

INFANT VICTIMS OF DRUG ABUSE

HEARING
BEFORE THE
COMMITTEE ON FINANCE
UNITED STATES SENATE
ONE HUNDRED FIRST CONGRESS
SECOND SESSION

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JUNE 28, 1990
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INFANT VICTIMS OF DRUG ABUSE

THURSDAY, JUNE 28, 1990

U.S. SENATE,
COMMITTEE ON FINANCE,
Washington, DC.

The hearing was convened, pursuant to notice, at 10:00 a.m., in room SD-215, Dirksen Senate Office Building, Hon. Lloyd Bentsen (chairman of the committee) presiding.

Also present: Senators Moynihan, Bradley, Rockefeller, Daschle, Danforth, Chafee, Heinz, Durenberger, and Symms.

[The press release announcing the hearing follows:]

[Press Release No. H-39, June 19, 1990]

SENATOR BENTSEN ANNOUNCES HEARING ON INFANT VICTIMS OF DRUG ABUSE; NUMBERS, TREATMENT COSTS ARE STAGGERING, CHAIRMAN SAYS

WASHINGTON, DC.—Senator Lloyd Bentsen, Chairman of the Senate Finance Committee, announced Tuesday a hearing this month on “the most tragic victims of drug abuse,” infants and other young children.

Bentsen (D., Texas) said the hearing on infant and child addiction will be at 10 a.m. on Thursday, June 28, 1990 in Room SD-215 of the Dirksen Senate Office Building.

The Secretary of Health and Human Services, Louis Sullivan, M.D., will testify. Other witnesses will testify by invitation only.

“Drug abuse has caused terrible problems for Americans, but nothing is more heartbreaking than infants who are born addicted to crack or other drugs,” Bentsen said.

“Thousands of these babies are born every year, many of them simply abandoned at hospitals. These children are the most tragic victims of drug abuse. More and more are born infected with AIDS, too, and virtually all of them have serious health problems at birth. The oldest victims of crack abuse are about 5 years old now, but their medical and developmental problems can last a lifetime,” Bentsen said.

Bentsen said the hearing will focus on the effects of drug abuse on these children and their mothers, and on services provided under the Maternal and Child Health Block Grant, Medicaid, foster care and other Federal programs.

“I asked the General Accounting Office last year to go around the country and take a close look at the scope of this problem, and we’ll be hearing that assessment at this hearing,” Bentsen said.

“The costs—physical, emotional and financial—are staggering and growing. They put a real strain on our Nation’s health care system and the social service systems that help these children enter foster care or be placed for adoption. According to information compiled by the Joint Economic Committee, just the neonatal intensive care for 375,000 babies cost \$2.5 billion in 1988 and government at all levels will soon spend more than \$15 billion a year to prepare these children for kindergarten at age five,” Bentsen said.

“This is a tragedy that won’t go away easily or soon,” Bentsen said.

“I want to get some solid answers about the extent of the problem, what can be done for these kids and their mothers, and how to eliminate or at least put a real dent in the number of these tragedies,” Bentsen said.

**OPENING STATEMENT OF HON. LLOYD BENTSEN, A U.S. SENATOR
FROM TEXAS, CHAIRMAN, SENATE FINANCE COMMITTEE**

The CHAIRMAN. The Chairman has the usual problem we have around here. I have to be in two other places. We will get this started and then I will have to return to the Budget Summit meetings. But we have dedicated this hearing to what has been a growing and an exploding problem in this country.

Over the last decade the use of drugs, like cocaine and crack, has an incredible increase. Each year, as we see it progress, the war against this menace takes more casualties, even down to the youngest and most vulnerable of all Americans, and of course that is infants.

Secretary Sullivan will be with us this morning to discuss the scope of the "drug baby crisis." We will also be releasing the results of the General Accounting Office report prepared at my request which contains new important information about the scope of this crisis. All one has to do is go to some of these hospitals that I have done to see some of the boarder babies that are there, to see the casualties of drug addiction by the mothers, and the results it has brought to them.

One of the things that the GAO report shows is it is grossly under reported. When you use some rigorous detection methods, the number of babies exposed to drugs is much higher than expected, an average of 16 percent or nearly one in six. At one hospital 42 percent of the babies were found to be drug exposed—42 percent. They are not all as healthy as that one. [Laughter.]

A recent estimate by the former Director of the Office of National Health Statistics puts the total cost of drug abuse at \$60 billion annually. But even that may turn out to be too optimistic. When millions of women at child-bearing age use illegal drugs a growing epidemic of drug-exposed infants has resulted and has overwhelmed our foster and health care systems.

Some estimates suggest that up to 375,000 drug-exposed babies may be born each year. Yet the magnitude of that epidemic has been a dark and well-kept secret in America. I think only the tip of that iceberg has been seen thus far. These new numbers are devastating evidence that the war against drugs has been lost. The consequences of our failure in that are staggering.

The care and treatment of drug-exposed infants may well become the major public health challenge of the 1990's, rivaling even the cost of the savings and loan bailout. For example, in HHS an Inspector General report estimates that drug-exposed infants are four times more likely to be born premature, 10 times more likely to die of sudden infant death syndrome. Also, increasing numbers of these children are affected with the virus of AIDS.

Some researchers have estimated that roughly three-quarters of AIDS-infected births result from the drug abuse of the mother, with the other quarter coming from the drug abuse of the father. Now after leaving the maternity ward, an additional series of problems may develop with these children. Burdened with the stigma of being a crack baby many enter the foster care system. One survey showed that only 7 percent of the foster crack children in New York had been adopted. The rest facing the possibility of spending

years in the foster care system or perhaps worse, to remain in the hospital and becoming a boarder baby.

The Congress needs to get a better handle on the cost associated with this kind of a crisis. In my own State, the State Medical Association estimates that between \$3,600 and \$50,000 is spent on hospital care per drug-exposed child—for each one of them. Here in Washington one youngster at the Howard University Hospital required at 245 day stay costing upward of a quarter of a million dollars.

But defining the problem is not enough. We must also search for solutions, one of which may be improving prenatal substance abuse treatment.

Now testifying before us today will be Dr. Richard Lowensohn, who is the associate professor of obstetrics at Oregon Health Sciences University, whose Portland, OR clinic has achieved a 50-percent success rate in obtaining drug-free births. Model programs such as his may be able to develop a strategy to address this kind of a problem.

As the drug problem in this country grows and as the costs associated with it become more and more apparent, we begin to comprehend the scope of the problem facing the health and the foster care systems of this country over the next decade. During today's hearings we are going to learn more about the nature and extent of this crisis and in particular what Dr. Sullivan and our witnesses believe to be the Federal Government's role and responsibility in addressing this kind of a difficult challenge.

As I stated, I have to participate in the Budget Summit meeting and I will be turning over the hearing then to my good friend, Senator Moynihan.

Senator, will you take over?

OPENING STATEMENT OF HON. DANIEL PATRICK MOYNIHAN, A U.S. SENATOR FROM NEW YORK

Senator MOYNIHAN. Good morning. I know what a disappointment it is to Chairman Bentsen that he has to go off to that Summit. This is a matter of the very most pressing concern to him. He initiated the request of the General Accounting Agency for the report we will hear about later in the morning and will of course know what transpires here and the testimony we hear.

I would only make a few remarks. But I hope I can convey a certain vehemence; and I hope I can persuade later in the day—later in the morning—Secretary Sullivan for whom we have great regard to be open with this committee about this subject, and that is the Medicaid care of children who are born with syndromes associated with crack cocaine use by their parents.

This administration, Doctor, has been in contempt of Congress in this regard. The Office of National Drug Policy has been just contemptuous of our concerns here and as near as contemptuous of the children involved as it could be. I do not take any pleasure in saying this. But in 1968—I'm sorry, in 1988—we enacted the Anti-Drug Abuse Act of 1988 in which we specified in statute, and I wrote the words that "there would be treatment on request for drug addiction."

We created the Director of National Drug Policy, the so-called "Drug Czar"—Dr. Bennett. It is now his post. We created two deputies, one for supply and the other for demand. We took those usages from economics and we made demand the first deputy, the people who will use the material. We were pleased when Dr. Clabor came down from Yale to fill that position.

Then slowly we were astounded to learn that although the bill specified that there would be equal attention to treatment with law enforcement that the Office was not going to provide that equal provision. Then we learned that Medicaid was not reimbursing, would not reimburse, pregnant women using crack cocaine who sought treatment. Pregnant women using crack cocaine seeking treatment are not reimbursed by Medicaid.

So we asked, isn't that illogical? Is that not what the law says otherwise? And the statute clearly contemplates that kind of care. And the Office of Drug Policy—I quote from the Associated Press last June 13, a spokesman for Dr. Bennett and Mr. Hamilton said, "Bennett continues to oppose Medicaid reimbursement," according to Hamilton. No.

We appealed to the head of the Health Care Financing Agency, Dr. Wilensky, and we have from her a two-page letter, which I know you know about, sir, which I would like to put in the record at this point. A letter of May 23 that says as best I can read Medicaidese, it says, "Of course we can reimburse a hospital providing care for a pregnant woman. Of course we can. But the White House says no." Mr. Bennett speaks for the President in this regard and he says no.

I note that Mr. Bowsher in the report that he reprepared for the Chairman with the characteristic directness that we have come to associate with his reports says that pregnant women should they need treatment, then that treatment should be reimbursed by Medicaid. We will hear from the Comptroller General, whom God knows is a refreshing event in Washington these days, later.

[The letter appears in the appendix.]

Senator MOYNIHAN. The Senate has just passed a bill on this subject, S. 1673, which I was the Senator—I'm sorry about the "I" but we have to locate these things—I was co-chairman with Senator Nunn of the task force that drew up the Senate side of the drug bill in 1988. When we learned by late 1989 that the Administration was not going to provide Medicaid reimbursement we introduced a bill, S. 1673, amending title 19, saying you will do so. And that bill passed the Senate unanimously and with the specific support of Senator Dole.

Is the administration for the bill? No. The administration does not believe that Medicaid should reimburse hospitals for treating pregnant women using crack cocaine. The Drug Czar says that is his view and his view is the White House view. He is located in the White House. I do not know what else there is to be said. I cannot imagine. It is barbarous and it is devastating.

I would hope, Dr. Sullivan, that you are changing this position. We have done all we can do with Dr. Bennett. He is not a Member of the Cabinet, you are. You are the chief health officer of this government. We look to you, sir, and we look forward to your testimony.

I did not mean to talk this long but this is not a new subject with us. We have been working on this committee for a very long time. We have had no response from the administration. None.

I am sorry to have kept you all. I believe, Senator Chafee, weren't you next? You are next.

**OPENING STATEMENT OF HON. JOHN H. CHAFEE, A U.S. SENATOR
FROM RHODE ISLAND**

Senator CHAFEE. Yes. Thank you, Mr. Chairman. I will submit my statement for the record. We want to hear from these witnesses. What you had to say I followed with interest. I am not sure it was all totally accurate.

Senator MOYNIHAN. Would you want—

Senator CHAFEE. I am not going to go back and forth on it. Medicaid, of course, does pay for the hospitalization of those who are in with cocaine addiction. That is stricken women, including those needing prenatal care. But we will hear more on that if this is the right forum to hear on that. I am not confident that this is all within the jurisdiction of Dr. Sullivan.

But we are here to learn and one of the problems we are trying to learn about today is why 11 percent of pregnant women in America expose their children to drugs. That to me is a shocking figure. I hope we can learn something from it.

Now I am in a somewhat similar situation as Senator Bentsen in that I have to step out for awhile, but I will be back and listening to the witnesses. I am glad we are having this hearing, Mr. Chairman.

Thank you.

[The prepared statement of Senator Chafee appears in the appendix.]

Senator MOYNIHAN. We thank you, Senator Chafee. We will get to that issue you raised.

Senator Daschle?

**OPENING STATEMENT OF HON. THOMAS A. DASCHLE, A U.S.
SENATOR FROM SOUTH DAKOTA**

Senator DASCHLE. Thank you, Mr. Chairman. I want to commend you for your hearing and for many of the remarks you made. I want to use this as an opportunity to talk about a problem that we have in South Dakota that is related to the one you just described for crack babies. It is the one that our Indian children have with what is called fetal alcohol syndrome.

Fetal alcohol syndrome among babies is so prevalent that 25 percent of all babies today born on the reservation have it; either fetal alcohol syndrome or fetal alcohol affect. They are exposed to such high levels of alcohol during pregnancy that they are born intoxicated, and they experience life threatening withdrawal shortly after birth. But in virtually all cases they are doomed to birth defects or mental retardation.

The saddest part of it is that it is 100 percent preventable. Twenty-five percent of our kids today on the Reservation are born with this. One of the witnesses at a hearing I held a couple of weeks ago out in South Dakota testified that it is tantamount to

genocide. It is frankly tantamount to a genocidal policy that may be inadvertent but nonetheless is happening today.

She cannot be here today. I know this is a hearing on crack babies. But if I could have one witness here, I would have had a person whose name is Janeen Gray Eagle. I am going to read a very short part of something that she shared with me. I want it to be part of the record on crack because it, as I said, has such a devastating consequence on our children, just like crack has on inter-city children.

This is Janeen Gray Eagle at a hearing a couple of weeks ago. "A woman came to the hospital ready to deliver and had never been to a prenatal clinic before. This woman was obviously intoxicated. When the baby was finally born, a little girl, she would not cry and had a very difficult time breathing. When the baby did start to cry the cheap smell of wine was on her breath. This baby would not breathe because it was technically 'passed out'."

This is child abuse.

Some of our babies have received so much alcohol through their mother's breast milk that they have a suppressed gag reflex and die trying to expel the liquor from their tiny bodies. This is child abuse. Let's talk about the baby who dies nursing, and that has happened by being smothered by a mother who is passed out. This is child abuse. This is happening as we speak. As we speak, before this hearing is out, a baby in South Dakota will probably have died from fetal alcohol syndrome.

So I commend you, Mr. Chairman, and I just hope that as we look at all of the torturous experiences that these young children are having today, whether it is crack or illicit drugs or legal drugs, that we remember there are babies dying today and 25 percent of the population of Indians in my State are experiencing something that children in Third World countries are not experiencing to that degree. It is incredible.

I hope that at some point in the future we can address this comprehensively. And to the extent this hearing will lend some opportunities for all of us to discuss options, I think that it is a very important hearing and commend you again for holding it.

Thank you.

Senator MOYNIHAN. Thank you, Senator. I would like to say again that Senator Bentsen, of course, asked for this hearing. The Subcommittee on Social Security and Family Policy could certainly address the Fetal Alcohol Syndrome and we will. We will.

Senator Durenberger?

OPENING STATEMENT OF HON. DAVID DURENBERGER, A U.S. SENATOR FROM MINNESOTA

Senator DURENBERGER. Mr. Chairman, there are many victims in the war against drugs but none are more heartrendering than the children born today as drug users.

What I would like to do is compliment not only the Chair for having this meeting but Tom Daschle for putting his finger on the problem. We have lived with fetal alcohol syndrome in our part of the country and lots of parts of the country for a long time. As he

said, maybe we have characterized it as a genocidal problem, but we now know that when it comes to the combination of mental illness and chemical dependency it is a problem being experienced by such a large number of Americans that you cannot say it is an Indian Reservation problem. It is not just a ghetto problem. It is a problem for all of us.

Tom has the problem in South Dakota, but does not have the capacity to deal with it in South Dakota. I mean the poorest counties, the poorest townships in this State are in South Dakota. The greatest problems, whether it is fetal alcohol, drug abuse or it is mental health problems, are right there. There is no way that South Dakota can deal with this problem unless somebody here in Washington, DC, wakes up to the relationship between mental health, chemical dependency in its broadest sense, and the high cost to society of the defects in birthing which are a result of the defects of the society in this country.

I am just going to make three points. One is, if we do not deal with the medical costs and access problem in this country you are going to be holding these hearings 10 years from now and the problem is going to be 10 times as bad. We must do something about the deficit in this country. It was horrible watching an hour and a half of histrionics last night over this debate on waste in government. We continue playing with the deficit while we spend money on remedial and we cannot spend money on prevention.

We put all our money into the neonatal intensive care units and none of it into MCH, and the rest of these things. And unless we have the courage ourselves to deal with this paralysis—this political paralysis—forget about these hearings.

