank you.

Mr. GUYER. And we welcome you all here, gentlemen, and we hope we will soon have an audience equal to what you have to share with us.

And our first witness is Dr. Grinspoon, who also is the one who has to catch the plane. But we want to give you all the time we can today. So, we will proceed with Dr. Grinspoon.

TESTIMONY OF LESTER GRINSPOON, M.D., ASSOCIATE PROFESSOR OF PSYCHIATRY, HARVARD MEDICAL SCHOOL, BOSTON, MASS.

Dr. GRINSPOON. Thank you, Mr. Guyer. I thought since you have my statement, I would discuss the history of this drug a little bit before getting to the contents of the statement. And then, if you are interested——

Mr. GUYER. We would be pleased if you just proceed any way you want to, if from your point you want to improvise, or however best you want to project it. Because we have no formalities.

Dr. GRINSPOON. Very good. I think it is essential to get a perspective on the relative harmfulness or what-have-you of this drug. It is important to have an idea of where it comes from, both literally and historically.

Now, as I think you know, it comes from a plant, erythroxylon coca, which presently grows in Peru and Bolivia. However, it should be noted that, in the past, it has grown elsewhere on this planet in places as diverse as Madagascar, Ceylon, particularly Java. Very much coca was grown in Java before World War II.

The point is one can't simply consider that the cocaine plant is peculiar to Peru and Bolivia and parts of Colombia, but will grow anywhere between the altitude of 1,500 and 6,000 feet where the mean temperature is about 65° and in soil which is too poor to support most other types of plants.

The drug first came to the attention of the West with the Spanish conquest. But for reasons that are not at all clear, it was ignored until the 19th century. It began to make an impression on the West at about the midpoint in that century.

A neurologist by the name of Paolo Mantegazza wrote the most exaggerated lyric reports about coca, making such statements as: "I would rather live 10 years with coca than 100 years without." One would wonder why people, such astute observers as Sigmund Freud, would pay attention to this kind of statement. And I think it is because Mantegazza also presented some cautionary comments.

In any event, Freud was influenced by Mantegazza and by Aschenbont. Aschenbont was a general in the Bavarian Army who, in 1880, put cocaine in the drinking water of the Bavarian soldiers and achieved the expected results.

A third person that influenced Freud—and the reason I mention Freud is because he was so influential in attracting the West's attention to cocaine—a third person was a man in America, a man by the name of Bentley, who at that time was writing, for example, between 1880 and 1884. He published 16 articles in the Detroit Therapeutic Gazette, which at that time was the equivalent of the prestigious journal, the New England Journal of Medicine.

Bentley was writing about coca—coca and cocaine was used interchangeably at the time—about the use of coca in the treatment of morphine addiction. So, this was the third source of influence on Freud.

And then, Freud wrote his very famous paper on coca in 1884. Between 1884 and 1887, cocaine attracted a lot of Freud's attention.

Now, I should mention that cocaine, which is the most active alkaloid among the alkaloids which are found in the coca leaf, was isolated in 1860, was then produced by the German company, Merck, and distributed as such. And then the America company, Parke-Davis, developed its own cocaine, and that was distributed starting in about 1880.

Freud took cocaine himself, between 50 and 100 milligrams regularly, and felt that it was a very useful drug. He was particularly attracted to it for the treatment of morphine addicts, and persuaded his friend von Fleischl to take cocaine to treat a phantom pain in his thumb. It was only later when Freud realized that von Fleischl was having difficulty with cocaine that it began to occur to Freud that there are some people who become very much involved with this drug in a way that they can't handle.

In fact, Freud writes that one of the most frightening nights of his life was the night he spent with von Fleischl, who was having a cocaine coke bugs, which I am sure you are now familiar with.

Nevertheless, Freud's position was cocaine could never hurt anybody who was not already addicted to morphine. He believed with Bentley that only people who are addicted to morphine could get into difficulty with cocaine.

The year 1884 was really the Anne Ashley for cocaine. First of all, that was the year that Freud wrote his source paper. That was in July.

In September of 1884, Freud's friend Koller, Karl Koller, whose interest in cocaine was aroused by Freud, wrote the pivotal paper on cocaine as a local anesthetic. Actually, that was a rediscovery of something that the Indians in South America had discovered a long time ago, but it revolutionized surgery because it was the first time that cataract operations could be performed without the risk of putting the patient to sleep or having him without an anesthetic. And it made what was otherwise a nightmare procedure a very easy one.

Then, of course, it was also the year that many people began to use Vin Mariani. I should go back a bit. A Corsican pharmacist by the name of Mariani developed a very popular prescription medicine

called Von Mariani, which was a solution of cocaine in wine. It was so popular that people like Thomas Edison, Honore Gibson, composers like Gouned and Faust, used it; Pope Leo XIII never went without it—he always had a flask of Von Mariani on himself—and Ulysses S. Grant, in 1885, during the last years of his illness, used a Mariani preparation. And there are many people who believed it was the use of this substance which provided him with the energy to write his now-famous memoirs.

At any rate, it began to be used quite widely. And it was also used not just as a prescription product, but began to be used as a general tonic. The people from Parke-Davis put the drug in cigarettes, sold cocaine cigarettes. There are what are now called "detail men" who would go from house to house selling cocaine.

One could go into a bar and ask the bartender to put some cocaine in one's whiskey.

Then, of course, in 1887, John Styth Pemberton, in this country, perhaps in imitation of Mariani—Mariani made his fortune with this substance—Pemberton, an Atlanta pharmacist, patented a substance which he called "French Wine of Coca," which was just like Vin Mariani was a coca, extract of coca, in wine.

Then, in 1888, he took out the wine and substituted soda water and extract of colabine, which contains caffeine, and renamed the substance "Coca-Cola." And in 1891 he sold the rights of the Coca-Cola Co. to a man by the name of Hastings Wright Chindler, and Chindler had an almost missionary interest in Coca-Cola and did a great deal to popularize cocaine, because while the Coca-Cola Co. is loathe to admit it, the fact of the matter is that is what Coca-Cola was all about at that time.

The reason that a soda fountain became a part of the American drugstore was because of Coca-Cola. People would go into the drugstore, and if they were having a stomach ache or headache and felt a little down, they would ask for a shot in the arm. And for a nickel, they could get a glass of Coca-Cola, which would make them feel better. It was very often the case, people who didn't have headaches, stomach aches, what-have-you, but wanted to feel good, would go into the drugstore and get a Coca-Cola.

The Coca-Cola Co. anticipated the Food and Drug Act of 1906 and took cocaine out of Coca-Cola. That is to say, they still used the extract of the coca leaf as they do now, but without cocaine, added more caffeine, and that was the end of Coca-Cola.

However, I should point out to you that in 1906, at the time this law passed, there were 69 imitations of Coca-Cola. And those imitations or those other cocaine-containing drinks continued to be sold for a while, actually until 1914, because the Pure Food and Drug law, 1906, simply demanded labeling and forbade interstate commerce. So that within a State the substance could continue to be sold.

Now, I think when one considers the dangers of the potential harm of cocaine, one has to consider that it was used quite a bit at the turn of the century and into the first couple of decades—before the turn of the century and into the first couple of decades of this century. And it is hard to estimate just how much was used, but, indeed, it was quite freely available. And I say it was very easy to get in a number of different settings.

And while there were certainly people who got into difficulty with it, there were far fewer than one might have expected. There were cases of death from cocaine, but curiously enough, most of those cases, for example, reported by a physician by the name of Meyer, at the turn of the century, were cocaine deaths which were at the hands of physicians who were using the drug as a local anesthetic. Particularly, people who had inflammation of the tonsils or the urethra seemed to be particularly susceptible to cocaine as a toxic agent.

Its use as a medicine began to decline with the development of procaine, which was invented in 1889 by Einhorn. And it gradually took the place of cocaine as a local anesthetic.

In the meantime, nerve block anesthesia was developed with cocaine by William Halstad, at Johns Hopkins University Medical School. And as I think you know, William Halstad developed quite a problem with cocaine. In fact, it was only revealed posthumously in a paper that was published in 1968 that Halstad was able to give up cocaine, but only at the price of 200 milligrams of morphine a day. He continued to work at the Johns Hopkins, and nobody knew the difference. He worked with morphine.

However, his work with cocaine—I presented an illustration of this in my book—deteriorated at that time. Nonetheless, the point I want to emphasize is that there was an awful lot of cocaine at that time. And what we can learn about the consequences of its use are not as devastating as one might expect.

I think that is kind of a quick rundown of the history. I might add that its use in this country disappeared particularly in the 1930's. It didn't disappear, but it became much less than it had been before and than it is now. And it is not clear exactly why that should have happened.

My own hunch is that one of the determinants of that phenomenon may be that amphetamines came to be available. The amphetamines were first actually rediscovered in 1928 and came onto the market in this country in 1932 in the form of a so-called benzedrine inhaler, not the bendraxal inhaler of today, but the benzedrine which contains the amphetamine benzamine, and then in vial form in 1935.

I think a lot of the interest which might have been directed toward cocaine during those years became fastened toward amphetamines. And now, as people are realizing, people who are attracted to this kind of drug, a stimulant drug, and realize that of the two, cocaine is the least risky, less risky, it is easier to use, and I think many of the people who are familiar with both prefer the effects of cocaine, that it is becoming increasingly popular again.

Now, unless there are some questions about that very rapid tour about the history of cocaine, I will get to some of the material in my statement.

Mr. GUYER. You mentioned that Parke-Davis was the first pharmaceutical company to handle cocaine.

Dr. GRINSPOON. The first American.

Mr. GUYER. I was curious that there is just one company now that is allowed to have the leaf; is that correct?

Dr. GRINSPOON. I believe it is Merck.

Mr. GUYER. Stephens, in New Jersey.

Dr. GRINSPOON. Stephens brings in the leaf.

Mr. GUYER. They are the only ones.

Dr. GRINSPOON. They are the only people who bring the leaf in. In fact, when I tried to find out how much leaf they brought into the country, they told me——

Mr. GUYER. Most of the pharmaceutical houses now have brand names for it.

Dr. GRINSPOON. No; I think there are only—I know that Stephens sends its aconine and its methylbenzaconine, which are the two components it gets from the leaf, to the Merck Co. And the Merck Co. puts out pure cocaine hydrochloride at something like $30.47 an ounce.

Mr. GUYER. As compared to $2,500.

Dr. GRINSPOON. As compared to the street price of something that isn't pure. The markup is enormous. But the Stephens Co. is very secretive even about how much leaf they bring into this country.

Mr. GUYER. Will you in your testimony be exploring the psychiatric effects of cocaine? That is your principal——

Dr. GRINSPOON. Yes; I will be glad to concentrate on that. I didn't think I would read this statement.

Mr. GUYER. Any way you desire.

Dr. GRINSPOON. First of all, Dr. Byck is going to talk about—I think one has to consider not just substance, but how the substance is used, the route by which it is used. The potential harm varies greatly on that basis. And Dr. Byck, I know, is going to address himself to that. So, I thought I would not take that up.

And I thought I would not talk about the mortality from cocaine because Dr. Wesley is here. He has written about this most recently, and I summarized that material in my statement.

Mr. GUYER. Dr. Byck, do you care to make a statement since you are talking in that regard? We will come to you later, of course.

Dr. BYCK. About the psychiatric or psychological effects of cocaine?

Mr. GUYER. Yes.

Dr. BYCK. I hate to interrupt Dr. Grinspoon's testimony on it. Let me say one sentence worth, and that is: It depends on how much a person has in him and how fast it gets in as to what the psychological or the physiological effects are.

I will talk about the psychological effects in my testimony.

Mr. GUYER. Thank you.

Dr. Grinspoon.

Dr. GRINSPOON. Let me start generally with the acute effects. I realize that other people have addressed you about this, but cocaine is a sympathomimetic stimulant drug which gives people a sense of euphoria, a sense of euphoria which is accompanied by a great deal of confidence. That I think, has a lot to do with the reason people who have to get up on the stage use the drug; it makes it more comfortable for them. It gives people energy, or they believe it gives people energy.

Actually, Freud was the first person, really the only experimental work he did with a dynamometer to demonstrate that depends a lot on how fatigued the individual is. It is certainly true, people when they are fatigued do get more of a sense of energy. And it diminishes the sense of fatigue.

It is a drug which, on the physiological side, raises the blood pressure, raises the heart rate, dilates the pupils, constricts the peripheral

blood vessels, raises the body temperature slightly, and raises the metabolic rate.

Now, to get to the psychological aspects, the psychiatric aspects, of cocaine, first of all, one has to keep in mind that much of what we know about cocaine is from literature that may be 50 years old. In a statement which I have prepared for you, I have simply taken the material from the last 3 years to try and bring it up to date. And yet, as I said in the statement, there are no great surprises.

When one considers the psychological aspects of cocaine, one has to consider both the acute and the chronic.

Now, the most acute—I have just mentioned that people get this kind of high—is a high which is shorter-lasting than that of the ampetamine, but very similar to it. In fact, as I indicated in the statement, many people find it difficult to distinguish in a blood study between amphetamines and cocaine.

The acute effect of cocaine is not so important from a psychological point of view, although there are people who can become somewhat—in fact, sometimes quite—anxious with a lot of the drug. But that is rare.

The other aspect of acute effects is that afterwards people may experience some degree of irritability and lassitude and disphoria.

The chronic use of cocaine has to be looked at in two ways: If one looks at the Cacaros—these are the South American Indians who have chewed coca leaf for perhaps thousands of years—there is some archaeological evidence which suggests it goes back 3,000 years—these are people who nowadays may chew cocaine or usually do in the work situation, which their work today begins at 7 and ends at 5, and they usually take about three breaks, about an hour apiece. to chew cocaine.

The Cacaros have been studied by a number of people—Legrette and F. B. M. Murphy. And while one has to take into account that one can't extrapolate the data from that kind of a setting very easily to the use of this drug in a modern industrialized society, and one also has to take into account the fact that they are chewing coca leaves, what we are talking about here is the use of the active, positive alkaloid among the alkaloids in the coca leaf—namely, cocaine.

Allowing for those two facts, it has not been possible to demonstrate that the Cacaros are significantly harmed by their lifelong use of coca leaves.

Now, there is the experience in the West, however, of some psychological consequences from the use of large doses of, and regular doses of, cocaine. As I say in my statement, I think that it has not been demonstrated that people who use cocaine in moderate amounts, no more than two or three times a week, intranasally—and Dr. Byck will get into the risks of intravenous use and smoking and so forth, more—but if we just consider people who use it intranasally two or three times a week, I am unable to persuade myself that they are very much at risk.

However, there are some people who become quite fastened, to cocaine. That is to say, while it is not an addictive drug, it is a drug which some people can develop a psychological dependence on it as, for example, William Halstad who fought very hard to give it up.

Now, people who use it everyday in fairly large doses run the risk of developing so-called coke bites or crash bites, which is a tactile

hallucination. They begin to believe there are bugs under their skin. And sometimes when you make the diagnosis, you see excoriations where they have tried to scratch them out. This is uncommon, but it is reported.

Another problem, I should say, with intranasal use, to get off the psychological problems for a minute, there is the problem of the nasal mucosa. People can damage their nasal mucosa, some usually reversible, but in some instances the septum is actually perforated.

Mr. GUYER. Can I interrupt you right there? The thought occurred to me that you mentioned how this would give you a built-up euphoria, and the ability to do unusual things. And I guess they at one time gave cocaine to racehorses before they had all the tests, and many athletes have taken cocaine to build up a peak point.

What is the span of this good feeling or great feeling? Would it last the length of a ballgame, for example?

Dr. GRINSPOON. No.

Mr. GUYER. I thought it was only 10 or 15 minutes.

Dr. GRINSPOON. That's why amphetamines are preferred by athletes. However, at the turn of the century, for example, the French bicycle race, although cyclists—I should say many of them—took cocaine, but took it about once every half-hour. The concern with athletes is mostly with another very closely related substance, amphetamines. It lasts longer.

And as you know, there has been a lot of concern about football players. I think, with amphetamines, too, it not only is a drug which gives a person a sense of more energy, indeed, when a person—the work of Beecher and his group at Harvard demonstrated that people can swim a little faster on amphetamines than people who are not.

But it also tends to make them more aggressive, and I think that's why football players are particularly interested in amphetamines. But cocaine was used by athletes, but it wasn't publicized as much.

One wonders about Nelograne, who publicized everybody important who used cocaine, if athletes were as important then as they are now, he probably would have had a lot of athletes in that book of his. But I don't think it is used as much as amphetamines for that purpose.

Now, again, we are talking about the heavy cocaine user, the daily regular heavy cocaine user. People can go on to develop a delusional system, a paranoid delusional system.

He may feel that people are against him or what-have-you. And, indeed, while it is so rare that I have been unable to identify a case of cocaine psychosis in the last 4½ years at Boston, I am convinced—and some of my colleagues even deny its existence—I think it does exist.

The descriptions, again, in the early literature, are compelling. As far as I am concerned those are good descriptions of cocaine psychosis. But I have to caution you that it is very rare. It must be very rare because very few people see it.

Mr. GUYER. Do you have any cases, that have had feelings of morbidity or persecution complex? Have you had any actual experience with people like that?

Dr. GRINSPOON. No, I have not personally. And I have seen a number of people with coca who have come to me because they feel they are using too much cocaine. Several of them have had a lot of anxiety, but not paranoid.

Mr. GUYER. You have patients who are on cocaine?

Dr. GRINSPOON. Yes.

Mr. GUYER. Memory losses and flight of idea, things like that?

Dr. GRINSPOON. No, not memory loss. And I think a person who is acutely intoxicated with cocaine may have something like flight of ideas. I mean, they seem very hyperactive, including in the way they think. And they even jump from one subject to another.

But the cocaine psychosis, as a clinical entity—and again, I am not speaking from personal experience, but what is in the psychiatric literature—appears to be very much like the amphetamine psychosis, only shorter acting or shorter lasting. Whereas the amphetamine psychosis will disappear in 3 or 4 or 5 days, the cocaine psychosis will disappear in an even shorter period of time. And both the amphetamine psychosis and cocaine psychosis is all but clinically indistinguishable from an acute, paranoid schizophrenic brain. Again, it is so short lasting that that is often the thing that helps to make the diagnosis—that it just disappears so quickly.

Now, there are people who believe that the cocaine psychosis is more prominent than we believe. It just doesn't come to medical attention. People like Wesson and Smith who run the Haight-Ashbury clinic have seen such cases, and they believe that the reason other people don't is because, as I say, it disappears very quickly. But I think it is also true that the people, generally speaking, don't use cocaine quite as recklessly as they did at the turn of the century and are more sophisticated about their use of it.

And I think that would be part of the reason why we don't see either many of these psychosis at all, nor do we see as many perforated septums as apparently were seen about, say, the turn of the century.

Mr. GUYER. This is Congressman Evans. And I think he would like to ask a question.

Mr. EVANS. Thank you, Mr. Chairman.

Dr. Grinspoon, we have heard a great deal of testimony that would indicate that in limited and controlled use of certain drugs, they are harmless. And I think from the testimony you have given you share that opinion about cocaine, is that correct?

Dr. GRINSPOON. That is incorrect. First of all ——

Mr. EVANS. I would like a correct statement. Thank you.

Dr. GRINSPOON. First of all, I don't think there is such a thing as a harmless drug. And I certainly don't think that cocaine can be said to have no potential for harm.

I started to research cocaine in 1973 through my interest in the amphetamines. After 3 years, I came to the conclusion that while it was not by any means a harmless drug—I think some of the things I have said here indicate that it's true—I think its harmfulness has been exaggerated. And I think it has been exaggerated largely by the media. But I do not think it is a harmless drug.

For example, if you would ask me do I believe that it should be legalized——

Mr. EVANS. I won't ask you that.

Dr. GRINSPOON [continuing]. I can't answer the question. I just don't know. I think that whereas I can be more confident in my view about marihuana, or another drug that I have studied, I can't be with cocaine for the reason that I don't think that we at this point—well,

I am a little concerned about what would happen if the price of cocaine were less than, say, the $4,000.

Mr. GUYER. I am going to say if you legalized it and brought it down to the price of the pharmacies, then it would be murder in the street because the thing that keeps people away from it now is the exorbitant price.

Dr. GRINSPOON. You see, I have to agree. I think the price does limit its use. Of course, there is another way of looking at it.

One could make it the same price, make it all tax, and look at what happens if it is the same price, if the cost is important in determining use. That is another way of avoiding the cops and robbers part of it and being sure people don't get cocaine that is adulterated with more dangerous substances and so forth and so on.

You see, I think the bottom line on these things it is a kind of an equation, but it is not a mathematical equation because you talk a little bit about lemons and apples, and maybe somebody thinks it is a fruit salad. But in any event it is a question of what is the potential harm of the substance compared to the potential harm of the laws by which we control that substance.

And by that I mean the infringement on individual rights, the involvement of the law from the cost of having the courts to a person being arrested, so forth and so on. It is that kind of equation which you people have to struggle with and I can't say more than I think that cocaine is a harmful drug. But it is less harmful than I think we have come to believe over the last decade or two.

Mr. EVANS. Dr. Grinspoon, you are a psychiatrist; is that correct?

Dr. GRINSPOON. That's correct.

Mr. EVANS. The psychological dependence that you talk about, you have not established it at this time, the extent of that dependence and the adverse effect that cocaine could have on an individual; is that correct?

Dr. GRINSPOON. Well, you see it is awfully hard to measure that. But I would say I think that most people would have seen people who are very involved. I have treated patients who have come to me, as I say, because they felt they were too involved with cocaine, and I have been able to deal with them quite successfully, more successfully than people who have tried to give up smoking cigarettes. So that that, too, is a drug which leads to an enormous degree of dependence in many people. In cocaine, I think, at least we see less of this psychological dependence, severe psychological dependence, on cocaine.

Mr. EVANS. Would you agree that cigarettes are much more plentiful and available and maybe you would not find that differentiation if cocaine was as plentiful?

Dr. GRINSPOON. Yes, I was taking that into account, Mr. Evans. I am saying a ballpark impression is that of people who use cocaine, I think there are probably fewer people who become as dependent on it as compared to controlling for the number of people who use cigarettes. I say that as an off-the-top-of-my-head impression. There really isn't any data to back that up.

Mr. EVANS. Along that same line, what is the potential harm for overuse of cocaine on an immediate basis as compared to other drugs? Would not the overuse of cocaine result in death?

Mr. EVANS. Yes, it can. And Dr. Wetli will be addressing himself to that.

For one to take enough cocaine to kill oneself, it is not clear how much. The best estimate we could arrive at was about a gram and a half taken acutely. But, on the other hand, William A. Hammond who was the Surgeon General of the United States the latter part of the 19th century took 1,300 milligrams, which is 1.3 grams, over the course of about 20 or 30 minutes, and quite obviously survived. He wrote about his experience.

But people certainly can take enough cocaine to kill themselves. It has been used for suicide and it causes accidental death.

Now, Dr. Wetli will be telling you about his experience, but one of the interesting things about his experience is that of the seven people who—Dr. Wetli can correct me if I'm wrong—but of the seven people who had cocaine absorbed in their gastrointestinal tract, of those seven, I believe six were people who swallowed condoms of cocaine or what-have-you in an attempt to hide it from law enforcement or had put it in their rectums or what-have-you. But they were accidental deaths in that sense.

But there is no question about it, and his paper makes it clear, even intranasally people can take enough to destroy themselves.

Mr. EVANS. Let me ask you about one other substance that is not exactly on the subject of cocaine, but I have seen reports which indicated that the use of PCP, which is an animal tranquilizer, I guess—I am not sure what it is—is being laced with marihuana and smoked. And there are reports of people exceeding their physical ability. In other words, they are doing more than a normal person could do and resulting in injury to themselves from overextension of work. Is that something that is known? Is that a valid assessment of PCP?

Dr. GRINSPOON. Yes, that's quite true. PCP or phencyclidine, which came into existence in 1957, only started being on the streets in 1967. And it is growing, unfortunately, rather rapidly. It is in my opinion an exceedingly risky drug.

And one of the consequences of using it is that one can much more readily develop the psychosis, and it is a different kind of psychosis from the one we were talking about. And one of the aspects of that is that people have enormous strength. In fact, they have such muscular power that there have been a number of reports of a phenomena called rabdomyalysis, which is the actual breakdown of muscle tissue.

For example, there has been a report in Lancet, the British medical journal, a few months ago, 6 months ago, of a man who was psychotic with PCP and assumed a football stance from which he would not move for many years. And one could see the tone in his muscles. And he developed this.

And with the breakdown of the hemoglobin and the myocin, it can block up the kidney so that, indeed, he went into renal failure.

These people, in other words, actually have enormous strength, strength to the point where they actually destroy muscle tissue and get into difficulty that way.

Mr. EVANS. Is it true that we all have more strength than we can use, but because of the pain, we receive pain when we are exerting ourselves to a point that it can be harmful to our muscles and tendons and so forth, that the PCP actually breaks down this pain or kills the pain so that we extend way beyond what we should be able to do? Is that what causes the problem?

Dr. GRINSPOON. Well, it isn't certain that that is, but that is the mechanism. Your idea is the mechanism that many people have proposed to understand it, or at least to understand a part of this phenomenon, which is peculiar, pretty much, to PCP psychosis.

Mr. EVANS. OK. There is a point in what I am getting to. And the point is if cocaine is faced with marihuana or laced in a way that it is smoked or inhaled, which is a much more dangerous way, I understand, of use, does the euphoria, the good feeling and the feeling of being able to do anything, operate in the same way that PCP would? Or do you have an opinion on that?

Dr. GRINSPOON. I do not believe that. I believe that is pretty much peculiar to PCP. That is to say, people with cocaine or amphetamines do have slightly more strength. As I say, Freud first demonstrated that with his experience dynamometer, but not significantly more. It is not in the same ballpark as the kind of thing you are talking about with PCP.

Mr. EVANS. One other question. We have had reported that there were some 5,433 individuals treated in treatment centers in 1978 from cocaine abuse, representing a 44-percent increase over 1977 admissions and 86 percent over 1976, which would indicate to me that the problem is becoming more and more pronounced in this country.

Do you attribute that to the greater accessibility of cocaine, or to what do you attribute that?

Dr. GRINSPOON. Well, I think that more people are using cocaine. And as with any drug, the more people that use it, there are always going to be some people that abuse it and get into difficulty with it.

Mr. EVANS. Would you say that that is a sophisticated enough drug and with the possibilities of dilution with imperfect materials or impure materials included in the cocaine that it is dangerous unless a person knows exactly what they are doing?

Dr. GRINSPOON. I think that's true of any drug.

Mr. EVANS. Well, it is true of cocaine, then?

Dr. GRINSPOON. It certainly is true of cocaine.

Mr. Evans. And do you think that the general public has the sophistication to use this drug safely even if you could tell them how much could be used safely?

Dr. GRINSPOON. I do not think the general public does, but, you know, there was a time the general public didn't know how to use alcohol.

Mr. EVANS. I think that is still true.

Dr. GRINSPOON. I was going to say certainly among some people, I think it is still true. If one considers not just the number of alcoholics, but the number who die of acute alcohol intoxication—that is when their blood level gets above 0.4, 0.5, percent, 50 percent of those people die from acute intoxication. There are may people who die that way.

Mr. EVANS. Do you think it is any argument from your standpoint as professor at Harvard that in view of the fact that we already have alcohol which is legal and we have cigarettes that are legal, that other drugs should be legal because alcohol and tobacco are legal? Should we add more drugs to destroy people because we already have one or two which may be harmful to the health of people?

Dr. GRINSPOON. Well, that is the most difficult question of all. I really don't know what to do about cocaine. I think it is difficult, however, to persuade people that certain substances should be prohibited when other substances which may represent as much risk or even more are freely available.

Now, I don't pretend to know what to do about this. But our present drug laws are really a kind of patchwork that really don't make much sense. They are not altogether rational. And I don't know what you can do about making them more rational and how to fit cocaine into that.

But I am not prepared to say that it should be legalized, nor am I prepared to say that I am satisfied with the present situation because I am not convinced that more harm may be done by the law than by the drug itself.

Mr. EVANS. Thank you, Mr. Chairman.

Mr. GUYER. I was curious, and I will try not to prolong this, I was very interested in your testimony, I think on page 12 where a questionnaire was recently sent to 1,500 plastic surgeons. And of 741 who answered, 592 used cocaine in nasal surgery.

And then, the next paragraph down, the ingredient is used in Great Britain and Canada for treating the chronic pain of terminal cancer.

What do you think of this perspective? You have made a very good case that serves a very useful product of therapy and treatment for many things such as throat, esophagus and nasal surgery. I tried to make some calculations——

Dr. Peterson is back of you there. He was with us on Tuesday and in some of our testimony, I think we brought out the fact that only about 85 pounds are used legally in the United States a year. And I don't know what it would cost in dollars, but with the price a while ago, it wouldn't even be close to $1 million any way you look at it. Yet, we have $12 million spent each year illegally. And according to Mr. Bensinger, we only intercept one-tenth of what comes in.

So that is a gigantic thing we are opening into. And it is so interesting to us because you have the clinical and doctoral background of actually seeing the people. And very few doctors are psychiatrists. So you have a further edge there in your experiential knowledge of these people.

And would you want to say anything in just a résumé here? I think we do have to move along, because of the time schedules. But we can come back to you also. Do you want to summarize?

One more thing. How do you detect that a person has used cocaine?

Dr. GRINSPOON. Well, to detect a person has used cocaine——

Mr. GUYER. Well, for example, it is illegal. We have breath-o-lator tests and blood tests for alcohol——

Dr. GRINSPOON. There are tests, but they are very expensive and difficult. There isn't a curbside test.

Mr. GUYER. In other words, an enforcement officer would have no way of having a test that he could prove somebody is just using——

Dr. GRINSPOON. No. Nothing like the breath-o-lator. No, absolutely not.

Mr. GUYER. Do you have any further questions?

Mr. EVANS. No.

[Dr. Grinspoon's prepared statement appears on p. 81.]

Mr. GUYER. I think we have to move along. If you want to take a break any time here, we can. I am surprised we haven't been called to the floor.

Just to talk now, you say that cocaine actually was in Coca-Cola when it first started out?

Dr. GRINSPOON. Yes, very definitely was. An article in the New Yorker, notwithstanding, which denied it, it said that cocaine was an incidental part of Coca-Cola, is just not true. I mean, John Styth Pemberton built what he first called, as I said, French wine of coca around the idea of coca and changed the name to Coca-Cola.

Mr. GUYER. This is his home state, you know.