The last thing I wanted to say is the hospitals of America are carrying this burden for us. We have to understand that. Just a little illustration I have been using is one of my staff members—the father works for me; the mom works for Chuck Grassley. They have just had a perfectly normal baby at one of the intercity hospitals in Washington, DC, and the delivery cost them \$7200. That same delivery in the Mayo clinic would have been about \$2,600.

I mean this hospital is carrying a whole lot of other overburden that gets loaded on a few people who can afford to pay these bills. And none of this money then is going into the kind of thing we are here to talk about.

I wanted to raise those three points to demonstrate that this is the right committee, I think, to take on this issue.

Senator MOYNIHAN. Certainly. We will obviously take up this as a special hearing and we will make the point that in my State private hospitals last year lost \$1.5 billion. The neo-natal wards go on out of sight almost at an incredible expense of remedial care, as you say, Senator Durenberger. And is a consequence of no effort whatever in advance.

Senator Heinz?

OPENING STATEMENT OF HON. JOHN HEINZ, A U.S. SENATOR FROM PENNSYLVANIA

Senator HEINZ. Mr. Chairman, first of all I want to agree with Dave Durenberger on each of the three points he made and what

he in part left unsaid, although it was very implicit in what he said—that if we do not deal with the deficit, we are never going to unshackle ourselves to do what we should be doing in the first place. And like each member of this committee I have done my time, and it is not pleasant, going to the neo-natal wards were the crack babies and babies infected with AIDS and with other problems, including the syndrome that Senator Daschle described, are all too evident.

You are first talking about costs, even if they are Medicaid-eligible costs, for neo-natal care that are reimbursed at a fraction, at least in our State. Secondly, these costs can add up to hundreds of thousands of dollars. As I said, only a fraction of that is reimbursed. And then, in addition, there is the problem of border babies. These are children whose parents do not want them who are forced to spend an even longer period of time at the hospital until they can be placed, perhaps with a relative—more often in foster care—if they can be placed. And the result is this enormous overburden of costs on our hospitals, only a fraction of which is ever reimbursed, and the hospitals are sinking under the strain.

If we allow them to sink, whether it is Hahnemann—and we are going to hear from Margaret McGoldrick later—or in Philadelphia also—the University of Pennsylvania or Temple University Hospital—the fact is that we are going to see what we have in the way of service delivery closed because no one is going to be able to afford it. Then, whether you have health insurance or not, the average American who needs it—who does not have a crack addicted baby, but does have a premature birth—isn't going to be able to get the care for their little baby infant son or daughter who is delivered at 6 or 7 months.

So this may seem to people as if it only affects the children of crack addicts or alcoholics, but it is going to affect everybody. If you go out to California, you will find that the trauma center system that they had out there, which was very good, is closing down because there is no reimbursement for it. And now when people are in accidents, who are not driving under the influence, they are very lucky to get the kind of trauma care that used to exist in California 5 years ago.

So, Mr. Chairman, I commend you on holding this hearing. I hope though that both the country and the Congress realize what is at stake.

Senator MOYNIHAN. I think that is a hugely important point that Senator Heinz makes. What is beginning to be at stake is the continued existence of our hospitals. We have institutions that have been in New York City for two centuries whose endowment has disappeared in the last 5 years.

Senator Symms?

Senator SYMMS. Mr. Chairman, I do not have a formal statement. I see our colleague from Connecticut is here to testify on the Victims of Drug Abuse Act that he is introducing this week and I would be interested to hear what he has to say.

Senator MOYNIHAN. We thank you.

Senator Danforth?

Senator DANFORTH. I have no statement, Mr. Chairman. I affirm everything that has been said by other members that I have heard. But I did not hear your statement.

Senator MOYNIHAN. Would you like me to repeat my statement? [Laughter.]

Senator DANFORTH. I am sure you will. [Laughter.]

Senator MOYNIHAN. And it will not have been for the first time. It has been 1½ years of saying this and still no answers. Perhaps today will be different.

Senator Dodd, we welcome you to the committee, sir.

STATEMENT OF HON. CHRISTOPHER J. DODD, A U.S. SENATOR FROM CONNECTICUT

Senator DODD. Thank you very much, Mr. Chairman. I have enjoyed immensely listening to the opening remarks of my colleagues. I, too, want to commend you and Senator Bentsen for holding these hearings. The Subcommittee on Children, Family, Drugs, and Alcoholism, which I chair, have had a number of them. In fact, I would say at the outset, I had the pleasure of visiting a number of facilities in your beloved State because so much work is being done in the city of New York. I went to Metropolitan Hospital on 97th Street, where turn right and you see Yorkville with homes or apartments that you can buy for nothing less than \$300,000 to \$400,000; literally turn your head left and it is Spanish Harlem where boarded up windows are the order of the day.

In that hospital, 30 percent of all children born at high risk are addicted at birth, just in that one facility; and the costs for these children run about \$40,000 to \$60,000 in the pediatric intensive care unit. Because crack is so new the statistics are not available for a great period of time, but they now know that once a child is released from the intensive care unit at that facility the average extended visits before the age of 2 are between five and seven—extended visits. And they are now beginning to establish the data that indicate that serious neurological problems and so forth are going to exist certainly into adolescence. Some experts believe that for some children, these problems may persist well into adulthood for infants born as addicts. So we are beginning to get some sense of the problems.

With all due respect, if I could make a suggestion at the outset, that has something to do with what Senator Daschle said earlier. I think we are all guilty of this to some degree. Really in a sense the hearing ought to be the Victims of Substance Abuse. I think too often we have focused, and with much just reason, on drugs as being the problem. The fact of the matter is, of course, that alcohol abuse accounts for a significant amount of the problems, not only on an Indian Reservation in North Dakota or South Dakota, but in the highways of Connecticut and New York. Across this country, substance abuse is something we need to pay a lot more attention to.

I would hope that in the future when we start dealing with legislation we will talk about it in those terms rather than just focus on the narcotics. But anyway, Mr. Chairman, I am delighted to be

with you. I have a statement and I will paraphrase some of it here and ask it be included in the record in full.

Senator MOYNIHAN. We will put it in the record as if read.

Senator DODD. I know you have very distinguished witnesses that you are very interested to hear from. Obviously, again, as you have all said here, the plight of children who are innocent victims of substance abuse draws from us many emotions—from deepest pity to the sharpest anger. That was reflected here this morning as well. It challenges, Mr. Chairman, our ability and commitment to reach out to even the most troubled parents.

I strongly believe, however, that the success in responding to the problem will be measured more by our compassion than our condemnation. The tendency is to condemn. But I think, frankly, the level of rhetoric needs to subside a bit and we need to do the hard work now of figuring out what works, how can we service these children, what is going on across the country in States and localities—where, I might add, a great deal of very positive things are occurring. We must learn from those experiences and try to apply them as we legislate here or encourage the administration to issue executive orders and the like that may contribute to the diminishing of this particular problem.

In that regard, Mr. Chairman, I am introducing a bill this week called the Children of Substance Abusers Act which is based on the principle that extending help early in providing comprehensive health and social services is one of the best ways to protect children and preserve families where substance abuse is present.

Mr. Chairman, many children of substance abusers become visible to us only when they enter the foster care system, an area about which I know you particularly and many members of this committee have a deep interest. I encourage you and applaud your efforts in focusing your attention on that particular problem. But testimony from our own hearings suggest staggering costs to society, as much as \$20 billion for infants born exposed to cocaine in just 1 year. That is the price tag we are now being told.

What of children themselves? We are only beginning to glimpse what the future holds for them. So far research suggests a cluster of subtle developmental problems. Head Start teachers tell us they already are seeing a pattern of behaviors, including short attention spans, delayed speech and combative or exaggerated behavior that could be traced to drug exposure.

The impact of substance abuse on children extends far beyond drug-exposed infants. The National Committee for the Prevention of Child Abuse estimates that some 675,000 children annually are seriously mistreated by a caretaker who is a substance abuser. The abuse these children experience is more severe and the neglect more complete than anything we have seen in the past.

I certainly do not have to tell this committee about the alarming rise in foster care placements, fueled in many areas of the Nation by substance abuse. And small wonder, since the resources to preserve these families often do not exist at all. Drug and alcohol treatment programs tailored for women with children are scarce and society has little understanding of the special supports these families need.

We all recognize that sadly some children must be removed from their homes. But it is tragic when children must be removed because we, as a society, are unwilling to invest in certain families, writing them off as unworthy of our support.

The children of Substance Abuse Act that I mentioned a minute ago will begin, we hope, to make that investment. The heart of the bill, Mr. Chairman, is a Children of Substance Abusers—or COSA we call it—that would provide \$100 million for comprehensive services to children and their families. This bill is unique in its extension of help beyond the prenatal period and its inclusion of any children of substance abusers. It thus provides a continuum of health and social services ranging from parenting education to pediatric care.

A primary goal of the COSA program is to preserve families. But children cared for by relatives, foster parents and adoptive parents are also included. Let me mention a problem here. We have one program in the State of Connecticut called Crossroads. It is only 1 of 11 in the country where the drug treatment program allows the pregnant woman or the woman with the new child to have that child with her during her stay with the treatment program.

In the city of New York, there are 25 such beds for the entire city. These beds are located at Odyssey House, which is well known I know to the Chairman—where children can be with the parents. The success rate of that program is much higher, where children are with their parents during treatment.

One of the problems we face in getting women—pregnant women or women with infants—to come forward for treatment is, frankly, that the system in the past has said that when you come forward and you admit drug abuse or you admit you're an abuser, then the first thing that happens to you is we take your kid. We take your kid.

And if you want to change this at all and encourage people to come forward, we have to stop that. You have to absolutely stop that. And you have to be able to say to parents that if you have a problem and you come forward, and you're pregnant or you have an infant child, we are not going to take your child away from you. Now you may have to for other reasons down the road. But you ought to try and keep these families together.

If these programs that we have now seen—only a handful of them in the country—are so successful in providing adequate treatment for people because they are allowed to keep their children with them, then it seems to me we ought to learn from it.

The last point I would make, Mr. Chairman, relates to what we modestly try to do with the little bill that we are introducing—and it is not going to solve all the problems here. But there is no such thing as a WIC family. There is no such thing as a Head Start family. There is no such thing as a HUD family. There is no such thing as an AFDC family. These are all the same families. And unfortunately, what we have done in the past with good intentions is to categorize through categorical programs these various things that are all designed to provide needed assistance to families, instead of trying to weave them together in what I have tried to call a seamless garment of services. Because the same family basically needs all or most of these services.

So you have to have some coordination of it. Families do not go out. They do not have cars. They do not have chauffeurs. They do not even afford in many cases the cost of transportation. You and I would not do it. We will not take the time to travel all over. We want one-stop banking now. We want to be able to deal with all of our problems in as expeditious a fashion as possible. That is the same problem that we face with many of these families, to go shopping around, to go to various places to get the services they need, they just do not do it.

So if we can coordinate these activities, this is part of what we are trying to do in our little COSA bill and part of what I suggest you are trying to do in your efforts here to try to bring some of these things together so it works efficiently. To just mount one additional program after another, we are deluding ourselves. We are not reaching the families that need help at all. So we need to have a far better approach, it seems to me, on the coordinated services.

I would just invite the attention to this little bill. As I say, it isn't going to solve everything—I know there is a tendency of all of us here to say we have found the answer, but we haven't at all. We have just come up with a program where we have looked and seen something that works. We saw it work in a little program in Connecticut. We have seen it work in a program in New York. There are only 11 of them in the country. They are successful and so our legislation is designed to try and come up with some funds so that the Dakotas and the West Virginias and the Minnesotas and the Missouris and so forth could maybe try something like this as well. It might really provide a meaningful treatment program for people who are substance abusers.

So, Mr. Chairman, I again appreciate your willingness to allow me to come forward here this morning and to share a few thoughts with you on the subject. I wish you well in your efforts as you move forward in an area that I know you have dedicated a significant portion of your life to.

[The prepared statement of Senator Dodd appears in the appendix.]

Senator MOYNIHAN. Senator, as Chairman of the Subcommittee on Children, Family, Drugs and Alcoholism, you who have concentrated the most on this legislation, I would like you to add a co-sponsor to your COSA legislation and congratulate you on it.

Senator DODD. Thank you very much.

Senator MOYNIHAN. Can I just make one point about the question of the specific issue before us today? Which is that we feel that with respect to crack cocaine we are dealing with an epidemic that struck very suddenly.

Senator DODD. Absolutely.

Senator MOYNIHAN. We know when. We know where. It appeared in the Bahamas in 1962. In 1966, March 1, 1966 the Lancet, which is the Journal of the British Medical Association, had an article and it is filled with these long discussions of controlled trial of small bi-polar probe and bleeding peptic ulcers. It is one of the world's leading journals. The lead article was epidemic-free base cocaine abuse; and it cited the Bahamas. It said that this thing has broken out. It is virulent and it is going to spread.

The public health profession in the United States did nothing about this. Not a thing. The Center for Disease Control in Atlanta, as far as I know, was mute. They just said nothing. And everything that these people in the Bahamas said would happen has happened. It is just, you know, the species had no experience of this assault and we have had very little success with these others. It is just the newness of this. Our inability as a society to say, yes, something new and awful is happening and what are you going to do about it is what we are trying to impress here.

But I congratulate you very much.

Senator DODD. Thank you.

Senator MOYNIHAN. Senator Daschle, you might want to say something.

Senator DASCHLE. I commend Senator Dodd for his comments and would like to associate myself with the remarks he made about the incredible array of locations that currently exist, and what an impediment that is to get assistance. I have actually had people tell me that they cannot afford the cost of traveling, if they are living in a small rural town, to come to one city after another to find these offices. So they just do not seek help.

It is humiliating in the first place. And then it is even a greater impediment to try to find these locations and they have no ability to do it. Some of them have no phone with which to even call to find out where these locations are. It is horrendous. If your bill does that I would be an enthusiastic supporter and I commend you for taking on that responsibility.

Senator DODD. I appreciate that. I should point out we just marked up yesterday, Mr. Chairman, the Head Start program out of the Labor Committee, along with a number of other programs. One of the features of the bill is a Coordinated Services Act that Senator Kassebaum has been tremendously helpful on, as well as Senator Coats and, of course, Senator Kennedy and others on the committee, which we will be offering for your perusal and support we hope at some point here in July or September, when Head Start and this bill comes to the floor.

But there is an effort in that legislation to really coordinate services. We do not know if we have done it perfectly but at least we are making an effort. Senator Durenberger was there yesterday on this as well as a member of our committee.

Senator MOYNIHAN. Well speaking of him, Senator Durenberger?

Senator DURENBERGER. No questions, Mr. Chairman.

Senator MOYNIHAN. Senator Heinz?

Senator HEINZ. No questions, Mr. Chairman.

Senator MOYNIHAN. Senator Danforth?

Senator DANFORTH. I wish you were right, but I doubt it.

Senator DODD. On what?

Senator DANFORTH. I think that you, as I understand your remarks, and Senator Moynihan, in his recent remarks, view this as similar to say an outbreak of polio where Government can step in, administer the right treatment, and deal with the problem. And that if there is a problem then the country as a whole has to be responsible for it and the cause is ours and the solution is ours.

I just really wonder if that is the case. For example, if it were true that this terrible, terrible problem could be solved by a pro-

gram which keeps mothers with children, that would really be wonderful and certainly worth the dough. And you cite a case where it is 90 percent effective maybe.

I know that when I went to Children's Mercy Hospital in Kansas City and talked to the people there I was shown a crack baby. I am told that crack babies are 15 percent of the births in the intercity hospitals in Kansas City. The doctor who was talking to me about this particular baby said, you know, this is really a highly unusual case because the mother actually comes by to visit the baby.

He said in the normal case the mothers show up at the hospital for the first time without any prenatal care, which is obviously something we should be talking about and dealing with; and that the mothers just give birth to the baby and usually leave the hospital on the same day, never wanting to see the baby or have anything to do with the baby.

You know, I doubt—I wish it were true, but I wonder if it isn't kind of a typical Washington response to a very important problem to say, well, there is a problem and therefore there has to be somebody in Washington who is to blame for this. And there has to be some solution in Washington that we can put in place that is going to take care of this so let's develop a new program for it.