Mr. EVANS. Tobacco and Coca-Cola.

Mr. GUYER. I guess there is a safe somewhere that holds that formula.

Dr. GRINSPOON. The present formula does not include cocaine.

Mr. GUYER. Certainly does not.

Well, this has been very interesting to us. And feel free to say anything further, or we can come back. But I understand one of the men has to catch a plane a little after 4 o'clock. So in deference to fairness to all of us, we will try to move along and get back.

Since Dr. Byck is here and we have looked forward to him—I have been reading the biography of some of you fellows. And it is very, very impressive. And we feel very enriched to have you with us because I know you are coming here at a sacrifice.

So let's now listen to Dr. Robert Byck, who is from the School of Medicine, Department of Pharmacology, Yale University. I welcome you here.

TESTIMONY OF ROBERT BYCK, M.D., DEPARTMENT OF PHARMACOLOGY, YALE UNIVERSITY SCHOOL OF MEDICINE

Dr. BYCK. Thank you, Mr. Chairman. I, too, will not read from my statement since you can pick that up another time. I think that really this is a very useful opportunity to address an issue which is rarely faced. And that is that sometimes we put the emphasis in the wrong place.

There has been a lot of emphasis on the presumption that cocaine is dangerous, at least as used in the United States, whereas all of the medical evidence indicates that in the way and in the amounts it is used now, cocaine is not dangerous in the usual sense. It does kill people; any drug can kill people. It does cause some users to get into serious trouble. And that is true of almost any drug of abuse.

Cocaine doesn't have the kind of health consequences that one sees with drugs such as alcohol and cigarettes. However, that doesn't mean it is safe.

What I would like to talk to you about for the most part is the importance of telling the truth. Right now, if we look at the hospital admission records and death records, cocaine doesn't look like a dangerous drug. There is a lot of advertising for the drug in the media. I use the word "advertising" rather loosely. Just reporting on cocaine can constitute an advertisement in certain contexts. People use cocaine

in many areas of society, and most of them don't get into too much trouble with it.

I would like to talk about an experience which is occurring in South America at the moment, which may indicate that cocaine can turn into a dangerous drug. I used to be in the same camp as Dr. Grinspoon appears to be, that is feeling one could be unsure whether or not cocaine could ever be legalized. But in my more recent experience, I have come to the absolute, clear conclusion that it should not be legalized under any circumstances. Let me tell you about that.

Peru, as you know, has had coca around for 2,000 or 3,000 years. We did experiments in the last year or so looking at the blood of Indians who were chewing coca. We found out that the active ingredient of coca is cocaine. Significant amounts of cocaine are found in the blood of people who chew coca. That is what coca leaves do. They provide cocaine in the blood and to the brain.

Mr. GUYER. You attended that international meeting?

Dr. BYCK. Yes.

Mr. GUYER. It is the first time it was ever held, isn't it?

Dr. BYCK. Yes. It was the first real international meeting on coca and cocaine. A number of investigators were supported by the State Department. It was partially sponsored by the National Institute on Drug Abuse and the Pan-American Health Organization. There, we heard a number of things which are, I think, pertinent to the work of this committee.

To me, the most important one was getting confirmation of material that we had already learned about the effects of smoking cocaine, a new route of administration. I am very hesitant to talk about it here.

Mr. GUYER. Would you first of all establish the difference between a narcotic and a drug?

I notice you say that we are in the wrong place.

Dr. BYCK. This is a committee on narcotics and cocaine is not, pharmacologically, a narcotic. A narcotic is a drug that has the actions of morphine or methadone or heroin. It is a drug that puts you to sleep, that reduces pain.

Mr. GUYER. Would you say cocaine is a stimulant rather than depressant?

Dr. BYCK. Cocaine is very clearly a stimulant. It doesn't produce sleep and it doesn't produce analgesia or relief from pain. In no way can it be called a narcotic, except by the law. The law has a right to call anything it wants to anything else it wants to. And it has chosen to call cocaine a narcotic.

However, from my point of view, as a psychiatrist, pharmacologist, cocaine is not a narcotic.

Mr. GUYER. You also said, and I am sure you meant this alinement to be taken into effect, aspirin kills more people than cocaine.

Dr. BYCK. I am positive.

Mr. GUYER. Can you elaborate on that? That is something we ought to know about.

Dr. BYCK. The first thing you have to consider about dangerousness is that just the potential for killing people is not dangerousness. Aspirin is available to huge numbers of people over the counter.

And naturally, most people who try to commit suicide take a commonly available substance. There are lots and lots of suicides with

aspirin. There are lots and lots of child overdoses with aspirin that result in death. So, you cannot use simple numbers of people killed as a judgment of whether or not a drug is dangerous.

Actually, cocaine in this sense, is a very safe drug. You almost never see anesthetic death due to cocaine. There have been a series of 14,000 consecutive doses of cocaine given with no deaths. Deaths from cocaine are very, very rare. They do occur, and I think it is important to recognize that they occur. But actually, the drug, in terms of the risk of killing people, is comparatively safe.

If you want a dangerous drug, take digitalis or digoxin. I think you may have colleagues or parents who take it. It is a heart drug. And that is really deadly, one of the deadliest poisons known.

Mr. GUYER. But it is used to save lives.

Dr. BYCK. Yes, it is used to save lives. Cocaine is also used medically. So, you cannot take whether or not something can kill you as a measure of dangerousness. I think measures of dangerousness have to relate to what happens to people over time.

For instance, it is very hard to kill yourself acutely with cigarettes. And with deference to Mr. Evans, I have to say that I believe the Surgeon General. It is very easy to kill yourself with cancer or heart disease if you smoke long enough. But if you look at cigarettes only in terms of how many people do you know smoke a cigarette and immediately die, I would come to the conclusion it is absolutely safe.

Mr. GUYER. I think statistics are very misleading. You read 6 out of 12 die of this, 1 out of 1 dies of something, but actually, when a person gets to the terminal state, sometimes nature kindly takes them with pneumonia, so they don't even die from the things they are hospitalized for.

But do you want to go back to your testimony on smoking? Because that was the injurious part of it.

Dr. BYCK. What I am concerned with is this: I have hesitated a long period of time talking about cocaine smoking, because usually, when things like this are reported, the media advertises them, and this attention has been a problem with cocaine all along. This relates to one of the questions you asked before: How come the stuff is so popular?

It is advertised by well-known folks using cocaine, arrested using cocaine. It is a very fashionable drug.

We must decide on a way of talking about drugs like cocaine which tells the truth about them, that people confirm because they are acquainted with users, and at the same time presents dangers properly.

I think we make a mistake when we say that snorting cocaine every once in a while is a dangerous habit and is going to kill people, because it does not. There are many people around who have been snorting cocaine and know that their friends haven't gotten into trouble. If you then tell those people that cocaine is very dangerous, they won't believe it. Then, when you get to the next step, when you are talking about something that is really dangerous, they are not going to believe you the second time.

I think we have to be very careful about giving a bad name to things that people have good experiences with. I think this happened to marihuana. There was tremendous emphasis on the dangers of marihuana at a time when many millions of Americans were using marihuana without getting into trouble. So, eventually, the Government was not believed.

I think we have to be careful that the Government is believed about cocaine, because there are dangers associated with the drug. These dangers are not particularly associated with the present use pattern.

Mr. GUYER. One of the purposes of our panel is not for publicity. We do want exposure if the story needs to be told, but it is to bring into the open what has been up to now a pretty secret kind of thing.

I have gone over your testimony, and I find, first of all, research is still in the cradle stage. We are not even stretching our legs in research.

I find out, also, we know very little about treatment and less about religion. And so, if you contribute one solid thing that might be helpful to this generation, it would be a great contribution to our work, because we don't want six witnesses coming in telling us something if taken right, it is all right. It is to avoid being caught if you are crooked. We would rather know the full facts without language, without any posturing, lies, but still laying them on the table with your experience. That's why we are here.

Dr. BYCK. I really appreciate that open-minded point of view because, in one sense, it is possible to say that snorting cocaine once is not dangerous. We have given a great deal of cocaine to many individuals, and find it to be a most unremarkable drug. We are giving cocaine by nose to normal young men. When anyone visits our laboratory, they look at the TV screen and say, "That guy took cocaine?" They don't jump around, they don't get excited; they sit calmly and experience a drug high and don't become dangerous.

Mr. GUYER. What about 5 years later? Are the membranes and so on not affected at all?

Dr. BYCK. The damage to people's membranes is quite rare with cocaine. It does occur, but it is a rare phenomenon. Part of this is because people don't use very much cocaine. It is expensive.

Tell me the last alcoholic with cirrhosis of the liver you saw when cirrhosis was caused by Dom Perignon. You almost never see it. This is not to say they couldn't do it; champagne is just not that available and not that cheap.

In Peru, however, they have had cocaine for a couple thousand years, and they never really had a serious cocaine problem. They had coca-chewing, which produces cocaine in blood, and have relatively cheap cocaine available because——

Mr. GUYER. You pointed out, too, and it is believed, only one-half of one percent of what is chewed is cocaine, the leaf.

Dr. BYCK. Well, the chewers get an appreciable amount of cocaine in their blood. We have measured the amounts. But in Peru the cocaine itself as a pure substance has also been available at much cheaper prices than in the United States. Despite that, they have not had a serious problem until about 3 or 4 years ago.

At that point, for reasons that are not clear, a number of people started smoking a material that was extracted from coca leaves, which they call "coca paste." It is really more cocaine than it is coca. A totally different use pattern then developed.

Users could not take it or leave it. They smoked cocaine compulsively, just like the heroin user. When you smoke it you get very high very fast, and you then very shortly thereafter get a real crash, a feeling of depression and a tremendous urge to use the drug again. When people start smoking the material, they smoke cigarette after cigarette.

And when they do that, they end up with a large total amount of cocaine in their bodies. They often become paranoid. They get somewhat crazy. They are fearful, they are anxious. Their heart rates go up; their blood pressures go up. Then they may progress to the point of psychosis, which we are presently investigating.

In Peru, Raul Jeri reported 148 cases of hospitalized "psychosis" due to coca-paste smoking.

Mr. GUYER. Couldn't it be a piggyback effect right there where the cocaine is not addictive, but the smoking is, the smoking with the cocaine produces the accelerated use.

Dr. BYCK. I think you hit on an important point there, because what makes the difference is how a drug is taken. For example, if you inject a drug intravenously, it can be highly addictive. It depends, with any drug, on what form you use it in and what route you take it by.

So, if you use cocaine in the form of coca leaves, it is a habit which is somewhat like coffee drinking. Coca-leaf chewing is engaged in by between 8 and 12 million people in the world without any apparent evidence of danger.

If you take it as a snorted powder in small doses, it doesn't seem to do very much, but it is very fashionable.

However, if you take cocaine intravenously, it is a drug which can cause acute dangerous reactions. If you smoke it, it is very similar to intravenous injection.

Mr. GUYER. I heard someone say you could drink the venom of a rattlesnake if there were no cuts in your mouth, and it would cause no damage. The white of an egg injected could kill you.

Dr. BYCK. I don't pretend to be an expert on that, but it may be true.

Mr. GUYER. You just don't talk about a subject blatantly, but you have to get into the fine points of what you are doing, and you get your results.

Dr. BYCK. It is very important not to ascribe evil to chemical substances. Chemicals themselves have no qualities of good or evil. The way people use them determines drug effects. So, I think we should concentrate on how drugs are used, on use patterns rather than on the chemicals themselves. One easily can be confused. Cocaine is an innocuous substance when used medically and is often innocuous when used recreationally, but in intensive use patterns it is very dangerous.

It has been said in the past cocaine is relatively safe. That is true for small amounts taken by nose. It is not true when the drug is smoked. When smoked the amount of cocaine in the blood goes up within a minute to levels that are higher than you get after an hour snorting cocaine. There is a rapid rise of cocaine in the blood.

When that happens, there is a jolt of euphoric feeling and then a crash. This causes the person to repeat taking the drug, again and again. That, I think, is an extremely dangerous habit.

You talked before about prevention. Cocaine smoking—in this country they smoke something called "free base," which is an extract of cocaine—is not yet a problem in the United States.

I have reports from California, from Chicago, and from New York about people who are smoking the substance, and I hear there are numbers of people now in San Francisco smoking the substance. Here is a

chance for the Federal Government to engage in an educational campaign to prevent a drug abuse epidemic.

Andrew Weil, for the most part an advocate of the use of natural drugs, told me that he met a woman in Bolivia 4 years ago who was absolutely wasted from cocaine smoking, and she said, "It is very nice, but it has got a hook in it."

That is the danger. This is a drug that is addicting in the traditional sense, and, therefore, is one that we must pay attention to. I suggest that we act as follows: No. 1, find out about it; No. 2, establish some kind of collaboration with the media; and No. 3, show what happens when this drug is used, so that we don't get an epidemic. We need our best minds to figure out how to do this without advertising the drug.

Mr. GUYER. We have to go vote and come back.

This committee did make a trip to Colombia just recently and talked to the President. I am just curious, since you attended the Lima Conference, did you find good evidence there would be good faith in those countries of cooperating along this line?

Dr. BYCK. All those countries were represented at the Conference. Colombia has become a tragic country that has almost been destroyed by the drug trade of another country. Colombia doesn't produce coca, and they wouldn't ordinarily have a major cocaine problem. What they have is armies of drug dealers running a billion-dollar trade in the middle of their country. They don't want it. It is sad.

Mr. GUYER. We were told 70 percent of all our cocaine comes from there as a transshipment point. The President of Colombia did say to us, "After all, I am trying, but you people are a market, and as long as you keep buying, I can't do much to stop it." He does have a problem down there.

Dr. BYCK. I think they have a serious problem. Some of the solutions which have been suggested don't seem practical to me I don't think you can eliminate the growing of coca in Peru and countries which have had it for thousands of years.

Mr. GUYER. Not with substitutions.

Dr. BYCK. I don't think so.

Mr. GUYER. That is not going to work?

Dr. BYCK. It can't work, if you consider these are crops grown on the slopes of mountains near jungle and grown by people for their own use for 2,000 years. And talking about wiping it out, you have a better chance of wiping out tobacco in Virginia than wiping it out there.

Mr. GUYER. We will come back to this.

[Brief recess.]

Mr. GUYER. We are going to resume our hearing.

Congressman Dornan of California just now joined us.

Let me say to Dr. Grinspoon, we know you have to catch a plane. Feel free at any time to leave.

Dr. GRINSPOON. No. As a matter of fact, I am OK timewise.

Mr. GUYER. OK. Fine. We want all of you to feel the same way if you have an engagement, because we are really just taking advantage of your presence here.

Let us have a résumé from Dr. Byck, if we can. Maybe you would like, in your own words, to just sort of capsule.

Dr. BYCK. What I have said so far is that the pure substance, cocaine, as used in the United States, does not seem to cause problems in terms of health consequences. There is, however, the potential of serious health consequences when the patterns of use change. You have to look at how much of a drug is taken and by what route. Cocaine is not unique among drugs in that, by some routes, and in some forms, it is relatively safe. As chewed coca leaves, it seems to be absolutely safe, but other routes—and I mentioned smoking—it can, in fact, be dangerous. The use pattern changes, depending on information given to the public.

We just shifted over to the question of: Would it be useful to try—and I think that was the question—to eliminate the growing of coca in Peru. It probably would be easier to eliminate the growing of tobacco in Virginia than the growing of coca in Peru.

I also think it will be, if you will pardon my intruding into the international politics, out of line for the United States to become involved in trying to eliminate habits or cultural patterns in other countries.

Mr. EVANS. Dr. Byck, you are familiar with the crop substitution program in Thailand, which is sponsored by the United States; are you not?

Dr. BYCK. Yes, I am aware of it.

Mr. EVANS. Do you see that as being any different than a crop substitution program in Peru or any other country? I happen to have visited the particular areas in northern Thailand, and, of course, the terrain is much as you describe it in Peru, on the sides of mountains. On a limited basis, the program seems to be working.

I think it would take tremendous resources to make it work all over, but I just want to mention that, to get your reaction to it.

Dr. BYCK. Well, the major difference, as I see it, is that coca use is part of the lives of the people in Peru, and has been for decades.

Mr. EVANS. Is that more so than poppy use in——

Dr. BYCK. Oh, yes, absolutely.

Mr. EVANS [continuing]. In Thailand?

Dr. BYCK. Coca is part of a ritual; it is part of an ancient religious rite. Alcohol in its social use in this country is a little bit closer to the coca use than, say, tobacco. It is really part of the lives of the people. When somebody grows coca, he may or may not define the end use, but if it is for the practices which are built into his daily life, and you tell him he should grow sugarcane or something else, he is going to say you are silly, and end up not doing it.

I don't think it has much of a chance of working.

Mr. GUYER. Couldn't we still have the enforcement sanction, though, to control the export of it and still not disturb what the local people want to use it for? If it is not harmful to them, what we are concerned about is—like in Turkey, we had a pact with Turkey. We had to pay $30 million or something, not to grow poppies. And they did it for 2 years or so. And they had some of those farmers educated, and they didn't really care because they didn't use the stuff anyway. But we found out if you offered them substitutes in crops, maybe canning industry, processing plants, you are doing them a great favor.

But our problem here is not what they do personally, when it is not injurious, but when 70 percent of all the crops coming into the United

States is coming from Colombia, it is a serious problem. It doesn't do what the natives do with their own people.

Dr. BYCK. I think trying to control both exports from those countries and import into our land is a reasonable approach. Unfortunately, I have a sense it hasn't worked, too well.

Mr. GUYER. Yes, Dr. Grinspoon.

Dr. GRINSPOON. Rather than comparing chewing coca to alcohol use in this country, I would compare it to coffee use.

Dr. BYCK. I would agree with that.

Dr. GRINSPOON. The way we use coffee breaks, coffee, they use coca-chewing breaks, and it is about as harmful to them as coffee to us.

Mr. GUYER. I don't remember that point in your testimony.

Dr. GRINSPOON. Second, I think as far as crop substitution is concerned, coca has the distinction of being able to grow where very few useful other crops can grow.

Third, I think one has to keep in mind—and the reason I mentioned this at the beginning of my statement—that the erythroxylon plant grows elsewhere than Peru and Bolivia. If it were possible, let alone desirable, to stop the growth, destroy the locality, somehow in Peru and Bolivia, I think that given the demand for cocaine, that would spring up in Java, Madagascar, British Guyana, Ceylon, many different places where, if not erythroxylon coca, then another specie, erythroxylon glovatensis will grow. I don't think that would be the solution to the problem.

Dr. BYCK. Just incidentally, when Americus Vespucius first saw America, one of the first things he reported on in his journal was finding Indians chewing these leaves and mixing lime with them. So, from the very beginning of the name "America," coca was used.

Now, that was in northern South America. I think that Dr. Grinspoon is right: When you have a crop that is that profitable—and I cannot imagine a more profitable cash crop—eliminating it from one area is not going to make it go away. I think that is what occurred with the poppy.

Mr. GUYER. Well, you say publicity is an adverse tool, you just mentioned it to prove your point, Americus Vespucius wrote about where he was, and got the country named after him. Columbus didn't.

Can you tell me, in closing, have you ever analyzed coca paste, fully analyzed it?

Dr. BYCK. Well, that is a sad tale of Government relation. When we first did work with coca paste, the Peruvian Government provided us with the coca paste and, gave a sample of the coca paste to some DEA agent in Lima. That was some 8 months ago. We have not yet received it.

Mr. GUYER. You were supposed to have a sample today; weren't you?

Dr. BYCK. I was supposed to have a sample and an analysis of it. And we have never received it. The regulations which govern the legal importation of cocaine and coca research use are much more effective than the regulations which seem to govern smoking or smuggling. I have been filling out forms ever since. I now have a number of licenses I never had before but no samples.

Mr. GUYER. I have been told it takes the same number of days to get a letter from Boston to Philadelphia now as a number of years ago.

Dr. BYCK. The restrictions on land import are so severe, you just get discouraged.

Mr. GUYER. Mr. Dornan, do you have some questions?

Mr. DORNAN. I do.

Dr. BYCK. I wonder if Dr. Grinspoon would comment on this also—do you agree with NIDA's findings or their estimate that there are 1½ million regular cocaine users in the United States?

Dr. BYCK. I know that if I consider the university community at Yale and take both the students I talk to and the young professionals and so on, I would say that is probably a low number. But I can't extrapolate from my experience to numbers like millions.

Mr. GUYER. Doctor, do you want to come to the table and share with us? You testified for us on Tuesday, and I think he is the man with the rough figures.

Incidentally, I think each of these witnesses ought to have a copy of your book, the little booklet that was put out, talking about drugs. They asked if we had anything recently on this.

Dr. PETERSEN. I don't have any with me, but I would be glad to supply them.

Mr. GUYER. See that they do.

Do you want to address the question there?

Dr. PETERSEN. Yes. Actually, to some extent—and I think Dr. Byck has even implied that—the business of how many people are using, the numbers vary. Are we talking about regular use? Are we talking about daily use? Are we talking about episodic use? Are we talking about people who have ever used?

If you want to inflate the figure, you take the number of people who have reported they have ever used, in which case you get quite a large figure. That gives you 43 million Americans who have used marihuana.

Mr. DORNAN. Regular use. They have made it part of their lifetime pattern and habits.

Dr. PETERSEN. That is fairly uncommon. If you are talking about really regular use, that is moderately uncommon.

Mr. DORNAN. 1½ million would be exaggerated?

Dr. PETERSEN. I think that might be on the high side if you are talking about regular use. We estimate that about that number had used one or more times in the month prior to the 1977 survey.

Mr. DORNAN. Let me ask all of you a question. And please take it and run with it and give me your observations.

About 3 months ago, give or take a month, I was watching in the morning a national television show, very popular, Mike Douglas Show. One of the last of a breed of very responsible, very literate, motion picture television writers was guesting on the show, and he said something quite shocking to Mike Douglas. Mike Douglas said it was his experience also, having moved there the last year.

This excellent writer—and he is probably one of the two or three that in scandal sheet reports go all the way back to Clark Gable and Gary Cooper scandals which were kept private by everybody because they realized they were hero models—this writer said:

> Mike, I have only seen three good motion pictures in the last 2 or 3 years. And most of our television programing is junk now. And I will tell you why. Most of our younger motion picture and television executives are supporting a $50,000-a-year cocaine habit. It has infringed on, destroyed the creative process. They are putting out junk because before they ever pay for their swimming pool, limousine, income tax or mansion, they have got this bottom bill of $50,000 for this habit.

And then, the discussion went on from there.

Now, I would like to ask you two things:

One: Is it too early to say any pattern of decay in the creative process, professional ability, by the regular users, some of who use day-to-day $50,000 habit? Or let's give the man an exaggeration factor of a $5,000, $10,000, or $20,000 habit. That is still above the average mean or medium income for the average American family, let alone an individual. Let's say $15,000, $20,000 a year habit. Does it infringe upon his professional ability or creativity, particularly the arts, which involves all of the creative acuity God has ever given us in this computer of ours we call a brain?

Two: Do you feel part of the growth factor with young people is because we see a defense written into motion picture and television scripts and the pattern extemporaneous or rehearsed on talk shows of building in a defense for cocaine use because the controllers and producers of these television shows are themselves defensive about a very expensive habit that they maintain?

Gentlemen, all three of you who desire—four of you——

Dr. BYCK. The idea that there are a large number of people with $50,000 a year cocaine habits strikes me as amazing. Can chronic drug use of any kind damage the creative or other productive processes? Certainly! Chronic alcohol use has damaged many a career. Chronic marihuana use may theoretically damage some people, certainly in the early years. Heavy chronic cocaine use can cause people to become less productive as with Halsted, the famous surgeon.

However, I don't think that the result that you are describing can be ascribed to cocaine. I think there are many other factors, beyond anything that I as either a psychiatrist or a pharmacologist could testify to.

Now, the second point is whether or not the media are "soft" on cocaine. By writing about fashionable people that use it, they make it much more of an "in" drug, and so might encourage its use in that manner.

I think that really we should be truthful about cocaine. There have been a number of very good articles in the New York Times and the New York Daily News which had a superb article on cocaine in their Sunday supplement. There have been very fine media pieces on cocaine.

The major offender, in popularizing the drug and making it fashionable has been the television reportage on cocaine. Cocaine is associated with money, and money is always very exciting to people.

I heard that Mr. Bensinger brought in $1 million worth of cocaine. And I have heard more talk about that than about any of the testimony the other day. I think money gets people excited.

Mr. DORNAN. May I interrupt with an observation that occurred to me night before last. One of the TV stations I was watching, one of the most definitive television works on slavery I have ever seen, British slavery—I thought it was superior to Roots—and in it, there was a scene of an important Member of Parliament supporting William Pitt, the Prime Minister, was using cocaine. And I thought it was in such a way, and I am a bit paranoid, and I come from Los Angeles, and it is an open bowl that Hollywood Park is now as though it were a dip of some kind.

I find the references in this otherwise excellent multi-mini series on slavery, there were the cocaine references.

Back to Los Angeles, a few weeks ago here there was a movie on Sherlock Holmes. They love to make references to Holmes' use of cocaine and Edgar Allen Poe. And I see it coming up far more than I have ever seen in my life. And I wonder if there is this defense mechanism of users saying, "It ain't all that bad."

Dr. GRINSPOON. I would like to say that is probably, I would agree with Dr. Byck, unusual, a $50,000 habit. You can calculate that out. That is about 1½ grams a day, every day. And that seems to me that that would be something quite rare.

Second, about cocaine and creativity, I think that there is very little evidence that cocaine dissolves creativity. In fact, there are many people who think it is the other way around. I don't think there is any evidence one way or the other. I don't believe people who believe they are more creative when they use cocaine have much to offer by way of evidence, either.

But if you take Robert Lewis Stevenson, for example, he wrote Dr. Jekyll and Mr. Hyde, a 30,000-word manuscript, in 3 days on cocaine, tore it up because he was dissatisfied and in the next 3 days wrote another 30,000-word manuscript, the one that survives.

Or you take people like some of the people I mentioned, Ibsen, Thomas Edison, Adelina Patti, many people who have been involved and quite successfully in the creative arts have used cocaine.

Now, again, I am not saying that as evidence that cocaine enhances creativity. But I am reluctant to accept at face value this man's comment either, about the degree of the habit he has or its effect in any direct way on creativity.

Dr. BYCK. It has been postulated that Stevenson might have used cocaine and it has also been suggested that Dr. Jekyll was his character without cocaine and Mr. Hyde was his character with cocaine. But that is only speculation. There is no evidence that Stevenson ever took cocaine.

There is, however, evidence that surgeons general, Popes, and national leaders, as well as a great number of other prominent individuals, did take cocaine in the form of coca wine, Vin Mariani. They were probably taking small doses. So one can't draw any conclusions from that.

Mr. DORNAN. Could you put to rest the coca mythology, using 1½-grams, which seems an awful lot for the roughly $50,000-a-year habit, would actually that have been in a 6-ounce bottle of Coca-Cola in the first years it was produced?

Mr. GUYER. They went through all this before you came.

Dr. BYCK. I think the answer was, nobody knows. I remember when we did that book on Cocaine 1977. I asked Dr. Peterson to find out just that information, and I don't think anybody ever found out.

Dr. PETERSON. I think they actually never did very good qualitative and quantitative analysis of the amount that was contained. But certainly, if they ever did, the actual amounts are buried in history. and I would strongly suspect they were fairly modest amounts.

Mr. DORNAN. Dr. Peterson, is cocaine phenomenon so recent. say within the last decade, in terms of great numbers, that you don't have

any saved former cocaine users the way you now find saved former heavy marihuana users, who say, "I have rebuilt my life and here is exactly what it did do to me when I was a regular user. It did encroach upon my creative process, destroyed my marriage, and I slept 12 hours a night."

Do we have any kind of testimony like that from regular heavy users?

Dr. PETERSON. There are some rock singers, I can't remember the names offhand, who have indicated this. The difficulty is, of course, cocaine users, heavy users, are almost by definition affluent because they have to be, or else are drug dealers. When you talk about how many people are actually using in that style, we don't have good access to that kind of affluent, upper-income group through any of the usual methods we survey drug use nationally.

As you know, there are at least three films I can think of in which cocaine use plays a role: Annie Hall, in which the character played by Woody Allen sneezes into a little bowl of cocaine, as you indicated, and two others, Easy Rider, and Superfly. So there has certainly been glamorization of cocaine. It has figured in popular songs, one of the earliest being Cole Porter's "I Get No Kick out of Cocaine."

So there has been a long history of glamorization. That is almost inevitable, given its high cost and the media impact when someone prominent gets arrested or "busted" for use. The number of people in that category is by now legion.

[Dr. Byck's prepared statement appears on p. 88.]

Mr. GUYER. If I could, we have Congressman Gilman from New York who just arrived, coming from another meeting.

I think now, the most patient man in the room should be heard. It is almost like being the father of the last kid in a musical recital. We have been anxiously awaiting to hear from Dr. Charles Wetli from the medical examiner's office, Dade County, Fla. Everybody knows where that is; Miami is the heart of where a lot of this action is.

We are just very delighted to have you with us today. Let's now hear your testimony.

TESTIMONY OF CHARLES V. WETLI, MEDICAL EXAMINER'S OFFICE, DADE COUNTY, FLA.

Dr. WETLI. I think for the most part, I will be reading the statement that has already been issued to you and with paraphrasing in some of the areas.

Basically, I think we have heard cocaine is a very popular drug. Its popularity has been renewed within the last decade as a recreational drug. We have also heard it is popular among all social groups, professionals, and so forth.

However, central to this renewed popularity is a belief that cocaine in not a harmful drug. Users and nonusers alike believe that toxic reactions and death from cocaine are extremely rare, or do not occur at all.

This can be found in some newspaper articles, some TV reports, and also certain books that can be found in what are commonly known as "head shops." Such misconceptions are reinforced by a lack of adverse publicity regarding cocaine.

The popular press, lay literature, and magazine articles generally extol its euphoric virtues and insinuate that it should be legalized since there is no hard evidence to prove cocaine is harmful. Even in the recent medical literature, there was very little relating to toxic reactions and death caused by the recreational use of cocaine. However, a few case reports of deaths resulting from cocaine use did appear in the forensic science literature between 1974 and 1978.

What got my interest in cocaine stimulated was when, in the first 6 months of 1978, the Dade County medical examiner's office, located in Miami, Fla., investigated four deaths that resulted directly from the nonmedical use of cocaine. This prompted us to review the files of the medical examiner's office.

The sole criterion used for case selection was the presence of cocaine or its metabolites in the fluids of persons autopsied by our office.

The medical examiner's office, which was created in 1956, serves the metropolitan Miami area and serves a population of 1.5 million people. The office investigates nearly 3,500 deaths per year and approximately two-thirds of these are autopsied. Extensive drug screening is ordered in cases of violent death and in deaths where drugs are suspected to have contributed in an individual's death.

If the case does not suggest drug abuse or drugs contributory in any way to the death, a toxicologic screen may not be performed. What it boils down to is that the selection method in itself is likely to be underinclusive in that it is not feasible to perform extensive toxicological screening in all cases investigated by a medical examiner's office. Prior to 1975, cocaine was detected by using basic ultraviolet scans of blood samples and by using thin-layer chromotography. In 1975 and continuing to the present, the major metabolite of cocaine, benzoylmethylecogonine, is detected in the urine by using enzyme multiplied immunoassay testing. If the screening is positive, cocaine—and lidocaine—are then quantified in fluids and tissues, utilizing gas liquid chromotography. Utilizing the above methods, a total of 68 persons who died between January 1, 1969, and June 30, 1978, were identified. Twenty-four of those died from the use of street cocaine preparations alone, 29 from the intentional use of other drugs in conjunction with cocaine, and 15 died traumatically with cocaine being detected only as an incidental finding.

The first cocaine-related death detected in Dade County occurred in 1969. Death from cocaine, with or without other drugs, was considered rare, with only two or three cases per year, until late 1974. At that point, nearly 10 deaths per year were encountered, and the incidence appears to be increasing.

Our data revealed an average age of 26 years in all three groups of cocaine-related deaths. Although white males preponderated in each group, a black to white ratio of 1 to 1 was evident in deaths where cocaine was used with other drugs. This compares with a ratio of 1 to 4 black to white in the 15 to 44 age group in the Dade County community. The typical individual who died of street cocaine alone was a 26-year-old white male.

In the 24 deaths that resulted directly from the toxic effects of street cocaine preparations, it was found that the drug was administered intravenously in 11 cases, orally in 4, and nasally or snorted in 5. In one case, the route of administration was undetermined.

In 18 of these 24 individuals, the deaths were witnessed by other people and they supplied information regarding the terminal events. From their accounts it was learned that individuals who injected cocaine intravenously generally collapsed and died within a matter of minutes after the injection, or went into a deep coma and died within 1 to 3 hours.

Those who ingested the drug orally or intranasally had a symptom-free interval of 30 to 60 minutes, after which they went into sudden unexpected grand maltype seizures, with death occurring a few minutes later from respiratory collapse.

The persons who died after snorting cocaine had also snorted the drug at least twice during the previous hour. The mechanism of death in all cases is one of respiratory collapse mediated by the effect of cocaine on the central nervous system.

Euphoria was the apparent motivation when cocaine was taken intravenously or nasally. However, this was the apparent motivation of only one of the seven persons who died after orally ingesting cocaine. In three instances, the victims were smugglers from Colombia, South America, who swallowed between 27 and 75 condoms which contained between 1 and 3 grams of cocaine each. Death occurred rapidly after one or more of the condoms ruptured inside the alimentary tract. In one case which occurred this year—not a part of our original study—a smuggler died aboard a jet from Colombia. At autopsy, 147 condoms remained intact and held an aggregate of nearly a half kilogram of cocaine. Two others died after swallowing an unknown quantity of cocaine when apprehension by law enforcement officials appeared imminent.

The seventh victim swallowed a large but undetermined amount of cocaine in a suicide attempt. The situation here was a drug deal gone bad. The victim was going to be arrested for murder, so he swallowed all the cocaine he was trying to buy.

The person who took the drug orally for a euphoric motivation was a relative novice in the use of cocaine. It was reported that she and her husband snorted the cocaine during the evening, after which he left to go to work. Apparently the victim, not realizing how much 1 gram of cocaine really was, swallowed it in an attempt to get an even higher euphoria and was found dead in bed. There was no evidence of suicide or homicide.

In instances in which adequate quantitative toxicologic data was available, it was found that the highest blood cocaine concentrations were in those who orally ingested the drugs. The lowest concentrations were found in the intravenous users of cocaine, while intermediate concentrations were found in those who died after taking the drug intranasally. Post mortem examination in all these cases disclosed only signs of a respiratory mechanism of death.

One thing I might mention, in none of these cases was there any evidence of infection, either peripherally at the injection sites, or deeper in the body, such as infections of the heart or anything along the lines so frequently seen with heroin addicts.

No specific anatomic effects could be termed unique to cocaine. Although nasal septal perforations were reported in the past, none were found in our series. In some instances, however, the persons performing the autopsy may have not looked at the nasal septum.

In 29 individuals, death was attributed to multiple drug intoxication involving cocaine. The contribution of cocaine could not be clearly defined in most of these. In a few instances, it was clear that death actually resulted from a drug such as heroin and that the cocaine detected in the urine or bile represented previous use.

In others, however, multiple drugs were detected in the blood and it was not certain as to which of these, by themselves or in combination, actually caused death. Although it is popularly conceived that the mixture of cocaine and heroin, known as a speedball, was popularly used, this was documented in only one instance. The drug most commonly associated with cocaine use was heroin, followed by barbiturates, alcohol, amphetamines, methadone, diazepam, and a few other miscellaneous drugs.

Cocaine was detected in 15 people who died traumatically. Seven of these were victims of homicidal and two of suicidal gunshot wounds, while five died in vehicular crashes and one died while fleeing police. Four of the five individuals who died in vehicular crashes were driving at the time of the fatal accident. In one of these, the blood alcohol level was very high as was the cocaine concentration.

A review of this particular case suggested that the cocaine may have substantially influenced the driver's actions and contributed to the fatal crash. Although the driver's actions suggested cocaine may have had a contributory part, it cannot be proved because the alcohol concentration was also very high. It was suggested, but no conclusion can be drawn in this regard.

It is noteworthy, however, we have not seen any vehicular deaths in which we could blame the crash and death on cocaine. We see it with other drugs such as methaqualone, alcohol, barbiturates, and so on, but so far nothing like this has been associated with cocaine, to my knowledge. At least it has not been in Dade County.

In several instances, the presence of lidocaine was detected along with cocaine. The lidocaine concentrations did not approach toxic limits in any case, and no lidocaine was detected in about half those tested. In none of our cases were other drugs, such as phencyclidine, found to be used as cutting agents. We were thus able to conclude that deaths caused by the use of street cocaine were directly related to cocaine itself and not to the presence of adulterants.

Completing the data for 1978 from the medical examiner's office in Dade County, there have been a total of nine drug deaths related to cocaine. Four of these were from street cocaine alone and five involved the use of other drugs as well. An additional 10 cases were detected where cocaine was thought to be incidental to death resulting from traumatic injury, such as gunshot wound or a vehicular crash.

Of particular note, however, was the decision of phencyclidine in three cocaine-related deaths in 1978 and 1979. At this time, it is not clear as to whether phencyclidine was taken separately, or whether it was intentionally mixed with the cocaine, or whether the cocaine was cut with phencyclidine.

The overall experience of the Dade County medical examiner's office, particularly that as reported recently in the Journal of the American Medical Association, volume 241, pages 2,519 to 2,522, 1979, permitted several conclusions. First among these is that when any drug

becomes popularly abused, a concomitant increase in deaths related to that drug is to be expected. Cocaine is not considered an exception to this general rule of forensic pathology.

Second, there is no exclusively safe way in which to take cocaine. Deaths from acute cocainism may occur whether the drug is taken orally, intravenously, or nasally. Although about half the deaths resulted after the intravenous injection of the drug, it is to be emphasized that death also occurred after snorting cocaine. Almost all who took the drug orally were smugglers or people eluding police detection, and they all took massive amounts of the drug.

This is not to be construed that the oral route is safe, but rather that cocaine is generally not taken orally for recreational purposes. In fact, studies reported by Drs. Byck and Van Dyke and associates in the Journal of Science, volume 200, pages 211 to 213, 1978, indicate that after the oral ingestion of cocaine, euphoric peaks and plasma concentrations are quite comparable to that seen after the nasal application of cocaine.

The mechanism of death as well as the toxicological data suggest there are several factors which contribute to the possibility of a fatal reaction. One of these, of course, is the peak blood concentration of cocaine. Another way of saying it is the amount you take and how much of that dose that is taken into the bloodstream.

However, the data also suggest that the rate of absorption into blood and, quite possibly, the prior use of cocaine by the individual all contribute to the possibility of a fatal reaction. The basis of some of this is because we have seen people who snort cocaine in what are not considered excessive amounts by witnesses, yet after 30 to 60 minutes, they go into convulsions. Their history of cocaine use shows all these people had been using cocaine for a long time in the past.

More recent experience in the Dade County medical examiner's office has revealed another factor predisposing to fatal reactions to cocaine. It is known that cocaine can trigger convulsions in epileptics.

These convulsions, of course, can rapidly lead to respiratory collapse and death. We have seen at least one case recently in which a young woman snorted cocaine and investigation revealed that her medication to control epilepsy, diphenylhydantoin, was in adequate concentrations in the blood. Her death quite likely resulted from the ability of cocaine to trigger the epileptic focus in her brain. This led to terminal seizure when she snorted the drug.

Ordinarily, the number of deaths related to a given drug of abuse is a fraction of the number of toxic reactions seen in hospital emergency rooms. This does not seem to be the case with cocaine. Thus, despite the increasing frequency of detection of cocaine at autopsy, the emergency treatments for acute cocainism in the greater Miami area are considered rare. This suggests that nonfatal acute toxic reactions from cocaine are minor and of short duration, whereas a serious reaction portends a rapidly fatal outcome.

A review of the recent medical literature indicated that these are not the only deaths ever reported concerning death from the use of illicit preparations of cocaine. In 1974, K. R. Price of western Australia reported a fatality concerning an individual who ingested an estimated 2 to 3 grams of cocaine hydrochloride and died about an hour later.

In 1977, Lundberg, Garriott, and their associates reported in the Journal of Forensic Sciences nine deaths related to cocaine. Three of these resulted directly from the intravenous use of street cocaine alone. They reported four additional cases in which cocaine was detected along with other drugs as well. Their case summaries, however, strongly suggest that the deaths actually were due to acute cocainism.

The evidence for this are the circumstances of the deaths and the time sequence after utilizing the cocaine. In other words, all these individuals died a short period of time after using cocaine, and the other drugs appeared to be incidental. It strongly suggested to me, after reading the article, that the other drugs were incidental and the cocaine was the culprit. In two of these, the method of administration was intranasal. One apparently used the drug intravenously, and the fourth administered the drug rectally.

Perhaps the most extensive review of this entire subject was published by Finkle and McCloskey in 1978 in the Journal of Forensic Sciences. They reported on 111 deaths gathered from medical examiners' offices across the United States and, I believe, portions of Canada, between the years 1971 to 1976. Nearly 78 percent were drug deaths, whereas 22 percent were nondrug deaths.

Cocaine alone caused death in 26 of the 111, or approximately 23 percent of the total. Death resulting from drug combinations was found in nearly 70 percent of the 111 cases. Their data, like ours, reflects a sharp increase in cocaine-related deaths commencing in 1974. The data reported by Drs. Finkle and McCloskey generally paralleled the study we did.

The average age and racial distributions were quite similar, indicating a Caucasian male in his mid-20's as being the typical victim of an acute cocaine reaction. They also found that the most common route of administration resulting in deaths was intravenous, but deaths resulting from nasal or oral ingestion are also occurring, with the nasal ingesters accounting for 8 percent of the fatalities. They likewise found that fatal toxic reactions from cocaine are very rapid, once symptoms commence.

With specific reference to the intranasal use of cocaine, they concluded, and I quote:

> The overall study findings in seven of these eight cases in particular clearly refute any lay or drug user opinions that nasal insufflation of cocaine is completely safe. The belief is not true and there is no pharmacologic or toxicologic rationale to suggest that toxic circulatory concentrations of the drug cannot be achieved by this route.

In summary, data from the Dade County medical examiner's office and the current forensic and medical literature regarding cocaine-related deaths were presented. Based on this, several conclusions are justified.

First, there is no safe way to take cocaine. Second, death in recreational users results directly from the toxic effects of cocaine and not from adulterants, such as mannitol or lidocaine. This does not mean that cocaine laced with strychnine wouldn't cause the death.

Third, respiratory collapse and death, mediated by the action of cocaine on the central nervous system, usually occurs rapidly after the intravenous injection of cocaine. Oral or nasal ingestion results in a

symptom-free period interval lasting as long as an hour, followed suddenly by generalized seizures and death.

Fourth, toxicologic and other data strongly suggest that the prior use of cocaine and the rapidity of absorption of cocaine help determine a fatal reaction. For the recreational user, this means that death may result from factors other than dose alone—I think especially death from nasal ingestion bears this out. Hence, a safe dose today may become a lethal dose tomorrow.

Our overall conclusion is that despite current belief and legal controversy, cocaine cannot be considered a safe recreational drug.

Mr. GUYER. Dr. Wetli, the first thing that comes to my mind, I wanted to ask you, how accurate is the Dr. Quincy series, as far as your office is concerned? Are they way out, or do these things really happen?

Dr. WETLI. Many times they do happen, because the producers of the show get much of their material from the medical examiners' offices. They are jazzed up and have a lot of pretty girls, and they work on one case at a time.

Mr. GUYER. Let me ask you, is your field pathology?

Dr. WETLI. Yes, it is.

Mr. GUYER. According to your testimony, you have about 2,335 autopsies a year, which means that is 6 or 7 a day.

Dr. WETLI. That's right. It is actually about 7.5 per day.

Mr. GUYER. How much staff do you have?

Dr. WETLI. Full-time staff, we right now have four.

Mr. GUYER. How many?

Dr. WETLI. Four full-time staff. We also have currently two residents. There are all together five generally in the rotation schedule, performing all those autopsies.

Mr. GUYER. That is an enormous job.

I am going to defer to our good friends here because I had occasion to ask too many questions.

Mr. Dornan?

Mr. DORNAN. I just wonder if you, in your work, see a pattern of increase that would be going up in a curve?

Dr. WETLI. Sharply up, very sharply. Very sharp increase.

Right now, we are in the process of looking at drug-related deaths in the past 10 years in Dade County. Of the top 10 drugs, cocaine ranks about sixth or seventh as far as frequency of death, pure drug deaths and not combination drug deaths. Most of the drugs are going down in incidence, whereas cocaine and others like methaqualone are sharply increasing.

Mr. GUYER. Would you yield?

Mr. DORNAN. Yes.

Mr. GUYER. Right at that point, I am curious; do you have any way of knowing the economic status of people who die? Were they wealthy, middle income, or off the streets? They weren't wealthy people, were they?

Dr. WETLI. I don't recall any real wealthy people. One of the ones that died from snorting the drug, however, was the wife of the original promoter of Woodstock. She wasn't poor, anyway. I don't know if she was rich, but she wasn't poor.

The girl who swallowed the drug for recreational purposes was also, I know, upper socioeconomic class. The remainder of them, from just gathering from the police reports, and so forth, they all seemed to be relatively middle income or low. Let's put it lower-middle income group.

Mr. GUYER. Thank you. That's all.

Mr. DORNAN. One of the most tragic and fascinating things which has occurred over the last 10 years of any drug abuse is that drug abusers are not specializing in any particular habit area. And wine has come back into popularity in the past 10 years. So it is wine mixed with pot or wine mixed with cocaine, wine mixed with uppers, downers. In your deaths where you are writing up the report, how do you choose what was the chemical of death to write down, if it is so mixed up that there are some coequal factors?

If the pharmacological mess in someone's body shows a little of everything, how do you choose which one to write down as the principal cause?

Dr. WETLI. First of all, you have to remember my job is to investigate death, not just to do autopsies. So the death investigation begins with the individual, what he was doing when he died.

For instance, you could not possibly interpret the autopsy findings of Elvis Presley unless you knew what he was doing when he died, that sort of thing. The same is true in all these cases. The concentration of drug in the blood has to be interpreted as well as the regular autopsy findings.

Now, we have a person who is simply found dead, and we see drug paraphernalia around the individual, no witnesses to the death, and we find there are toxic levels of multiple drugs. We have no way of knowing which one was lethal. The fact is that generally, all are contributory to a greater or lesser degree.

In those cases, we sign the death certificate usually as multiple drug intoxication, and list the drugs in which order we feel were probably most contributory.

Mr. DORNAN. Is that incidence on the increase, multiple drug intoxication leading to death?

Dr. WETLI. Polydrug abuse deaths are rapidly increasing, almost exponentially.

Mr. DORNAN. Would that be the experience of the other gentlemen, too?

For example, Dr. Grinspoon, in psychiatry do you find—what is this new expression, poly——

Dr. WETLI. Polydrug abuse.

Mr. DORNAN. Polydrug abuse. Do you find this increasing?

Dr. GRINSPOON. Polydrug use is increasing. I am not in the same position as Dr. Wetli. I can't say about death. I defer to him, but it is certainly true, polydrug use is increasing.

Mr. DORNAN. But in the psychiatric field, you find the patient who takes so much Valium, they then need to take an upper to counteract its effect. So you get a 50 percent——

Dr. GRINSPOON. No, not really. There is an increased use of Valium. There is no question about that, but people don't take other drugs to counteract it.

From a psychiatric point of view, the drug which is probably of greatest concern right now is PCP. Behind that, amphetamines, barbiturates, alcohol, and methaqualone. Dr. Wetli mentioned methaqualone Quaaludes. Many people take all of these drugs at the same time and separately.

Mr. DORNAN. Dr. Wetli, in the course of one of your investigations, looking for cause of the death, do you not find friends of the deceased because of an emotional upset, say, due to the death of someone close to them or in an open talkative mood, where they might be more willing to discuss their own drug abuse and begin to spill out a story that would help you know the circumstances of a group of people rather than just an individual?

Dr. WETLI. That does happen. The usual things where there is a drug of abuse involved, resulting in the death of an individual, the first thing, of course, is to try to cover it up. The police are usually responsible for what is going on, and the medical examiner. We see enough of these cases to say, "OK, it is a drug-related death. Let's find out what it is." After a while, these people will generally come forth with the information.

Occasionally, I have gotten phone calls myself where they are very interested in knowing what the results of a toxological analysis are, because they are afraid it was cut with something other than the usual thing; that it was maybe laced with strychnine or cyanide, something along those lines. This is especially true with cocaine because of a prevalent belief among users it is so safe.

In fact, a reporter called me last week and we were talking about cocaine. He said, "I thought you could take as much as you wanted to and it would never hurt you." This is the belief in the streets. This is why some people are upset and are afraid to use it because they are afraid it was cut with something else. That is always true with PCP and cocaine related deaths, deaths in which just those two drugs are found.

Mr. DORNAN. Thank you.

Mr. GUYER. Mr. Evans?

Mr. EVANS. Thank you, Mr. Chairman. Mr. Chairman, I think one of the problems that has been pointed out by Dr. Byck in our current laws and myths surrounding drugs is that, in the beginning, without knowing what we were talking about, we overexaggerated the harmful effects of some drugs, and we predicted dire circumstances or dire results which would occur from the use of marihuana, cocaine, and other drugs.

On the other hand, I think that in an effort to combat this, and expressed by the user of particular drugs who use the drug without any harmful effects, we have seen the type of thing which Dr. Wetli just described, and that is, the individual on the street believing that you could use any amount of a particular drug.

I guess the truth should lie somewhere in between. That is to do as you say, Dr. Byck, be truthful about the possible consequences of drugs.

Now, I am getting to this point. Both of you, Dr. Byck and Dr. Grinspoon, have testified to the potential harmful effects of cocaine, and I guess your testimony has been based upon somewhat of a laboratory control type research. Would that be correct, in addition to your medical training and other training that you have?

Dr. BYCK. Well, I can't speak for Dr. Grinspoon, but my testimony is based, and can only be based, on situations where I know that actually cocaine and only cocaine was the drug used. One of the great problems with all street drug use is that there is no pure food law for street drugs, and so you never know what people get.

I have seen enough so-called cocaine psychosis, that turned out to be caused by PCP, to have to stick, to a certain extent, to either laboratory experience or experience in countries where cocaine is sufficiently cheap and so widely used the probability that everything that isn't——

Mr. EVANS. Let me ask you, you have witnessed psychosis caused by cocaine?

Dr. BYCK. I have never witnessed it, nor, for that matter, have I ever met anybody that has.

Mr. EVANS. Taking the testimony of Dr. Wetli, would you have any difference of opinion if you could be satisfied that the situations that he has described are in fact correct, based upon the investigation he did, not only with the medical evidence, but with the investigative work that he did into what people were doing at the time of death?

Dr. BYCK. I don't think Dr. Wetli and I have any difference of opinion at all. I would look at his data somewhat differently. My major point would be you can kill any person with an adequate amount of almost any drug that is sold.

Mr. EVANS. Dr. Byck, my concern is this: We are trying to formulate a policy with cocaine. And we are listening to witnesses in order to try to do that.

Now, I would get a much different opinion as to what should be done from the testimony that Dr. Wetli has provided than I would from what you provided, for instance.

I am wondering wherein the actual policy should come from, wherein it should. Do you feel that you fear, perhaps, of the harmful effects of this drug would be colored by the testimony that you heard from Dr. Wetli?

Dr. BYCK. I don't think Dr. Wetli would disagree with me. The major problem with cocaine is not that it kills people. I think the point of his presentation is that the number of deaths is increasing, indicating an increasing amount of use. But actually, if you count—even on the large side—24 deaths in Dade County, where 7 of them were due to smuggling or suicide, it is not a lot of people dead.

Dr. WETLI. If I can comment on it, partly what Dr. Byck said, I completely agree with. And I also mentioned in the paper any drug that becomes popularly abused, any drug whatsoever, you are going to start seeing death related to that drug.

The main point of my paper is that I am trying to counteract the belief that cocaine is completely safe as a recreational drug. One can't say: "I am snorting three or four or five lines of cocaine a day, a couple of times a week, and have been doing it for 5 years, and therefore I am not going to have any reaction with it:" People have to realize they are playing Russian roulette with cocaine. They can die from it.

The point that frightens me a little bit is, right now cocaine is very expensive to buy. Forgetting about cutting with PCP or any of the other hazards of street drugs, it is very expensive. What bothers me is that if cocaine becomes cheaper and more readily available to people, that they will indeed take advantage, not necessarily consciously, but take advantage of the reinforcing aspect of this drug.

George Harlan reportedly said: "After one hit of cocaine I feel like a new man. The only problem is, the first thing the new man wants is another hit of cocaine." Reporters Geraldo Rivera and Carl Hiassen have reported on intelligent people, such as lawyers, stockbrokers, what-not, who were much like the individual on the Mike Douglas Show, who said they had habits totaling about $10,000 a year. One stockbroker, I think, said $500 a week or a month. It was a phenomenal amount of money spent on cocaine. And he says it was definitely ruining his life.

These people can afford the drug. If cocaine is available relatively cheaply, such as the price of marihuana right now in equivalent amounts and so forth, what are the teenagers going to be doing with it? These people don't have the emotional maturity and intellectual capabilities and so forth that you have.

If they start using cocaine the way teenagers generally approach things, believing it is safe, you are going to have a lot of problems.

Mr. EVANS. Dr. Wetli, let me ask you one other question. We have been concentrating on health questions of potential use, but what is the potential use for harm to others in cocaine or any other drug, from the standpoint of crime or improper driving or the lack of social conduct, if you will? What are we talking about in the special problems of cocaine? Do we have any problem in that area?

Dr. WETLI. No. The drugs I particularly worry about in that area are alcohol, barbiturates, phencyclidine, marihuana, and especially methaqualone.

Mr. EVANS. You don't have any problem with driving, then?

Dr. WETLI. We have not had any deaths that I know of in Dade County in which erratic driving was definitely connected to cocaine. We have had one case suspect because of the way the individual was driving, but we can't prove it.

Mr. EVANS. I just want to find out what one do you use and not have any problems.

Dr. WETLI. You won't like this, but if I was going to be using a drug and drive, it would have to be cocaine. The reason for this, by the way, is because it is metabolized so rapidly, which is one of the reasons, I think, for its popularity.

Mr. EVANS. Thank you, Mr. Chairman.

Mr. GUYER. We are enormously grateful for all of you coming the distances you have and sharing with us the wealth of your experience, which we hope will be productive in our crusade against narcotics generally.

This task force is having its maiden experience. We have only had two hearings. And we are going to have one in September and possibly one in October. And then we hope to have a special hearing on the west coast some time before the end of the year.

Mr. EVANS. Excuse me, Mr. Chairman. There is one thing I wanted to ask Dr. Wetli. I didn't hear it in his testimony and the testimony of the others.

That is the smoking of cocaine and the greater potentiality for harm as a result of this. Did you determine that there was any smoking usage of it that resulted in any of these deaths that you were talking about?

Dr. WETLI. Not yet, but we are looking forward to it.

Mr. EVANS. Let me ask you one other question in that connection. I noticed in "High Times" magazine and in some of the paraphernalia shops they have, very, very commonly, apparatus for the transfer of this into a smoking compound. And of course, these shops do try to spread the word that you can get a better high, and the magazine does the same thing.

What is the potential for harm resulting from this type of commercial practice, which is in most States entirely legal?

Dr. WETLI. The smoking of cocaine is just recently becoming a fad, like any type of drug abuse, starting back in the 1800's. It goes in cycles.

Smoking cocaine has not yet reached, I think, popular proportions, at least down in the Miami area. But I am sure it is coming. And I am sure we are going to probably see deaths from it.

Dr. Byck is probably best qualified to answer that particular question, because he has done some work in this particular area of smoking cocaine.

Dr. BYCK. Well, smoking is appearing in a number of places in the United States. But it is not yet a widespread problem. What I am hoping is that any reporting of this serves not to advertise it, but to put it in perspective, that even people who otherwise don't think that cocaine is the devil can learn that this is an extremely dangerous habit.

Mr. EVANS. Dr. Byck, any reporting of it should reflect that this has a great deal more potential for harm than the way it is traditionally used, should it not? And I think anybody should know that the same way that they should know what Dr. Wetli was talking about—that you can't take just any amount of it and be OK.

I don't like to see people use it, but I don't like to see them die as a result of not knowing what they are doing, either. But I share your concern that the more we spread the word, that the more chance there is of people trying it, unless it is done in the proper way.

Dr. BYCK. I think that all of us can be caught in the position of trying to tell people how to do something illegally. It is a very bad bind to be in. But I do agree with you.

Mr. GUYER. We were deliberating not whether to pursue the subject to any great extent because of the fact that it might become an invitation. And we were aware of it.

The one thing we do need to do, I think, is look in the paraphernalia shops, for it is one of the best indexes we have as to how to judge the frequency of drug intake. And it is awfully hard to get statistics in this field. For example, we had an inquiry—this is the first hearing—from the city of Cleveland. In fact, I am supposed to get back to them this week. Because they suddenly have the curiosity, how do you tell where it goes on, and what about here at home?

So the staff of our Department is working on this now—DEA, at least. And it seems that the reporting is done by groups of States. We are going to try to get some kind of basis for them. But sometimes you can get overreactive in some of these things.

And to the tricyclist, the mother said, you stay out of the apples and cookies and candy, which gave him three ideas he may not have had.

So we don't want to make this an instrument where we do more harm than good. But we do want ourselves at least to know what we are talking about, lay it on the line and tell it like it is.

And with that note, I think we will thank you. And the hour has approached that I am told Congress is going to adjourn at 5 o'clock today. We usually go to 7 or 8, but there is a ball game tonight.

So we thank all of you. If you want to stay a few minutes afterward for any questioning or socializing, we will be happy to have you. Thank you.

[Whereupon, at 4:57 p.m., the meeting was adjourned.]

PREPARED STATEMENTS

Prepared Statement of Lester Grinspoon, M.D., Associate Professor of Psychiatry, Harvard Medical School, Boston, Mass.

Until recently scientific knowledge about cocaine use and abuse was very limited, and most of it was based on studies more than fifty years old. There were no controlled experiments on human beings; even the clinical literature was sparse and affected by the limitations and prejudices of an earlier era. Recently cocaine has been gaining popularity on the street faster than any other drug, and, partly as a result, more significant work has been done on it in the last five years than in the preceding forty. This research is of several kinds: controlled experiments on human beings and animals, animal studies aimed at discovering theoretical models of psychosis, studies on medical uses, clinical reports on adverse effects and treatment, surveys and sociological reports on illicit use, chemical detection and identification studies. There have been no surprising discoveries, but we have put our knowledge on a sounder basis and filled gaps in it. And since illicit use has become so widespread, it is easier to judge the effects and dangers of cocaine as it is ordinarily used, avoiding the bias and sensationalism that often accompany insufficient information. Our emphasis will be on work done in the last five years even when the results are a confirmation or summary of knowledge familiar from earlier work.

ACUTE EFFECTS

The central stimulant and sympathomimetic effects of cocaine are familiar: euphoria, confidence, energy, increased heart rate and blood pressure, dilated pupils, constriction of peripheral blood vessels, rise in body temperature and metabolic rate. They have recently been classified, with detailed references, in a useful paper (Byck and Van Dyke, 1977). An excellent summary of behavioral effects on animals is also available (Woods, 1977).

A recent study (Fischman et al, 1976) examines the cardiovascular and subjective effects of intravenous cocaine in nine subjects. Cocaine, dextroamphetamine, and placebo were administered in a controlled, double-blind experiment. The effects of cocaine on heart rate, blood pressure, respiratory rate, and mood increased as the dose was raised from 4 to 32 mg. Major effects were experienced only at doses of 16 mg. and above; subjects rated doses of 24 and 32 mg. as among the highest they had ever taken. Dextroamphetamine (10 mg.) was equivalent to 8–16 mg. of cocaine, and subjects usually had trouble distinguishing between the two drugs, although the effects of dextroamphetamine were sometimes perceived as lasting longer. The authors conclude that the stimulant action of cocaine resembles that of amphetamine. In another controlled study intranasal (snorting) and intravenous routes were compared. Nineteen illicit cocaine users took doses of 10 mg. and 25 mg. intranasally and intravenously, and 100 mg. intranasally. The 10 mg. intranasal dose had no observable subjective or physiological effect; at 25 mg. there was a rise in systolic blood pressure (no other physiological effects) and some euphoria (the most commonly reported feeling was relaxation). One hundred mg. affected mood strongly and also raised heart rate and diastolic blood pressure, but not respiratory rate or body temperature. Intravenous cocaine had marked physiological and mood effects even at the 10 mg. dose. In its effect on blood pressure, 25 mg. of intravenous cocaine was equivalent to 20 mg. of oral dextroamphetamine in another study. Twenty to

thirty minutes after the 25 mg. intravenous dose and 45–60 minutes after the 100 mg. intranasal dose, a few subjects suffered a mild letdown during which they experienced lethargy, irritability, and a desire for more cocaine (Resnick et al., 1977). The average street dose of cocaine, it is worth noting, is 20 to 50 mg. intranasally.