If you are right, I am for it. I am not ready to sign on as a co-sponsor this very minute.

Senator Dobb. Let me suggest this, Senator. I thought I had tried to make it as clear as I could that in fact the programs that are working were not Washington-originated. These are things that are happening in the local communities of this country. So it isn't a Washington idea in the first instance.

Secondly, I don't disagree with you. I thought—I'll let the Chairman speak for himself—but I thought we made it quite clear, at least I tried to, that this is not a panacea. It is not going to solve the problem. But there is something tragically wrong when we are either unable or unwilling to try and provide basic services for people who seek them. You and I both know that no legislation is going to inject a will into someone to come forward and to seek treatment.

That is something that people have to decide for themselves. The tragedy is that when that decision is made in far too many cases there is no one there to say that we have something here that may help you. That is really all I am talking about here.

You are absolutely correct. We are not going to come up with some magical solution here that is going to eradicate this particular problem anymore than we have been able to eradicate other problems. But in this particular case, there are some things that are working, not Washington originated, that appear to be servicing a community.

For instance, it has now been proven in some of these cases that if someone would go out and identify, if you can, people who are abusers and are pregnant and let them know what can be done during that period of pregnancy, many of them can be helped to be better parents. It is unnatural for a mother to abandon a child. There is something else going on that causes that decision. If people who are trained and talented can reach that individual during that pregnancy, and not frighten them into believing that

because they have associated with a governmental agency—be it State, local or Federal—they may lose their child, then they can get the kind of care and assistance and the education. And if there is a way for them to get off the substance abuse, if that is what they are interested in doing, then maybe we can save some lives, maybe we can keep that family together.

There are some local programs in this country that seem to indicate that is the case. All I am suggesting is that we glean from that experience, which is not a Washington experience, and try and provide some resources so that that effort could be duplicated in some places like Missouri, like Kansas City, so that maybe those children that you saw in that hospital, the numbers that you saw could be reduced; and that you and I do not end up having to vote for legislation to provide for foster care or provide for some sort of housing or needs that those children would have because there may have been an option that will have kept that family together. Maybe. Maybe.

So I do not disagree with you at all. I would be making a tragic mistake here if I left you with the impression that I thought this little bill or anything else was going to eradicate ignorance, poverty and disease and solve the drug problem. It is not going to do that. But a program in New York, Connecticut and a few other places seems to be working. And it seems to me our responsibility here, when we identify a program that is working some place, wherever it is, at a local level, that we ought to try and learn from it and try at least to provide the opportunity for other States and jurisdictions to maybe try it where it has proven to be successful. But I do not disagree with your basic premise.

Senator MOYNIHAN. Thank you.

Senator Rockefeller?

Senator ROCKEFELLER. No questions, Mr. Chairman.

Senator MOYNIHAN. Senator Bradley?

Senator BRADLEY. Mr. Chairman, I do not have any questions for Senator Dodd. But I was struck by Senator Danforth's comments. And at a minimum one of the things that we might look at is a variation on a bill that you introduced last year which was Medicaid coverage for residential treatment and rehabilitation. That might very well be narrowed further to apply to pregnant women who are addicted and who, if Medicaid allowed them, not only to get prenatal care, but also to get residential treatment for that addiction that you might end up with a mother who gave birth to a child that she would not abandon, would want to care for.

I would make that modest suggestion as an area that this committee might actually work to avoid the tragic problem that you so correctly identify.

Senator MOYNIHAN. Senator Dodd, we thank you very much.

Senator DODD. Thank you.

Senator MOYNIHAN. We welcome Senator Akaka, who has been patiently awaiting his opportunity. Sir, would you mind moving down to the center so we can all hear you in the back of the room, as well as see you.

Senator, I think this may be the first time you have appeared before the Finance Committee. We want to particularly welcome you on this occasion.

STATEMENT OF HON. DANIEL K. AKAKA, A U.S. SENATOR FROM
HAWAII

Senator AKAKA. Thank you very much, Mr. Chairman. It is certainly an honor for me to appear before you and your committee for the first time. I thank you for this opportunity to testify before you, the Senate Finance Committee, about the growing problem of addiction to crystal meth, a form of speed, and the damage it inflicts on its youngest victims. I also want to recognize the distinguished witnesses here, beginning with Hon. Louis Sullivan, the Secretary of the U.S. Department of Health and Human Services.

The ice epidemic, Mr. Chairman, has been building in my State of Hawaii over the past several years. Ice has the potential of overtaking crack cocaine, as a drug of choice for young people throughout the country. Although both crack and ice may be smoked, similarity ends there. Ice is cheaper. Only \$50 will buy enough of the drug to keep someone high for a week. Its high lasts anywhere from 7 to 30 hours and it leaves its user prone to extreme uncontrolled violence.

Furthermore, crystal meth and other forms of this drug are simple to produce and do not require any imported ingredients. In fact, a National Institute of Drug Abuse study showed that in 1989 there was a 70-percent increase in hospitalizations related to ice.

My amendment, Mr. Chairman, to S. 1970, the Omnibus Crime Bill, would launch a multi-pronged attack on the use of crystal meth, by sharply increasing the penalties for major and mid-level ice dealers. It also seeks to improve the methods of treating ice addicts and to study and develop a protocol for treating newborns afflicted with ice addiction.

My amendment would also develop a model program in the State of Hawaii to educate students against the dangers of ice. Today we will be hearing more about the tragic circumstances of infants and young children born addicted or drug exposed to cocaine. Unfortunately, there is also a new population emerging—ice babies, born to mothers who are ice abusers.

These infants are already permanently damaged or at great risk. Let me share with you the experience of Earline Piko, a registered nurse who directs substance abuse programs at the Wai'anae Coast Community Mental Health Center located on the Leeward Coast of Oahu. Ms. Piko directs a new program for ice babies and their mothers. In the 30 years that she has worked with infants and young children she has never seen children as asocial as those born addicted to ice.

Mr. Chairman, I shudder—shudder to imagine what will become of these children and what will happen to our communities if we do not implement an aggressive and compassionate program to address this problem. I believe Wai'anae's program offers a real solution.

The Hawaii State Child Protective Services indicates that cases of mothers and infants testing positive for crystal meth are being reported to them at the rate of 30 per month as of November 1989. They further report that mothers and infants from Wai'anae, a relatively youthful and predominantly native Hawaiian community constitute a large number of those identified.

Unfortunately, these statistics fail to show the full extent of the problem. It is considerably more widespread than the reports indicate. Testing is not universal. Only the primary maternity hospital on Oahu tests, and these tests are administered only to those mothers who fit a socioeconomic profile or if a newborn is in obvious distress.

When an infant tests positive for ice, the child is frequently removed from the mother and placed in foster care. About half of these children live with extended family members or other persons known to the mother. Others become border babies.

The Wai'anae Coast Community Mental Health Center program seeks to provide alternatives to the separation of mother and ice babies, through a residential, as well as a community-based day treatment program. Comprehensive services are offered to assist the initial bonding of the mother and child, as well as providing the necessary education, counseling and support to create an ongoing safe and healthy environment for both. Substance abuse treatment for the mother and other family members and health care for the mother and child are integral components of the program. Hawaii is the only State which has experienced the problem of crystal meth for any period of time. For this reason, Mr. Chairman, the program I have described offers a unique opportunity to examine the short- and long-term effects of ice on infants, to assess the various levels of intervention, and to develop and test the best mix of treatment components.

The initial funding for the program is provided by the Alcohol and Drug Abuse Division of the Hawaii State Department of Health. It is my understanding also that a portion of these funds comes from the National Institute on Drug Abuse. Medicaid will be involved in the health care component and the project sponsors will probably apply for maternal and child health assistance in the future.

Mr. Chairman, and members of the committee, Federal programs, including those under the jurisdiction of the Finance Committee, should expand support for efforts to prevent and treat crack and ice babies. I am hopeful that programs such as the Wai'anae Coast Treatment Program which tries to assist the whole family to create and maintain a safe, secure and healthy environment for children can show us the way to halt this spreading scourge.

I thank you very much, Mr. Chairman, for this opportunity to testify before you.

Senator MOYNIHAN. We thank you, sir. We would like to—I think I can speak for the committee to say that you have brought this issue before us and we accept our responsibility to see that this newest form of epidemic is included in the medical provisions that this committee is responsible for, Medicaid in particular. We are going to hear from Dr. Sullivan on that directly.

Can I just ask, your amendment, will it be offered on the crime bill?

Senator AKAKA. I have offered it. It should be in the crime bill.

Senator MOYNIHAN. It should be? Well it should be passed as well.

Senator AKAKA. As I understand it, it is one of the six amendments.

Senator MOYNIHAN. Well there you are, that is a very exclusive list as we have learned. We congratulate you once again on the way you are learning to use this institution. We thank you very much and we are going to hear from Dr. Sullivan on just these issues.

Senator AKAKA. Thank you very much.

Senator MOYNIHAN. You are very generous to come forward, sir. [The prepared statement of Senator Akaka appears in the appendix.]

Senator MOYNIHAN. And now as Senator Akaka has said, our next witness is Dr. Sullivan. Once again, we welcome you here, sir.

Senator, if you would like to sit with us, we would be very honored to have you. If you have to go, you have to go.

Good morning, sir. Not for the first time do we greet you here with the Finance Committee.

STATEMENT OF HON. LOUIS W. SULLIVAN, SECRETARY OF HEALTH AND HUMAN SERVICES

Dr. SULLIVAN. Thank you very much, Mr. Chairman, and members of the committee. I am pleased that you have invited me here to testify on the effects of substance abuse on mothers. This problem has been dramatically escalated by crack cocaine use.

The impact of addiction on the health and well being of infants and children is one of the greatest tragedies caused by America's problem of drug and alcohol abuse. Today I will discuss with you our understanding of the gravity and the scope of this terrible problem, our approach to the problem, some of the specific programs that are in place, and the activities that I have inaugurated to help find effective solutions to the problem.

I know the committee is deeply committed to meeting the challenge presented not only by substance abusing women and their children but by the drug problem in general. I firstly believe that the Administration is meeting these challenges effectively. America is becoming increasingly intolerant of the use and abuse of illegal drugs. We are fighting back because no caring person can stand by silently and watch the devastation that drug abuse has wrought.

Mr. Chairman, the message that I have for the Congress and for all Americans is that substance abuse by mothers can have devastating effects on their children. It can even kill them. Drug and alcohol use by pregnant women is a burden that they, their children and the whole Nation carry into the future. For most of us, the heart-wrenching stories we read in our newspapers on the destructive impact on mothers and their children are almost unbelievable—and I have heard some of them from you this morning.

In Philadelphia a 31-year-old mother wound up in a city shelter with her three children after being evicted from a house for not paying her rent. Her story is as follows, and I quote: "I sold the food out of my refrigerator to get high. I sold my clothes, the TV, the washing machine and all our furniture to get high. The kids hardly ate. I saw what I was doing to my kids, but getting high was more important than taking care of my family."

Mr. Chairman, as you and the other members of the committee know from your own experience, it is even more shocking to see the effects of substance abuse first-hand. On a recent visit to the newborn care unit in Boward County Hospital in Fort Lauderdale, one of more than a dozen such hospitals I have visited in the last year, I saw some of our country's finest health care professionals caring for newborns who, in too many cases, had been effected by a mother's drug use.

Eight of the babies that I saw that day were exposed to cocaine before birth. The consequence of maternal cocaine use can be a life time of pain.

One baby I saw that day had received intensive care and other services over a period of some 8 months, that cost \$698,000. Here, Mr. Chairman, is the bill from that patient's birth. Eight months of therapy, almost \$700,000, with very little prospect that that infant would ever leave the hospital and become a productive citizen.

This, Mr. Chairman, represents an extreme case. But the size of this bill that is about a half inch thick, the size of this bill is only one measure of the pain and the suffering, unnecessary pain and suffering endured by that infant. All of this could have been avoided if the mother's drug addiction were prevented. Estimates of the number of infants that are born exposed to substance abuse range from 30,000 to 375,000. But most figures we believe are closer to 100,000.

But since most estimates are based on localized studies, the Department of Health and Human Services is currently attempting to get a better handle on the scope of the problem through national epidemiologic studies. So let me share with you some information that we do have today.

Data from the 1988 National Household Survey on drug abuse indicate that of the 59 million women of childbearing age in the United States over 5 million are current users of an illicit drug, including 1 million cocaine users and 4 million marijuana users.

In addition, our Inspector General at Health and Human Services has just completed three studies of the issue at my request, which I am releasing today and I would like to enter into the record. One is on crack babies, the other is on selected model practices for crack babies, and the third is on border babies.

Senator MOYNIHAN. We will put those in the record directly after your testimony.

Dr. SULLIVAN. Thank you, Mr. Chairman.

The first report reviewed the situation in 12 major cities in our country. The Inspector General found that there is no typical crack exposed baby. Some babies are born with clear symptoms of maternal drug use, others look normal at birth, and thus may not be immediately identified as having been exposed to drugs. These children may experience developmental problems even years later.

We have learned that drug abusing mothers are not necessarily young teenagers. In Massachusetts 72 percent of the pregnant addicts treated were not first-time mothers. The average age was 24 years. Data from the National Household Surveys show that drug and alcohol abuse affects all socioeconomic classes and all races.

Mr. Chairman, although we know the rates of infant mortality and morbidity are linked to substance abuse by child-bearing

women, we need to know more about the precise effects of drug exposure on infants. We need to learn more about the safest and the most effective ways to treat drug abusing women.

Health and Human Services is working to improve the quality and effectiveness of drug abuse treatment in general. Pregnant women are a special focal point of this effort. Pregnant women and mothers can present special challenges for treatment programs, and treatment of any disease in a pregnant woman poses safety issues related to the child she carries.

At the National Institute on Drug Abuse we are supporting research demonstrations on treating women. While our knowledge is imperfect we cannot wait for all the answers before we work with our States, localities and individuals to prevent drug abuse by pregnant women and to treat women and their children.

The best thing a pregnant woman can do is to stay healthy while pregnant, to avoid drugs, avoid alcohol, avoid tobacco, and any other substance which will harm her baby. We must do all that we can as Government, as private organizations, and most importantly as individuals to encourage healthy habits among our citizens. I am asking our fellow citizens to help. Anyone who knows a drug or alcohol using pregnant woman has a duty to warn her away from these substances, and if necessary, to help her toward treatment. This is especially the responsibility of the baby's father.

I am also asking the Public Health Service to educate the public in general and especially those most at risk about the tragedies associated with substance abuse by pregnant women. We know pregnant women need drug abuse treatment and prenatal care. My goal is to ensure that appropriate treatment is available. Several important Federal treatment efforts are now underway.

First, within our basic block grant to States providing support for drug abuse treatment and prevention, there is a dedicated pool of funds for services to pregnant women and for women with dependent children. Reports from the States indicate that this 10-percent set aside is increasing the availability of treatment programs for women. To improve drug treatment efforts supported through the block grant, we have submitted a proposal that would require the approval of State drug treatment plans as a condition for receiving block grant funds.

A second initiative is the Health and Human Services special demonstration grant program for Pregnant and Post-Partum Women and Their Infants. I believe these demonstration projects are especially promising. The model projects are run by public and private organizations. They are located in community, in-patient, out-patient and residential settings; and they focus on education and prevention, and treatment of women. Special priority is given to projects addressing the needs of low-income women, especially those who use crack cocaine.

By the end of this year we expect to have about 100 demonstration grants, which at full operation will reach 60,000 women. This program which began in 1989 with a budget of \$5 million is now at \$32 million; and the President has requested for fiscal year 1991 an increase to \$38 million. One demonstration funded under this program is the Family Services Center in San Antonio, TX. It provides services to 120 substance-abusing women and their infants.

Each participant receives medical care, group counseling, educational services, and intensive follow-up; and infant development is monitored for 3 years. These programs—locally designed by creative, committed people—can make a difference. Good ideas can be shared and replicated. That is what we hope to do with the Pregnant and Post-Partum Women and Infants demonstration grants program.

There is another innovative program that I understand the committee will hear about this morning. Dr. Richard Lowensohn, of Portland, OR will describe the Substance Abuse Family Evaluation Clinic at the Oregon Health Sciences University. It uses local and donated funds to build on existing State and Federal Government resources, including Medicaid.