A report on the effects of intravenous cocaine in rhesus monkeys at doses of .05 to 5 mg. per kg. indicates increases in respiratory rate, body temperature, and heart rate only at the largest dose, while increases in pupil size, and changes in motor activity and other behavior begin at 0.2 mg. per kg. Changes in behavior were more clearly correlated with dose than physiological changes, and they occurred at much lower doses; for example, monkeys would press levers for a dose as low as 0.05 mg. per kg. (Wilson et al., 1976).

Cocaine has been administered to depressed patients orally and intravenously (Post, Kotin et al., 1974; Post, Gillin et al., 1974). Oral cocaine produced no consistent changes in mood and behavior up to a dose of 200 mg., although it reduced sleep time. Intravenous cocaine at doses of 2.5 to 25 mg. produced marked physiological and mood effects: heart and respiratory rates and blood pressure rose, and patients experienced a tearful emotional catharsis.

In another study cocaine was administered to normal subjects in 10 percent solution intranasally at doses of 0.19 to 1.5 mg. per kg. There was no consistent cardiovascular effect, and the peak blood concentration came about 60 minutes after application, much later than the high point of euphoria reported in street use of cocaine (Byck et al., 1977).

The last five years have put us in a better position than before to estimate the kinds and magnitude of adverse reactions. Studies of recreational users suggest that for the great majority, undesired effects are rare and not serious (Siegel, 1977; Waldorf et al., 1977). But some authorities familiar with the street scene insist that both laboratory experiments and surveys tend to underestimate their number and severity (Wesson and Smith, 1977). The most common undesirable effect is a feeling of irritability and lassitude after the effects subside, with a desire for more of the drug. Physicians in attendance at rock music concerts and elsewhere have reported an acute anxiety reaction with symptoms including high blood pressure, racing heart, anxiety, and paranoia (Rappolt et al., 1976). More severe effects like tactile and other hallucinations and delusions are uncommon but do occur. Hospitals rarely see cases of cocaine psychosis, but a few have been reported, mainly in habitual cocaine abusers (Wesson and Smith, 1977); it is qualitatively similar to amphetamine psychosis but lasts a shorter time, and for that reason among others rarely comes to the attention of physicians.

In high doses cocaine can cause depression of the medullary centers and death from cardiac or, more often, respiratory arrest. But in practice severe physical poisoning and death from the toxic effects are rare. There are no well-documented anaphylactic (allergic) reactions (Van Dyke and Byck, 1977). Six cases of death from cocaine poisoning in 1970–1973 are recorded in a 1974 paper (Price, 1974): in every case the cocaine was apparently either injected intravenously or eaten in large quantities. Another study of cocaine-related death (Lundberg et al., 1977) finds five documented cases and adds nine more, three of which involved cocaine alone, always taken intravenously: in the other cases alcohol, morphine, or other drugs were also involved. In a three-year survey of Dallas County, Texas, the authors of this study found only two of a total of at least 228 deaths caused by drugs in which cocaine was present at all. Another recent study uses data from coroners' and medical examiners' offices over an area with a population of 63,000,000 (Finkle and McCloskey, 1977). In the period 1971–1976, 111 fatalities were found in which cocaine was somehow involved. Twenty-five of the 111 were not toxic overdoses but deaths by murder, suicide, or accident related to drug use. Only twenty-six of the 111 cases involved cocaine alone, without other drugs. The increase from 2 deaths associated with cocaine in 1971 to 29 in the first six months of 1976 suggests both more cocaine use and more awareness of cocaine on the part of coroners and medical examiners. Of the twenty-six deaths associated with cocaine alone, four (15.4 percent) were from oral cocaine, either suicides or smuggling incidents; two (7.7 percent) were from intranasal use; the rest were from intravenous injection or the method of administration was unknown. Six of the 26 were suicides. Most of the deaths were from respiratory arrest preceded by seizures. Deaths from opiates and cocaine in combination were more common than deaths from cocaine alone. A

still more recent study of 68 deaths associated with the recreational use of cocaine from the Medical Examiner's Office of Dade County in Florida found that over a 10-year period, 24 persons died directly of the toxic effects of cocaine. The drug was taken intravenously in 11 instances, orally in 7, and nasally in 5 (the method of administration was undetermined in one case). All but one of the oral cocaine fatilities were due to overdoses which arose from attempts to use the gastrointestinal tract as a place to hide the drug from authorities. (Wetli and Wright 1979) From May 1975 to April 1976 medical examiners reported to the Federal Drug Abuse Warning Network (DAWN) 57 cocaine-related deaths including 6 (out of 4,668 drug-related deaths) that involved cocaine alone (Petersen, 1977).

For acute cocaine overdose, the recommended treatment is administration of oxygen (under pressure if necessary) with the patient's head down in the Trendelenburg position, muscle relaxants if required to accomplish this, and if there are convulsions, intravenous short-acting barbiturates (e.g., 25–50 mg. sodium pentothal) (Gay and Inaba, 1976). For the anxiety reaction with hypertension and tachycardia, 10 to 30 mg. of intravenous or intramuscular diazpam has been recommended. An alternative that seems to be a specific antagonist of cocaine's sympathomimetic effects is propranolol (Inderal), a blocker of peripheral adrenergic receptors. Fifty cases have been successfully treated with one mg. of propranolol injected intravenously every minute for up to eight minutes. (Rappolt et al., 1976; Rappolt et al., 1977).[1]

Because cocaine increases energy and confidence and can produce irritability and paranoia, it has often been said to cause physical aggression and crime. Although it clearly can do so in some circumstances (Grinspoon and Bakalar, 1976, p. 225), there is no evidence of any consistent association. The effects on aggressive behavior have been studied in mice, monkeys, and pigeons (Hutchinson et al., 1976; Hutchinson et al., 1977). Like caffeine and nicotine, cocaine increases nonattack behavior produced by a noxious stimulus more than it increases attack behavior; in contrast, dextroamphetamine causes a relative increase in attack responses. What little evidence there is suggests that cocaine is not as conductive to aggression as other drugs like alcohol, barbiturates, and amphetamines.

CHRONIC EFFECTS

These have recently been summarized with detailed references (Byck and Van Dyke, 1977). It is important not to attribute to ordinary recreational use the kinds of pathological effects observed in high-dose intravenous injection by laboratory animals. If it is used no more than two or three times a week, cocaine creates no serious problems (Siegel, 1977). Taken daily in fairly large amounts, it can disrupt eating and sleeping habits, produce minor psychological disturbances including irritability and difficulty in concentration, and create a serious psychological dependence (Waldorf et al., 1977; Siegel, 1977). Although there is no physical dependence, sometimes mild withdrawal like anxiety and depression arise. Perceptual disturbances (especially pseudohallucinations), paranoid thinking, and rarely, psychoses also occur in chronic users (Wesson and Smith, 1977; Siegel, 1977). Runny or clogged noses are common; often they are treated with nasal decongestant sprays. Less often, noses may become inflamed, swollen, or ulcerated; in the older literature there are reports of perforated septa, but it is hard to find them today. All the undesirable effects (except, of course, nasal problems) are much more commonly produced by intravenous injection.

In experiments where unlimited access to intravenous cocaine is provided, animals will kill themselves by voluntary injections. In one recent experiment, for example, monkeys to whom intravenous cocaine was available 23 hours a day (infusion of 0.2 mg. per kg.) developed hyperactivity, tactile hallucinations, ataxia, severe weight loss, tremors, and convulsions as they continued to inject the drug; they died within five days. Methamphetamine and dextroamphetamine had similar effects (Johanson et al., 1976).

[1] A warning should be added. In a recent letter to the *New England Journal of Medicine* (December 1, 1977), John D. Catravas and several colleagues at the University of Mississippi described a controlled experiment in which they gave dogs intravenous propranolol (6 to 10 mg. per kg.) and an hour later a fatal dose of cocaine. The propranolol did not prevent or retard death, although pretreatment with chlorpromazine did. The authors warn that propranolol is effective at best only against moderate overdose and should not be regarded as a protection against lethal dangers.

Although human beings do not use cocaine in this way, craving can become a serious problem for those who have constant access to it. Users sometimes find it necessary to deny themselves access to cocaine for a few days or weeks (Waldorf et al., 1977); some have been known to try to lock up their bank accounts so that they will not spend all their money on it (Resnick and Schuyten-Resnick, 1976). Because of this potential for psychological dependence and the accompanying problems, people familiar with cocaine are aware of a need for caution in using it.

Dependence potential varies with route of administration. For example, animal experiments continue to show that intravenous cocaine is one of the most powerful, possibly the most powerful of drug reinforcers (Woods, 1977; Goldberg and Kelleher, 1977; Johanson and Schuster, 1975). Monkeys will also smoke a cocaine cigarette and chew cocaine-based gum; they prefer a cocaine cigarette to a lettuce cigarette, but they do not choose cocaine gum over procaine or ordinary sugar gum (Siegel et al., 1976).

Other issues explored in recent research are tolerance and sensitization. Recent experience has confirmed that at the usual recreational doses tolerance to the euphoric effect does not arise. One study on monkeys found progressive tolerance to the convulsive effect of daily high intravenous doses (starting at 3.1 mg. per kg.), which disappeared after 40 days when the drug was discontinued. Tolerance also developed for cardiac and respiratory stimulant effects in this experiment (Matsuzaki, 1976). But other studies have found that chronic treatment lowers rather than raises the convulsive threshold in rats (Stripling and Ellinwood, 1977). More undisputed are the phenomena of reverse tolerance or sensitization observed in animal experiments. Rats show increasing hyperactivity and sterotyped movements for an hour or two after each of a series of daily injections of the same dose (Post and Rose, 1976; Stripling and Ellinwood, 1976; Kilbey and Ellinwood, 1977a). This increased sensitivity endures for as much as seven weeks after the drug is discontinued (Kilbey and Ellinwood, 1977b). Several theories have been developed to account for the sensitization effect (Stripling and Ellinwood, 1977), which is also produced by amphetamines. It may partly account for the fact that stimulant psychoses occur mainly in chronic abusers who take a higher dose than usual for a short time.

At present chronic cocaine abuse does not commonly appear as a medical problem, and this is little literature on treatment. For chronic cocaine abusers who appear at clinics in a state of anxiety, diazepam or chloral hydrate has been recommended. For long-term treatment the only recommendations are very general—counselling or psychotherapy (Gay and Inaba, 1976).

Animal experiments and some human cases show that cocaine has a real potential for abuse, but at the present level of use it does not present many serious social or medical problems. For example, according to the records of DAWN, in May 1975–April 1976 cocaine alone or in combination with other drugs was involved in only 3.6 percent of cases at drug crisis intervention centers and less than one percent of drug cases in hospital emergency rooms (Petersen, 1977). The Client Oriented Data Acquisition Process (CODAP) reports that 1.2 percent of clients appearing at federally funded drug treatment facilities in 1975–1976 (about 650 clients in all) gave cocaine as their primary drug of abuse; another 4 percent reported cocaine as a secondary drug problem (Siguel, 1977). It is hard to say what the reality behind these statistics is, since they say nothing about the nature or real causes of the problems faced by cocaine users. Some authorities contend that there is much hidden cocaine abuse, especially in combination with depressants like barbiturates, heroin, and alcohol (Wesson and Smith, 1977), some of which has serious consequences that do not come to the attention of any treatment system. In general, cocaine seems to present some of the same dangers as the amphetamines, but in a less severe form. Most cocaine users have learned ways of taking the drug that prevent adverse effects. Whether the present high price and limited accessibility are also crucial in forestalling abuse remains to be seen.

MEDICAL USES

The only recognized medical use for cocaine in this country is as a topical anesthetic in eye, ear, nose, and throat surgery and in endoscopy of the upper respiratory and digestive tracts. This use has recently been defended as safe, effective, and necessary in the face of suggestions that it should be stopped because adequate substitutes are available (Schenck, 1975). Cocaine combines vasoconstriction (especially important in nasal surgery), long duration of anes-

thesia (an hour), and relatively low toxicity in a way no synthetic topical anesthetic can duplicate. The usual maximum dose is 200 mg. The practice of using epinephrine along with cocaine to retard its absorption by the mucous membranes has been rejected as unnecessary and dangerous (Anderton and Nassar, 1975). A questionnaire was recently sent to 1,500 plastic surgeons; of 741 who answered, 592 used cocaine in nasal surgery. They had seen no deaths and 14 severe reactions in 93,004 cases. Ninety-five had never used cocaine, and 54 had stopped using it; the latter had seen five deaths and 20 severe reactions in 15,028 cases (Freehan and Mancusi-Ungaro, 1976).

Cocaine is also used in Great Britain and Canada, but not in the United States, as an ingredient in Brompton's mixture, a preparation for treating the chronic pain of terminal cancer. The drink contains 10 mg. of cocaine and 5 to 20 mg. of morphine in a base of alcohol and sugar syrup (Mount et al., 1976; Melzack et al., 1976). The cocaine probably serves to prevent too much sedation and clouding of the senses while enhancing pain relief. In the United States a similar use has recently been found for amphetamine in combination with morphine.

A major use of stimulants in medical research is the study of model psychoses (Ellinwood, 1974; Grinspoon and Bakalar, 1976, pp. 167–175). Cocaine and amphetamines mimic functional psychoses more closely than any other drugs. The sensitization of animals to certain effects of cocaine after chronic treatment and the progressive changes in their behavior may correspond to the development of a functional psychosis in human beings under chronic stress. By analogy with the lowering of the threshold for convulsions by repeated electrical stimulation of the limbic system, it has been proposed that cocaine produces a kind of pharmacological kindling of the mechanisms that cause hyperactivity and stereotyped movements in animals, and, presumably, psychosis in human beings (Post et al., 1976; Post, 1977). The effect probably involves the neurotransmitter dopamine; the peculiar pharmacological properties of cocaine as opposed to amphetamines (Groppetti and di Giulio, 1976; Scheel-Kruger et al., 1977) may prove relevant to this research.

DETECTION AND IDENTIFICATION

Because of greatly increased medical and legal requirements, much work has been done on this in the last few years. For identification of street samples, methods used include cobalt thiocyanate tests (Winick and Eastly, 1975), a test based on the odor of methyl benzoate (Grant et al., 1975), thin-layer chromatography (Winnick and Eastly, 1975), high pressure liquid chromatography (Trinler and Reuland, 1975), and gas-liquid chromatography (Hammer et al., 1974). Tests for cocaine and its metabolites in blood plasma and urine include gas-liquid chromatography (Javaid et al., 1975), which is slow and expensive but sensitive; thin-layer chromatography (Wallace et al., 1975), which is rapid and cheap but less sensitive; EMIT or enzyme multiplied immunoassay technique (Jatlow, 1976); mass spectrometry; and others. The various identification methods have recently been summarized in several papers (Bastos and Hoffman, 1976; Jatlow, 1976) and their relative merits estimated (Hawks, 1977).

RESEARCH IMPLICATIONS

An important area for further research is the study of model psychoses and their relation to the effect of cocaine on neurotransmitters. For this purpose studies on the modification of cocaine effects by other centrally-acting drugs are necessary, as well as comparisons between the pharmacology of cocaine and that of amphetamines and tricyclic antidepressants. Differences and similarities between the acute effects of cocaine and amphetamines must also be explored further, and behavior changes produced in animals by chronic stimulant use must be defined more carefully.

Other research topics are also of interest. One is the exploration of structural variations on the cocaine molecule for medical purposes. It will also be useful to clarify ideas about drug abuse and drug dependence by further animal experiments comparing cocaine with other drug and nondrug reinforcers. Since abuse potential seems to depend greatly on route of administration, more experimental work is needed on the effects of intranasal and oral as opposed to intravenous cocaine. Finally, more detailed clinical and demographic studies of chronic cocaine abusers who come to treatment centers would throw light on a subject about which very little is known and improve our capacity for treatment and prevention.

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PREPARED STATEMENT OF ROBERT BYCK, M.D., DEPARTMENT OF PHARMACOLOGY YALE UNIVERSITY SCHOOL OF MEDICINE

Mr. Chairman, distinguished members of the Committee on Narcotic Abuse and Control: Thank you for the opportunity to testify before this committee. My name is Robert Byck and I reside at 1405 Yale Station, New Haven, Connecticut. I am a physician and a psychiatrist and am Professor of Psychiatry and Pharmacology at Yale University School of Medicine. I practice as a clinical psychiatrist, teach in the Yale University School of Medicine, and do research and consultation as a clinical pharmacologist. A clinical pharmacologist is a scientist who studies the effects, action, and disposition of drugs in man. I was a Burroughs Wellcome Scholar in Clinical Pharmacology from 1972 to 1977 and have been involved since 1974 in clinical studies on the actions of cocaine in man.

At Yale I teach medical students and house staff in both the Departments of Psychiatry and Pharmacology. Much of my teaching is directed towards an understanding of the use of narcotics and other dangerous drugs. I am the author of major textbook chapters on drugs used in psychiatric disorders as well as the psychological basis for drug taking.

I collected and edited Freud's cocaine papers in a book published in 1974 and am an author or co-author of over 25 publications and presentations on cocaine. I have done basic work in the actions of marijuana on nerve membrane and was, until this year, a member of the Initial Review Group for the National Institute on Drug Abuse.

My colleagues and I were contributors to the National Institute on Drug Abuse monograph Cocaine 1977. Members of the group and I recently attended the first Interamerican Seminar on Coca and Cocaine held in Lima, Peru on July 2–6, 1979. In that seminar most of the major research investigators into cocaine were present and there was a useful exchange of information and opinion. The seminar was supported in part by the Department of State and the Pan American Health Organization.

The National Institute on Drug Abuse has supported my research on cocaine by both the contract and grant mechanism since 1974. I am particularly pleased to be here today because it is my opinion that the government of the United States should pay attention to the work it has paid for. I hope to give you a modern perspective on cocaine, an overview of dangerous drugs, a statement of a new problem, and suggestions as to what can be done to deal with problems of cocaine use and abuse. The new problem, smoking of coca paste or free base, calls for immediate action on the part of the government.

COCAINE

Perhaps I am in the wrong place. This is a Select Committee on Narcotic Abuse and Control. Cocaine is not, by any pharmacological definition, a narcotic. Although legally classified as a narcotic, it is pharmacologically classified as a local anesthetic and stimulant drug. Its pharmacological actions are not similar to the opiate or morphine like drugs which are truly narcotics.

Cocaine is a dangerous drug. So also are alcohol, tobacco, aspirin, and penicillin. The Committee should understand the varying meanings of "dangerous" in order to put cocaine in perspective. A drug is not dangerous simply because it can kill you. One has to consider why the drug is being used, in what dosage, and with what regularity. This can then be related to the size of the population at risk. Those are some of the considerations leading me to classify aspirin and penicillin as dangerous drugs. Aspirin kills more people than cocaine, as does penicillin. Usually deaths from aspirin are deaths from accidental overdose or suicide. Deaths from penicillin are from adverse reactions, usually of an allergic nature. However, to put these facts into perspective, one must recognize that these are drugs used by, and available to, large populations.

Cocaine, like all drugs, can cause death if taken in large doses. It is important to recognize that an extremely high dose of cocaine, far higher than those used in the street or in any of the usual forms of abuse, is required to produce convulsions and death.

Coca and cocaine are used by at least twelve million people in the world and probably at least two million people have been exposed to cocaine in the United States. In order to look at any mortality figures to judge dangerousness you must know the size of the population at risk, the frequency of drug use, and the time over which that population was observed. It is important to look at the accuracy of the reporting methods and establish criteria for scienitfic acceptability. [In a separate document (Addenda 1) Dr. Peter Jatlow lists criteria for ascribing a death to cocaine.]

Another aspect of dangerousness is not related to death but rather to whether users become sick or disabled. Any drug taken in adequate amounts can cause harm. The question to address is: In the amounts usually used, does cocaine make people sick or hurt them? Certainly its modern medical record is clear. It is a safe local anesthetic and vasoconstrictor, that is, a drug which constricts blood vessels. My colleagues and I demonstrated, in a fourth-coming article in the Journal of the American Medical Association, that cocaine, used for anesthesia, causes no unusual or adverse cardiovascular effects.

One must also ask: Can illicit users get into serious psychological or other medical trouble with cocaine? Here the answer is yes. But that answer must be a qualified yes. I will qualify it by giving a brief discourse on cocaine in relation to important variables of pharmacology.

EFFECTS AND DOSE

If you give a large enough dose of cocaine to a normal man by the intranasal route, that is if he snorts it into his nose as a powder or it is placed into his nose in a solution, the following will happen. First, the inside of his nose will become anesthetized. He will be able to feel nothing except a chilly feeling and a numbness. The blood vessels in the nose will become constricted very tightly. It

is that property that makes cocaine a unique local anesthetic. The person's blood pressure will rise over the course of the next hour. The degree his blood pressure will go up depends on the dosage used or the amount placed into the nose. His heart rate will increase and he may show an increase in temperature. At large doses his pupils will get bigger. At moderate doses there is no particular effect on breathing but at very high doses breathing will stop. At very high doses cocaine, like all local anethetics, will cause convulsions.

The drug user becomes "high," feels good, and often feels a sense of calmness as well as energy. Psychologically cocaine usually causes an intense euphoria or sense of well-being, the primary reason for its popularity. After repeated high doses of cocaine a person may become fearful of others or paranoid. It is still debatable as to whether or not cocaine can cause a psychosis or insanity and it is quite clear that such psychoses, when they do occur, rapidly resolve. In animal studies, where monkeys were set up to administer cocaine to themselves, researchers found that cocaine is one of the most potent reinforcers.

Because something is enjoyable does not make it either dangerous or bad. Elsewhere our society would be an exceedingly dull one. What is there about cocaine and cocaine use which has caused it to be treated with such unreasoning fear and often inappropriate regulation?

EFFECTS ARE DEPENDENT ON HOW THE DRUG IS TAKEN

In order to examine the drug and its effects we have to know the form in which it is given. Is it a natural substance, a crude extract, or a pure pharmaceutical preparation? Next, the amount of pure substance administered and the chronicity and duration of use should be considered. All of these factors can change the effects of the drug and so are important in this Committee's consideration of cocaine use in the United States. Since humans vary in their personality characteristics and in physiology, we must also consider the people who use cocaine and how the use of the drug interacts with their bodies, personalities, and activities.

Different people take cocaine in all forms for different reasons. For example, eight million Indians in South America chew coca leaves as part of their culture. The most active ingredient in coca leaves is cocaine. Our group has demonstrated, in collaborative experiments with Peruvian investigators, that when coca leaves are chewed cocaine is found in significant amounts in the blood of the chewers. Yet, although these leaves are chewed by a chronically improberished and depressed population, there is no significant public health problem which has yet been identified as a result of coca chewing. The question of whether coca chewing causes damage is moot after 2,000 years of coca use by these Indians.

It is apparent that coca chewing, if not a totally benign method of cocaine administration, is certainly not one which has caused obvious difficulties. Despite this, coca leaf is pertinent to this Committee's investigation since large coca plantations may provide a source for the cocaine entering the United States. We should, however, recognize that this habit, although foreign to us, is an integral pattern in the culture of eight million people and cannot lightly be interfered with.

At Yale we have demonstrated that cocaine, given in gelatin capsules, is well absorbed from the gastrointestinal tract and produces significant levels of cocaine in the blood. In fact it has all the actions of snorted cocaine with a somewhat different time course. Many of the deaths reported from cocaine are from oral use. Ofttimes this is the result of a smuggler or a dealer attempting to swallow immense doses in order to hide them. Since the drug is well absorbed such events are often lethal. Drug abuse with oral cocaine is relatively infrequent and I know of no instances of death by the oral route after recreational use of the drug.

For reason of tradition, rather than pharmacology, snorting is the preferred route of drug abusers in this country. Most "of" the street preparations which are available are not pure cocaine but contain other local anesthetics, inert sugars, or other adulterants. It is this adulteration, along with the exceedingly high price, which results in the relative "safety" of cocaine in the United States. Snorted cocaine acutely causes an increase in heart rate and blood pressure and dilation of the pupils, but chronic use may lead to damage of the mucus membranes of the nose. Intranasal use of cocaine does not present an obvious medical or public health danger in the United States.

Cocaine can also be dissolved and injected intravenously. The effects of intravenous injection are rapid; the absorption is complete and most of the actions are seen almost immediately. Although a relatively infrequent route of drug-

abuse, this certainly is one of the most dangerous. Complications from the intravenous route are not limited to the effects of the drug, but may result from other drugs, bacterial contamination, and from foreign materials. One must be careful not to attribute these adverse effects to the drug itself but rather one must assign them to the route of administration. The effects by all routes are similar and vary only in their intensity depending on the dose.

The drug is broken down in the body by enzymes in the plasma. Some people are genetically different and do not have these enzymes, so that some of the severe adverse effects reported from cocaine may be from this small group of people who lack the enzyme to metabolize the drug.

"COCA PASTE" AND "FREE BASE"

Reports from South America and in this country have indicated that there is an increasing use of crude coca paste or free base cocaine taken by smoking. When the leaves of coca are converted into cocaine, in order to decrease their volume a crude material known as coca paste is prepared in South America. This coca paste, which contains from 40–85 percent cocaine, is now utilized by smoking in cigarettes, in which it is combined with tobacco or marijuana. This I believe is a serious new problem and cocaine suddenly could become a dangerous drug used in this way.

Drs. Jatlow and Bailey of our group at Yale developed a method for measuring the amount of cocaine in the blood. We recently reported to the American Psychiatric Association in Chicago the effects of smoking coca paste in young men. Those experiments were done in Peru in collaboration with Dr. Raul Jeri of the University of San Marcos. Dr. Jeri had previously reported 148 cases of psychiatric hospitalizations of individuals who had been smoking coca paste. This was striking; Peru has had cocaine available for thousands of years and has never had a serious drug abuse problem prior to the advent of smoking.

We were particularly interested in what happened when individuals smoked coca paste under their usual circumstances. We found that the amounts of cocaine in the blood after two minutes of coca paste smoking were greater than those found an hour after similar doses by the intranasal route. There was an extremely rapid rise in the amount of cocaine in the blood when coca paste was smoked. It was obvious that this route of administration appeared much closer in its effects to an injection than it did to the usual intranasal route.

The person who smokes coca paste has a very intense euphoria almost immediately after he starts smoking the cigarette. Within 15 minutes after smoking one cocaine containing cigarette, his elevated mood decreases and, although he is still feeling the drug effect, he has painful anguish, depression, and drug yen. At the time of that anguish he still has significant levels of cocaine in his blood. In order to cure the anguish and intense drug craving, he will light up again and continue to smoke.

The difference between coca paste smoking behavior and the usual use of cocaine in this country depends on that intense bad feeling and desire for additional use of the drug. The patterns of use are compulsive and continuous. Users become totally dependent on the drug, will do anything to get it, and may use it to the extent where they become paranoid, are totally involved with drug taking, and become social cripples. Continuous coca paste smoking may lead to psychiatric hospitalization. At the conference in Lima, Andrew Weil, a student of coca and cocaine, told me that a woman he had met who smoked coca paste had said, "It's nice but it has a hook in it."

I think that this is a point to which the Committee should direct its attention. There is a hook in smoked cocaine. People become compulsive users. For that reason it is important that we bring attention to this use pattern and, by research and comparative sociological and ethnographic study, examine the dangers of this new pattern of cocaine use. In the U.S. manufacturers have been advertising smoking pipes and chemical kits for conversion of street cocaine to a material known as free base, which is similar to coca paste. I believe this is a dangrous habit and can represent the same threat that the speed epidemics of the 1960's represented in their time. Let me emphasize that, although cocaine itself can be a relatively safe material, this new route of administration can change that picture. We do not yet have an epidemic of free base or coca paste smoking in the United States. The possibility is strong that this might occur. It is occurring in the countries of South America. We must learn about this route of administration and its effects. Cocaine smoking represents a serious health hazard.

Of course the other routes of administration are not entirely innocuous and recurrent and repeated use of any drug can never be deemed medically safe. However cocaine has a far worse reputation than its pharmacology indicates and so, as with marijuana, it would be unwise to represent falsely the health dangers of its use. Our society has chosen to select what intoxicants will be legal and illegal. We have made an unfortunate choice in taking two of the most dangerous, alcohol and tobacco, and making them the drugs of choice for legality in our society. We should not confuse the use of cocaine with either criminality or aggressiveness. There is no evidence that cocaine causes an increase in aggression but there is ample evidence that alcohol does. There is no evidence that cocaine causes an impairment in performance in acute use but alcohol does. There is no evidence that, in the commonly used routes in the U.S., cocaine represents an acute or chronic health hazard of any significance, but there is no question that tobacco does.

In summary, cocaine should be regarded as a medically useful drug but making it freely available would be medically and socially unwise. Even though it is a relatively benign drug, pharmacologically cocaine is often abused. It can be used repeatedly by either the intranasal or oral route, as well as by the intravenous and smoked route. Although it does cause a euphoria, excessive use of this or any other drug may interfere with an individual's productivity and his contribution to society. Because cocaine is so intensely pleasing to the user it will always be smuggled into the U.S. We should pay serious consideration to decreasing the profits of this trade. These, however, are political and sociological issues and are in the domain of government, not science.

On the other hand, we know that cocaine, like amphetamine, can be used safely. We should attempt to maintain our reason and increase our knowledge and not to choose pharmacological villains. We should recognize that there is a danger of a drug abuse epidemic of cocaine because of a new route of administration rather than because of new properties of the drug. For that reason I would suggest that an intensive cross-cultural investigation be made of coca paste smoking, and that a commission be formed to examine ways of prevention and education. The advertising of cocaine smoking by the paraphernalia manufacturers should be restricted by agreement.

Cocaine has been glamourized in the media and by its association with well known, wealthy, and popular figures. Television, newspapers, and magazines must recognize that when they report on cocaine in a fashionable context they are providing the most effective advertising for the use of the drug. The media should use caution in reporting about it. The results of the reporting should not have the effect of advertisement for cocaine but rather should present a reasoned and informed truth about the subject. Caution is therefore indicated.

I don't think we can wait a long time for this research and planned educational campaign to get under way. We are on the brink of a dangerous drug use phenomenon. We should do something about it as rapidly as possible. This might involve collaborative research with South American countries and application of our best thinking in order to avert the problem. It is particularly important that research continue to be supported so that actions of the drug, as well as reasons why people use drugs in particular patterns, can be investigated. It is, finally, equally important that legislators, scientists, educators, and the press get together to open a discourse on how to deal with problems of drug abuse in more effective ways.

ADDENDA BY PETER JATLOW, M.D., PROFESSOR OF LABORATORY MEDICINE AND PSYCHIATRY, YALE UNIVERSITY SCHOOL OF MEDICINE

There is insufficient knowledge about the toxicity of cocaine to establish definitive criteria for attributing a fatality to the effects of cocaine. We have listed below (section A) ; problems or caveats which complicate the evaluation of possible cocaine-related deaths, and (B) : criteria which should be met before cocaine can be assigned a possible role in the causation of a death.

A. PROBLEMS

(1) The route (i.e., oral, nasal, intravenous) and rate of administration may be more important than the total amount used, or found in the body (i.e., blood) in causation of toxicity or other cocaine effects.

CONTINUED

1 OF 2

(2) Cocaine has a very short (1 hr.) half-life in plasma (i.e., is rapidly removed from blood by excretion and degradation). Therefore, if much time elapses between administration of cocaine and death, blood levels may be misleadingly low.

(3) Even after death, cocaine continues to undergo rapid degradation. Therefore, if there is a delay in obtaining the specimen after death, blood concentrations may also be misleadingly low.

(4) Even after the specimen is taken, cocaine is still not stable because it is rapidly degraded by an enzyme called serum cholinesterase. Therefore, unless an inhibitor of this enzyme is added to the specimen, the analysis will not be valid.

(5) The issues discussed in items 2, 3, and 4 above can lead to the erroneous assumption that relatively low concentrations of cocaine can cause toxicity and/or death.

(6) Cocaine is often "cut" (adulterated) with other substances, such as lidocaine, which not only can emulate the effects of cocaine, but which also have well established serious toxic effects themselves.

(7) Some individuals have deficient activity of the enzyme (serum cholinesterase) which degrades cocaine in the blood. It is possible (but by no means established) that such individuals are more susceptible to cocaine toxicity than the normal population.

(8) All of the above comments relate to the acute effects of cocaine. Little is known about the chronic effects and toxicity of cocaine.

B. CRITERIA FOR POSSIBLE IMPLICATION OF COCAINE IN A FATALITY

(1) Cocaine and/or its metabolites are found in biological fluids.

(2) Cocaine concentrations in the blood at the time of death is greater than 1 ug (1000 ng)/ml.

or

Cocaine concentration obtained one hour after administration (or death) is greater than 500 ng/ml.

Note that concentrations as high as those described above have been observed in humans without serious toxicity.

(3) Measurements of cocaine in blood plasma should be performed on specimens which have been adequately collected and stored. This includes addition of an inhibitor of the enzyme cholinesterase which degrades cocaine.

(4) Measurements of cocaine in blood plasma should be performed with adequate methodology. Established methodology for the accurate measurement of cocaine in blood plasma includes: (a) gas chromatography with a nitrogen detector; (b) gas chromatography with an electron capture detector; (c) mass fragmentography.

(5) No other drugs or other toxic substances are found in significant concentrations in body fluids following a carefully and comprehensive toxicological analysis.

(6) No other cause of death (i.e., trauma, metabolic illness, heart attack, stroke, etc.) is determined by post mortem examination, chemical analysis or history.

COCAINE: A MAJOR DRUG ISSUE OF THE SEVENTIES

WEDNESDAY, OCTOBER 10, 1979

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE ON NARCOTICS ABUSE AND CONTROL,
Washington, D.C.

The Select Committee met, pursuant to notice, at 1:20 p.m., in room 2212, Rayburn House Office Building, Hon. Tennyson Guyer (acting chairman of the Select Committee) presiding.

Present: Representatives Lester L. Wolff, E de la Garza, Benjamin A. Gilman, Robert K. Dornan, and Robert L. Livingston.

Staff present: Patrick L. Carpentier, chief counsel; Alma Bachrach, chief of staff—supply; Roscoe Starek, minority counsel; Toni Biaggi and Elliott Brown, professional staff members.

Mr. GUYER. We are going to call the committee to order. We have some members that will be here, but due to the fact that much of the testimony has been recorded, they can catch up when they arrive.

I want first of all to thank all of you for coming and the caliber of witnesses that we have. And I want to thank the staff for their part in assemblying the hearings and contacting the witnesses. They have done an enormously good job. And we want to thank the press and all media for their coverage. We realize a lot of more important things are going on in addition to us, and we think this is very important. And we are happy you are here.

So I am just going to say briefly that today's hearing is the third in a series concentrating on the drug cocaine. The committee will seek to determine cocaine's cost to society in terms of human suffering and the inevitable expense of law enforcement efforts that pertain.

A major purpose of this special task force has been to dispel the notion that cocaine is a harmless drug therein creating a climate of acceptance. Today's witnesses will provide another dimension to the cocaine story. The committee will hear testimony which will make us question the glamorization of this drug and will show that adverse effects are not only a possibility, but a definite reality.

The availability, abuse and popularity of cocaine in the United States has reached pandemic proportions with between 19–23 metric tons having illegally entered the country in the last year.

The activities of a major cocaine ring operating in the Washington metropolitan area were recently disrupted through the efforts of a Drug Enforcement Administration Task Force. Today, we have the privilege of hearing firsthand from Detective Michael Hubbard, a member of the Metropolitan Police Department, and a principal investigator of the task force, what lies beneath the headline, "Agent tells of infiltrating drug ring as porn seller."

Testimony will also reveal the character of individuals presently involved in the trafficking of cocaine and the lure of high profits which is adding to the increase of white-collar involvement in the trade.

In addition to the law enforcement aspects surrounding cocaine, the committee is highly interested in cocaine's effects on human lives. Two residents of a drug treatment facility will discuss the problems associated with obtaining and using cocaine, and the effects the drug has had on their lives.

I might ask this as a favor, when we get down to the residents of Phoenix House, we are going to ask you to regard the confidentiality of the witnesses. We have no obligation to the recording of their voices, but we will ask that you not take pictures.

They are coming in this role which is very much appreciated, and I don't think we are tying anybody's hands in asking this as a courtesy.

We are very happy to welcome our principal witnesses now. And we might just introduce the panel here.

We have Nash Schott, assistant U.S. attorney, Eastern District of Virginia. Would you like to identify yourself?

Mr. SCHOTT. Yes, sir.

Mr. GUYER. And Leonie Brinkema. Did I pronounce that correctly?

Ms. BRINKEMA. It is Leonie.

Mr. GUYER. And she is the assistant U.S. attorney, Eastern District of Virginia, and I understand has done a great job as well.

Ms. BRINKEMA. Thank you.

Mr. GUYER. And Justin Williams, U.S. attorney, Eastern District of Virginia, here for questions only, is that right?

Mr. WILLIAMS. That's correct, sir.

Mr. GUYER. And Detective Michael Hubbard of whom we are very proud, Organized Crime Branch of the Metropolitan Police Department assigned to DEA Task Force.

Mr. HUBBARD. Good afternoon, sir.

Mr. GUYER. Thank you.

And then, to the second panel, we will introduce later the following witnesses.

So in the interests of the economy of time, we are going to go right into the testimony. And I will ask you all to just raise your right hands.

[The witnesses identified were sworn by Mr. Guyer.]

Mr. GUYER. And we are going to take the order in which I think you have asked. And that is to have Mr. Schott make the opening statement. And we may be interrupted by the bells as you know how this works here for quorum calls or votes. So I think we will try to have all testimony at one time and then come back for a question period afterward.

TESTIMONY OF NASH E. SCHOTT, ASSISTANT U.S. ATTORNEY, EASTERN DISTRICT OF VIRGINIA, U.S. DEPARTMENT OF JUSTICE

Mr. SCHOTT. Good afternoon, members of the committee, Mr. Chairman. My name is Nash Schott, and I am an assistant U.S. attorney from the Eastern District of Virginia and chief of our Major Drug Traffickers Prosecution Unit. With me here today on my left is Justin W. Williams, U.S. attorney, Ms. Leonie M. Brinkema, assistant U.S. attorney, and a member of our narcotics unit, and Detective Michael

Hubbard, who is assigned to the Organized Crime Branch of the Metropolitan Police Department.

The U.S. Attorney's Office for the Eastern District of Virginia is responsible for all prosecutions in the eastern half of the State. We have three offices: one located in Alexandria, one in Richmond, and one in Norfolk, Va.

This past summer, because of the increased complexity of narcotics cases, the growing degree of specialization required, and because of a continuing commitment to vigorously pursue these cases, the U.S. attorney, Justin Williams, established the first Major Drug Traffickers Prosecution Unit our District has ever had.

There are three other assistants who work with me, and we are responsible for all Federal narcotics prosecutions in our District. Of the 95 U.S. attorney's offices around the country, 24 of these offices have such narcotics units.

This past summer, Ms. Brinkema and myself tried a major narcotics cocaine conspiracy case entitled *U.S.* v. *Tillery, et al.*, which resulted in a successful prosecution of nine defendants. It was the first time in our District that a Title III Court Authorized Wiretap was ever used in a narcotics investigation. Ms. Brinkema and Detective Hubbard are here to respond to questions along with myself about various problems and issues that they dealt with in the investigation of that case.

In addition, we are fortunate in that Mr. Williams, the U.S. attorney, has had a great deal of experience both as an Assistant Commonwealth attorney in Virginia and as a Federal prosecutor during the past 10 years with all types of narcotics cases and the prosecution of cocaine cases.

At this time, I would like to turn the microphone over to Ms. Brinkema who will describe some of the problems and techniques in the investigation which resulted in the case of *U.S.* v. *Michael Tillery, et al.*

Mr. GUYER. Thank you very much.

Mr. SCHOTT. Thank you.

Mr. GUYER. Ms. Brinkema?

TESTIMONY OF LEONIE M. BRINKEMA, ASSISTANT U.S. ATTORNEY, EASTERN DISTRICT OF VIRGINIA, ALEXANDRIA DIVISION, U.S. DEPARTMENT OF JUSTICE

Ms. BRINKEMA. Good afternoon, members of the committee. I am just going to briefly summarize what I have submitted to the committee already in a formal written statement.

Mr. GUYER. Fine.

Ms. BRINKEMA. Basically, I am just going to summarize the role which I played as a prosecutor in this cocaine investigation.

As the committee may already know, in most major criminal investigations, the prosecutor becomes involved at a very early stage with the police. In this particular case, we had two types of teamwork going on. The first set of teamwork was that between the Metropolitan Police Department and the Drug Enforcement Administration in the form of the DEA Task Force. I mention that because that particular team was in large part responsible for the success of this case.

As you know, this case involved among other things the use of a court-authorized wiretap and also other sophisticated electronic surveillance techniques in the investigation.

Mr. GUYER. May I ask at this point what authorization did you have to do to get that permission or what steps did you have to take?

Ms. BRINKEMA. To get the wiretap?

Mr. GUYER. Yes.

Ms. BRINKEMA. The procedures for obtaining a court-authorized wiretap are spelled out in title 18. And basically, they involve the following steps: The Department of Justice, first of all, has an internal reviewing process. No wiretap can be applied for unless the Attorney General himself authorizes such application.

And this is the point where the prosecutor becomes so important, working with the investigators. It was my job to develop an affidavit establishing probable cause as to why a wiretap was called for in this case.

Under the statute, among other things, besides establishing probable cause to believe a crime has been committed, is being committed, you have to be able to convince the Attorney General and later on, of course, a judge, that ordinary law enforcement techniques are inadequate, and you have to be able to justify the use of a wiretap.

Mr. GUYER. So you certainly played the role of a consulting professional attorney.

Ms. BRINKEMA. That's correct. And I helped, as I said, to draft all of the paperwork because I was familiar with what the legal requirements were. The papers then went through the Justice Department. When they were authorized, I then took them down before the District Judge who read them and authorized the wiretap which in this case was authorized on two telephones in the apartment of Defendant Tillery, and it ran for 29 days.

Mr. GUYER. Thank you for that aside. I didn't mean to disrupt your testimony, but that was very interesting to know how that is done.

Ms. BRINKEMA. In any case, as I was saying before, the first example of teamwork was the task force. And the task force was a fine team because each group brought its own special expertise.

The second example of teamwork in this case was the teamwork of the prosecutor with the law enforcement people. And I have already given you one example of the role which the prosecutor played in helping the investigation to move along.

The other areas in which the prosecutor was involved in this case was consulting on other techniques besides the wiretap. For example, in the course of this case, we use pen register devices. The committee may not be familiar with what a pen register is.

Very briefly, it is a machine which can be attached to a telephone line, and it enables one to decipher the outgoing——

Mr. GUYER. We have our full chairman, Mr. Lester Wolff here who is a busy man. And we have just gone ahead.

Mr. WOLFF. Please.

Ms. BRINKEMA. Mr. Wolff, I was in the midst of explaining what a pen register device is.

Mr. WOLFF. Please go ahead. I didn't mean to interrupt.

Ms. Brinkema. It is a machine which enables one to decipher the telephone numbers which are being dialed out from a telephone as well as giving the time of day that such telephone calls are being placed. It does not reveal the contents of the call. But this was the first electronic device which we used in this case after Detective Hubbard had already worked himself into the group and had begun to make contact with some of the defendants.

The detective had met several of the defendants at this point and what had happened was when he came to see me, he had reached the point where he had made three cocaine purchases and was getting ready to make another one. And he had also reached the point where he had received the telephone number of one of the defendants.

And the mode of operation of this group was that Detective Hubbard was to telephone ahead of time whenever he wanted to place an order for cocaine, and then when he came into town to pick the order up, he would again call the individual whom he had met.

We, therefore, felt this was an excellent case in which to use telephone surveillance techniques. And that is why the decision was made to go for the pen register.

We had serious problems of surveillance of these people. Most of the defendants lived in high-rise condominiums and apartment buildings in northern Virginia which made it impossible to surveil their apartments. You could not tell who was coming and going.

We had also found it very difficult to keep track of these people because they all drove very fancy and very fast sports cars. And, therefore, the decision was made if we were to go any further with the case, try to get to the ultimate source of the narcotics, we would have to try for the wiretap. And we did. And as the committee knows, it was authorized.

And the wiretap in this case was a complete success. We got exactly whom we had hoped to get with this wiretap. This happened to be a group which did almost all of its business by telephone. And, therefore, the wiretap was an extraordinarily successful technique in this case.

The wiretap ran for a month, during the month of March 1979. And then, after that, we closed the wire down and spent the next 2 months getting ready for the inevitable trial which we knew would be coming.

With any wiretap, there is an incredible amount of man-hours that go into it, not just the actual monitoring or the listenings, but just the paperwork. Every conversation had to be transcribed. And so we had agents tied up for 2 months transcribing the conversations.

As a result of the pen register, we were able to start determining those phone numbers which were being called by the particular defendant—a woman in this case whose name was Ginger. And I think Detective Hubbard will give you more detail about her. And we were able to start analyzing the patterns of phone calls. You could see how many times a call was going to a specific number and also the times of day.

We were then able to start isolating those phone numbers which were being called very frequently. And by this, I mean sometimes 5, 10 times a day, almost every day of the week, and also the time of day. Many calls were being placed after midnight. And again, those calls gave us grounds to be suspicious because in any drug operation a lot of business is done in the late hours.

After identifying these telephone numbers, we also found through checking out our resources of the Drug Enforcement Administration that many phone calls were being placed to numbers in Detroit and in New York which we had documented information were linked to narcotics figures. And again, this began to confirm some of the hypothesis we had in this case that this was a multiple jurisdiction case and that we were not dealing with a completely local group.

As I said earlier, the case progressed through the use of an undercover agent, through the use of pen registers. We finally reached the point where we knew we could go no further into the group. Detective Hubbard had been introduced as far as we thought he was going to be able to be introduced.

Mr. GUYER. May I ask at that point, did you have teams around the clock helping you on your surveillance?

Ms. BRINKEMA. Yes. The wiretap ran 24 hours a day. It was on two telephones. We had three agents in the listening post throughout the operation of the wire—one man for each phone, and a third man sort of a relief man.

In addition, there were always men out on the street to do surveillance. One of the difficulties that we had in this particular wiretap was that the defendants were very streetwise. On two different occasions we picked up on the wire that some of the defendants thought they might have spotted our police surveillance cars. And we immediately pulled our cars off.

This made surveillance difficult during the conduct of this wiretap. There is a saying in police talk about heating up a wire. You have to be very careful when you are running a wiretap not to do so much surveillance that the defendants begin to get nervous and suspect they might in fact be tapped or under surveillance.

So in this case, we had to run a delicate balance between gathering enough corroborative evidence to help the wiretap in court and yet not overdoing it so that we would perhaps get the defendants nervous and have them change their mode of operation.

I was under an order from the judge who had authorized the wiretap to make a report to him on a 5-day basis, summarizing the amount of conversation we had been picking up and indicating whether the wiretap was still justifiable, because a wiretap is constantly reviewed while it operates.

During the course of the wiretap, more than 2,000 telephone calls were actually intercepted, and we determined that more than 20 percent of those calls were directly related to illegal narcotics activity.

Another fact the committee might be interested in was, one of the other difficulties we had with the wiretap in this case was that these people, as do many other drug dealers, used a great deal of code in referring to their products. We would hear references to shirts, chickens, boys, girls, books, apartments, in fact, some of the nicknames that these people had threw us off, too. One defendant's nickname was grandma. The first time the agents heard this conversation about grandma, they minimized it. As you know, the law requires that innocent conversations not be intercepted.

At that time, we thought they were talking about their grandmother and did not know the conversation was narcotics related. As the case progressed and we began to analyze things more carefully, we were

able to figure out that, in fact, grandma was one of the people we were interested in, and we began to listen to those conversations.

My job as the prosecutor throughout all this was to make sure that the court order directing the agents to minimize, and restricting them to listen to, narcotic-related or other crime-related conversations was complied with.

After the wiretap was concluded, as I said, we spent about 2 months getting all of the transcripts ready. Then, at the end of May when we felt we were ready to go ahead with the trial—because in the Eastern District of Virginia, we have an incredibly speedy calendar, and our cases go to trial very quickly after they are indicted, so you must be completely ready to try a case the day you indict it—we worked out four search warrants, which I again helped the agents draft, and I prepared an indictment.

At the end of May, the indictment was handed down by the grand jury, and the search warrants were authorized by a magistrate, and we arrested the defendants and executed search warrants in four locations, one in the Distict of Columbia, three in Virginia. The case went to trial in July and, as you know, we were successful in convicting all those who were indicted.

Mr. GUYER. This is a tremendous revelation.

Incidentally, Mr. Benjamin Gilman has arrived, Congressman from New York, very active member of our full committee as well as the task force.

I was so fascinated, I didn't follow your script.

Ms. BRINKEMA. I didn't either. I thought you wanted a summary, so I did not bother.

[Ms. Brinkema's prepared statement appears on p. 136.]

Mr. GUYER. I notice Mr. Hubbard, I believe, was introduced as a pornographer, potential customer for pornography material.

Mr. HUBBARD. Initially, I purported to be the owner of bookstores in the Philadelphia area.

Mr. GUYER. Are you going to go into testimony at this time to follow the continuity?

Ms. BRINKEMA. We thought, in structuring this, I would just give you an overview of what the prosecutor did, and then Detective Hubbard would explain to you how he was introduced to the group and what this group was like and how he performed his roles as an undercover agent.

Mr. GUYER. You may continue, Mr. Hubbard.

TESTIMONY OF MICHAEL E. HUBBARD, DETECTIVE, DRUG ENFORCEMENT ADMINISTRATION AND METROPOLITAN POLICE DEPARTMENT TASK FORCE

Mr. HUBBARD. Mr. Chairman, members of the committee, it is indeed an honor for me to be given an opportunity to speak in front of the committee from the perspective of a street police officer or street agent.

I first became involved in this case following an introduction of myself to a masseuse known to me at that time as Ginger. This introduction was effected through cooperation of a private citizen who

assisted us a great deal just by making this introduction, his primary concern being to ferret out drug traffickers.

Following the initial introduction to Ginger, we effected one purchase of cocaine. She indicated to me in talks at the time of the initial meeting that over a protracted period of time, she would be able to sell me large quantities of cocaine. Basically, the sky was the limit.

In an instance like this, it is impossible to ascertain whether the person can factually back up the claims they are making. So following the initial buy, myself and my partner, Detective Richard Budai, set up a subsequent buy approximately a month later, increasing the size of the buy to approximately $3,500 on the second occasion.

Again, if I could, following Ms. Brinkema's format, I am just going to briefly summarize the written remarks.

Mr. GUYER. Please.

Mr. HUBBARD. We made the second buy. The quality had improved, of the product being purchased, as had the quantity. It appeared to us, in discussing this with the supervisors of the Drug Enforcement task force, Lieutenant Merritt, who is the direct supervisor of the combined task force and the agent in charge of the Washington district office of the Drug Enforcement Administration. Mr. Canaday would again, in turn, give his permission for subsequent buys.

Both of these gentlemen, by the way, are with us today to answer any questions as we go along.

After the first two buys were effected, Ginger kept referring to the utilization of sources other than her regular sources of supply and that, as she got to know me better, perhaps I would be fortunate enough to start dealing with her regular people who would be able to give me better prices and better quality.

Initially, my cover was that I was a resident of Philadelphia, Pa., and involved in massage parlor and bookstore businesses in Philadelphia. I used the name Mike Lewis in conjunction with this so at least the first name was close enough that I could respond to being called by the first name.

In an instance like this, it becomes something of a problem, as I also live in the Metropolitan Washington area. My wife and I would on occasion be out shopping, and I would look in the next aisle over and see someone who would be one of my potential defendants, and we would go shop somewhere else.

In fact, during the course of this case, we moved out of one apartment building and moved into a residence a little farther out.

Early on in the case—I think Ms. Brinkema has touched on it to a great extent, and I personally cannot overemphasize the assistance they provided for us to get in touch with the prosecutor's office, specifically Ms. Brinkema and Mr. Williams, from the U.S. attorney's office who then guided the direction of our case, as opposed to merely the law enforcement agents pursuing a matter, and when they are through making the case bringing it to the prosecutor's office. I don't think I would personally initiate a case of similar magnitude without doing so probably from day one in the future.

After the first several buys were successful, we were not completely successful in surveillance techniques, as Ms. Brinkema mentioned. We thought maybe the pen register device would be in order. Ms. Brinkema has described the pen register device, but in brief, it provides us with

the phone numbers being called from the people we are looking at in an investigation.

After keeping meticulous records for a protracted period of time, we ran the initial pen register device in the basement of my home. As a matter of fact, we started to see a pattern of phone calls being made to specific phone numbers, and we went to the prosecutor's office and obtained a grand jury subpena for the subscribers' information on that phone.

By then cross-checking various criminal records with the Drug Enforcement Administration as well as with the Metropolitan Police Department, we started to see a pattern of known violators from this judicial district as well as, specifically in this case, New York and Detroit. These two cities started to play an important role as we continued our investigation.

I think if there is a single factor that allowed us to continue moving upward in this case, it would be the composite force of Federal and local narcotics officers. I think we local police officers like to feel we have a certain feel for the street and are able to work our way into positions in an undercover capacity, but this combined level of expertise, along with the cooperation all the way down the line of the prosecutor's office, combined to help us consider other viable investigative techniques.

We then used consentual recordings where I would place a telephone call to the defendants and order quantities of cocaine. These recordings were helpful then in gathering probable cause for the title 3 at a later juncture.

Primarily, as I was supposed to be a resident outside this area, I would call ahead and make a telephone order. In so doing, the order, when I would allegedly arrive at the airport, was filled, which in itself would be a crime that they did, in fact, use the telephone.

After approximately three purchases, I was able to meet—I had been explaining to Ginger that I wanted to meet the ultimate supplier of this product so, as a businessman, I would know exactly whom I was dealing with and where to come if I ever had a problem. So on the fourth occasion, we met a Mr. Michael Tillery. At that time, he was only introduced to me as Michael.

Short of the other investigative techniques, the surveillance and primarily the pen register device allowed us to find a Michael living in a certain area of northern Virginia where surveillance followed him to the Representative. We were able to ascertain that was the direction our investigation was taking.

From that time on, I dealt extensively with Mr. Tillery in conjunction with further buys. We met additional defendants through Mr. Tillery, and along the way, Mr. Tillery informed me that in dealing with his preferred customers, he preferred, as he and his group dealt in increments of $100,000, their investment outside the country, that every time I called and placed an order, most normally, I was coming between what he termed cycles. They operated on approximately a biweekly cycle every 10, 15 days.

When they would have their shipment arrive in $100,000 increments, it would be delivered to them, and they tried to rid themselves, so as not to be under too much heat, if you will, be rid of their product within a period of no more than 72 hours.

So he said, as I have been dealing with him and Ginger for a period of several months now, he would like to include me in his list of preferred customers. In the future, he wanted a telephone number where he could contact me upon receipt of his next shipment of kilo quantities of cocaine through his sources, as he referred to them. He referred to them also as the "big man" and his "family."

At that time, we had to back off and implement other investigative techniques to facilitate his ability to get in touch with me. After some doing, the telephone contact between myself and Mr. Tillery increased as did the level, both quantitatively and qualitatively, of the cocaine that we were purchasing.

After a period of time, it was ascertained by my supervisors as well as the prosecutor's office that in an undercover capacity, we had probably gone as far as we could. There were certain limitations imposed in an undercover role.

One of the best signs that a person is potentially dealing with a police officer or agent is that person's refusal to use any narcotics when they are purchasing, and I find out that particularly means cocaine traffickers. Oftentimes, the people purchasing will, in fact, test the product as opposed to some other drugs, specifically heroin.

The big-level violators in heroin oftentimes will not test their drug. They have other people take care of that for them.

So after some fumbling around over a period of several buys, the best I was able to come up with was I had a bad high blood pressure due to the fact that I drank too much, ate too much; I certainly could not allow myself to use cocaine. This seemed finally to be acceptable.

We heard quite a bit on the wire in reference to this person from Philadelphia not using drugs, and that created a considerable problem for us.

It was then decided that we should go with the title 3 to try to ascertain the identity of the ultimate source of supply of the cocaine. Following subsequent purchases, we were able to identify one Antonio Perdiz from New York City. As the investigation continued, he was identified as at least one of the sources of supply.

As luck would have it, we did serve the final search warrants on, I believe, May 22 this year. We served four search warrants, three in the Arlington-Alexandria area, one in the District of Columbia.

In the apartment at the Representative, where I personally served the search warrant, Mr. Perdiz was nice enough to come down from New York and be there for us.

I should point out at that very time, we had sent an agent to New York to find him. He had to come right back down.

This, in closing, is a brief overview of the case. More detailed specifics are contained in the written remarks. Again, I would like to thank the committee and the chairman for honoring me and allowing me to testify here.

Mr. GUYER. I want to compliment all of you for the manner in which you have told the story in sequence. I am going to allow the others to ask questions.

[Mr. Hubbard's prepared statement appears on p. 141.]

Mr. GUYER. I have just one or two questions that just can't wait. I have only been in contact with one agent who was undercover. This happened back in Ohio, and he still was undercover, and somebody

took his picture. We had to get hold of the cameraman right away because he was still operating. I am curious now what your function is, since your cover is blown. How will you continue now?

Mr. HUBBARD. I can assure you, it is now.

Mr. GUYER. Other assignments out of the city, or do you go back to another capacity?

Mr. HUBBARD. I am a detective with the Metropolitan Police Department, Investigative Services Division. I have within the past 2 weeks returned from the task force to my parent unit, which is that of a detective on the street. So fortunately, I have no need for a cover.

Mr. GUYER. What is the most amount of money they had to provide you with, your purchases?

Mr. HUBBARD. The largest purchase we made was $10,000 at one time.

Mr. GUYER. But the whole operation was a million dollar operation as I remember reading about it.

Mr. HUBBARD. These people, it would certainly appear to all of us involved in the case, were certainly not wolfing, if you will, when Mr. Tillery said they invested in $100,000 increments and buys of this quantity. They are talking cocaine of a very great purity, in the vicinity of 85 to 90 percent purity, which can then by the time he sells me a kilo quantity of cocaine, he indicated to me after giving me code words such as when you call me on the phone say "apartment" and that will mean one kilo, "two-bedroom apartment" will mean two kilos. A kilo is 2.2 pounds of cocaine which I am sure the members of the committee are familiar with.

Mr. GUYER. Yes.

Mr. HUBBARD. This would be 85 percent purity, and Mr. Tillery related to me along the way as a businessman, he gave an unconditional money-back guarantee on his product.

Mr. GUYER. How much street value is that?

Mr. HUBBARD. By the time, say, for example, an easy format would be ½ kilo just over 1 pound of cocaine in the raw form which would then be cut down to the purity which in this area is normally in the vicinity of 10 percent. By stepping on this, I would now have a pile of 9 pounds of powder which I could then further reduce into ounces and then into grams, being 28 grams per ounce, approximately each gram selling on the streets of D.C. in the user's form for approximately $85 to $100 per gram—28 grams per ounce, 16 ounces to 1 pound, my initial investment would only be $25,000 for ½ kilo, just over 1 pound.

The turnaround rate is an increase of money in the vicinity of 300 times. I would not be in the category of a person bringing the raw coke into the country because they make their large profit as well.

Mr. GUYER. Did you have a feeling all the time they were checking on you, too, from your interceptory phone calls?

Mr. HUBBARD. Yes, sir, they were.

Mr. GUYER. They discussed that pretty widely?

Mr. HUBBARD. Yes, sir, they did.

Mr. GUYER. Did you ever learn the source of their supply? Was it coming in from Colombia, or do you know that?

Mr. HUBBARD. It was coming in from Colombia. And as it pertains to this portion of the case, the source of supply that was arrested, Mr. Perdiz from New York.

Mr. GUYER. Did you ever know the pilots involved?

Mr. HUBBARD. In this particular matter, we did not.

Mr. GUYER. Two more questions. I know the rest of the committee are anxious to ask questions. Did you stumble onto any other illicit operations? That, you may not want to discuss, but in the course of your dealing with them, did you discover, for example, some local things that might be embarrassing for breaking laws other people were involved in?

Mr. HUBBARD. Yes, sir. Here again, as has been pointed out, there are pending cases for——

Mr. GUYER. That stem from your——

Mr. HUBBARD. That's correct, sir.