Third, beyond the substance abuse an associated care provided through these special projects, are the broader prenatal care and other services targeted on all low-income women, including substance abusers, through the Maternal and Child Health Block Grant and the Medicaid program.

I have asked the Health Care Financing Administrator, Dr. Gail Wilensky, to work with the States to make sure they fully understand how the Medicaid program can be used to support drug abuse treatment for pregnant women, including treatment services in small residential facilities. I am also asking that HCFA work with the Alcohol, Drug Abuse, and Mental Health Administration to ensure that the providers also understand Medicaid's role.

Our States have considerable latitude to cover in-patient hospital and out-patient drug abuse treatment services. Recent eligibility changes for pregnant women broaden the population that can be served. In addition, we are looking for ways to urge the States and private providers to give priority in treatment to pregnant women and women with young children. We will also be working with the medical and social services communities to improve outreach to women of child bearing age to encourage them to seek treatment.

I would like to focus now on the specific programs that are targeted to substance exposed children. However, it is important to note that through our basic programs in foster care, in child abuse and neglect, in Head Start, in aid to families with dependent children, and Medicaid, Health and Human Services provides general support to States and to families. These programs provide a basic infrastructure which can be used to help address the needs of children and families suffering from substance abuse.

Drug abuse has strained the capacity of the child welfare and the foster care systems. We clearly need to search for ways to improve child welfare services, to support foster parents and relatives of affected children, and to increase the stability and the quality of these children's lives.

With that in mind, we have asked for \$47 million in additional funding this year for child welfare services, in conjunction with a limitation on foster care administrative costs. We are implementing the Abandoned Infants Assistance Act which will provide approximately \$10 million more in 1990 and 1991 for demonstration grants and other efforts to help prevent the abandonment of infants or young children.

A new initiative within our Administration for Children, Youth and Families is our 1991 proposal for an additional \$6 million in the Child Welfare Research and Demonstration Program for innovative projects that demonstrate ways to meet the immediate non-medical needs of infants born to crack cocaine using mothers and HIV infected infants.

While society's goal must be to keep families together wherever possible, we must be prepared to act quickly when it becomes clear either that a child is in immediate danger of harm or that there is virtually no hope of family reunification. In the latter case, adoption is the solution and should be promoted.

I am urging States to look at their processes for terminating parental rights, to make certain that we are using all means available to expeditiously place a child in a nurturing environment when that is the only alternative.

Mr. Chairman, I have provided you and the committee with an overview of the Department's current strategies: research, prevention efforts, increase in capacity to treat women, and stimulating the development of innovative interventions for mothers and children.

Let me mention one additional example. The Women's Annex in Tacoma, WA provides transitional housing for women and their children recovering from drug and alcohol abuse. The goal is a drug-free life, education and independence. The Women's Annex was initially funded by a local attorney who acquired seven houses and renovated them into housing for women recovering from crack addiction.

Services are now financed through private contributions and the Washington State Division of Alcohol and Substance Abuse. Innovative programs like this will help us chart a course for helping substance abusing women and their children. But it is no substitute for prevention efforts that send a clear message that substance abuse during pregnancy is harmful to the child, harmful to the mother, as well as to the Nation.

That concludes my statement, Mr. Chairman; and I would be pleased to respond to your questions.

[The prepared statement of Dr. Sullivan and the three reports appear in the appendix.]

Senator MOYNIHAN. We thank you, Mr. Secretary. Can I just—knowing that you have a time constraint, let me go directly to the one issue. Can I ask you, has the administration changed its position to state that Medicaid funding ought to be available to pregnant women with drug abuse problems? I think I read this in your statement.

You say, "I have asked the Health Care Financing Administrator"—that is Medicaid—"to work with the States to make sure they fully understand how the Medicaid program can be used to support drug abuse treatment for pregnant women including, for example, treatment services provided in small residential facilities."

Now are you saying this is already available or will become available? Is this a change in policy, as I hope it is?

Dr. SULLIVAN. Mr. Chairman, this is in affect now. The Medicaid program is operated by my Department, by Dr. Gail Wilensky as

our Administrator for our Health Care Financing Administration. Her letter is the letter that describes the various ways that the Medicaid program is already supporting drug abuse treatment for mothers affected by crack cocaine. This describes a number of different settings in which this occurs. There are some settings in which, by law, Medicaid does not provide payment for drug treatment services and that is in the mental health facilities for the ages, I believe, 22 to 65. That is because those mental health facilities traditionally have been a State responsibility.

The Medicaid eligibility is also influenced by the State requirements as they have been drawn up. But through the Medicaid program, as well as through our demonstration grant programs, we do provide support for treatment of substance abusing women.

Senator MOYNIHAN. Doctor, I am certainly not going to dispute you, but the hospitals do not think so. Mr. Bowsher will testify very shortly his report, the reports they put out, he proposes that the Congress take action requiring States to include substance abuse treatment as part of the package of services available to pregnant women under Medicaid. He says it should be required.

The spokesman for the White House, Mr. Hamilton—a spokesman of Mr. Bennett, who is in the White House—said—I am quoting the Associated Press—“We are not convinced that Medicaid is the best way to do it.” Mr. Bennett continues to oppose Medicaid reimbursement. I think we have a problem here, sir.

Dr. SULLIVAN. Senator Moynihan, what Dr. Wilensky's letter describes is the fact that the Medicaid program is a program that is jointly operated with the States. That is, the States define the eligibility criteria for participation in the Medicaid program. But in those States that do provide support for drug treatment through their Medicaid program, based upon income criteria, Medicaid will pay for drug treatment for substance abusing mothers.

What Dr. Wilensky also describes is that this is not a mandatory Federal program, but an optional program with the States. The reason I have directed Dr. Wilensky to work with the States to clarify misconceptions and misunderstandings about this, is the very question that you raised, that there is already in a number of our States treatment available through the Medicaid program. But it really is as determined by the individual States as to whether they will cover drug treatment in their Medicaid program. Our rules require that for those individuals who are eligible for Medicaid according to the income criteria, not disease specific criteria, then this would pay for those services.

Senator MOYNIHAN. Now is it possible to hope that you might have Dr. Wilensky get in touch with Dr. Bennett?

Dr. SULLIVAN. I will get in touch with Dr. Bennett myself.

Senator MOYNIHAN. There you go. Thank you very much, sir.

Now I think, Senator Durenberger, you are next, sir. Senator Daschle is next. I am sorry.

Senator DASCHLE. It doesn't matter. Thank you, Mr. Chairman.

I commend you, Dr. Sullivan, for your statement. I think you probably have the toughest job in town today. Considering all of the problems we have in health care in this country, I do not know of a person who has a more difficult job than the one you have. But

I must tell you, I do not know if anyone is going to have what it takes to confront it as directly as we have to.

A lot of what you have said are things that I think are very commendable. The concern I have is something that you hear every once in awhile at a hearing, that when all is said and done there is always a lot more said than done. I am real concerned that that is the very thing that is going to happen when we talk about this; we are going to leave this hearing and we are all going to feel a little better having exposed a lot of the problems, but life is going to go on and we still are not going to break out of this incredible vicious circle we are in. And that vicious circle comes in part from the fact that we are spending eight times at the end of life what we spend at the beginning. I mean that is really the one problem that I do not think we are going to be able to effectively confront until we are really fully appreciative of the tremendous value of prevention and prenatal care.

And I didn't hear that in your statement, frankly, to the degree I would like. It is not there. We are nibbling around the edges. I think when all is said and done, there is going to be a lot more said than done with regard to preventive care that we are provide our people.

There is no more better demonstration of that than on the Reservation, something I addressed earlier. The fact is that less than one-half of 1 percent of the entire Indian health budget is spent on prevention today—less than one-half of 1 percent. In fact, in spite of the fact that 60 percent of everybody on the Reservation are chemically dependent, alcohol-related, 1 percent of the entire Indian health budget this year is devoted to alcohol treatment and prevention.

That Indian person who goes in at the end of his life or her life for treatment is going to get it in emergency care. But that pregnant Indian woman who is chemically dependent looking for prenatal care cannot find it. At the hearings that I held in the last couple of weeks, I asked IHS, do you have any counseling out here? Is Indian Health Service out here trying to provide any kind of outreach effort? The answer is no. We do not see Indian health people out here.

So we are going to be right back to this very location a year from now unless we see a significant new commitment to that realization, that more has got to into prevention. It is a matter of reorienting those dollars. It is not just what we spend, it is what we spend it for. I think that is the question. What do we spend it for?

I hope that we can work with you in coming up with some new ideas and certainly with some resources that turn that 8 to 1 ratio back to where it belongs. We need to provide a lot more opportunity for prenatal care, preventative care and the kind of access to care that just does not exist in rural areas or in the urban areas.

Thank you.

Dr. SULLIVAN. Thank you.

Let me just simply say, Senator Daschle, I fully agree with your perspective on prevention and I did comment in my statement on prevention. Perhaps I didn't emphasize it to the degree that we should or that you would like. But no, I fully agree with you that the best strategy for dealing with the drug abuse problem is pre-

vention. And certainly while we do have successes with treatment, treatment is very expensive, often times very long, because we have to look at treatment of drug abuse as treatment of a chronic disorder. Also there are the very real human costs in terms of babies born with congenital anomalies, with neurological development defects, et cetera. So clearly I would agree with you about the importance of prevention, not only in drug abuse, but really as we look at our health care system in general.

As you know we are working intensively in my Department to respond to the President's charge of last January to examine our health care system. I am convinced that the proposals we come forward with will have to have a significant emphasis on health promotion and disease prevention. So I fully agree with you.

Senator DASCHLE. I know you agree. Let me just illustrate what I consider to be another example of things more said than done. It just demonstrates the point. I know you are sincere and there is no more sincere person in this room. But tell me what we are spending this year for WIC as a total percentage of eligible mothers this year. Do you have that percentage off the top of your head?

Dr. SULLIVAN. No.

Senator DASCHLE. As you know, it is roughly 30 percent.

Dr. SULLIVAN. Right.

Senator DASCHLE. Seventy percent of WIC eligible mothers are not going to get a nickel. You said, and I agree with you wholeheartedly, that it is the best investment we could make. It is the most efficient investment we could make. It is going to save us money down the road.

But we all talk here. We are all together and we are all going to be holding our hands once more saying, we have to deal with prevention, we have to do all we can. And you get an opportunity—we get an opportunity, it is not just you. Collectively, we have an opportunity to put our money where our mouth is and say, all right, let's deal with it and 70 percent of the mothers are not going to get WIC help again this year.

That just is not right. I mean we have to come up with a better way of reorienting our priorities and making sure that when we talk prevention we really mean it and we follow through with nuts and bolts legislation that allows it to happen.

Dr. SULLIVAN. I certainly would agree with you that WIC is a very good investment and a good program. But I simply want to point out that that program is in the Department of Agriculture. We have no control over that. So I would not want anyone to believe that this is a program that we are responsible for.

Senator DASCHLE. I cannot accept that. You are at the table, at the Cabinet meeting, and I know that you are rolling your sleeves up—and I by all means do not mean to be critical of you—I am just illustrating that as an example.

I mean to say that it is not a House problem or an Agriculture problem—it is our problem. We have to deal with it. You are part of an administration. We are part of a Congress. And we have to deal with it. I do not want to shift responsibility to somebody else.

Senator MOYNIHAN. On that note I think we can agree. We want to give everyone a chance to ask Dr. Sullivan something before he has to leave.

Senator Heinz, you are next, sir.

Senator HEINZ. Mr. Chairman, thank you.

Senator DURENBERGER. Mr. Chairman, I wasn't passing, but I will wait until John is finished.

Senator MOYNIHAN. Oh. Senator Durenberger?

Senator DURENBERGER. Mr. Chairman, first I cannot leave Tom's comment alone. WIC would not be in Agriculture if the Agriculture Committee did not insist that it be. I am sure if Dr. Sullivan had his way it would be in his Department. I am sure that you would agree with that. I think that is one of the problems around here. The Labor and Human Resources has some part of it, this committee has some part of it, Agriculture has some part of it, and that is why we do not do a very good job of pulling these programs together.

Dr. Sullivan, my first question is about sort of setting some priorities and how we do it. I am just going to quote from Chuck Bowsher's report. "To prevent the problem of drug exposed infants, women of child bearing age must abstain from using drugs." I heard you say there are 59 million American women of child bearing age, there are 5 million that use illegal drugs and 1 million are using cocaine.

"Women of child bearing age must abstain from using drugs." Do you agree with that?

Dr. SULLIVAN. Oh, yes, definitely.

Senator DURENBERGER. "To reduce the impact of drug exposure pregnant women who use drugs should be encouraged to stop and be given needed treatment." Do you agree with that?

Dr. SULLIVAN. Yes.

Senator DURENBERGER. Now the rest of his report deals with the problem out there in America—long-waiting lists. "Unless women who have decided to seek treatment are admitted to a treatment facility the same day, they may not return." All of us who have had personal familiarity with this problem of the the decision, the intervention, the husband, whatever the case may be, knows that unless the treatment is available when the decision is made you are going to lose statistically 50 percent of the people.

Some programs deny services to pregnant women for fear of legal liability. The lack of child care services is a problem. Fear of criminal prosecution is a problem. Fear of foster care and never getting their kids back is a problem. And I think you would not disagree with any of those problems. My question is: How can we continue to run a bifroated system like this where 1 million women of child bearing age are on cocaine today? And we run this system in which we rely on the Annex in Tacoma; and we rely on a lawyer who put seven homes together some place; we rely on a broken down welfare Medicaid system, which yes, in Minnesota, by God, we are going to provide Treatment. We will probably pay the provider 50 cents on the dollar in order, you know, to do it, but we will.

But in Mississippi they won't because they cannot afford to. Mississippi has something like 14 in-patient beds for treatment I recall from a hearing. I guess what I am hearing here, someone like you need to say in addition to the fact that we need to stop that we need to address this problem as a national problem. And just be-

cause we may be able to deal with it better in Minnesota than they can in Mississippi, does not mean we ought to continue this system of relying on Medicaid, medical assistant, private support, unless there is a good reason for it.

Maybe there is some special value in keeping that old system in place. And if so, I suppose you should speak to that. But I would kind of like to hear you say why we shouldn't, in effect, nationalize the approach to stopping or encouraging the stopping of women of child bearing age from using drugs.

Dr. SULLIVAN. Well thank you, Senator Durenberger.

Let me say first of all that the number of drug treatment slots is increasing quite rapidly as the President's drug program is being implemented. We have created an Office for Treatment Improvement within Alcohol, Drug Abuse and Mental Health Administration, and the number of treatment slots with the President's drug program will double with State matching monies from the prior level of around 350,000 up to more than 750,000.

One of the problems we run into, and the various States run into, is not lack of money but the objection of communities to having drug treatment facilities placed in them. That is one of the difficulties—the shortage of counseling people is another and these are other issues as well. But clearly, even with all of that, we recognize that we need to continue to press to increase the number of drug treatment slots.

But on the issue of why not a Federal system, I think the Senator from Hawaii's presentation illustrates why we feel that our system should be a State-based one. That is, the problems are very different in States. I think the problem that we heard about in Hawaii with ice is very different from the problem in New York with cocaine and heroin. We need to have that kind of flexibility to address the problem that exists there.

So that, as well as keeping the cooperation of the States and the privacy agencies, keeping the local community involved in the administration and supervision of the programs we feel represents the best strategy. That does not mean the Federal Government does not have a role. It very clearly does have a role to work with the States, to not only provide financial resources, but oversight, data, and tracking of the system. But presently we believe that having that degree of flexibility at the State level is preferable to approaching this from a single, uniform national program.

Senator DURENBERGER. Yes. Mr. Secretary, I did not mean to imply to you or my colleagues that we ought to take over the system. I am really talking about a national commitment to solve the problem through prevention, not remediation. I mean remediation you have to carry on for those people that are in the system. But a national commitment to work on prevention which largely means setting some goals and objectives, educating people and financing this whole effort.

I do not know what the providers of mental health or chemical dependency or substance abuse treatment are paid in my State. But if they are paid through the Medicaid program the way all other people are paid on the Medicaid program, they are getting 45 cents on the dollar for their services or maybe that is against charges, maybe 65 cents and so forth.