Mr. GUYER. Discoveries?

Mr. HUBBARD. This investigation is continuing, and we have other people in mind. But in response to your question, there was other criminal activity. Specifically, there was an interstate stolen car ring operating.

Mr. GUYER. As well known as you are, I would think you would run into a lot of friends someplace along the way. You made these purchases at what kind of places?

Mr. HUBBARD. Purchases were made in restaurants and at Washington National Airport.

Mr. GUYLER. Pizza parlour, I think it was.

Mr. HUBBARD. We met there on two separate occasions. As a matter of fact, that particular pizza parlour was a favorite of my wife's and my own, and we had to quit going there.

Mr. GUYER. Did you have to explain Ginger to your wife at all?

Mr. HUBBARD. It is rather ironic; one of the problems associated with a case like this, my primary job is as a detective with the department, and the hours that are necessary to be put in requires a very tolerant wife to put up with all the comings and goings, and the fact she reads about her husband being a pornographer from Philadelphia, when all the time she thought I was a police officer.

Mr. GUYER. My final question: Would you say you had excellent cooperation with other authorities, local and area authorities, in preference of your projects?

Mr. HUBBARD. As a total overview, we would not have made the case without total cooperation.

Mr. GUYER. That's fine. I have taken more than my minutes.

And Congressman Wolff, would you like to continue?

Mr. WOLFF. Thank you, Mr. Chairman.

The cocaine case is, I would say, fairly rare?

Mr. HUBBARD. That is correct.

Mr. WOLFF. Is that because of the priority that is established by the department for cocaine or——

Mr. SCHOTT. If I could respond to that, our office does and has prosecuted a number of cocaine cases. And cocaine has a high priority in our office and certainly in this particular case happened to be a very large case, but we have cocaine cases going on all the time.

This was, of course, a major case and involved a lot of individual efforts and a lot of hours on it. But there are a number of cocaine cases going all the time.

Mr. WOLFF. We had heard in other departments and other areas that cocaine did not have the high priority that heroin had, for example.

Now, is it because of the widespread use or traffic in cocaine in this area that you have had a number of such cases?

Mr. WILLIAMS. I am Justin Williams, U.S. attorney.

Mr. Wolff, I think one of the reasons that we have given cocaine quite a bit of high priority, I think among other things, is the proximity to airports, particularly Dulles Airport. At one time in the last 2 years, we used to joke about one flight that used to come in from La Paz. We used to call it the cocaine express because the customs patrol and DEA agents would be out there, would periodically do 100 percent search on certain passengers that would be coming in that would meet possible profiles.

We could come up with passengers carrying in their clothes or special outfits or shoes, multipound quantities. And we ended up 2 years ago with one 18-defendant conspiracy case where we traced the cocaine not only to Bolivia, but we ended up working with Bolivian authorities and actual prosecuting some of the people that were responsible for bringing the cocaine in.

Mr. WOLFF. Insofar as cocaine is concerned as a drug of abuse, how widespread would you say it is in this area?

Mr. WILLIAMS. That, I would say, given the nature of the increasing cases and in some of the investigation, some of the people, different types of people, that the investigation can be financing are involved in this, not only so much in our office, but I think in the experience throughout the country, you will have various types of people. I don't think you can limit it to any one group. And that is why it is such——

Mr. WOLFF. I don't mean to limit it to one group. I am interested in your feeling whether or not the abuse or use of cocaine in this area is more widespread or is it on the rise? We have seen it spread to the highest places here.

Mr. WILLIAMS. On that, I think I would probably defer to Mr. Canaday who, I know, is here from DEA as a special agent in charge of the Washington District Office.

I am not really sure I would be in a position to comment generally about beyond our own district. I know we just had an increase in cases.

Mr. CANADAY. Mr. Chairman, I am Dave Canaday.

I think we found basically throughout the country—I have been in various offices, having transferred from Seattle about 1½ years ago. I noticed that we do have more high-level cocaine cases in progress here than, for example, we had in the Seattle area. I tried to underscore basically that I think the availability in this particular area seems to be higher.

We right at the moment are devoting about 50 percent of our enforcement activities toward this cocaine problem because of this prevalence here. I think that this particular case right here underscores the magnitude of the organizational levels that we are seeing in the cocaine traffic and as Mr. Williams pointed out, the flights coming in from South American countries that ourselves and Customs are very closely monitoring.

Mr. WOLFF. Would this have anything to do with the number of diplomats you have here who have immunity and are able to travel into the area? We found a number of areas in the country where people have utilized this immunity as a cover for their own illegal activities.

Mr. WILLIAMS. I did not find in our cases any prevalence of diplomatic involvement. We came up with, I believe, one or two people that we may have had some connection with embassies in this South American cocaine trade such as *The United States* vs. *Aramayo and Lopez*. We did find, however, some fairly wealthy Bolivians who were really involved in big business bringing this drug in.

I think the prevalence is the money to be made in it.

Mr. WOLFF. Is it money to be made or high-income area use that is involved? It is kind of an elitest drug, and it requires very substantial funds to be able to participate.

Mr. WILLIAMS. I think it is a combination of both, no question about it. This is a wealthy area.

Mr. WOLFF. One fact that interests me is the fact that you have as much buying money as you have here; that is something that doesn't exist in other parts of the country. How is that arranged?

Mr. HUBBARD. Again, this is one of the advantages, I feel, of a combined narcotics effort between the State, if you will, or in this instance the District of Columbia Police Department and the Federal Enforcement Administration.

Mr. WOLFF. But is it a normal practice here to have substantial amounts of money available for buying in order to pursue individual cases?

Mr. CANADAY. Yes, sir, DEA has special funds set aside for task force operations. We maintain a separate DEA account for ongoing DEA——

Mr. GUYER. Would you want to pull up and sit on the end there? You can share the microphone, and it may be easier for you.

Mr. CANADAY. As I was saying, we have separate accounts for ongoing DEA investigations, funds that are called deploy, purchase of help, purchase of information funds, and then the task force funds. And our funds for the Washington District Office for the task force was not sufficient during the course of this investigation to completely make all the purchases that had to be made. I think it totals somewhere in the area of $49,000, total paid, which necessitated myself going back to our regional office and they in turn through headquarters. And we were able to obtain the necessary funds.

Mr. WOLFF. Can any of you give us an estimate as to what you think is the approximate cocaine population here?

Mr. CANADAY. I couldn't answer that, sir.

Mr. WOLFF. Well, is it 1,000, would you say? Hundreds of thousands?

Mr. CANADAY. I really couldn't say, sir. I could say it is considerable.

Mr. WOLFF. I am happy to see you couldn't say because normally, we get some figure. We get what is known as the Rangel formula. Dependent upon the determination of the individual making the ascertainment, we usually get a round figure. I am happy that you don't profess to know.

But one final question. Is cocaine use in this area on the increase?

Mr. SCHOTT. The best way I think to respond to that question would be one isn't at a loss for cases. We are constantly busy with cocaine cases. And in order to give you a fair answer, it is hard, obviously, as Mr. Canaday has just pointed out to give figures, to give statistics, because one never knows the magnitude of the problem.

But it is fair to say that our office is constantly, you know, prosecuting these cases. And therefore, it is certainly prevalent if that is the proper word.

Mr. WOLFF. I want you to know that I think you have done an outstanding job, especially in view of the fact of the deemphasis that has been placed upon cocaine and marihuana in other areas where the target is only the "hard stuff," heroin and the like. We are faced with a multidrug problem in this country. Too often, people seem to overlook the fact that cocaine is rapidly overtaking heroin as a drug of abuse in this Nation.

Ms. BRINKEMA. Mr. Wolff, you might also be interested in knowing in this particular case, we did seize approximately 4 ounces of heroin when the search warrants were executed. It is also interesting to note that two of the defendants we indicted in this case were indicted in June of this year in Detroit as being members of a multiple-defendant heroin and cocaine conspiracy case, working out of New York, Washington, and Detroit.

And I offer that to the committee as an example of the fact that I think when you are dealing with professional narcotics businessmen, even though their primary product might be cocaine, there is every reason to believe that there are other products they will be dealing with as well. And we do have proof these people were dealing with heroin.

Mr. WOLFF. What sort of bail was set on these people?

Ms. BRINKEMA. The initial bail, if I am not mistaken, was $100,000 on the top three people and $50,000 on all of the minor people. And again, in the Eastern District of Virginia, our judges have, I think, had a very good position on both bail before and after conviction.

All of the defendants, five defendants, who went to trial are appealing their convictions. To my knowledge, all five are still in custody.

Mr. WOLFF. You said initial bail. Was that reduced in any way?

Ms. BRINKEMA. It was eventually reduced to $50,000 for the top three individuals and $25,000 for the lesser involved individuals.

Mr. WOLFF. The $100,000 was considered to be excessive; is that right?

Ms. BRINKEMA. No, it was not considered to be excessive. Most of these people, for example, were local residents. They had never been outside of the area. Most of our defendants had never had any previous criminal involvment. When the judges looked at these factors, they did lower the bond.

Mr. WOLFF. One factor that I might comment on and pass on to other members is the problem of the amount of bail fixed in many of these cases. Here, you had a case that was involving, conservatively, several million dollars, and when bail is set at a particular amount and then is reduced—there were, perhaps, higher-level people involved. Many times, these traffickers consider the bail as merely a cost of doing business and don't stay around very much longer after the bail is set, and especially after it is reduced.

Mr. SCHOTT. That is the truth, Mr. Chairman. One of the things, of course, under the Bail Reform Act, the judge has to consider just insuring the presence of the particular defendants. What we can do, and do do, is pursue *United States* v. *Nebbia* hearing whereby we try to ascertain where the money is coming from because, if you can find out

Mr. GILMAN. What is that—approximately 10 narcotics cases awaiting prosecution; is that it?

Mr. SCHOTT. There are six investigations I am conducting right now at the present time.

Mr. GILMAN. What about cases awaiting prosecution?

M. SCHOTT. Right now, I have two cases scheduled to go to trial. I have been moving cases pretty fast. We don't have cases just lying around.

Mr. GILMAN. Do you handle all of the narcotics prosecutions for the District?

Mr. SCHOTT. Our unit handles; the four of us have the primary responsibility of bringing our narcotics cases because, as Mr. Williams has indicated, in addition to cocaine, we have, for instance, PCP cases **and heroin cases and cases which require specialization.**

Mr. GILMAN. Is the District of Columbia prosecuting its own cases?

Mr. SCHOTT. That's correct. The U.S. attorney, District of Columbia, has the major crimes unit, and they handle their own narcotics cases.

Mr. GILMAN. They have their own prosecutor?

Mr. SCHOTT. They have their own prosecutor.

Mr. GILMAN. How do you determine when the Federal attorney comes in as compared to the local district attorney?

Mr. WILLIAMS. Usually, Mr. Gilman, we will coordinate that with the State. Where there is a situation, where there are normally going to have to be substantial buys made, where a local jurisdiction might not **have the buy money, if there is a situation where we have got individuals operating not only in this particular judicial district, but in various** parts of the country, we will normally prosecute that kind of case. We will work with it.

Mr. GILMAN. Do you make the determination or does the——

Mr. WILLIAMS. We will make it jointly with the—in our case, let's say the local commonwealth attorney, we might sit down with the commonwealth attorney in the county. There may be several substantive buys. He may say, "Look, I will take the substantive buy; you people work on the conspiracy case. That will involve more than my jurisdiction."

Mr. GILMAN. Do you, either you, Mr. Williams, or Mr. Schott, take any active role in the planning for narcotics strategy for the region?

Mr. WILLIAMS. I would say we definitely do. We are the prosecutors. All of us normally try to get involved, even at the earliest stage, deciding whether to try to make additional buys.

Mr. GILMAN. You get involved at an early stage in an investigation, but now I am talking about overall planning for combating narcotics trafficking in this region.

Mr. WILLIAMS. I would say definitely, yes, we will sit down strategy-wise, for example, with—periodically, I will sit down with Mr. Canaday, and we will talk about our priorities, whether we should be devoting more efforts as far as PCP, what we are going to do about, for example, do we want to go after even small, very small, heroin buy cases and perhaps if we can put pressure on these individuals, go up the ladder. Same thing in cocaine.

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So I would say definitely.

Mr. GILMAN. How often do you meet with Mr. Canaday to plot out strategy?

Mr. WILLIAMS. I would say we are certainly at least in telephone contact on a weekly basis, and I would say——

Mr. GILMAN. You don't have strategy sessions by telephone, do you?

Mr. WILLIAMS. No. For example, we are going to be meeting, we just were chatting about it today—we are both going to be going down to Norfolk division next week. We will be sitting talking to those people and probably looking at the priorities of the Norfolk office.

I will say on a monthly basis, I am usually over there.

Mr. GUYER. If Mr. Gilman will yield, how many districts are there in Virginia?

Mr. WILLIAMS. We have two—Eastern District and Western District.

Mr. GUYER. I wonder, Ben, if we could move around and come back to you.

Mr. GILMAN. Just one more question.

Do you know of an overall plan for this whole region on narcotics, combating narcotics trafficking?

Mr. WILLIAMS. Yes. I would say that I think we do. One of them is increased emphasis on what I think is the most effective prosecutorial tool—that is the narcotics conspiracy case, that major type of prosecution, as well as we are also putting in increased efforts on, I'd say, PCP and trying to get to your major violators, your financiers, your people that can afford to deal in the kind of quantities we had in this kind of case.

Mr. GILMAN. And you have adopted a strategy to do that?

Mr. WILLIAMS. That would be, I think, our basic strategy, yes, sir, that we will work on those types of prosecutions just as we did on this case.

Your question before as to Mr. Schott about how many cases, I might put in perspective, Ms. Brinkema worked, I think, on almost nothing else for somewhere around 8 or 9 months, did nothing else but work full time on this one case. Any major narcotics conspiracy case will normally take one or two assistants. Usually, we put two or three on it. I would say anywhere from 4 months to as much time as a year on just one case.

Mr. GUYER. Thank you.

We will come back, Mr. Gilman.

Bob Livingston?

Mr. LIVINGSTON. Thank you very much, Mr. Chairman.

Before I begin, I want to congratulate you and Chairman Wolff for putting together this discussion on this very important issue, one in which I am terribly concerned. Being an ex-prosecutor myself, ladies and gentlemen, I can sympathize with the toil and trouble you went to to accomplish these results and get through this case and many like them.

Has the IRS been involved in this particular investigation, or does it become involved in investigations of this sort? Can they be of help to you?

Mr. WILLIAMS. Not in this particular situation. What we will definitely do, Mr. Livingston, is where we have a situation, and we have a couple I can't talk about in particular details, but where we

have a major drug trafficker, one of the things we will try to do is to see if, in the course of the investigation, we can develop what potentially would be both IRS violations as well as being able to—we are interested in showing that a trafficker has substantial sources of income. If we can pursue a joint investigation both with IRS and DEA, we will try to do it. We will get them to come in.

There is no question, it has been made much more difficult under the Income Tax Reform Act getting the disclosure, even getting the Internal Revenue Service intelligence agents, those agents.

Mr. LIVINGSTON. So you bring them in; then it is basically for them to build an IRS case against the offender rather than to get them to exchange information with you?

Mr. WILLIAMS. The information can't be exchanged unless it turns out to be a joint investigation. If we do come up in the course of the investigation, we can bring them in even without them knowing what they had or enough is found to justify. So we get approval for a joint IRS tax and narcotics investigation. Then, they can disclose to us; then we are in good shape. We can really pool information back and forth.

Mr. LIVINGSTON. Can you envision circumstances under which information might be freer and of more help to you in prosecuting narcotics cases?

Mr. WILLIAMS. Of course, this would be a little bit out of my area as far as I think it would be—I am not exactly sure what the position would be from Justice, but from a line prosecutor's point of view, if there were less restrictions as far as being able to get the information that IRS people can come up with, it would make our job tremendously easier.

We can see people having numerous expensive cars, homes, and investments, no visible reason to have that type of resources, and we can't get at it.

Mr. LIVINGSTON. What is the current price of cocaine on the market?

Mr. HUBBARD. At the street level, probably $85 to $100 per gram.

Mr. LIVINGSTON. It is a fairly lucrative business?

Mr. HUBBARD. Extremely so.

Mr. LIVINGSTON. Is that the reason you see a growth of cocaine business among white-collar group people who don't have prior criminal records? Is that what you attribute it to?

Mr. HUBBARD. In my opinion, in this particular group of people, that is exactly the label, sir.

Mr. LIVINGSTON. It is very lucrative.

I noticed, Mr. Schott, you indicated you had no shortage of cases. Do you envision ever having a shortage of cases as long as this high profit potential is on the street for people to get into this kind of business?

Mr. SCHOTT. No, absolutely not. I think that it is one of the reasons why we set up the unit because we find there is a tremendous amount of drug traffic, all sorts, in our district. I don't envision the lack of cases in the future.

Mr. LIVINGSTON. So in fact, law enforcement would have all the cases they could possibly cope with as long as the profit potential is great enough to encourage people to risk their lives and their careers and their fortunes to make a few extra bucks in this kind of a market?

Mr. SCHOTT. Exactly. I think the profit margins are enormously high, and I think that is one of the primary reasons, obviously, for drug traffic.

I think what is also important to bring out is, we are particularly fortunate in this case because of the court-authorized wire; without a court-authorized wire, you just can't reach certain people. And even if you get a court-authorized wire, that doesn't mean you are going to reach the people.

It took a tremendous amount of time on the Drug Enforcement Administration's behalf. They spent countless hours monitoring the wire, on the street surveillance efforts, just really countless hours. We had some 60 hours' worth of tapes. Just preparing for trial and putting on a case like this is quite complex. The people that were involved in this case had all types of sophisticated equipment called for—warning system beepers, speed dials on the phones to jam the register.

So, when you talk about this type of activity and you are talking about major narcotics conspiracy cases, it is a very involved and a long process.

Mr. LIVINGSTON. Would you agree with me, despite all that long process and work and expense the Government went to to prosecute this case, if you had the facilities, you could handle 10 times as many cases of this sort?

Mr. SCHOTT. Well, certainly, we would be happy to get any resources we could get. I don't know. Obviously, any law enforcement agency would like more resources.

Mr. LIVINGSTON. That is not my question. The fact of the matter is that the prospective defendants, prospective cases to be made, are there.

Mr. SCHOTT. Absolutely. I'm sorry.

Mr. LIVINGSTON. Thank you.

Mr. GUYER. Mr. de la Garza from Texas is next.

Mr. DE LA GARZA. I just have a couple of questions, Mr. Chairman, I guess probably to Detective Hubbard. I apologize for my tardiness in not being able to hear your presentations, but I have read the statement and commend you for it.

My question is, I guess, to you, Detective Hubbard, since you were involved directly. What is the attractiveness? Is there any? Did you uncover any unusual new method of using cocaine or——

Mr. HUBBARD. Yes, sir. In connection with this investigation, the attraction of the drug, I don't know. I have had the people that I dealt with talk to me about the lifestyle involved. Their choice of words is, it is a beautiful life. It entails limited work other than to maintain a professional front, for example. It appears to involve their entire lifestyle as far as the hours they keep.

Mr. DE LA GARZA. What about the user? Is he doing something different besides living?

Mr. HUBBARD. Here, we ran into a process that was labeled free basing, which is a novel method to us in the law enforcement community in Metropolitan Washington, inasmuch as they were processing the cocaine to totally take out the dilutants, reducing the cocaine to 100 percent purity, and then engaging in smoking this cocaine after a short process that I, on one occasion, had the opportunity to observe them doing.

We had not in this area run into this before. In this process, it would be entirely conceivable, and the people that I was dealing with in an undercover capacity indicated to me that they were very hard pressed, notwithstanding the fact they were living in $1,000 apartments, driving $12,000 automobiles, to keep up monetarily with this "free basing," as they termed it.

They would puff one puff on what is like a water pipe, and it would be between $100 and $200 of raw cocaine. They could sit around for hours and do this. We had occasion——

Mr. DE LA GARZA. Who is doing this; the user?

Mr. HUBBARD. This would be users, but as I pointed out before, in this particular group of persons, the drug traffickers in the cocaine trade also appear to use their drug as opposed to—there is a dichotomy between the traffickers in this area; though they may be the same people who traffic in heroin, they will not use heroin, but they certainly do use a lot of cocaine.

Mr. DE LA GARZA. In cocaine, the trafficker then is also a user?

Mr. HUBBARD. I think everyone of the ones we ran into in this instance was a user of cocaine, was not, in fact, a user of heroin or that type of drug. But these people using this system of free basing could easily, a group of three or four at a party, use up several thousand dollars' worth of cocaine in a matter of several hours. Phenomenal, the amount of money involved.

Mr. DE LA GARZA. If this is an ongoing situation and you have had availability to continue surveillance over this, after the convictions, do you find that the use or traffic has decreased or remained the same, or if you are able to answer that question.

Mr. HUBBARD. I could only do so, sir, based on personal observations of the street, and it appears to have had little impact on the traffic. If I could, in furtherance of your previous question about novel uses, Ms. Brinkema reminded me of another novel form of cocaine to us in this area. The term "speed balling," used by these people, is a combination of heroin and cocaine then used together to, in their terms, enhance the high. This, again, would not be used by the people I was dealing with because they were, quote, "the beautiful people." They stuck exclusively to cocaine and perhaps Quaaludes and things of that nature.

Mr. DE LA GARZA. This high-balling is a mixture for ingestion or——

Mr. HUBBARD. It is used, both ingested and snorted or taken in any form.

Mr. DE LA GARZA. Then to the other question; you say that to your knowledge in your area, you find no appreciable decline in the use or user traffic after the convictions? Can you detect any difference after the convictions?

Mr. HUBBARD. Personally, I cannot. To paraphrase Mr. Schott, we are not at a loss for constructive cases to initiate.

Mr. CANADAY. We, in fact, have others on the way, Mr. de la Garza. Cocaine traffic seems to be somewhat different than large-scale heroin trafficking. Personally, I think there are more people in this area involved in the sale of quantities of cocaine than heroin, say.

For an example, we can make massive arrests in a very good, high-level heroin conspiracy case, and we can very definitely see sometimes

a decline of availability for a while—not so readily cocaine. I think mainly it is because there are just simply more traffickers out there selling.

Mr. DE LA GARZA. That was the purpose of the question, to contract when you make a big bust in an area in marihuana or heroin, you can see some—at least a slowdown or going further under cover, and so on. But cocaine doesn't seem to do that, then?

Mr. CANADAY. I might answer that we do have several other what I would consider major cocaine investigations underway within the judicial area. So it is still out there to be gotten.

Mr. DE LA GARZA. You may have answered the question—just one final question, Mr. Chairman—besides money or changing basic laws and wiretapping and so on, but directly affecting, do you have any recommendation? What can we do to assist all of the agencies involved in trying to curtail or, hopefully someday, eradicate, legislativewise within our jurisdiction?

Mr. WILLIAMS. I was about to say within the, I think, probably legislatively, I think we are hoping that any changes do not dilute the current investigative tools that we have at this point. The use of the wiretap is essential. The use of consentual monitoring, the present laws that we have at this time are very valuable.

The only limitations that we see as a practical matter would be just the amount of manpower that we will have, both prosecutors and agents and judges available to try the cases.

Mr. DE LA GARZA. Thank you very much, Mr. Chairman.

Mr. GUYER. Thank you.

Before we have Congressman Dornan from California, I just want to say you have contributed enormously to our studies. One of the reasons why we had a task force is, nobody seemed to know anything about cocaine. They knew they used to chew it years ago, and so forth, but it was never brought out in the open, and we have never established yet that it is addictive. It becomes more of a lifestyle than addiction.

We did have testimony from medical examiners that it did directly cause death. That is the first time it has gone on record, the first time we know that it does directly cause death. We had the medical examiner of Miami, Fla. He had post mortemed quite a number of them. We now know it is a killer, and it is also the Cadillac of the business.

Now, I give you Bob Dornan who is quite a celebrity himself from California—not in this field.

Mr. DORNAN. Mr. Chairman, has anyone asked about headshops?

Mr. GUYER. No, we were on the verge when Mr. Wolff was trying to get a figure. I had suggested he might want to ask that, but it was never asked.

Mr. DORNAN. Maybe Ms. Brinkema, you are going to anticipate what I am going to ask, which is fine. I just put one handle on it. I watched on the Today Show this morning an obnoxious debate between someone attempting to defend headshops, which gave me a feeling of déjà vu. I thought I was back in television between the late fifties, early sixties, with all these comments about headshops. And it really did glamorize for young people the drug trade.

Since three of you represent eastern Virginia, which in my case is northern Virginia where I live, I will just relate an experience and ask you to comment.

I heard a song by a British record artist on the radio. Two of my five children were with me. They are almost over 20 now. I said, "Let's go buy this record." I noticed a record shop right on Dolley Madison, and my younger daughter, who is 18, said, "I don't think you want to go in there, daddy."

I said, "What is it, a headshop?" Those were all up and down Hollywood Boulevard in the old days, 8 years ago. I have cased them out, and I know the junk they sell.

She said, "You don't want to see this one. They have got the word."

I went in. I went in the backroom operation, and I was surprised how much like the height of the drug exposure in the late sixties this job was, not just the black-white posters, but long pipes of maybe 50 to 60 varieties, every type of roach clip and paraphernalia you could possibly want for marihuana, but it was the cocaine derivations that I had never seen before in one of these headshops, and, of course, all manner of teenagers coming and going in the shop.

Then, I caught a special about a week later on one of the networks how they sent young people in to show that they would sell to teenagers and subteens, and then finally this debate on October 10, today, on the Today Show.

I wonder if any one of you, starting off with you, Ms. Brinkema, could give me your impressions upon how these headshops contribute to this, the word you have quite properly emphasized, the glamorizing of this particularly ugly facet of the drug trade.

Ms. BRINKEMA. Well, Congressman Dornan, from my experience in this case, I cannot directly respond to your question. However, I can say this: The paraphernalia which has been developed is extraordinary. One of the things which surprised all of us in this case, and one of the individuals in the case essentially told us about this, was that during one of the searches, there was—I don't remember what brand it was—a beer can. I think it was a Coors beer can. We were later told by one of the people in this case, "You never got the beer can."

We said, "What do you mean, we didn't get the beer can?"

It was a stash. It is from California, and evidentally one of the new forms of a stash. It looks exactly like a beer can, but you can untwist it, and it is a very nice, convenient way of holding the dope. And our agents, because they didn't know, had left that beer can.

All I offer this for is to suggest that the sophistication of this type of paraphernalia is amazing. We still learn every day. We were all professionals in this business, and from this little case, we learned about beer cans as stashes, we learned about free basing, we learned about speed balling, we learned a great deal from this case.

Mr. DORNAN. Right. When I said the debate was obnoxious this morning, one of the aspects of the debate, why I so characterized it, was this man made an unemployment case in an inflationary period that if we were to crack down on these headshops, thousands of small businesses across America would fold and hundreds of, if not thousands of, people would be on the unemployment rolls because,

after all, the making of roach clips doesn't necessarily mean they are going to be used to smoke marihuana; the same with all the cocaine paraphernalia.

Am I correct at assuming this jewelry store item of gold or silver razor blade hanging around the neck came from cocaine use, it is the razor blade used to cut your cocaine?

Mr. HUBBARD. That is correct.

Mr. DORNAN. Sometimes maybe innocent people who look at the razor blade as something else will go in and buy it or give it to a friend or fiance as a gift. And you see these razor blades worn around in the strangest places, including some congressional staffers if I might make that observation.

Mr. Schott, you wanted to comment?

Mr. SCHOTT. No, I think I have nothing to add to what Ms. Brinkema said.

Mr. DORNAN. Mr. Williams, have you in your observations on the headshop paraphernalia as far as being the first introduction to young people to cocaine where they would go in to buy a record and walk in the backroom and be overwhelmed by this candy-store-type array of paraphernalia that just superglamorizes drug use?

Mr. WILLIAMS. I can see that definitely happening. Let's say as an exposure or someone seeing the glamor. What I was thinking about when you were talking is a situation you can have, let's say, some young people may be driving along the road or something or stopped, and an officer, let's say, sees something that this type of paraphernalia and can end in, at least, if nothing else, the young people being questioned, possibly exposing themselves to, well, at least the embarrassment. There may be a search. They can put themselves to being exposed to things that they would ordinarily not be exposed to.

Mr. DORNAN. One of you mentioned Quaaludes being used in conjunction with cocaine. Do they use these after they would use a cocaine? And what other drugs do you recall hearing about that were used?

Mr. HUBBARD. In conjunction with this case, sir, if I could just briefly comment on your remarks about the headshops——

Mr. DORNAN. Sure.

Mr. HUBBARD. During the conduct of this case, I think educationally to myself as well as Ms. Brinkema and all of us associated with this case was the fact that many of these people, particularly on the lower level of the distribution, the upper-middle class, often times, they were not proud about involving juveniles. It made no difference to them in regards to selling their drugs. They were of the impression it was almost acceptable because they could buy all the paraphernalia on the open market. Therefore, the drug must be quasi-legitimized in their opinion, in talking with some of the peripheral figures in this case.

It was almost impossible for me, from my perspective as a law enforcement officer to convince them this is in fact unlawful behavior. And I really can't counter the argument that they can go into any neighborhood store and buy papers for their marihuana, snorting spoons, razor blades in gold to have them handy around your neck at any time.

In relation to other drugs with these people, quite frankly, when we executed the final search warrants—and I should backtrack a little bit—during my undercover phase with Mr. Tillery, I consulted with him about the prospects of buying heroin. And he indicated we would really have to step up our business. It would cost me $200,000 per key, as he termed it, of china white. This would be Southeast Asia heroin.

So it appears these people at least had the capacity to switch over and do business with me if the amount involved were big enough.

In conjunction with our closing out the case, we found large amounts of heroin and cocaine. I will point out that beer cans, the Coors beer can, that was inadvertently left behind by that particular search did in fact, by persons who talked to us, contain approximately 4 ounces of high quality heroin. But in addition to that, we recovered, I think, about $25,000 worth of heroin, approximately 6 pounds of cocaine in various forms at different locations, PCP, marihuana, hashish, various pills, black beauties. I don't know if we recovered Quaaludes or not, but in the conduct of investigation, they were referred to and distributed a number of times.

Mr. DORNAN. In a subculture even among the so-called beautiful people, it doesn't have to be true necessarily for some chemical rumor to start—you will enjoy your cocaine more if enhanced by a Quaalude before or after. Because we have other panels under our narcotics committee here where we will have many doctors. And I am surprised at how naive some of these doctors pretend to be.

I think doctors have a responsibility that if some particular pattern develops, then they could tell if someone was coming in and specifically asking for Quaaludes, it might be to use it in adjunct to a cocaine habit.

I wonder if there were anything else you could think of, any pills or rumors where they say this particular combination was dynamite?

Mr. HUBBARD. The closest thing that I have run across is this concept of free basing. These particular people that I dealt with had only recently discovered the "joys" of free basing and were spending every penny they could get their hands on in so doing. It was their topic of conversation at all times. Often times on the wire, they would talk about getting together and playing baseball which we later learned meant free basing, thus spending enormous sums of money.

I had occasion to speak to one of our defendants who indicated to me he was a former heroin user, and he was more scared of the high associated with free basing. He felt it was more damaging to him and he had less control of his faculties while free basing than he did while injecting heroin.

Mr. DORNAN. What did you notice yourself about the behavior of individuals after smoking cocaine?

Mr. HUBBARD. On one occasion, I watched Mr. Tillery who was attempting to acquire a large package for me to purchase in between, his choice of wording, in between their cycles, delivery cycles. He brought back a small quantity of approximately 2 grams of cocaine to an apartment in northern Virginia, the Park Center. And he performed this process in front of me.

And I paid as careful attention as I could to later rehash what we had seen. In this area, we did not know what we had seen. It is ap-

parently a new phenomenon that has come in from the State of California from an area. No offense intended.

Mr. DORNAN. My district so far leads the world of these so-called beautiful people and the adjoining district in Beverly Hills and Hollywood. And I find them anything but beautiful.

We seem to be murdering the English language. The word "gay" has taken on an opposite meaning and so has the word "beautiful," now. But go ahead.

Mr. HUBBARD. I concur.

In watching him perform this process, he then said, "I have reduced this to its solid state, and it is now 100 percent pure," indicating that the loss of powder was insignificant. He then explained to me how this process could be utilized without going into it further.

He then smoked what he said would be a very small quantity. It appeared to me to be considerably less than one gram. And he immediately sat down. He picked up the phone and dialed it. His pupils appeared to be dilated. He was laid back, if you will, and he called someone, apparently the person from whom he had acquired this particular small portion of cocaine. And his term was, "I just rang my bell."

He explained to me that he really enjoyed this particular phenomena. For approximately ½ hour after that, he sat there in what appeared to be a wasted state and later told me this was just a test. He had just used a very small quantity of this, and if that was any indication—certainly not being a physician or pharmacologist by training—I would certainly be scared of it.

Mr. DORNAN. Mr. Chairman, I know we have another panel. Just one question on terms. Sherman. Is this only the term used with a marihuana joint combined with PCP? Have you heard this explanation, Sherman?

Mr. HUBBARD. No, sir, I have not.

Mr. DORNAN. So I bring more California folklore to your attention.

Mr. HUBBARD. Perhaps you can pass it on; it will help us.

Mr. DORNAN. You mentioned PCP just in passing. This is a terrifying drug; it is just the result of the most beautiful murder I have ever had in my district of young children in a residential district in the afternoon from a burglar who heretofore had not killed anybody. And among this so-called beautiful set in northern Virginia across the River Styx here, they actually use PCP, too, in conjunction with this?

Mr. HUBBARD. Several of the people I did business with at the lower level of this conspiracy did in fact use PCP. And quite frankly, as you say, not being a physician or a pathologist, I believe I could tell that they were on a protracted basis using that particular drug because from a layman's perception, it seems to really shortcircuit them out on a long-term basis. You can almost spot PCP users.

Mr. DORNAN. The chairman asked me earlier what you thought you do now that you have blown your cover. I suggest you run for Congress. We have a lot of people whose cover was blown in Congress, and we would love to have you.

Thank you very much.

Mr. HUBBARD. Thank you.

Mr. DE LA GARZA. Write California.

Mr. GUYER. I might say there in sequence to what has been said, we have uncovered step by step some very interesting things. And when Mr. Dornan mentioned the headshop, we had a call from a Cleveland radio station shortly after our first hearing. And they thought there was no incidence at all of cocaine usage by virtue of the scarcity of cases and convictions. And yet one article in Cleveland carried a story that one record shop was selling $10,000 a week in paraphernalia. That is just one shop.

You know, you don't make that much money in costume jewelry. So this has to become a very important index which does indicate copious abundance which otherwise would never be known.

But you people have really enormously contributed to the story we are trying to tell.

I forgot to ask, how many people do you have on your staff all together?

Mr. WILLIAMS. We have a total of 21. We have a total of 21 assistants. We have now been authorized in this coming fiscal year 5 more so we will have 26.

But as far as doing narcotics work, we have four people.

Mr. GUYER. That is a tremendous job with a handful of people when you consider the thousands of agents we have working in other directions and so forth.

Do you have anything in the final round-up?

We have another panel that is going to be very interesting. I hope you won't go away. We have the Phoenix House people. This is a different aspect.

And, incidentally, our next hearings will be in your State of California where we hope to get some of the people who have become the victims, and are rather celebrated, who are going to deglamorize this if we can obtain them. And we are trying to set that up.

We have gone through the medical, psychological, the enforcement, the revolution, arrest with the conviction, the use, and now we are having the therapy.

Do you have any final word you want to say for the record?

Mr. WILLIAMS. Yes, sir. Mr. Chairman, I would like to thank you for all of us being able to appear. And just one closing thought that might tie in with what Congressman Dornan has said, mentioning a little bit about violence.

In this particular case, one of the defendants, Tillery, told Mr. Hubbard, not knowing, of course, he was a policeman, that we have the ability to take care of the man. We also had individuals who came around looking for one of the cooperating individuals in the case. And just because you have a drug that might be associated with beautiful people doesn't mean that you are not going to have people that are quite violent to protect this type of investment.

I have had cases in the past where agents have been threatened. I myself have been threatened, and so I think it should be kept in mind, in any kind of narcotics case, you will have potential for violence to witnesses and to law enforcement people.

Mr. GUYER. I hope all of you will realize you have contributed a great deal to the avoidance of many damaging, jeopardizing things that could happen to many people's lives and should give you a good

feeling that you have helped in a way to open the door for a lot of people and place some sunshine in that otherwise they may never have.

We do want to thank you profusely for being here, and we think that this is a story that should be told. We are not seeking publicity ourselves, but something that has been sort of the silent thing that has just been laying there.

Incidentally, one of the facets we are going to touch on is cocaine as an aphrodisiac. A lot of people think this is a real sex springboard. That is another myth we are going to try to expose.

We thank you all for coming. We would like to see you again.

[Whereupon, a recess was taken.]

Mr. GUYER. We are going to resume our hearings. We had just a little break here. And we do have some very interesting people coming up with a different kind of story to tell. And we hope that you will stay with us.

And we hope also we will get as much cooperation from the House floor as we have had in the last 1½ hours.

So we are pleased to have with us now, if I have the correct pronunciation, Mr. Kevin McEneaney who is the director of Public Information in Phoenix House Foundation. And we have two residents. We will call them Wade and Ginetta.

And I think we will just ask you if you will hold up your right hands.

[The witnesses identified were sworn by Mr. Guyer.]

Mr. GUYER. And I think that we will just ask Kevin McEneaney to proceed immediately into his story. And then we will go as time permits. And all this will be a matter of record so we will have your testimony as part of our very, very important hearings here.

TESTIMONY OF KEVIN E. McENEANEY, DIRECTOR, PUBLIC INFORMATION, PHOENIX HOUSE FOUNDATION, INC., ACCOMPANIED BY GINETTA AND WADE

Mr. MCENEANEY. Mr. Chairman, members of the committee, Dr. Mitchell S. Rosenthal, president of Phoenix House Foundation regrets that he cannot be with you today to talk about the critical problem of cocaine abuse in the country.

My name is Kevin McEneaney, and I am Director of Public Information for the Phoenix House Foundation. My responsibilities include the several hundred Drug Prevention Education programs that we hold each year in schools and communities throughout the Nation.

I believe you will find that the young Phoenix House residents who have accompanied me will present evidence the committee is not likely to hear from another source. Wade and Ginetta's experience of cocaine has been direct, and his and her area of expertise is the street and the patterns of use that exist among young people today.

There is no argument about the increase in cocaine use by the young. This committee has undoubtedly already learned of the 20-percent increase in cocaine used by high school seniors between 1977 and 1978. That same study revealed that one-third more seniors had used the drug within 1 month of the survey in 1978 than had used it within 1 month of the 1977 survey.

And the number of seniors who expected to use cocaine in the future had doubled. Last year's survey of high school and junior high school students throughout New York State reported that more than 10 percent of the State's students had at least tried the drug.

Certainly, there is a direct connection between the growing acceptance of cocaine as "recreational drug" for adults and its use by adolescents and pre-adolescents. Clearly, the use of cocaine by glamorous figures in the entertainment world has had an impact.

Recent recruits to Phoenix House who had used cocaine and were well integrated in the subculture of young drug abusers claim the recent increase in cocaine is partly the desire of youngsters for a more impressive "image." They also believe it is caused by greater availability of the drug and by the belief among youngsters that cocaine is a "safe" drug. As one resident put it, "Coke and smoke are all right." "They beat liquor."

As you gentlemen have been learning, cocaine is not necessarily a safe drug. There is no guarantee that the young user will not administer a fatal dose. But the risk of death is admittedly slight.

I'm sure the committee has heard enough expert testimony on the physical effects of cocaine and the particular danger of smoking the drug in the form of coca paste or free-base cocaine. So let me move onto what we have learned about young users now in Phoenix House.

Many of our young people have smoked cocaine or attempted to smoke the drug by sprinkling street coke on marihuana. They talk about experiencing "the freeze," the throat-numbing sensation that comes when the drug is inhaled. However, it is doubtful if many of them have used coca base or converted their street cocaine to free base.

But now, chemical kits to convert street cocaine to free base are available through the Nation's huge headshop net. So we can expect to see the same extreme examples of dependency and the same psychological symptoms that researchers have reported among coke smokers in South America.

Among the young users at Phoenix, we discovered that few used cocaine as a primary drug. Indeed, they considered cocaine a "play" drug, one that they could only purchase after their basic drug need for heroin, amphetamine, or depressants, even marihuana, had been met.

While all began by administering the drug intranasally, most of those who continued using the drug soon began to use it intravenously. However, they had considerable anxiety about shooting cocaine, for they were aware of how intense and short-lived was the resulting euphoria.

They had all experienced the desperate craving for more of the drug that almost invariably followed an intravenous high. They would sell whatever they had—jewelry or clothing—to buy more. They would commit unplanned and foolhardy crimes.

As a result, these young people attempted to "control" the euphoria cocaine induced by using it in combination with other drugs. They would "speedball," use cocaine with heroin, or take it with oral Methadone or with Quaaludes.

What this indicates is that the use of cocaine by youngsters is likely to lead to the use of other drugs as well. They, too, will want a more intense euphoria and eventually a means of controlling it.

Invariably, it seems to me, we come back to the same basic realities about drug abuse by the young. It cannot reasonably be considered in terms of what specific substances are being used by what particular populations. We cannot lessen our concern because public attitudes about the use of certain drugs have changed.

We cannot assume that because large numbers of adults have been able to use cocaine or marihuana with little apparent ill effect that it is safe for adolescents to do likewise. We must recognize that the drug use by youngsters is a danger all its own; that it inhibits maturation, intellectual, and emotional development.

Gentlemen, I believe the increased use of psychoactive drugs by the young, no matter which drugs they are, must invariably result in a growing number of adolescents who will be incapable of functioning successfully and independently in our society. What we risk by failing to control drug abuse among adolescents today is an unmanageable population of socially handicapped, unemployable, and disruptive adults, tomorrow.

I brought a few items, before we have Wade and Ginetta talk with you, that we have been able to get through some tests that have been done in the New York area—mainly sending young people out to headshops to buy certain types of paraphernalia. We certainly have a lot more that has to do with other drugs, but these would relate to cocaine.

This one item here is a pen which writes and functions as a pen. And a youngster can bring this to school, and the barrel has been modified. And as you notice, there is just a short barrel, and there is an empty barrel here where you can put your cocaine in. And by closing it up again, the nipple at the end of the pen comes off and comes into a little cull there where you snort cocaine while you sit in class or while you are in school and go undetected by having it in this chard pen as it is called.

This system which was talked about earlier in the first panel is the free-base system which was bought in New York in a headshop for $19.98, was bought by a youngster between the ages of 12 and 14 and essentially does what the officer was talking about before, allowing one to bring the cocaine back to its base form and to smoke it.

Just to show you that this is not something that is new, as has been said, and I think often the Government is not aware of the new trends that are coming in, this is an issue of the magazine that the publisher was on the Today Show this morning that was defending the paraphernalia industry. And it is called "The Paraphernalia Digest." And this issue was June 1979, issue.

And here is a very large ad called "The Ultimate High." In Colombia, the natives call this "Snow Toker Base." For over 100 years in every village, it has been the talk of the town. And it lists a distribution network of almost every region of the country where these things could be bought.

This is an advertisement to tradesmen in this 25,000 store network that goes on throughout the country.

Mr. GUYER. Everything sold there is perfectly legal; is that right?

Mr. MCENEANEY. Yes. There are other ads in here. Another one is called "The Original Snow Toker" by another company which says the hottest selling line in 1979, and it is basically again a combination of pipes and other paraphernalia you use in this snow-based system.

What I am saying is this is not something that is new; it is the fact we have a subculture here in an underground. The Government is not following some of the trends that are going on.

Incidentally, this particular magazine and the person who was on the Today Show, the owner of this magazine, had a long interview with the new director of NORML and the articles about their direct mail campaign to these tradesmen and these store owners for money to support the movement that NORML was doing with marihuana.

So that we got a combination of drugs paraphernalia, stuff they use in paraphernalia, that they use in a variety of drugs going to support certain drugs such as marihuana. And now, we are seeing this movement to say that cocaine is OK.

The last item before we got to the young people is an article that I clipped on the way here from the New York Daily News. And this morning's issue had a very small eighth of a page ad for a new film that is out called, "Cocaine Cowboys," that will blow you away. Yesterday's paper had a full-page ad for this movie.

So I bring in two young people we have from Phoenix House who have come into treatment. Again, their primary drug may not have been cocaine, but they have extensive use of cocaine, and they can give you that kind of expertise through the street and what is happening with the young people today.

Mr. GUYER. Thank you very much.

I would like to just say for our people in the audience and the press that this is a publication that Phoenix House has, a 10-year report. And it is really an astonishing story. It began back in 1967 with five ex-addicts who got together in a rat-infested part of town in Manhattan, in the slum area, and today, 12 years later, they have some 700; is that correct?

Mr. MCENEANEY. 700 people in treatment for Phoenix House in New York.

Mr. GUYER. Who are now drug-free?

Mr. MCENEANEY. That's right.

Mr. GUYER. The youngest around 13, the oldest around 71?

Mr. MCENEANEY. That's correct.

Mr. GUYER. I think it is an astonishing story of someone who had a great idea for helping people. And we are just very grateful to have some of these people here today. So without any preference, Ginetta, would you like to tell a little bit about your story?

GINETTA. Good afternoon. My name is GINETTA. I am 19 years old. And I just came into Phoenix House not too long ago. I got into drugs when I was about 17. It was after I had finished high school.

I had been exposed to a lot of drugs, marihuana, you know, to be specific, at the age of 12, but that was the current thing. But at the age of 17, I got involved with cocaine and amphetamines because I moved out of the house, and I moved into Manhattan. And I got a new job, and it was just like—you know, it is kind of a fast life. And so cocaine was very glamorous to me.

I am a musician and in the jazz field. That is basically a primary drug, beside liquor, cocaine. And it is a natural thing to go backstage in any entertainment field and just snort. So I would sit back there and snort it also because I loved the feeling, and it gave me energy and made you happy and things were just great.

The fact of the matter was, and it was a very expensive habit. It didn't get to be my primary habit; amphetamines were. But it was still an extremely expensive habit, and I found——

Mr. GUYER. Let me ask you at this point, what instrument do you play?

GINETTA. I played trumpet; I still do.

Mr. GUYER. How expensive was cocaine? Were you able to afford that on your salary?

GINETTA. Well, yeah, but I preferred to buy amphetamines. That was my primary, you know, habit, my primary drug. But I could afford it, yes, because I was working nights, something I didn't particularly like, but that's what addiction would do to me. It makes you do various things that might be morally wrong to you or to the law without any second thought as long as you can get hold of it.

But as I was saying, I moved out of Manhattan when I was 18 because I was just going down hill. And I moved to Texas to go to music school. And cocaine there was very evident as it is all over the country, I'm sure. But I have like personal experience with colleges on this particular campus. Cocaine was basically limited to musicians.

It was a music school, like the sportsmen and the intellectual people on the campus, didn't really indulge in it. And I found it was a much lesser percentage of cocaine users because it is expensive and it is deemed, you know, glamor drug and this and that.

But in Texas, it just is not as heavy as in New York.

When I came back from Texas this spring, I got into cocaine heavier, and speed. And I started shooting it because the weather was very humid, and the cocaine tends to melt, and you really don't want to waste a bit of it, so you start shooting it.

So to me, it was very degrading sitting in the bathroom with a belt around your arm shooting. I am a respectable citizen, but you just see yourself, but you don't see yourself. It is an insidious drug. Like I said, it takes over you, and it psychologically alters you. You become—I did at any rate—scattered and kind of almost schizoid and paranoid as a basic factor use of it, in the prolonged usage of cocaine and amphetamines. I became just strange.

And it got to the point where I was stealing money, you know. I had a little tiny job as a chambermaid, and I took that on because it was easy to steal money.

At the end of this summer, I went into a detox program, not because I wanted to: because I had to. And after the detox, I myself decided to come to Phoenix House because there was no other alternative. My musical career was not going anywhere because of the prolonged use of my drug. I just found myself getting into severe mood swings, and I just couldn't function with my horn or anything else.

So I came into Phoenix House. And I am hoping it will—it has been putting me on the right track. It is kind of hard, but I am hoping I can lick it, you know.

I am always flitting around. I hope I can perhaps light for a year or two. And I am trying to get my own thoughts without the use of drugs. Thank you.

Mr. GUYER. How much family do you have, Ginetta?

GINETTA. Family?

Mr. GUYER. Yes.

GINETTA. I am the youngest of nine. I grew up in Rockland County, N.Y.

Mr. GUYER. Your father and mother living?

GINETTA. Yes, living and all right.

Mr. GUYER. How far in school did you go?

GINETTA. I finished high school in 3 years, and 1 year in college.

Mr. GUYER. College and specialized in music?

GINETTA. Yeah, and languages.

Mr. GUYER. Do you have a few questions or shall we wait?

Mr. LIVINGSTON. Mr. Chairman, why don't we go ahead and hear Wade?

Mr. GUYER. All right, we will hear Wade's story, then, next.

WADE. Good afternoon. I first was introduced to coke in Denver, Colo. I had quit school in the ninth grade because I wanted to get a job and go on my own and get an apartment and everything. And I was going out, and I was partying. And I got mixed up with people that I was hanging around with. All of them was doing coke so I first started snorting the drug. And then, after a while, I seen somebody shooting it so I was curious of the effect it would give me. So I shot the coke.

After shooting the coke, I realized how much I liked it. I liked it so much, it was the best out of all the dope I have shot. It is the best rush out of all the drugs. It lasts for about 1 hour. And while, when you shoot it, you want to get high right after that again, which I went down hill very quick.

I was a waiter. I was making good money. But the drug is so expensive, I couldn't pay for it. So I had to start stealing. I committed all kind of crimes behind the drug because I couldn't afford it. Mostly, it was right after getting high off the drug, was when I committed these crimes right after an injection.

It led me—it was so expensive at one point, I got disgusted with the drug because it was just way out of hand. It was like $100 a day, and that was—I wasn't staying high all day on the drug. So I went to heroin which is $50 a day. And I stayed high all day. And then I started speed balling on the drug, mixing coke with the heroin because the high was a lot better, and it lasted a lot longer.

So I started mixing heroin and cocaine every time I would go get high because it lasts longer.

Mr. GUYER. Could we ask what about the cost? What did it cost you a day in your combination of cocaine and heroin? It is a pretty expensive habit in any combination form. What did you have to really take in a day to maintain that?

WADE. It was $100 a day.

Mr. GUYER. Had you been arrested for any of these crimes?

WADE. I was kicked out of department stores for shoplifting, and they had seen my arms. And I told them I was getting into the Methadone program, and so they had let me go.

Mr. GUYER. You didn't serve any time anyplace? In other words, you did find some people who were sympathetic to your problems?

WADE. Yes, I did. They seen that I really needed some help.

Mr. GUYER. How did you hear about Phoenix House?

WADE. I knew I was going to wind up in jail because I had five separate occasions I could have been arrested, and it was all drugs. It was all related to drugs. A guy got robbed once. I could have got arrested. I had got arrested for Valiums that wasn't mine because I was trying to do some other drug so I wouldn't crave cocaine as much.

It is not necessarily addicting; it is more or less psychologically addicting. And it is really after you use drugs, you will do almost anything after you inject a drug to get more.

Mr. GUYER. Is Colorado your home?

WADE. At the present time, yes.

Mr. GUYER. Or did you start off from someplace else?

WADE. I have lived in New Orleans, Charleston, S.C., Newport, Ky., Baltimore; I have lived fairly all over.

Mr. GUYER. Is your family scattered?

WADE. They are in New Orleans at the present time.

Mr. GUYER. How old are you now, Wade?

WADE. 21.

Mr. GUYER. Mr. Livingston?

Mr. LIVINGSTON. Thank you, Mr. Chairman.

Mr. GUYER. Mr. Dornan, when you get some time, too, we would like to have you join us.

Mr. LIVINGSTON. I would just like to thank all three of you—you, Mr. McEneaney, for your work at Phoenix House, and all three of you, Ginetta and Wade, for your statements. They are very powerful, moving statements.

But I almost am at a loss for words because I find that what you have told us is something we have all known, but I guess we don't really stare it in the eyes even though we read about it in the papers day in and day out. We don't stare it in the eye until we are confronted with a couple of people like you who have been through this kind of thing.

I, too, am from New Orleans, Wade, and I can tell you what you have experienced is being experienced by hundreds if not thousands of school kids in New Orleans every day. And, of course, across the Nation, the same thing.

I wish I could see some stop to it, but my questions to the earlier witnesses indicated my own belief that because there is a profit motive, and a very lucrative profit motive involved in not only cocaine, but other drugs, heroin, what have you, that we are not going to see the end of this problem tomorrow or next week, next month, or in the immediate time coming.

But I am particularly sorry that—I see we still have some representatives of the media here. I'm sorry that the TV media——

Mr. GUYER. Well, we had asked them not to take pictures.

Mr. LIVINGSTON. I realize and understand the reasons for that, but they could have been here and made comments about what we have just seen. Because I think it would be helpful. I frankly think what you all are doing is about the greatest weapon that we have to fight this sort of drug traffic in this Nation.

Talking about your personal experiences means more to young people throughout the country than anything we on this committee could do, I'm sorry to say. We can make legislation more available for law enforcement people to crack down on the traffic, but you are

the ones who are going to really get to the heart and soul of the people who are most potentially susceptible to using drugs no matter what type of drugs they are.

I would encourage you to continue what you are doing, not just to walk away from here today and say, "Well, you have licked it, you have accomplished something." You go back to wherever you are going, and you continue to talk to people your own age and younger and even older and tell them that that simply "ain't" the way to go.

I wish you well, all of you.

Mr. McEneaney. Thank you.

Mr. Guyer. Mr. Dornan?

Mr. Dornan. Thank you, Mr. Chairman.

If I could associate myself with everything that the chairman has said and my colleague from Louisiana. I came to Congress with Mr. Livingston.

I would like to ask you a little bit about two things—peer pressure, and if you could elaborate a little bit on what one of you said about your first introduction to drugs. I understand Ginetta that in the music industry, there is peer pressure. You see it every night on the more famous talk shows, kidding about the band. Anyone who is an artist in the field of music, it seems they are supposed to accept a permissive outlook toward drug abuse.

Could you tell me, because we were talking about headshops with the former panel, prior panel, some of your observations about what age level young people are first hit with this glamorizing of drugs and any comments you might have on a force that I think surpasses gravity itself? And that is peer pressure.

Ginetta, you go first.

Ginetta. I feel nowadays, it is the age where the young people are exposed to it; drops every year. They get younger and younger. And like when I was in high school two years ago, everyone—well, not everyone, but most people had tried cocaine and headshops. We used to love to go into them because they were fun. We could see what type of paraphernalia we could pick up. And my friends would brag about the newest bong added to the collection or the newest coke spoon that just came out. And we thought nothing about it.

And I just think that the young people today—I still am one—they just see no seriousness at all. I know I never saw any seriousness about the usage of the drug or the addiction that goes along with it, and which it is an addictive drug in every case.

I just feel that the age is dropping every single year, and the awareness of young kids is basically the same. They really know nothing about it except the glamorization and how to use it. The awareness and the dangers of it is relatively unexplored as far as marihuana. Every body knows what marihuana does to rats, but cocaine is still a fun drug. The stars do it; why can't I?

It makes me feel great, you know. Some way, this is great.

Mr. Dornan. Where does that impression come from that the stars all do it?

Ginetta. Well, Freddy Prinze, let's give that one example. Freddy Prinze was a bona fide cocaine addict, but also, like I said, in the jazz field, I know most of the very big names as far as jazz goes, and they are all indulging in it. I have been present.

Mr. DORNAN. Do you pick up these rumors about people having plastic inserts to replace their septum?

GINETTA. A friend of mine had a deviated septum. He was telling me about it. He said, "Ginetta, I have to shoot it now." I said, "Well, that is not a very good alternative."

Mr. DORNAN. Had to shoot the heroin?

GINETTA. No, speed.

Mr. DORNAN. Because it ate away the membrane?

GINETTA. Sherry told me it was painful, a deviated septum. He said it was, and it was from prolonged usage, excessive amount of cocaine.

Mr. DORNAN. And you would hear in the culture names of superstars?

GINETTA. No, I would see them. I would be with them.

Mr. DORNAN. Actually with them?

GINETTA. I know them. So when I did snort, I would be snorting with them, you know. Because the jazz, as I said, that part of the music field is relatively intimate. So if you know—you just know everybody.

Mr. DORNAN. At the user level, how long is the time that it takes, the rumor, of regular use of cocaine before you get to destroy the membrane in your nose?

GINETTA. At the rumor level, you say?

Mr. DORNAN. Yes.

GINETTA. I would say maybe 2 years of serious addiction.

Mr. DORNAN. So people who are using would say, "Well, man, I have only been using it 1 year so I don't have to worry about that"?

GINETTA. And they would say, "I only use a dime a day. I only use it when I have to work. I only use it"—all these rationalizations, you know, disregarding the seriousness or the effect of it.

Mr. DORNAN. Would you agree with me when a subteen, 11, 12, 13, years of age, makes that shift from using their parents which is an important thing in a child's life, more so than their brothers or sisters, to bring home the report card, get that constant reassurance from their parents they are loved—not overemphasizing love based on achievement—but when the young person shifts to that peer pressure situation, it is as heavy or equal to the importance of getting love from your parents.

That is where we come to the adolescent, the teenaged gap, the age gap—you call it the generation gap. It overwhelms you to the point of you don't socialize with your parents; you don't go out with them on weekends; you don't have to live with them day in and day out at school. You are accepted regardless of what you are by your parents because they are your blood, and you are theirs.

But friends and young kids are cruel, as we know, and you could be an outcast if you don't go along with the crowd.

Mr. MCENEANEY. From our programs that we run in schools, one was recently on "60 Minutes." We had a show about one of the schools we did work within New Jersey. We have found that youngsters coming out of the sixth grade into generally junior high school are coming up against a tremendous wall of pressure of the subculture of kids saying drugs are OK, this way of life is fine, the notion of being intoxicated on whatever substance you want, be it butylnitrite, marihuana, cocaine, is all OK.

To get back to your question about the paraphernalia industry, they are fueling this in the subculture; they are putting this out; they are

creating the rationales for the youngsters to throw back at their parents; they are promoting it in their literature in these kinds of things in the statements that they do with this type of stuff.

What happens then is, they set up this subcultural group is a school situation, and when a seventh grader walks in, the overwhelming pressure is to do as the subculture is doing. That is the initial introduction.

We feel that one of the best ways we can begin to work with this is to try to build on the nucleus of kids who are there who are resisting, who are saying, "Hey, wait a minute; being high in school or being intoxicated when you are driving or going to work or being at a typewriter, those kinds of things, is not the best way of life."

We feel that that is the message that we can carry through young people like this and other young people who go in and reinforce those youngsters to combat that pressure because it is only going to be through reversal of the pressure, only having people say, "OK, it is not good to be stoned every day, to use drugs this way," we will be able to give a social conscience to these young people.

Mr. DORNAN. Attack that peer pressure headon.

Wade, would you——

Mr. MCENEANEY. That's right.

Mr. DORNAN. Wade, would you give me your opinions on this peer pressure when you were first introduced to drugs? I don't want you to look for a cop-out or anything, or it takes a superhuman young person to resist this, but if you could just describe in your own words that first impact of peer pressure where on a daily basis, if you were to be putting down the drug-style life, you would constantly be swimming upstream against what the so-called beautiful young people might be doing in a high school situation?

WADE. Everybody that I was associating with, everybody did coke that I associated with, which I didn't do. That influenced me a lot because I had thought I would never shoot any drug, but then, I was curious, and I wanted—there was so much about it, everybody kept saying how great it was. Finally, after a period of time, I gave in, and I did snort some coke.

Then it led to shooting, and then, after it led to the shooting, it led to the heroin and everything. It led to all the rest of it overnight because it was so expensive.

Mr. DORNAN. Wouldn't you agree there is hardly a bright grade-school child in this country who could ever picture himself shooting? There are enough movies on the late, late show from men in the Golden Army who say, "I will just play around the fringes; only jerks shoot." And when you get past the shooting, and you have been doing it, you can hardly remember that moment you crossed over, how easy it was to make the move. It was no big deal.

The pace is so fast, when you get introduced to the whole culture, that suddenly something that was absolutely the furthest thing from your mind you were a young kid, you could actually stick a needle in your arm, because everybody is frightened of a needle.

You look back and say, "That was no big deal to make that transition."

WADE. No, I didn't really answer your question.

Mr. DORNAN. Do you remember the first day you actually stuck a needle in your arm?

WADE. Right.

Mr. DORNAN. And it wasn't a big deal to you, then?