That is simply because they are not the most important problem facing State legislature. There are limited resources at that level. I am just asking the question: Why don't we make a greater national financing commitment? Not that we say, you are going to do it differently in every State. But the national financial commitment to deal with this problem just is not there today.

Dr. SULLIVAN. The one response I would make, Senator Durenberger, is just that in response to the drug crisis, the President's program has actually increased by five-fold the monies for prevention at the Federal level. So clearly we are moving in the right direction. I have stated in the past and I will reaffirm here today, the fact that if we find that additional resources are required, I am going to be asking for them. Because we are committed to effectively addressing this problem.

Senator DURENBERGER. I think my time is up. Thank you.

Senator MOYNIHAN. Thank you, sir. We thank you for that—your questions.

Senator Heinz?

Senator HEINZ. Mr. Chairman, I have been listening to this discussion on and off today, shuttling in and out, with a vague misgiving. It has to do with not only the fact that there is an absence of access to the health care system generally as well as to treatment for drug dependent mothers, but there is also a reluctance—and in large part I think it is very understandable—for people, even when they have the financial ability, to access our health care system at all.

The bedside manner of the health providers in this country—whether it is in their private offices or, more likely if you happen to be young or poor or minority, in an emergency room at a hospital, where your first experience with a provider is, if you haven't been to one before—would seem to have turned off a lot of people from accessing the health care system.

I was talking with a 67-year-old man the other day who was retiring. I asked him, you know, how was his health and how was his last check up, and he told me that he had never been to a doctor in his life because he didn't trust them. This fellow has always had full health insurance coverage. He wasn't young, obviously. He wasn't particularly poor. He wasn't minority. He was perfectly well educated.

There is a serious question that, so far as I know, has been unexamined—either by the medical profession or by the Department of Health and Human Services—about the extent to which the interaction of provider attitudes and recipient or beneficiary attitudes contribute to the problem of access to care. I say that because if it is a turn off, as Senator Danforth suggested, to finally go to a treatment facility and have said, come back next month—or in the case of one of my constituents in Philadelphia where it took six trips, each one more discouraging than the next, to the government agencies involved before a clear answer was received—or to go to a doctor who might say you should probably get some prenatal care, we are dealing with a hopeless situation.

How can we get people seeking neo-natal care, let alone drug treatment, if they will not go and see a doctor in the first place? I reject the notion that it is all due solely to ignorance on the part of

the person who needs the medical services. So my question, Dr. Sullivan, is this: To what extent do you believe this is a problem? And secondly: To what extent has anybody done any serious study of it?

Dr. SULLIVAN. Well, Senator Heinz, it is a real problem. I think there are multiple reasons for it. I, for one, have been very concerned about it. It so happens that last evening I was the keynote speaker at a conference on future training of health professionals that was sponsored by one of your constituents, the PEW Foundation, that has just formed a Commission that I happen to serve on. The Ethics Office determined that I could do that.

The theme of this Commission over the next 8 to 10 months is just that—how do we train the right kind of health professionals for the future and not simply those who are technically proficient, but also who have that ability to interact in a positive way with patients so that that bond of trust and relationship does develop.

There are a number of things that I outlined to them that I felt needed to be done. They are similar to things that I outlined during recent commencements where I addressed more than 2,000 physicians graduating from the schools where I spoke, including the Jefferson Medical School in Philadelphia. So since there are about 16,000 medical school graduates this year—

Senator HEINZ. We are going to make you an honorary citizen of Philadelphia at this rate. Don't stop. We truly appreciate that.

Dr. SULLIVAN. Thank you.

But the theme that I gave on those commencements around the country is the same theme that I gave to the PEW Foundation last night, that we need to develop what I call a renaissance position. That is, we need to maintain the idealism that medical students, dental students, and other health profession students take with them as they enter the health professions school.

There are a number of factors that happen that causes that to be lost, some of them during the training process, but also equally some of those that are in the practice environment. This is where the health system review that we have underway now and certainly the activities of the Pepper Commission and other commissions need to address.

Senator HEINZ. Dr. Sullivan, may I interrupt? I may not have made my question clear.

Senator MOYNIHAN. Senator Heinz, I wonder if I could say that Dr. Sullivan is supposed to be at the White House and the Chairman of the Pepper Commission and Senator Bradley are here. Maybe you could make a quick question.

Senator HEINZ. Very quick.

Dr. SULLIVAN. And I will give a quick answer.

Senator HEINZ. I know Dr. Sullivan is involved in these issues. My question—and if you want to respond for the record because I do not want you to take up the time and I do want the other members to have a chance to talk with you—is this: Have there been any serious studies of consumer attitudes regarding health care services? Has anybody done a serious study, sitting down with probably several hundred potential beneficiaries and really talking with them about their views, their feelings, their experiences with health care providers, so that what Tom Langfitt and you and

others are doing—while it is clearly directionally correct—is better understood than it is today?

If you just want to answer that yes or no or you don't know and you'll find out, that would be an appropriately short answer.

Senator MOYNIHAN. Yes, now that was the question.

Dr. SULLIVAN. A quick answer. I will get details back to you. But yes, there have been studies but I am not sure they are as comprehensive as the ones that you have mentioned. Some by the Association of American Medical Colleges, for example; others by the American Hospital Association and there are others. But we will get those for you.

Senator HEINZ. Thank you very much, Mr. Chairman.

Senator MOYNIHAN. And now the Chairman of the Pepper Commission, Senator Rockefeller.

Senator ROCKEFELLER. I won't ask any questions. Rather, I want to make six quick points because I know you have to go and we have many witnesses this morning.

First, I want to congratulate Gail Wilensky for upgrading Medicaid's status within HCFA and for treating it as seriously and aggressively as Medicare. Unfortunately, this has not been the case in the past. I am very happy that Dr. Wilensky has taken these actions.

Second, I commend you for your own statement in favor of giving priority treatment to pregnant women and children. The Pepper Commission recognized the tremendous need to give top priority to pregnant women and children. The first phase of the Pepper Commission recommendations provided immediate coverage for pregnant women and children through the age of 6. I would like to commend you on identifying pregnant women and children as a top priority. Third, I would like to express my concern over the level of cuts being discussed this year for the Medicare program. There are certainly going to be enormous cuts and I am terrified about the effects of these cuts on our health care system. I hope that you will fight to protect Medicare and Medicaid and health care programs in general.

Fourth, Kay James, who is sitting behind you, is a very distinguished member of your team. As you know, she and I serve together on the President's National Commission on Children. One of the things that she and I heard Dr. Barry Brazelton talk about at Commission meeting was the effect of crack cocaine on pregnant women. Although the effects of crack wear off on the mother within a very short period of time, ultrasound examinations have documented that crack can effect the fetus for 2½ hours. It was an unbelievably powerful thing to consider what the effect of crack will have on that child when it is born.

I guess my final comment would be that when Kay James and I were in Los Angeles with the Children's Commission, we saw an unbelievable disorganization of child welfare services. I would raise the question that Senator Durenberger did, perhaps in a different way, by saying that I hope you will join with us on the Children's Commission in considering how to approach these problems. We have time left until our final report is due, even though our children do not.

There has to be a fundamental structural reform to the entire way in which we deliver child welfare services, not only at the Federal level but at the State level. I would not even dare ask the question of how many States have services for mothers that are crack cocaine dependent under Medicaid or any other program. I would not even want to know the answer.

I thank the Chair.

Dr. SULLIVAN. Thank you.

Senator MOYNIHAN. We thank you, Senator Rockefeller.

Dr. Sullivan, you are excused from answering, but I know you agree with the thrust of many of those questions. I am sure you do. Senator Bradley?

Senator BRADLEY. Thank you very much, Mr. Chairman. I have just two questions. The first one follows up on Senator Moynihan's earlier point.

As you know many States characterize drug treatment facilities as institutes for mental disease; and, therefore, Medicaid does not cover for drug treatment in those States. Would you favor a Federal mandate that Medicaid cover drug treatment for women who are pregnant? That it would be mandated. No State would get out from under it by categorizing something as an Institute of Mental Disease, those facilities delivering drug treatment to women who are pregnant.

Dr. SULLIVAN. Senator Bradley, I would have to say that I could really not respond to that before looking at that very carefully for several reasons.

One is that when the President met with the Governors last September at the Education Summit in Charlottesville, a very strong message that they gave to all of us was that they didn't want any further Federal mandates. We were looking in my Department at that time the possibility of further Medicaid expansions. And because of the vehemence from the statement from the Governors we really felt that it would not be appropriate to go forward with that.

The other response I would make is this: It is clear to us that there really is either a lack of information or misunderstanding about what programs are available to our States. That is why, again, I have asked Dr. Wilensky to work with our States to be sure that they are aware of the full range of services that are available.

If once that is done we find that there is still a significant gap, we would certainly be working to find ways to fill that gap. But I would not today want to commit to, you know, a Federal mandate.

Senator BRADLEY. I regret that, Dr. Sullivan. Because there are clearly women who are pregnant who need drug treatment. And when they give birth to a child that is addicted, the problem is visited on the next generation. I do not think that this is a matter of kind of politically balancing the requests of Governors when there are lives at stake directly, and when you have the power to change that. So I want to register that.

My second question, I would like to read—you referred a little bit to it in your testimony. I would like to read an excerpt from a report that I recently read. It is about a mother addicted, gives birth, the child is addicted to cocaine. The mother takes the child

home. The Department of Human Services doesn't know whether she should or she shouldn't. She does. They say, fine.

Finally, on December 23 paramedics found the emaciated body of the 6-month-old dead in the infant chair. According to authorities cocaine poisoning was the cause of the death. Crack smoke blown into the baby's face and mouth in an attempt to pacify her was possibly the source of the fatal intoxication.

The medical examiner reports that 10 other infants, ranging in age from 28 days to 10 months, have died in Philadelphia over the past 3 years from inhaling crack fumes.

Now in your statement you asserted that you feel that babies should be taken from parents who cannot take care of their child. I would like to know what specifically you are proposing to see that children are protected and are taken from environments such as the one in this example.

Dr. SULLIVAN. Senator Bradley, what I would say first of all is this: that we believe that there are those circumstances where termination of parental rights should be done. But I want to emphasize that we look upon that as a last step, not a first step. Because our goal is to preserve families wherever possible. So this is not a step that we would undertake lightly.

But when that does occur, we believe that other programs would be coupled with that—adoption programs, congregate care programs for those children. As I said in my statement, when there is immediate danger of harm to the child, where there is indeed a situation like the one you described, it is clear to us that it is in the best interest of that child to remove the child from the home.

Senator BRADLEY. Do you see any problem with the way the system now works in terms of family courts, child protection agencies? Do you have any specific recommendations?

Dr. SULLIVAN. I don't have specific recommendations today. But I certainly would respond that yes, there are problems with the way the system works now. It is very difficult to terminate parental rights. It is a very involved, complicated process. Obviously, it is designed to be sure that termination of parental rights is not done capriciously.

This is a problem that we would need to look at much more intensively to come forward with a detailed plan as to how that would be done.

I also think that it would vary, of course, according to various State laws and, you know, specific circumstances.

Senator BRADLEY. Do you intend to do that, come forward with some recommendations?

Dr. SULLIVAN. Yes, we do. This is an issue that we are still looking at. We clearly are not yet at the stage in our thinking and in our development that we have specific programs today. But, yes, the reason for this being in my statement is the fact that we believe that this has to be considered and has to be part of any comprehensive plan in dealing with the problem of crack babies.

Senator BRADLEY. When will you be coming forward with those?

Dr. SULLIVAN. I really cannot commit to a date now, except I would say as soon as we really can develop a thoughtful, workable program, we will be coming forward.

Senator BRADLEY. Thank you.

Thank you, Mr. Chairman.

Senator MOYNIHAN. Thank you, Senator Bradley.

Senator Chafee?

Senator CHAFEE. Mr. Secretary, just briefly a couple of questions. I am sorry I missed some of this. I hurried back. I thought the program might be over with.

Do you have any statistics—and I know these statistics may be hard to come by—on what percentage of these babies are drug-exposed as opposed to alcohol-exposed?

Dr. SULLIVAN. It varies, of course, from locale to locale as Senator Daschle mentioned.

Senator CHAFEE. I heard Senator Daschle when I was here before say 25 percent of the problem on Indian Reservations was alcohol.

Dr. SULLIVAN. Yes.

Senator CHAFEE. Those are his statistics?

Dr. SULLIVAN. Right.

Senator CHAFEE. Do you have any national statistics?

Dr. SULLIVAN. Yes. Overall about 60 percent of the problems with substance abuse really are alcohol and 40 percent are other drugs, including cocaine. So we do have a significant problem, you know, with alcohol.

Senator CHAFEE. Yes. I think that is important to remember, that alcohol is the cause of much of this.

The next question quickly: Are you supporting the alcohol warning labels on cigarette packages and ads are you supporting the effort require warning labels?

Dr. SULLIVAN. We have not yet taken a position on that, Senator Chafee.

Senator CHAFEE. Well if you are not, I hope you will. I think it is very important. Not that it is going to solve every problem, but I think it will be helpful.

Finally, there is constant talk here about new programs. I just hope that some attention will be paid to S. 384 which is the Home and Community-Based Services Act which I have spoken to you about many times to extend Medicaid coverage to the developmentally disabled who are in their communities rather than going to institutions.

I believe that will help in caring for these babies who are kept by their mothers, rather than going into institutions. So I urge your further attention to that legislation, S. 384. This is the seventh year I have had this. We have a majority of this committee now behind it, a majority of the U.S. Senate. But we haven't yet got the full support of the administration.

So I hope you will do that and I want to thank you for your testimony.

Thank you.

Senator MOYNIHAN. Thank you, Senator.

Just two concluding things quickly, Mr. Secretary. May I suggest that at least some members of this committee are committed to the proposition that we have a public health emergency in crack cocaine and that an epidemiological approach is warranted. We take it as important that the Lancet, which is perhaps the oldest and most respected medical journal in the world, had as its lead article

in 1986 an epidemic, free-base cocaine, describing the Bahamian experience which begins in 1982—that recently.

People resist it because this is not a natural organism. It is not a virus; it is not a bacteria. But it is a mutant. We had a sudden mutant of cocaine and suddenly free-base cocaine. And you had different situations. The Lancet article suggested that the epidemic term was legitimate because epidemic suggests a sudden imbalance between the forces that promote and retard disease. That is familiar to you as a physician—but a sudden imbalance.

We would be profoundly interested to know whether, for example, the enormous rise in illegitimacy ratios in some parts of our country was part of that sudden imbalance. You spoke about, you know, fathers should be involved with these matters. Well fathers have disappeared in segments of our society.

And it is found by this Senator that the Center for Disease Control in Atlanta has seemingly been oblivious to all this. You don't have to answer. But would you just take note. And could I say because this is a legitimate concern of the committee, you mention the National Household Survey on Drug Abuse finding 5 million women of child bearing age use an illicit drug; between 7 and 15 percent of all births in four selected major cities involve drug use by the mother. Do we have breakdowns by majority, minority, by ethnic group, by racial group in these matters?

Dr. SULLIVAN. They are not broken down by racial group; they are broken down by social class, Senator.

Senator MOYNIHAN. I would have thought you might have wanted both. But could we get those data?

Dr. SULLIVAN. Yes.

Senator MOYNIHAN. We would like to see them. The more you know, you never know you might stumble onto something that solves the problem for you.

Dr. SULLIVAN. Dr. Goodwin is reminding me that we do have the data by race but there is no correlation in terms of drug abuse. The correlation is by social class.

Senator MOYNIHAN. What do you say to letting us look at the data.

Dr. SULLIVAN. Fine.

Senator MOYNIHAN. I am sure we will learn something.

Dr. SULLIVAN. We will be pleased to supply that to you.

Senator MOYNIHAN. Thank you, Dr. Goodwin; and thank you, Dr. Sullivan. We very much appreciate you.

Dr. SULLIVAN. Thank you.

[The information appears in the appendix.]