WADE. Ever since then, I kept on saying, "Just one more time," and there was never no end to one more time."

Mr. DORNAN. Mac, you were nodding your head.

Mr. MCENEANEY. Yes, there is a thing in the subculture in the progression of drugs, and I hate to get into the old progression of the sixties that marihuana led to everything else, but there is an undermining of traditional values that goes on when a youngster moves into the subculture because the subculture by itself is a different force of values, and there is a different value system.

Just by the fact you go against your parents and you smoke pot or do anything else or get high with some substance, you already are confronting the traditional values that they gave you. As you move along and begin to use other drugs, they undermine the basic values that you had, and ones that you said you would live by when you first entered this subculture which is, "I am never going to do that," seems to go by the wayside.

More importantly, one white powder is not much different from another white powder, so if you are involved in snorting cocaine or smoking cocaine or using PCP in its crystal form or you are using drugs like that, to have another drug next to it that was white and is heroin is not a big leap. It is a very small transition.

I think what happens to the user is, he deludes himself into believing that I have managed these drugs up to now; I am managing this drug; I have it under control; I can do the next one. It is that deluding kind of concept that moves a person along the progression syndrome.

Not everybody is going to follow that, but there are going to be significant numbers of people, and especially with the availability around.

Mr. DORNAN. It looks like we are going to have to have a vote in about 10 minutes. I would like to have a couple of direct questions. Did either of you have any problems with your parents? Did you feel like you wanted to defy them? And afterwards, were they any help to you when you had your problem?

GINETTA. In my case, I really didn't have a drug problem until I moved out. I moved out a month after I turned 17, so I was still young.

I had problems previously, but nothing drug related. When I did move back for the summer, last summer and this summer, I was a bona fide speed freak and a coke user. My mother recently told me she had been afraid of me.

I basically screamed all the time. I stayed out of the house. I worked nights. Again, I stayed out of the house until 6 and came home and slept all day and went to the beach, or what have you. I just stayed away because the chemistry was extremely—the tension was electric, the fact that the amphetamines and cocaine just shortened my temper and my tolerance level some.

Mr. GUYER. In other words, your mother couldn't really help you too much?

GINETTA. No, she couldn't help me at all. She was very old fashioned and just reverted to the same old——

Mr. GUYER. That is the last thing you needed was a sermon.

GINETTA. Exactly.

Mr. GUYER. Wade, did you have any help at home or resistance at home?

WADE. When I was living at home, I wasn't doing any drugs. It is when I moved out and started not having to come at certain times is when I got introduced to cocaine.

Mr. GUYER. Do either of you believe that one step—we have never established that marihuana itself is, shall we say, totally injurious, but did one lead to another? Did both of you start on marihuana?

GINETTA. Yes.

WADE. I started on marihuana.

Mr. GUYER. Then you went to hard drugs?

GINETTA. Yes.

WADE. Me personally, I don't like smoking marihuana. I never did. I like to drink, but once I did coke, that was the first drug, I went to every one of the other drugs like overnight.

Mr. GUYER. Did either of you feel resentment against the older generation; it is part of our fault that we set some bad examples or we have done some things wrong?

GINETTA. No.

Mr. GUYER. Is it just you have a new, free style, new freedom and do what you want?

GINETTA. No, I don't blame anybody.

Mr. GUYER. Do both of you feel safe now, as far as being independent from what got you into trouble? Do you feel like you can walk away from it now?

GINETTA. No, no. That's why I am in Phoenix House.

Mr. GUYER. I was going to ask you if you are both still there now.

GINETTA. We haven't been there long.

Mr. GUYER. This is a tremendous thing for young people, and I am past the moralizing stage. My first job was as a case worker when I was about 19. I had 300 people to take care of, in addition to myself, so I am insensible to shock. I learned that quite young. You are no help to people if you are going to go in and tell them how wrong they are.

The son of one of my closest friends who was the mayor of my home-town got on drugs. He has now joined Teen Center in Cleveland, which I think is probably doing a pretty good job.

Do you know Teen Challenge, I should say?

Mr. MCENEANEY. Yes.

Mr. GUYER. I think that the greatest contribution you could make for us is—it is like the old-fashioned revival meeting, but tell your story so that somebody knows it can happen. Because in my judgment, all the idealism in the world doesn't help unless somebody has walked through the woods and says, "I have been here, and I made it; I came back."

I think that today we want to hear somebody who said, "Look, I don't mind telling you how low I was, how depraved I was. I would do anything in the world to get what I had to get, but that is over with now, and it is not too late to start."

You people could really be missionaries, so to speak, for young people who haven't done what you have been able to do.

GINETTA. I was going to say that a drug addict once told me she took the elevator all the way down, and if she could help us by stopping us before we got to that point, it would mean a lot to her. That is hopefully maybe what we could do.

Mr. GUYER. Do you feel coming here today has helped you in the sense you are helping somebody else?

GINETTA. Sure; it is an honor for me.

Mr. GUYER. We feel here, you know, it takes a lot of courage to do what you are doing. And this whole program of Phoenix House, there are all too few of them with the incidence we have. It is a shame, because a life is too valuable to be destroyed.

You are both young, and you have got a great future. And with people like Mac—I am going to call him Mac—here today that understand, this is far better than all the preachment in the world. People in trouble don't want someone to just tell you how bad you are, get out of the picture, down into the snakes, and you deserve what you get. That won't help you.

Did you find the people you used to shack up with in these parties were any help to you when you got into trouble? If you needed money, were they helpful?

GINETTA. They would lend me money if they knew it was for drugs, yes. They would lend me money.

They were not beneficial to my health or mental well-being at all because we were all in the same boat.

Mr. GUYER. It is like a girl getting pregnant. That is your problem instead of mine. You find that kind of thing.

Maybe I am saying too much. Do you want to say a word?

Mr. LIVINGSTON. Mr. Chairman, could I ask one final question?

Mr. GUYER. I would like for you to.

Mr. LIVINGSTON. You indicated you felt that the cocaine started you to other drugs. I want to follow up with Ginetta. Did you feel the same thing when you got into cocaine? Did you have no aversion to getting into pills?

GINETTA. I never took dope because that was the last leg of junkyism. That was the real degradation, but it got me into downs, which I thought I would never do, and I did. Yes.

Mr. LIVINGSTON. Thank you very much, and I want to echo what the chairman said. I think you all are very brave coming here, and I congratulate you. I hope you stay on what you are doing.

Mr. GUYER. I am sorry we can't give more time because you made quite a trip, but according to the bells, we have first a quorum then a series of votes, I think, following that.

We want you to know that what you have left with us is a tremendous contribution to our efforts. I would hope that we find something in that paraphernalia thing, if they can't prove it does something useful, we can make it illicit and put it on the black list to be sold. That might be a beginning.

That might be where legislatively we can do something about it. At least it is something for us to think about.

I would like to just leave the invitation open for you to come back because this is an ongoing committee. If you feel there is something

else you want to say and didn't get a chance to say it today, by golly, we will give you a return invitation.

Mr. DORNAN. Mr. Chairman, this is a tough problem getting at this paraphernalia thing. As I said to the other panel of witnesses, the overwhelming effect this has, particularly upon junior teens, you know the cliche, guns don't kill people, people do. You can add the ingredient that the bullet is what does the killing; the gun is just the temporary holder of the bullet.

So in a way, the Federal Government has disapproved of both ammunition and automatic machine guns, for example.

If there is some way we could say that the drug is the bullet, but the carrying equipment, the bong pipe, is a part like the gun, you put the bullets inside the gun, there must be a way to get at that paraphernalia. If you have any ideas or suggestions or you are kicking it around in Phoenix House, please write to this chairman here because this cocaine subcommittee stays in existence for 1 year and 3 months, that we know of.

We are going out to the coast. We need your help because this is such a tough problem.

Mr. GUYER. We also need postgraduate, you know, kind of followup because we are right at that stage now where everything is ahead of you. And we can't afford to have you fall off the cliff. In other words, if we can be some help so you are going to turn out to be that musician you wanted to be, that would be a shame to lose that skill and ability you have at a point like this.

You are not going to do that because you are going to make out. The fact you are here proves that. But we would like to see you go on up that ladder. And maybe we could have a program that picks up where we have left off to help people with their careers.

We have enough people on the sidelines criticizing; we need some people to say this is a one-way trip; we only go through this place once; make it good; travel firstclass; and the best is yet to be. And I would like to be part of that program.

And thank you again for coming. We are going to have to just adjourn for now.

And if you have any other questions, the staff will help you with anything incidental while you are here; also anything you need to do or somebody you need to see or be escorted or whatever.

[Whereupon, at 3:45 p.m., the hearing was adjourned.]

PREPARED STATEMENTS

PREPARED STATEMENT OF LEONIE M. BRINKEMA, ASSISTANT UNITED STATES ATTORNEY, EASTERN DISTRICT OF VIRGINIA, ALEXANDRIA DIVISION, U.S. DEPARTMENT OF JUSTICE

Good afternoon, gentlemen. As Mr. Schott has told you, my name is Leonie Brinkema, and I am an Assistant United States Attorney in the Eastern District of Virginia.

In my remarks today, I am going to sketch out the role played by a prosecutor in an ongoing investigation. More specifically, I am going to outline for you what I did as a prosecutor during an investigation conducted in 1978 into a multiple-defendant cocaine conspiracy which terminated in the successful prosecution of Michael Tillery and eight codefendants this past July.

I would like to begin by explaining to the Committee that the successful prosecution of Mr. Tillery and the co-defendants was the result of teamwork. There were two teams involved in that case. The first team was the Drug Enforcement Administration, Metropolitan Police Department Task Force. The Task Force represents a joint effort by federal and local police resources to improve effective investigation of illegal narcotic activity in the Washington, D.C. area. This team effort between the local and federal authorities was extremely effective in this case because each police force brought with it its own special expertise. The combination of the expertise is what enabled us to create such a successful case.

For example, the Metropolitan Police Department has had extensive experience in the use of various electronic surveillance techniques, including use of pen register devices and court-authorized wiretaps. Also, the local police officers have detailed knowledge of the criminal activities of various local major narcotics violators. The federal law enforcement agency has various powers which the local one does not, such as the administrative summons power, which enabled it to obtain information more effectively and efficiently than the local police officers. By joining their talents and resouces, the Metropolitan Police Department and the Drug Enforcement Administration were able to put together this Task Force, which investigated the Tillery case from beginning to end. The second example of teamwork which contributed to the success of this case was the combined efforts of the investigators, that is, my office. In any large-scale investigation, it is extremely important for investigators to work closely with prosecutors. When prosecutors become involved in an investigation at its earliest stages, they are frequently able to prevent the commission of mistakes which may later come back to haunt the government during its prosecution of the defendants.

Prosecutors play several roles as advisors during the course of an investigation. The first role is to ensure that legal mistakes are not made. For example, the prosecutor helps evaluate whether the facts create enough probable cause to support the obtaining of search or arrest warrants. The prosecutor assists in the drafting of affidavits in support of such warrants. The prosecutor may be called upon to make a split-second decision whether there is enough probable cause to justify an arrest without a warrant.

The second area where the prosecutor's judgment makes an invaluable contribution is in advising investigators about the types of evidence to be gathered. Because the prosecutor's job is ultimately to convict defendants who go to trial, the prosecutor must make sure that the investigators obtain a sufficient amount of evidence to be able to convince a jury beyond a reasonable doubt of the defendant's guilt. And, therefore, the prosecutor evaluates the evidence and suggests to investigators particular types of evidence they need to be gathering.

Lastly, in a joint prosecutorial effort, the prosecutor helps evaluate the momentum of the case and assists in making determinations as to when it would be most appropriate to call the case to an end.

Particularly in this case, I thought I would present to the Committee a chronology of how I worked with the DEA–MPD Task Force in putting this investigation together and in prosecuting it. Then Detective Michael Hubbard, who is a Metropolitan Police Department Officer and who was a member of the Task Force, until October 1st of this year, will describe his undercover role in the investigation.

In July of 1978, Detective Hubbard was introduced to a masseuse known as Ginger. Ginger began to sell him cocaine and introduced him to other members of her group. By September of 1978, Detective Hubbard had made three cocaine purchases from Ginger and two co-defendants.

I first became involved in the case in September 1978 when Detective Hubbard and his partner, Detective Budai, came into my office requesting that I consider the appropriateness of obtaining a pen register on Ginger's home telephone. Let me stop here for a moment, gentlemen, and explain to you what a pen register is, because some of you may not be familiar with it. A pen register is a machine which can be attached to a telephone line to decipher the telephone numbers dialed from the telephone. It has a little paper-tape printout, much like the printout you would see at the supermarket, on which the machine is able to decode the electronic impulses of a telephone when an outgoing phone call is being dialed. When an outgoing call is placed, the actual numbers that are being dialed are printed on this type. In addition, most pen registers now also have a timing mechanism so that the time of day, down to the second, at which that phone

number is dialed can be indicated. Pen registers give additional information because as soon as the telephone receiver is taken off the hook, electrical impulses are produced on the line. The pen register tape will also indicate what time the phone is taken off the hook, what time it is returned to the hook, and it also indicates when an incoming call is made, although it does not decipher from what phone number an incoming call is being made.

Getting back to the investigation, in her dealings with Detective Hubbard, Ginger, who was later identified as Teresa Starr, had given him her telephone number on which he was to call her when he wanted to place orders for cocaine. She had also indicated to Detective Hubbard that the way she operated was to have people place orders by phone. She would then get back to them, or have them call later for confirmation of the order. So Detective Hubbard already had an indication that this individual used her telephone as an integral part of her illegal activity. During these telephone calls with Ms. Starr, Detective Hubbard used another investigative tool, something called consensual recording. It is legal for an individual at one end of a telephone line to tape-record the conversation on the telephone line if he is one of the speakers. Law enforcement people frequently use consensual recordings to gather evidence. In this investigation we obtained several cassette recordings of telephone conversations between Detective Hubbard and Teresa Starr.

I agreed with Detectives Hubbard and Budai that a pen register would be an excellent investigative tool, and I prepared a court order for the Magistrate directing the telephone company to permit the agents to install the pen register device. It took about a week to get the phone lines all worked out. The machine was installed and started to operate.

From the first day we knew that this would be an excellent case for telephone investigative work and that our hypothesis was correct because the phone never stopped ringing. Furthermore, we began to see patterns of phone calls.

The analysis of the telephone data is an example of the kind of detail work necessary in a major investigation of complex criminal activity. Each telephone number dialed was written on a 3x5 card, and then, every two or three days, the various telephone numbers would be brought to my office, and I would draft what is called a grand jury subpoena to the telephone company asking for subscriber information, because obviously we did not know to whom those numbers were listed. We issued dozens of such grand jury subpoenas.

Many of the telephone numbers dialed from Ms. Starr's telephone were to telephone numbers listed to people who had either been convicted of, or who had been involved in, other narcotics violations. We began to keep track of patterns of phone calls to determine which numbers were being called most often and at what time of day. We began to focus in on those numbers frequently called at night and whether the subscribers were prospective members of a conspiracy. We also noted quite a few outgoing phone calls to foreign jurisdictions, including for example, Detroit and New York City.

The Detroit and New York connections in this case were extremely interesting to us from the start. Analysis of some of the telephone toll records for long distance calls showed, for example, a pattern of telephone calls to a number in Detroit which was listed to an individual who was a documented large-scale narcotics dealer. That individual had been arrested in New York City within the past year with a pound of cocaine in his possession. This kind of information indicated to us that we had formed a correct hypothesis in approaching this group as not only a conspiracy which relied upon the use of the telephone, but also upon a group which had connections to out-of-state people. That hypothesis was proven correct later in the case when we found out that in fact, not only was our key source of supply an individual named Tony Perdiz from New York City, but moreover that defendant Perdiz as well as defendant Hargrove were about to be and have since been indicted in Detroit with several other individuals as part of a major conspiracy distributing both cocaine and heroin in the eastern half of the United States.

By the end of September, Detective Hubbard had been successful in getting himself introduced to Ms. Starr's immediate supplier, Michael Tillery, a man whom she had originally introduced to Detective Hubbard as "Michael." Detective Hubbard did not know Michael's last name or address. However, the pen register again proved to be an invaluable investigative tool at this point. On September 28, 1978, as a result of an earlier arrangement with Ms. Starr, Detective Hubbard called Ms. Starr at her residence and asked her if the cocaine was available. She indicated to him that the deal was ready but that he should call her

back in about one hour. The pen register reflected that as soon as Ms. Starr hung up, a telephone number was dialed from her phone. A subpoena was issued to the phone company, and it came back identifying the phone number as being in the name of a Michael Tillery, and, of course, the subpoena return information also indicated his address. The pen register also showed that five minutes after that phone call a second outgoing call was made, again from Ms. Starr's telephone, and subscriber information helped us to identify the individual subscriber to that number as an Anthony J. Quander, and we also learned his address.

Agents of the Task Force were conducting surveillance at Ms. Starr's apartment building at this time and observed a male leave that apartment a minute or two after that first phone call. He was observed taking a taxi to The Representative, which is an expensive high-rise condominium in Arlington, Virginia. It happens to be the apartment at which the defendant Michael Tillery lived. This male was observed entering The Representative and a few minutes later returning from The Representative and going back to Ms. Starr's apartment building in Alexandria. It was in this way using the combination of the telephone information and physical surveillance that we were able to identify two of the co-conspirators within a week of that event, that is, co-conspirators Michael Tillery and Anthony J. Quander.

Now that we had the identity and the residence of the defendant Tillery located, we applied for a pen register on Mr. Tillery's telephone. And again, when that went into operation it revealed an extraordinary amount of telephone activity. When I say extraordinary amount, I mean thirty, forty, fifty calls a day, every single day. A great many of them occurred after midnight. That kind of pattern of activity, again, is suggestive of, in this context, criminal use of the telephone, since most drug dealers deal primarily in the evening hours. Because of this extraordinary use of the telephone, and the fact that each time Detective Hubbard made contact with the defendant Starr for purchase of cocaine, he had to do so through the telephone, we came to the conclusion that this was an ideal case for a wire tap. Then, as the prosecutor, it was my job to make sure that all of the requirements of the wire tap statute were complied with, and I began working with the agents on developing the affidavit which was necessary for the application to the District Court for a wire tap.

There was another reason for our decision to use a wire tap. By the end of last year, we realized that we had penetrated as far as possible into the organization through the use of an undercover agent. And, we were extremely limited as to what we could do in terms of surveillance. For example, the apartments of both defendant Starr and defendant Tillery were located many floors up in high-rise modern buildings, which made it impossible to really conduct surveillance on the coming and going of individuals in the apartments. And, we were unable to follow these people with automobiles because they had a habit of driving incredibly fast and would have been able to spot an agent very easily. Detective Hubbard could not gain any further entry into the organization, in part because there was an initial distrust of him, since he would not share or sample the drug product. This is always a tip-off to drug dealers that the person they are dealing with might be a police officer.

We were satisfied from the conversations that defendant Tillery was not the main man in the organization and that he, indeed, had a large-scale supplier from whom he got his narcotics. These people were obviously significant targets to us, and so the decision was made to apply for the wire tap.

The wire tap was granted after extensive review by the Department of Justice, and at the end of February, 1979, a Federal District Court Judge reviewed the application and authorized a wire tap for thirty days.

During the course of the court-authorized wire tap, more than 2,000 incoming and outgoing telephone calls were intercepted. Of these, more than 300 were considered to be directly involved with illegal narcotic activities, and in addition, at least 15 others were related to other crimes which included interstate transportation of stolen motor vehicles and possession of stolen property. My job as a prosecutor during the operation of the wire tap was to make sure that the judge who had authorized the wire tap was kept informed as to its progress. Under the court order I had to present the judge with a written report every five days detailing the progress of the wire interception and indicating to the judge whether or not the continuation of this electronic surveillance was justified. While the wire tap was being operated, we used surveillance and other techniques to corroborate what we had heard on the wire tap and also to assist us in identifying more specifically the identities of the various persons involved in conversations.

Surveillance of these defendants was extremely difficult, however, because these were very sophisticated individuals. On two different occasions while the wire tap was in operation, we picked up conversations indicating that the speakers had identified what they thought to be suspicious cars, that is, possible police undercover vehicles keeping surveillance on them. In both cases, we knew that the defendants and their colleagues had spotted our undercover vehicles. We, of course, immediately had those vehicles moved. By the end of the thirty-day period, we had nearly run out of undercover cars to use. We kept alternating cars so that the targets would not get suspicious when they saw the same car four or five times on the same day driving by their residence.

We were extremely fortunate during conduct of this wire tap to have chosen as targets for this investigation people who spoke a great deal on the telephone. Although these defendants did use code words and nicknames, which, for a while, made it difficult for us to be sure what it was they were talking about, we were able to determine by the tone of voice and by the context of conversations exactly what was being spoken about and to whom. Code words were frequently used to refer to cocaine and included such terms as "shirts," "chickens," "white," "girl," "onions," "books," and "apartments." Defendant Tillery explained several code words, such as "apartment" to Detective Hubbard. We also know that the term "paper" referred to money.

The wire tap greatly increased our understanding of the scope of this conspiracy and enabled us to identify other participants in this narcotics distribution organization in other jurisdictions. The identity of many of these individuals would never have been learned but for conversations and intelligence gleaned from the wire tap. It is likely that this information will ultimately bear additional fruit in the form of subsequent prosecutions in our own or other federal judicial districts.

After the wire tap was concluded, which was at the end of March, our main job was, first of all, to transcribe all of the conversations that had been recorded. This was an incredibly time-consuming job because the tapes not only had to be transcribed, but they had to be checked and rechecked for accuracy. Also, during this time period, we made preparations for the ultimate conclusion of the case, including deciding which individuals would in fact be indicted as the case came to an end.

Towards the end of May, I prepared a preliminary indictment and started working on affidavits for search warrants for four locations. On May 21, 1979, I presented the case to a federal grand jury which returned an indictment. Bench warrants were issued for the arrest of the nine defendants. At the same time the defendants were being arrested, search warrants were also being executed.

The case finally went to trial on July 23, 1979, after the pre-trial motions of the defendants, including motions to suppress the wire-tap evidence were denied. On July 26, 1979, after a four-day trial, the jury returned guilty verdicts on the five defendants, including defendants Tillery, Hargrove and Starr, who had gone to trial. The other defendants pled guilty along the way. The various defendants have now been sentenced and received terms ranging from probation for the co-defendant who cooperated with the government all the way up to eleven years imprisonment for Tony Perdiz, the cocaine supplier from New York City.

The defendants who have received sentences are now in prison, and the five defendants who went to trial have filed their appeals, and the matter is now pending before the Fourth Circuit. My role as a prosecutor of this case will not be over until all of the appeals have been settled, and that means that for at least another year I will be working with this particular case writing briefs and making oral arguments before the court.

As I am sure you gentlemen can see, there is a great deal of work which goes into this kind of an investigation and prosecution. What I believe may be of special interest to you in the Tillery case is the fact that we used almost all of the major investigative techniques available to us as law enforcement officers and prosecutors. From the personal involvement of an undercover police officer, Detective Hubbard, through the more sophisticated techniques of electronic surveillance and, of course, the traditional standby for all police officers, just plain old-fashioned hard work. Lastly, to repeat the theme I began with, what really made this case successful was the teamwork between the federal and local police forces and between the prosecutors and the investigators. It is this kind of joint effort which, in my opinion, leads to the most effective and successful law enforcement.

I would like to thank the committee for offering me this opportunity to share with you my experiences in working on this investigation.

PREPARED STATEMENT OF MICHAEL E. HUBBARD, DETECTIVE, DRUG ENFORCEMENT ADMINISTRATION AND METROPOLITAN POLICE DEPARTMENT TASK FORCE

Mr. Chairman, Members of the Select Committee on Narcotics Abuse and Control. It is a pleasure to be here today to recount for you the details of the Tillery case, an investigation into a cocaine distribution ring that operated here in the Washington, D.C. metropolitan area.

As indicated, I became involved in this investigation through my participation in the Drug Enforcement Administration/Metropolitan Police Department (MPD) Task Force in April of 1977. The joint resources of the DEA/MPD Task Force gave us the opportunity to go beyond the mid-level violator in our investigation to the upper-echelon of the multi-jurisdictional organization, so as to immobilize the source.

I would like to say at the outset that all individuals identified in the course of my testimony have been tried, convicted, and are now incarcerated. Furthermore, although I will be speaking about my role as the undercover detective, it should be noted that my efforts were supported by the entire Task Force in conducting surveillance, providing back-up, and so on. Without their support this investigation would never have reached fruition.

Also early in the investigation, the United States Attorney's Office was apprised of the developments and potential for this case. The Assistant United States Attorney assigned to this matter immediately became involved and worked in concert with us throughout the remainder of the investigation.

Specifically, the investigation that we're looking at today began in April 1978 when my partner and I met with a concerned citizen in order to effect an introduction to people on the periphery of known narcotic violators. This new-found acquaintance, Ginger, a masseuse, first introduced me to two Colombian nationals in late July. As far as she knew, I was Mike Lewis, a massage parlor operator/pornographer from Philadelphia who was looking to branch out into drugs and make money. In the early stages to develop my association with Ginger, I made two buys from the Colombians, spending $1,800 for 1 ounce of cocaine on one occasion, and $3,500 for 2 ounces on the other. Ginger told me that these Colombians were not her primary source of supply. She described her regular source as a member of the legal community who had the capability of supplying multi-pounds of cocaine weekly.

By the time we were ready to arrange for the purchase of the third exhibit, I had gained Ginger's confidence.

The first time I purchased cocaine from her primary source of supply I was not allowed to meet him and was requested to remain in a backroom. It was not until my next purchase from the organization in late September 1978 that I was allowed to meet the primary source of supply—introduced as Michael, later identified as Michael Tillery. The previous succession of multi-ounce cocaine purchases were used to develop the case and, basically, buy my way into the organization.

Upon consultation with the Task Force Supervisors, it was decided to augment the development of the investigation by spending greater amounts of money for greater amounts of cocaine. This was done primarily to further develop the conspiracy potential of the investigation.

I was now authorized to spend $9,500 for 6 ounces of cocaine. I learned directly from Tillery that he was, in fact, the principal; however, all transactions would be arranged through Ginger. This was done to insulate Tillery and his organization from the possibility of law enforcement exposure. Furthermore, Tillery advised that he was a businessman and any drugs purchased by me came with a money-back guarantee.

With the support of the entire Task Force, the next three months were spent developing investigative leads on the case. Pursuant to court approval, we installed a pen register on Ginger's home phone Thus, we were provided with a list of phone numbers, the records for which we subpoenaed from the telephone company. The subscriber information was then checked against the central files of the MPD and DEA; and as expected, we had quite a few "hits", that is, phone numbers registered to known narcotics violators.

It was also during this period between buys that I met Ginger for dinner at an exclusive, well-known restaurant in Washington while under the surveillance of Task Force personnel. Over dinner I was able to develop more information regarding drug connections, access to other drugs besides cocaine, and technical advice on "cutting" or diluting drugs.

The next time I attempted to arrange for the purchase of cocaine, Tillery advised that I was trying to buy "between cycles". At that meeting, Tillery confided in me and discussed the nature and scope of his operation. He explained how he purchased cocaine from his source approximately every 15 days and made purchases in varying amounts, although always in increments of $100,000. Tillery would then notify his regular customers of the shipment's arrival, from which time they would have 72 hours maximum to consumate the deal. If no deal took place within 72 hours, the cocaine would then be sold elsewhere. As a regular customer, Tillery explained that I would be able to purchase a ½ kilo of at least 85 percent purity for $25,000 and would also be supplied with necessary diluents.

Tillery assured me that there was plenty of profit in this business for everyone. In the Washington metropolitan area, our records indicate that street-level purity of cocaine was and continues to be approximately 10 percent. Therefore, the purchase of ½ kilo (1.1 pounds) could be diluted and increased to approximately 8 pounds. Realizing that with 16 ounces to the pound, 28 grams in one ounce, and a typical street price of $85–100 per gram, we're talking about very large amounts of money.

Mr. Tillery instructed that over the phone I should order the cocaine using a code word as a cover to avoid detection. He further suggested using as a code the "renting of apartments." (apartments meaning cocaine) Efficiencies referred to ¼ kilo; studios, ½ kilo; 1 bedroom, one kilo; 2 bedrooms, 2 kilos and so on. Money was to be codified as "paper" and since the price was known in advance, there would be no reason to refer to exact amounts over the phone.

By this time in developing the conspiracy, I had been associated with these traffickers for approximately six months and had spent a considerable amount of Task Force funds on cocaine. Also, a great deal of investigation had been accomplished by other Task Force members in the development of this case. At this point, they became less suspicious of me. In furtherance of our relationship, Tillery asked if I could use my cover as a legitimate businessman to procure a laboratory press for him. I agreed to help and the "good faith" picture of the laboratory press I ultimately showed him was, in fact, a selected photograph of equipment belonging to DEA.

Of the individuals I dealt with, many had legitimate fronts. Their condominiums and apartments were all in some of the most exclusive residences in Northern Virginia. Further, these people had no reluctance in involving juveniles in their lifestyle.

From undercover conversations, it was apparent that these people preferred dealing in cocaine rather than other drugs. They felt that their clientele were a better class of people rather than, for example, heroin traffickers. They also felt that the penalties for cocaine trafficking would be less severe than for heroin trafficking. However, it should be noted that when the case was terminated, a sizeable quantity of heroin was seized as well as large quantities of cocaine.

During the course of the investigation, while I was continuing to make undercover purchases, we were able to install a pen register on Tillery's phone, which provided us with the necessary documentation to apply for a Title III wire intercept on his phone. This enabled the Task Force to identify Tillery's source of supply as Antonio L. Perdiz of New York, who was already known to law enforcement authorities.

In May 1979, approximately one year after the Task Force initiated this investigation, we simultaneously executed four search warrants in Alexandria, Arlington and Washington, D.C. As a result of this investigation in Washington, we discovered a facility for processing multi-kilograms of cocaine, and seized approximately six pounds of the drug. Large amounts of heroin and cocaine and varying amounts of PCP, marihuana, hashish, and pills were also seized. The DEA/MPD Task Force was able to arrest ten individuals associated in this conspiracy investigation.

Gentlemen, in brief, those are the facts regarding the background of the Tillery et al. investigation. With me this afternoon is David Canaday, the Special Agent-In-Charge of DEA's Washington District Office and Lt. William J. Merritt, Metropolitan Police Department, serving as immediate supervisor of this joint task force and we will be happy to answer any questions.

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