Senator MOYNIHAN. And we now shall hear from our patient and ever cooperative Comptroller General. We are very much aware that we have kept you all morning, sir and we do not dare think what amount of the Nation's business has not been attended to because of the length of our hearing. But you are all the more welcome. And you have two associates with you. I would not be surprised if these persons helped you with your report.

Mr. BOWSER. Why don't I give you the names, Mr. Chairman.

Senator MOYNIHAN. Sure.

Mr. BOWSHER. Janet Shikles is on my left, who is the Program Director of this area for the GAO; and Rosemary Martinez on my right, who is the assignment manager for this report.

Senator MOYNIHAN. Ms. Shikles, Ms. Martinez, we welcome you to the committee.

Sir?

STATEMENT OF CHARLES A. BOWSHER, COMPTROLLER GENERAL, U.S. GENERAL ACCOUNTING OFFICE, ACCOMPANIED BY JANET SHIKLES, DIRECTOR FOR HEALTH FINANCING AND POLICY ISSUES, AND ROSE MARIE MARTINEZ, ASSIGNMENT MANAGER

Mr. BOWSHER. Thank you, Mr. Chairman. At the committee's request we were asked to review the extent of the problem of substance-abusing mothers and their infants and its impact on the health and social welfare systems and the availability of drug treatment and prenatal care to drug-addicted pregnant women.

We had four major findings, Mr. Chairman, and I would like to summarize them. Then, because of the time, I will just go on to some of the recommended solutions.

Senator MOYNIHAN. Yes, sir.

Mr. BOWSHER. Our first major finding is that tens and perhaps hundreds of thousands of drug-exposed infants are born each year, but the exact number is unknown because hospitals are not identifying many of these infants. To explain that a little further, if you go to hospitals in the inner cities that know they are dealing with these cases, they make some attempt to identify such infants. As you get further out into the suburbs, many of the hospitals are not that anxious to know and, therefore, unless the mother identifies herself, many of these children are being born without being reflected in the statistics.

The best estimates we have been able to find, show that the number of drug-exposed infants born each year ranges from 100,000, to possibly 375,000. But they are probably inaccurate. In other words, what we want to emphasize today is that these births are probably understated.

The second major finding is that these infants constitute a growing national problem, necessitating medical and social services that will cost billions of dollars in the years to come. I think Chairman Bentsen's opening remarks about how costly this problem is going to be was not overstated at all.

If you recall, the President's budget document that Mr. Darman presented to the Congress this past year touched on the idea that we had tried to get across in late 1988: There are major problems facing this Nation that have to be addressed or we are going to have very big costs in the future, such as the S&L crisis and the nuclear weapons systems.

In other words, to Mr. Darman's list I would add one more PACMAN— drug-exposed infants. Because the financial implications of this area are very, high and growing and some of your witnesses today explained very well what the problems are; they include more than the health care costs at the time of birth. Moreover, what we are doing is using our high-tech capability in the

hospitals to save these children. It costs a fortune, but we are putting more effort into that than into prevention.

We also see these children go into the educational or social service systems at great financial cost. One estimate of the cost of services for a drug-exposed child who is significantly impaired is as high as \$750,000 for the first 18 years of life.

Senator MOYNIHAN. And we saw that from Dr. Sullivan for the first 6 weeks or so in one hospital.

Mr. BOWSER. That is exactly correct.

And if Senator Bradley was here, I would point out that the Infant Mortality Commission that Senator Chiles chaired and of which I was a member, saw low birth weight babies being born all over the country. We save them with very high-technology medical care. But many other countries are getting much better results by focusing more on prevention at much less cost than our system.

The third major finding is that despite the demonstrated ability of prenatal care and drug treatment to reduce the number of infants affected by drug abuse, there is a serious shortage of drug treatment capacity for pregnant women. Of the estimated 280,000 pregnant women nationwide in need of drug treatment, less than 11 percent are receiving that care. Another way to put that is 89 percent are not.

Senator MOYNIHAN. Yes.

Mr. BOWSER. And although the demonstration projects are very good—there is no question about their worthiness—we have to recognize that the vast majority of the women who need this treatment are not getting it and are encountering quite a few barriers to treatment.

Just to read a couple paragraphs out of my statement on page 10—

Senator MOYNIHAN. Don't stop—don't go by that less than 1 percent of funds, will you?

Mr. BOWSER. No, I am coming back to that.

Senator MOYNIHAN. Okay.

Mr. BOWSER. Okay.

But just to expand on this problem, as stated on page 10 of my statement, "In addition to insufficient treatment capacity, some programs deny services to women because they are pregnant. A survey of 78 drug treatment programs in New York City found that 54 percent of them denied treatment to pregnant women because of the fear of legal liability. Drug treatment providers fear that certain treatments using medications and the lack of prenatal care or obstetric services at the clinics may have adverse consequences on the fetus."

And other barriers to treatment exist. Pregnant addicted women told us that the lack of child care services often make it difficult for them to seek treatment. They also are often very concerned about whether their children are going to be taken away from them. So they have a lot of fears about even seeking treatment.

More and more health professionals now believe that some comprehensive residential drug treatment that includes prenatal care is one of the better approaches to helping women to give up drug use during pregnancy. We discussed this with some of the doctors at Boston City Hospital some months ago when I was there with

my team. We are also planning to go to Chicago in the near future to talk to some of the people at Catholic Charities who have reopened some of their institutions to try to help women who are seeking such help.

I know Senator Chafee is concerned about setting up too many institutions. But sometimes these residential programs might have merit for treating a women who is on drugs and perhaps other substances, and is trying to bring into this world a healthy, full-term infant. These programs are costly, but at least sometimes you get a child who is healthy and doesn't have all the problems that children born to drug-abusing mothers may have.

The last item, our fourth major finding, is that less than 1 percent of the Federal funds allocated under the Federal anti-drug strategy are specifically targeted at drug treatment for women. For drug-addicted, pregnant women the percentage of Federal expenditures is even less. So whatever money is out there, very little Federal drug treatment funds are being used for the pregnant women.

Senator MOYNIHAN. Yes.

Mr. BOWSHER. This is a situation about which we feel very strongly. And it leads to the options that I would just like to summarize here at the end of my statement. That is, if the Congress should decide to expand the Federal resource commitment to treatment for drug-addicted pregnant women, several options could be used.

One option would be increasing the Alcohol, Drug Abuse and Mental Health Services block grant to the States in order to provide more Federal support for drug treatment.

The second option would be increasing the ADMS Women's Set-Aside from 10 percent to a higher percentage to assure that expanded treatment services under the block grant are targeted specifically to substance-abusing pregnant women.

The third would be creating a new categorical grant to provide comprehensive prenatal care and drug treatment services to substance-abusing pregnant women.

The fourth would be increasing funding of the Maternal and Child Health Services block grant specifically for substance abuse treatment for pregnant women.

And the fifth would be requiring States to include substance abuse treatment as a part of the package of services available to pregnant women under Medicaid.

I believe your point, Mr. Chairman, about the difficulty of getting the Medicaid money out there is very real. I might ask Janet to expand on that point.

Senator MOYNIHAN. Ms. Shikles, do I pronounce that correct?

Ms. SHIKLES. Shikles.

Senator MOYNIHAN. Would you do that, please?

Ms. SHIKLES. Well, we are looking into the situation, and we have found that most of the money now spent under Medicaid for substance-abuse treatment appears to be spent either for detoxification in a hospital, for emergency treatment, or as Mr. Bowsher said, for very expensive care in a neo-natal unit. We are having difficulty finding out what is covered and what is spent in the States on treatment services. As you know, those are optional services.

Senator MOYNIHAN. Right. And something in the bureaucracy does not want to tell. Do you sense that? They do not want to say, "Here is what you can do and better do or should do." Sir?

Mr. BOWSHER. I think that is what our people are finding time and time again when they are out there.

Senator MOYNIHAN. Are you ready for questions?

Mr. BOWSHER. Yes, we are ready for questions, Mr. Chairman. That concludes our statement—our summary of it at least.

Senator MOYNIHAN. Could I just make—I won't ask you to say. But when the whole thrust of the 1988 legislation was up there, there should be a balance between law enforcement and treatment and demand. It is not there. The people we put in charge have rejected that. They have rejected Medicaid. And less than 1 percent of Federal funds allocated under the Federal Anti-Drug Strategy is specifically targeted at drug treatment for women. It is just another example.

I think in response to Senator Bradley's question to Dr. Sullivan about should we mandate the matter, you in effect say yes, mandate. You say requiring States to include substance abuse treatment as part of a package of services available to pregnant women under Medicare.

Mandate is one thing, and Governors become weary of our telling them what to do with their own resources. But Medicaid is more than—the greater part of Medicaid are Federal funds and we ought to be able to do that. I just think the extent to which we have an epidemic here and that it is part of that pattern of the natural defenses breaking down, I wish I could get them interested.

I mean, you know, where is the concentration of crack babies concentrated? They are concentrated in areas where illegitimacy ratios are 80 percent. There has to be some correlation. Can I ask Ms. Martinez, Ms. Shikles, ought we to inquire into these patterns?

Ms. MARTINEZ. In our study we did collect some information on the sociodemographic characteristics of the women that were giving birth at these hospitals. We did not look at information regarding marital status, however. But we did look at the age of these women and we also looked at their financial status. At seven of our hospitals, more than 50 percent of the patients were on Medicaid.

Senator MOYNIHAN. Which meant they were on AFDC, which meant there was no marital status. I would start there. I mean, I am not going to press, but I would start there.

Senator Rockefeller?

Senator ROCKEFELLER. Thank you, Mr. Chairman.

Mr. Bowsheer, you surveyed 78 drug treatment centers. Fifty-four percent of those programs denied treatment for pregnant women. Medical liability is cited as a problem. Under physician payment reform one of the things that was started was, I think, incredibly important research in medical outcomes and practice guidelines.

Specifically in the case of the treatment of pregnant women who are abusing drugs, are there any studies—is there any evidence—of what it is that has worked in helping them overcome their problems or dealing with their problems? Is there, in your judgment, the possibility of developing through "outcomes research" a proto-

col where there could become a standard of care or a series of standards of care for treating drug-addicted pregnant women.

I am interested in your comments.

Ms. SHIKLES. It may be very difficult to get an exact protocol because often the physician does not know all the drugs that the woman might be using. But several recent studies have found that if you can make the treatment system more user friendly to the woman, you can get very good outcomes. We do not know if these will be sustained over the long term, but you can reduce the risk of prematurity; you can often have a baby at normal birth weight. Most of the treatment now is more male oriented coming out of the heroin phase.

Senator MOYNIHAN. Heroin was a male drug. Crack cocaine increasingly is a female drug. That is a very important distinction. Go ahead.

Ms. SHIKLES. And the systems are just now shifting over to try and focus on women. They are only starting in a few places around the country. But they are finding that when they establish a treatment system focused on women that provides prenatal care services as part of the treatment package, that is supportive of the woman and does not make her feel like a criminal, that allows her to bring her children with her, they can at least get her off drugs during the pregnancy, resulting in a much more positive outcome.

Senator ROCKEFELLER. You are saying that in several instances where this has been studied this has been the case?

Ms. SHIKLES. That is right.

Senator ROCKEFELLER. Then that has the chance of having some universal applicability, does it not?

Ms. SHIKLES. Yes, it does. But there still would be some variability because they have not done enough studies.

Senator ROCKEFELLER. I understand that. But that is precisely the point of outcomes research.

It would seem to me that not pursuing outcomes research, no matter how little evidence there is, would be inexcusable. We should pursue it incredibly aggressively, especially after having said that there are some programs that have been successful in helping drug-addicted women who are pregnant.

Ms. SHIKLES. That is correct.

Senator ROCKEFELLER. It sounds to me like that is fairly important to pursue aggressively.

Mr. BOWSHER. One thing I think, Senator, is that as Senator Danforth said earlier, we probably cannot come close to eliminating this problem. This is a big problem. A lot of people are not going to want to come forward to get treatment.

But a lot of people do want to come forward.

Senator ROCKEFELLER. And you better believe it.

Mr. BOWSHER. Therefore, what we are trying to do with our report is to highlight the extent of the problem, which I think you understand very well, and also the fact that we need to target more effort to this problem. It gets back to the old budgeting system—in other words, we spend a lot of money in this country on health care. We spend a lot of Federal money on a lot of programs.

And yet, here is a program where you have major problems, for the children, for the mothers, for the people that are involved, in-

cluding the people that are trying to help them, and we are not giving them much help when it comes right down to it.

Senator ROCKEFELLER. Yes. But I do not buy into Senator Danforth's argument. There is tremendous potential for behavior modification and for outreach service to teenage pregnant mothers by women who have been through it and are able to go into the housing projects and start talking to others who need assistance.

If you buy into his argument, then you walk away from the problem. You simply walk away from the problem as a matter of national policy. So it just seems to me if 54 percent of the treatment denials are related to medical liability concerns, we must aggressively address that issue. We have 72 OB/GYN's in West Virginia—Senator Moynihan is tired of hearing me say this—but the number keeps going down. We have 1.8 million people; and only 72 OB/GYN's left because of the fear of medical liability.

Mr. BOWSHER. Right. No question.

Senator ROCKEFELLER. But if you can develop practice guidelines and, by doing so diminish the fear of medical liability by virtue of those protocols, it seems to me that is crucial to do.

Mr. BOWSHER. If I could just add one thing, Mr. Chairman, to the Senator.

Senator MOYNIHAN. Please do.

Mr. BOWSHER. I see this issue as being just the most extreme part of the infant mortality problem we are facing in this country. In other words, we are down to 19th, I think, among the world's nations. That is what Senator Chiles' Commission came up with. Japan is number one. They have figured out how to get their pregnant women proper health care, proper nutrition, and other services. And they even carry right on through to the inoculations for the children and into the school, and every child shows up at the first grade with their book; and nobody would come to school without their book.

So there is tremendous peer pressure to have proper health care and proper health treatment starting when the mother is bearing that child. We have so many problems in our health care system, in our legal system, in this whole area that are preventing us as a nation from having much better results; and yet we are spending more and more of our GNP in this area, and we are not getting it to the aspects of the problem that we should.

I think these drug-exposed infants and their mothers are just the most extreme part of that problem.

Senator ROCKEFELLER. Mr. Chairman, would it be possible for us to get the study that Janet referred to, what has worked in terms of treatment with pregnant women.

Senator MOYNIHAN. I'm sure. I see Ms. Shikles is saying yes. Say yes.

Ms. SHIKLES. Yes. [Laughter.]

[The information appears in the appendix.]

Senator MOYNIHAN. Senator Chafee?

Senator CHAFEE. Thank you, Mr. Chairman.

First, I agree with everything that Mr. Bowsher said. I have been involved with this as most of us have for many years, trying to do something about preventive medicine and getting the message out.

I come from a State that is manageable because it is relatively small, and thus we are able to reach out to most pregnant women.

We have a State Health Department. We do not have community health departments. It is all run from the State. Our State has adopted, I suspect, every option under Medicaid. Never mind the mandated ones which we obviously do; we do the optional ones such as providing care for pregnant women over poverty.

One of the problems you find—and we have gone into it more—it is necessary to have an outreach programs. You cannot just have the facilities. Say, please come, here we are.

Mr. BOWSHER. No. That is very true.

Senator CHAFEE. Even though the facilities are down in the areas where they are located, you have to have people go out and find these individuals and bring them in. That is the first point.

Secondly, I would hope in this whole business of drugs we would not lose sight of alcohol. You have heard the previous statistics from Dr. Sullivan. Alcohol is a horrible part of the drug problem. Crack gets everybody's attention—as well it should—but we should not overlook alcohol. It has been around so thus it doesn't have, if I could use quotes around it, "the glamour" of tackling the drug problems.

Mr. BOWSHER. Yes.

Senator CHAFEE. In the 1988 Drug Bill I was able to get in a provision that said that drug treatment facilities must give priority of their treatment to pregnant women. Now apparently that is not working, judging from what you are saying.

Mr. BOWSHER. That is correct.

Senator CHAFEE. And of all your testimony I found, zeroed right in, I found the most depressing the part you have on page 10 that 54 percent of these very few drug treatment programs deny the treatment to pregnant women because of the liability. Now something is wrong with our system.

Mr. BOWSHER. Yes.

Senator CHAFEE. As you know all through this Congress we are trying to reform our health care delivery system, whether it is medical liability, or managed care enhancement, particularly as it deals with the treatment of pregnant women. I am glad you have this figure because that will help us along in trying to do something, finding some solutions that have to come from the Federal Government. Reform will not be easy. The trial lawyers are all around the place, as you know.

Mr. BOWSHER. Uh-huh.

Senator CHAFEE. And other groups that oppose reform say, "oh, leave it to the States." Well there is a national problem and I think it requires a national solution, certainly as far as seeing that these women, if they do come to the centers—if we are fortunate enough to get them there—at least they ought to be treated.

Thank you, Mr. Chairman. I am sorry I cannot stay, but I appreciate what Mr. Bowsheer does. He and his outfit always do a good job and they merit the high respect they are held in around here.

Senator MOYNIHAN. They certainly do. Thank you very much. Mr. BOWSHER. Thank you.

Senator MOYNIHAN. We would hope that you would stay alert to things you think we ought to be asking you on these matters. We

will listen with great attention to this report. I know Senator Bentsen appreciates it hugely. We want to thank you again, sir.

Ms. Shikles, Ms. Martinez, thank you very much. Just remember one thing, keep in mind the possibility that all these things might simply be a dependent variable that falls out of a breakdown in social structure which is the equivalent of the natural defenses that the Lancet refers to. An epidemic breaks out when the balance between natural defenses and offenses breaks down. Something like that.

Mr. BOWSER. Okay. Thank you very much.

Senator MOYNIHAN. Yes, sir.

Now we are going to hear from Dr. Richard Lowensohn who is an associate professor of the Department of OB/GYN and Chief of Obstetrics at the Oregon Health Sciences University.

Doctor—is it Lowensohn?

Dr. LOWENSOHN. Lowensohn.

Senator MOYNIHAN. Lowensohn.

What is the Oregon Health Sciences University?

Dr. LOWENSOHN. It is the State University for the State of Oregon; and it is the medical school for the State of Oregon.

Senator MOYNIHAN. Fine by me. I am happy to learn. I liked it better when they called it medical school. But if they want to call it Health Sciences University, fine.

We welcome you, sir.

STATEMENT OF RICHARD I. LOWENSOHN, M.D., ASSOCIATE PROFESSOR, DEPARTMENT OF OB/GYN AND CHIEF OF OBSTETRICS, OREGON HEALTH SCIENCES UNIVERSITY, PORTLAND, OR

Dr. LOWENSOHN. Thank you, Mr. Chairman. I am the chief of obstetrics at the Oregon Health Sciences University where I am an associate professor and the director of the Substance Abuse Family Evaluation (SAFE) Clinic for treatment of substance abusing pregnant women. I am also the chair of an Oregon task force which has been examining this issue for the past year and a half.

My testimony will deal with the approach used by our clinic and its results; its value as a model for use in other settings; and then with the cost of such care and funding issues. I would ask that my full statement be submitted at this time for the record.

[The prepared statement of Dr. Lowensohn appears in the appendix.]

Dr. LOWENSOHN. Substance abuse has increased in Oregon, as with the rest of the country. Last year 532 infants were referred at birth to Children's Protective Services due to drug abuse, an increase of over 800 percent in only 5 years. The instance of abuse among pregnant women is probably 15 to 20 percent based on several different studies. Although cocaine is the most popular drug of abuse, Oregon is also the third largest producer of marijuana and of amphetamines in the country, as well as a strong consumer of alcohol.

Senator MOYNIHAN. May I just interrupt? I have to say, largest producer. You mean you grow it?

Dr. LOWENSOHN. Yes, sir. Grow it or manufacture it.

Senator MOYNIHAN. And some consume it as well.

Dr. LOWENSOHN. Absolutely.

Senator MOYNIHAN. I make that point because we are spending fortunes having the Coast Guard chase around the Caribbean intercepting marijuana, rowboats, and the Customs Service has an air force, based for some suspicious reason in Oklahoma which is supposed to shoot down planes carrying marijuana. But have the marijuana consumed in the United States is produced in our national forests.

Dr. LOWENSOHN. Yes, sir.

Senator MOYNIHAN. So much for intradiction. Thank you, sir.

Dr. LOWENSOHN. The SAFE program opened in December of 1988 in response to this problem, as a joint effort by the departments of obstetrics and psychiatry. The primary focus is prenatal and obstetrical care with a comprehensive program of substance abuse counseling, psychiatric evaluation, nutrition, child birth and parenting education, supported by child care and assistance with transportation.

Missing so far from our program is any access to drug-free housing or job training, both of which are essential for a comprehensive program. Our typical patient lives with a substance abusing partner. She has another child, no independent income, less than a full high school education and no job skills of any kind. She has no independent transportation and no child care opportunities.

Cocaine is the drug of choice for over half our patients. Almost all patients also use alcohol and marijuana, and the majority of our patients use more than three drugs on a regular basis. Since the SAFE Clinic opened—

Senator MOYNIHAN. That is a pattern that we are beginning to be familiar with; is it not?

Dr. LOWENSOHN. Yes, sir.

Since the SAFE clinic opened 62 Portland area women have participated in the program—30 have delivered their babies, 9 have dropped out, and 23 continue active participation during their pregnancy. Of the 30 women who have delivered half stopped their drug completely, another quarter used significantly less drugs through the pregnancy, and one-quarter continued with their usual drug use.

Of the 30 babies born to women being treated through SAFE, half appeared to be completely free of any drugs at delivery. The fact that these infants were born healthy and not in need of intensive treatment, nor observation, is certainly one indication of SAFE's success.

The SAFE clinic provides a good model for how to approach the problem of substance abuse and pregnancy, because dealing with the non-medical issues of drug addiction can be so overwhelming for these women, they must be addressed at the same time as drug treatment. Nevertheless, unless the medical care is the primary focus we find that the women have no motivation to show up. Once the child is born the mother often loses interest in continuing substance abuse treatment or parenting training for herself.

Costs for clinic, personnel and space are almost \$9,000 per month. We bill State Medicaid for prenatal care and substance abuse treatment for those women who qualify. The funds available

through Medicaid in title 19 add up to about \$2,100 monthly, which leaves a shortfall of almost \$7,000 per month.

Senator MOYNIHAN. Sir, you will not mind my interrupting because this is a matter we are trying to get very clear. We bill State Medicaid?

Dr. LOWENSOHN. All Federal Medicaid money comes through the State.

Senator MOYNIHAN. Oh, I see.

Dr. LOWENSOHN. We cannot bill the Federal Government directly.

Senator MOYNIHAN. Oh, I see. But unlike in New York there is a special Medicaid program that is purely State funds. This is regular Medicaid?

Dr. LOWENSOHN. Right.

Senator MOYNIHAN. And you bill them and they send you checks?

Dr. LOWENSOHN. We can bill the State through Medicaid. We bill for prenatal care. We bill through title 19, through the mental health, I believe, for the substance abuse treatment. I do not do that particular billing myself, but that is handled specifically by the substance abuse treatment program.

Senator MOYNIHAN. But they get Medicaid money?

Dr. LOWENSOHN. They get title 19 money.

Senator MOYNIHAN. Title 19 money?

Dr. LOWENSOHN. Yes, sir.

Senator MOYNIHAN. We are beginning to find a pattern of variation around the country. Thank you. We now know something about Oregon.

Dr. LOWENSOHN. This is paid for, the short fall, by donated funding, including two local March of Dimes Chapter grants, a grant from the State Department of Human Resources, and most importantly donations in kind of personnel and space from the clinical departments at the University.

While our program is not cheap, the alternative is much more costly. If we do not provide this care a Florida study has estimated that each infant reported to Children's Protective Services will cost an average of \$8,000 for their first year of life alone. At that rate our 30 infants delivered thus far through the SAFE clinic would have cost \$240,000 for the first year of care alone.

First year costs, however, do not begin to address the true scope of the problem. Much of what we fear from cocaine, alcohol, amphetamine and marijuana abuse is behavioral damage, which will be most obvious and costly when these children drop out of school, fail to hold jobs and/or commit crimes as adults.

Programs similar to Portland's SAFE Clinic do not exist in sufficient number or size in any part of Oregon and I doubt that they do in any State in the country. The components of our program are typically handled by a varied and often uncoordinated grouping of agencies. In order for treatment programs to be effective, funding must be developed that both defines and requires coordination of care through one central agency, which I feel should be the medical care site.

Active substance abusers have little personal organization. We are asking too much of them to negotiate a maze of agencies to get

the help they need in order to stop using drugs. Parenting is a challenge for anyone. But if you throw in an irritable, difficult to satisfy drug-damaged baby in a drug-using environment you can easily see that this is a set up for child abuse. More programs like SAFE should be developed and funded through both the public and private sectors. In addition, demonstration projects adding job training and drug-free housing to drug treatment programs need to be established.

We have shown that programs like SAFE can help a woman have a drug-free pregnancy and a healthy baby. Now it is time to set a new goal of helping these women to make the permanent transition to responsible parenthood by providing coordinated comprehensive services over the longer term.

Thank you for taking an interest in this problem. I will be happy to answer any questions you have.

Senator MOYNIHAN. Well thank you for establishing that it can be done at the level of you know a local place specific. Every place is local in some sense. And that you do find that you can get your Medicaid reimbursement and all.

I want to ask you this question, as a physician and as a scientist. There are obviously problems of scale here aren't there? In the City of New York we estimate that there are about 400,000 persistent users of crack cocaine. It appears in our streets about 5 years ago, 6 maybe now. And it is in an epidemic form and epidemics crash, of course.

You have last year 532 infants were referred at birth to Children's Protective Services due to drug abuse. If it were 15,000 it would be a different number wouldn't it?

Dr. LOWENSOHN. Yes, sir. We are a small State. We have 30,000 births a year. And happily being a small State with 1 percent of the births in the country we have a smaller problem to deal with.

Senator MOYNIHAN. What are you dealing with? Are you dealing with a—I'll be blunt. I think skid row comes out of Portland, Oregon; does it not?

Dr. LOWENSOHN. Yes.

Senator MOYNIHAN. Yes, the term "skid row" is from Portland. That is where they are skidding the logs down into the Columbia there; right?

Dr. LOWENSOHN. Right. It was originally "Skid Road."

Senator MOYNIHAN. It was Skid Road? I see. Okay. Well along Skid Road built up the usual collection of things that are associated with high risk or migrant labor.

Are you dealing with a skid row population here?

Dr. LOWENSOHN. The University is the State hospital. It is also essentially the county hospital for the Portland area, as there is no other county hospital. So we certainly do deal with all the women who come in of lower socioeconomic class. We aren't exclusively a lower socioeconomic class hospital.

Senator MOYNIHAN. No, but I mean this group—

Dr. LOWENSOHN. But the problem throughout the State is also socioeconomic classes and with all groups. Identification is not nearly as good amongst healthy pregnant women as it is amongst poor pregnant women. The one study that was done in Florida has shown that women who receive public care are 10 times more

likely to be screened for drug use than women who receive private care.

Senator MOYNIHAN. Okay. I am not resisting that information, but you tell me here, "Our typical patient lives with a substance abusing partner. She has another child, no independent income, less than a full high school education, and no job skills of any kind."

Dr. LOWENSOHN. Yes, the typical patient for our clinic is a lower socioeconomic class patient.

Senator MOYNIHAN. That describes a deviant population in Portland?

Dr. LOWENSOHN. Yes.

Senator MOYNIHAN. You know, those are people—the jukes and the calicacs are the original studies of families in the Catskills in 1920's.

Dr. LOWENSOHN. But a lot of our patients are just low income. They are not low quality people. They are just coming from poorer families.

Senator MOYNIHAN. That is right. I guess the jukes and calicacs were meant to be the study of a regressive set of family traits over six or seven generations.

Dr. LOWENSOHN. Yes.

Senator MOYNIHAN. I don't press that. Low income. But low income is often as a dependent variable as it is otherwise, would you not say?

Dr. LOWENSOHN. Yes.

Senator MOYNIHAN. I mean you behave like this and you will have low income. You can pretty well predict it. I guess what I am saying is that I just wish the epidemiologist would get hold of this subject and tell us who our populations at risk, and what are the vectors that might break them. This is at some level we are dealing with something as simple as the impact of technology on society, are we not?

Dr. LOWENSOHN. Yes. But, Senator, the studies that have been done so far seem to suggest that women are at risk, that people are at risk, that this is not a problem that has a specific socioeconomic class that is at risk. What happens is that people of a specific socioeconomic class get identified and therefore get responded to. But women in a higher socioeconomic class still have someone paying the bills, so they do not necessarily get caught.

They are 10 times more likely to be identified and reported if they are poor.

Senator MOYNIHAN. Right. I am certainly not going to disagree with you, but I resist that idea. I think that sort of comes under the heading of very bad disposition of a form of denial. Not on your part, but I think there is a generic form of denial that this is something happening everywhere. I do not think it is happening everywhere.

Dr. LOWENSOHN. Well the study in Florida found that the instance of drug use was the same in the private population as it was in the public population. But the instance of identification and reporting was 10 times higher in the public population.

Senator MOYNIHAN. The private public distinction being?

Dr. LOWENSOHN. This was all women receiving prenatal care in one county in Florida.

Senator MOYNIHAN. Uh-huh.

Dr. LOWENSOHN. And they did an anonymous urine test on all pregnant women for the study. They found a ten-fold increase in the reporting, but no significant difference in the rate of drug use.

Senator MOYNIHAN. Really? I guess we have it here. This is the report of the Subcommittee on Human Resources of the Committee on Ways and Means, the enemy within crack cocaine in America's families. My God, they got this printed since June 12. This is Panoas County, FL.

Dr. LOWENSOHN. They found a 16-percent instance of drug use in the public population; a 13-percent instance in the private population.

Senator MOYNIHAN. There was no significant difference between the rates of positive test results for patients in private than public sector medical facilities, nor according to socioeconomic status. The incidents of positive drug tests results for the individual drugs are also similar except for cocaine which is slightly higher among women in the public health sector. Well there you are.

Dr. LOWENSOHN. When they went back to find out why they found by interviewing the health care givers that people are much less comfortable asking the questions and doing the testing on people that they identified as being of a similar social class and of people that they are likely to run into in the corner grocery store or the corner market. And for that reason that people were more uncomfortable testing the private patients.

Senator MOYNIHAN. Uh-huh. Well I live and learn. I would like to know more about that county and we will study more of that. This is Chasnof, Incidents of Drug Use in Pregnancy. We will see.

But, listen, thank you very much for your testimony. We now have something that is very important to us—a case in which a State institution got itself Medicaid benefits for an intensive care which had consequences, obviously. I think we all should go away from this morning's hearing with the memory of Dr. Sullivan lifting up \$700,000 worth of hospital bills that were brought about that, you know, paid for the care of a child after it was born, what could have very well have been prevented beforehand. Would you agree on that, Doctor?

Dr. LOWENSOHN. Yes, sir.

If I could possibly just respond to one statement of Dr. Sullivan's?

Senator MOYNIHAN. Sure. Please.

Dr. LOWENSOHN. Although we have donated \$7,000 a month of our services to provide this clinic it has not been willingly. It is because so far we haven't been able to find any funding to cover that \$7,000 a month shortfall. It was not our intention to set this up this way.

Senator MOYNIHAN. Well there you are. At some level the Federal Government is not forthcoming in the way it ought to be. Don't you feel?

Dr. LOWENSOHN. At the moment there is very little funding available.

Senator MOYNIHAN. And yet you will get funding for—you know, the \$700,000 comes under a category that you can pay for. Don't we have some of that craziness?

Dr. LOWENSOHN. Yes, sir.

Senator MOYNIHAN. I mean if you have to go into one of those neo-natal scenes all over Manhattan, the Bronx, Brooklyn, which is of space-age medicine and tremendously expensive, that is okay; but don't show up here 3 months pregnant and say, you know, you are kind of worried about your behavior because we cannot do anything for that.

Dr. LOWENSOHN. You could save a lot more money by spending it up front.

Senator MOYNIHAN. We would save a lot more children.

Dr. LOWENSOHN. Yes.

Senator MOYNIHAN. And lives. It needs aggression. I think we have, I am glad to hear, Senator Rockefeller saying and Ms. Wilensky, a new Administrator who really will work at this and put some life back into it. Bureaucracies have cycles and some of them go more abundant out of like civilizations and then suddenly they revive. This one may be reviving. Your testimony will help us do that very much, sir; and we thank you.

Dr. LOWENSOHN. Thank you.

Senator MOYNIHAN. This committee will stand in recess for 15 minutes so we can all have a little "7th inning stretch."

[Whereupon, the hearing recessed at 1:00 p.m. and resumed at 1:17 p.m.]

The CHAIRMAN. This hearing will come to order. Is Mr. Hayward here? Mr. Hayward if you would come forward. Mrs. Louise Scott, would you come forward, please?

I apologize for the delay. Our problem is, we have too many things going at the same time. I have been tied up in the Budget Summit meetings; and, frankly, will not be able to continue too long here.

Mr. Hayward, you are with the Delaware Department of Services for Children, Youth and Their Families, testifying on behalf of the American Public Welfare Association, National Commission on Child Welfare and Family Preservation.

Mrs. Scott, you are a foster parent testifying on behalf of the Delaware Department of Services for Children.

We are pleased to have you both. Mr. Hayward, would you proceed?

STATEMENT OF CHARLES E. HAYWARD, SECRETARY, DELAWARE DEPARTMENT OF SERVICES FOR CHILDREN, YOUTH AND THEIR FAMILIES, TESTIFYING ON BEHALF OF THE AMERICAN PUBLIC WELFARE ASSOCIATION AND THE NATIONAL COMMISSION ON CHILD WELFARE AND FAMILY PRESERVATION, WILMINGTON, DE

Mr. HAYWARD. Thank you, Senator. I am Charles Hayward, secretary of the Department of Services for Children, Youth and Their Families in Delaware; and I am representing the American Public Welfare Association's National Council of State Human Service

Administrators and the National Commission on Child Welfare and Family Preservation.

The National Commission on Child Welfare and Family Preservation was established by APWA to assess the issues facing our Nation's child welfare systems. Composed of 26 members, we are a diverse group of administrators including cabinet level human service commissioners, local public welfare administrators, public child welfare directors and APWA board members. Our charge is to propose legislative and program recommendations to recast Federal law and State policies in light of the new realities of child welfare.

Mr. Chairman, I want to thank you for your efforts on behalf of children and your long-standing concern for society's most vulnerable children, those at risk of abuse or neglect. Your attention to these children today is of special importance. Simply put, the child welfare system in America is under siege. Last year we received over 2.4 million reports of abuse and neglect—an increase of 118 percent since 1980. We also placed more children in foster care than at any time since the early 1980's.

In fact, we had had a decline in the number of children in foster care, but the number of children being placed in substitute care increased by over 80,000 in the last 3 years. By the end of 1989, 360,000 children lived apart from their parents with some children having no hope for being reunited with their families.

Many of the children coming into our care today are different from those that we had just 5 years ago. They are more troubled, more seriously abused, and far poorer. Their lives have been damaged by drugs, sexual abuse, serious physical or mental health difficulties, AIDS, and developmental disabilities. Persistent poverty governs their lives. Over half of the reports of child abuse and neglect—the largest single category—involve deprivation of necessities. From a policy perspective, providing adequate food, shelter, health care, clothing and supervision is as much a matter of "wallet" as is a question of will.

Drugs are the blame for the spiraling number of children being removed from their homes. Children from families with drug and alcohol problems and babies and infants with drug-addicted mothers are the most serious problem facing child welfare agencies today. Available resources fall far short of meeting the challenge: these families require more comprehensive services and more specialized skills than child welfare agencies can offer today. Agency staff lack adequate training, medical information, and access to drug treatment services for these troubled families. Foster parents lack adequate training, support services and reimbursement.

The situation threatens to get worse. The Inspector General recently concluded that over 100,000 cocaine babies were born in the United States in 1988 and that by the year 2000, there are likely to be from 500,000 to 4 million drug-exposed babies. If you add any proportion of that number to the children already in foster care the situation we have now where it is almost impossible to recruit the numbers and types of foster parents that we need to serve these children will be impossible in the future.

Although the majority of infants born exposed to crack cocaine return home with their birth parents, there is a strong probability

that a large number of drug-exposed infants will later require foster care or specialized services. Experiences have already taught us that these children cannot thrive in a home environment that lacks special care. And the difficulty of caring for these children in these numbers will confound an already exhausted pool of foster homes and parents.

For those who may not be, and we have much discussion here today about those children who may not be identified. Many of these children will show up later through such programs as Child Find, EPSDT, new programs to be established under 99-457 and other special education programs.

Mr. Chairman, I am afraid that the country is not prepared for the problems that these children face, nor for the full magnitude of the problem they pose to all of us now or in the future. One real challenge for policymakers and administrators at the Federal, State and local level is the simple but critical lack of solid national information on the effect of the current drug epidemic on the child welfare system. The few national statistics we have are very wide and make it difficult for us to plan effectively to meet the crisis.

APWA recently conducted a national survey of State child welfare agencies to collect statistical data on children referred through the Child Protective Services System because of a parental substance abuse and alcoholism. We found that many States do not have the capacity in their current information systems to produce data in this area.

But let me just give you a few examples. In New York the child substitute care population is increased by 18,000 children or 66.3 percent in just 2 years. In Illinois the number of alleged child abuse, neglect reports increased by 32.7 percent between 1988 and 1989. The number of substance affected infants increased over that same period by 403 percent.

In the State of California the number of CPS reports increased by 36.6 percent from 1986 to 1988. During these same years, the number of children with parental alcohol or drug dependency involved in CPS cases increased by 55,000.

The CHAIRMAN. Mr. Secretary, your time has expired. But we will take your entire statement for the record.

Mr. HAYWARD. Thank you.

[The prepared statement of Mr. Hayward appears in the appendix.]

The CHAIRMAN. Mrs. Scott?

STATEMENT OF LOUISE SCOTT, FOSTER PARENT, TESTIFYING ON BEHALF OF THE DELAWARE DEPARTMENT OF SERVICES FOR CHILDREN, YOUTH AND THEIR FAMILIES, WILMINGTON, DE

Mrs. SCOTT. I would like to thank you for having the opportunity to be here. My name is Louise Scott and I have been an approved foster parent for the Division of Child Protective Service in the State of Delaware for the past 6 years. Previously before coming to Delaware, I was a foster parent in Virginia. I have had approximately 20 children placed in my home, ranging in age from 3 days, direct from the hospital, until they were 18 years of age.

I have provided a home to a teenager mother and her baby; a sibling group of five, ranging in ages from 1 to 5; delinquent girls, sexually abused girls, infants born drug addicted, physically abused children, emotionally abused children, and children who have been developmentally delayed. I also have my own personal experience in the foster care system in New York, having grown up in numerous foster homes from the time I was 9 months until I was 18. My last foster family is very much a part of my life, although I have been reunited with my biological parents.

In addition to my experiences as a foster child and foster parent, I hold a bachelor's degree in human resources management and I am a licensed practical nurse. I say this only because I have various perspectives in the foster care system, having been a foster child and now being a foster mother.

I have been a foster parent for 15 years and the children who are entering the foster care system are very difficult children, more difficult than they were 15 years ago. For example, adolescents entering care today tend to be more angry; they exhibit more difficult behaviors; they have low self-esteem and street-wise attitudes that make them appear to be incorrigible, but they are not. We have recently seen drug-addicted babies entering foster care. I have drug-addicted babies in my home. These babies are hard to live with because they are constantly irritable; they have breathing problems; they are nonresponsive to normal handling; they are developmentally delayed; constantly crying; they are more aggressive when they are toddlers; they are more active, restless and destructive.

I have a theory that some of the children that we are seeing in the school systems today who are presenting problems in the schools, in the community, and in their families may be babies who were born drug-addicted but were not identified at birth. So these children are presenting problems now.

I would like to list the major suggestions for improving foster care. Mine was for Delaware, but I think it should be for everywhere. I think there should be a more professional attitude taken toward our foster parents. I mean after all we are the ones who have to live with these children on a day-to-day basis. And I think that our opinion and what we feel as a part of the case plan for the children who come into care is very important. I think foster parents should be encouraged to take an active role in the planning of the child's care.

We need more respite. I think respite is very good for foster parents but is a preventive medicine for children before they come into care because if some of the parents had respite care there may be no reason for placement, because foster parents do not have adequate respite care when the children come into foster care, there is disruptive in placement. So you do not have prevention.

Foster parents are like any other parents, they get tired sometimes and they need some way to have their children away from them for, you know, a little period of time. If they cannot have that, you usually end up having children who are taken out of the home.

I think training. When I became a foster parent I wanted to be a foster parent because I was in foster care. And there was a love of

children. But children who come into care today need more than just love. They need people who are trained to handle and take care of the special needs that are required. So I think that additional training for foster parents is required and is needed.

I think there should be improved access to resources for foster parents. I have five foster children in my home and I have two of my own children; and I would like to be able to provide for these children who I take into care, the same type of care that I give to my own children. I am not financially able to send all of my children off to camp—whether it is basketball camp or swimming lessons or what have you. I think that we should have advocates for foster parents who go out and find the resources that foster parents need to take care of the children.

As I said before, we are like any other parent. Sometimes we become foster parents because we love children, but we are not aware of the resources that are available to the children. And if we had someone who was an advocate for foster parents who could go out and find these resources, these scholarships that may be available to foster children for camps, that we would be able to give better care.

I would like to see the independent living program expanded to offer a less structured program for the adolescents. When children come into care, especially when they are 16, they need to be prepared for independent living. And because there is a double standard, as a foster parent I am more reluctant to take a child into care if they are 16 and they do not want to go to school and the law says they do not have to go to school. So I am more reluctant to take this child into my home than I am a child who is in school. And sometimes the child needs it even more.

So I think that an overall improvement of the foster care system is what every State needs. But in order to encourage more foster parents to stay as foster parents and to become foster parents that we need things like respite care and we need improved resources for the foster parents and for the children.

The CHAIRMAN. Now you have at the present time, what, five foster children with you plus your own two children?

Mrs. SCOTT. Five foster. Yes.

The CHAIRMAN. And you receive some compensation, obviously, for taking care of the five. Do you have anyone assisting you in caring for those children or do you try to do that all by yourself?

Mrs. SCOTT. Well I have been a foster parent for a long time so I know how to use the resources. I have a girl scout troop. [Laughter.]

The CHAIRMAN. You have a girl scout troop?

Mrs. SCOTT. Yes.

Mr. HAYWARD. And her husband is there also.

Mrs. SCOTT. And my husband. He had to say that. My husband, okay, if you say. But the babies, I get a lot of help from my foster—

The CHAIRMAN. You have all the children working at their own particular tasks, I suppose—

Mrs. SCOTT. Yes.

The CHAIRMAN [continuing]. To contribute to the overall effort?

Secretary Hayward, when you talk about an 83-percent increase over 3 years in California, then the other increases you have told me about, how much of that do you think is a maybe more careful determination of what Mrs. Scott was saying, of whether or not there has been drug abuse.

Are we doing a better job of discerning that or is it that there is just that much more increase in the use of crack?

Mr. HAYWARD. I truly believe that it is a major increase in the usage and abuse of a lot of illicit drugs which has caused the number of additional referrals into the foster care system. As some of the earlier comments were made, we are many times dealing with a portion of the population who is identified through various clinics and through service providers who deal with a segment of the population. But I also agree that there is a larger proportion of the population that is generally not identified who are also out there who require services that we often do not get referrals on.

The CHAIRMAN. When you go through some of these hospitals and you look at the border babies you see a child no larger than your fist and you think about the quality of life of that child. Those are some terrible moral problems. What else do you think we can do to try to turn this situation around? Specifically, what kind of services do you think we need?

Mr. HAYWARD. There are a number of services; and a number of those have been talked about today, which have proven to be very effective. One of the major ones is, first of all, doing more in the preventative end. Having a system that will provide services to pregnant women up front without the menace over their heads that the child is going to be taken away.

One of the things that has happened over time is that the child welfare system has really changed. It is no longer the system of last resort. It is turned to as the system of first resort because there are a number of other programs that no longer exist or they are also so overwhelmed that they cannot provide services. So you have the child welfare system as being the front door for many, many services.

Therefore, pregnant women do not come forward if they feel they are at the point where they would like to receive some service if it is to a protective agency or a threat of referral to the protective agency is there, such that when the child is born if they do want to take care of the child, the child is going to be taken away. That is, I think, one of the major policy issues that we have to figure out how we are going to resolve.

If we are going to follow a line of family preservation that children grow best in families, in their natural families, and we are going to do what we can to keep those families together, you take one tact. If the tact is, any drug-abusing mother has abused that child because of the use of that drug, then you take a very different tact. So I think what we have to do is determine which tact we are going to take. Then I think some of the solutions will be much easier.

But right now we have a number of different philosophies out there on how you deal with these families and children; and, therefore, you have systems clashing with each other. But you definitely need services that are going to be on the preventive end. Secretary

Sullivan raised his bill for the \$698,000 that was spent for a child in a neo-natal clinic. That is just about 95 percent of what our whole State of Delaware's prevention money for drug-free schools was for a year for the State.

The CHAIRMAN. Mrs. Scott, you told us about the need for loving care in your own experience as a foster child and the continuing concern and commitment to it. And you have had your own children, and then you have had other children, some that have been subjected to drug abuse and some that have not, I assume.

Other than pride in your own children, tell me what major differences you see in one that has had drug abuse and one that has not.

Mrs. SCOTT. Well I had two babies in my home at the same time that were of the same age, one was substance abuse and one was not. Developmentally, this child was way behind. At first it was low birth weight because she only weighed 1 pound and 12 ounces at birth. And she was in the hospital for 3 months before she was discharged. Coming out of the hospital at 3 months, it was just like being an infant just born and she developed along those lines, always being 6 months behind—raising her head, sitting up. Very irritable, crying all the time. And sometimes almost like a failure to thrive baby. The baby was constantly whining, constantly eating, never getting enough. Sometimes not wanting to be held and being very nonresponsive to attention until she was about a year old.

At that time she became very attentive, but only to the two primary caretakers. The baby is out of my home now, but I see the baby constantly. And right now she is the same, like there is 5 days difference between the baby that I still have. Very aggressive, very hyper. But yet on the learning end, nowhere near the baby that is in my home that is the same age, not talking yet.

The CHAIRMAN. And the problem is not that they are 6 months behind, they lag further and further and further behind as they go along.

Mrs. SCOTT. Yes.

The CHAIRMAN. Thank you very much for your testimonies.

Mr. HAYWARD. Thank you, sir.

Mrs. SCOTT. Thank you.

The CHAIRMAN. Our next panel, Dr. Maureen Montgomery, assistant clinical professor of pediatrics at the Children's Hospital in Buffalo, NY; Margaret McGoldrick is vice president for health affairs and acting hospital director, Hahnemann University Hospital, Philadelphia; and Mr. Sherman McCoy, the chief operating officer of the Harlem Hospital Center, New York, NY.

Dr. Montgomery, if you would proceed please?

STATEMENT OF MAUREEN E. MONTGOMERY, M.D., ASSISTANT CLINICAL PROFESSOR OF PEDIATRICS AND CO-COORDINATOR, INFANTS OF SUBSTANCE ABUSING MOTHERS (ISAM) CLINIC, CHILDREN'S HOSPITAL OF BUFFALO, TESTIFYING ON BEHALF OF THE AMERICAN ACADEMY OF PEDIATRICS, BUFFALO, NY

Dr. MONTGOMERY. Thank you, Mr. Chairman. I am Dr. Maureen Montgomery from the Children's Hospital in Buffalo; and I am

here today representing the Academy of Pediatrics, and I think personally more representative of my own clinic at the Children's Hospital of Buffalo, which is a clinic dedicated to the care of children and their mothers who have been using drugs while they were pregnant.

So my focus is a little bit different than some of the other speakers today because my first contact with these mothers is when they have delivered their children. I have no contact with the mothers prior to their delivery.

There are a few points I wanted to make ahead of my prepared statement that have come up as we have been listening to speakers this morning. And if you don't mind, I would just like to say a couple of things.

The first is that I think the issue here is poverty. I think drug abuse is added onto the issues of poverty, but I don't think we can address this issue and expect families in poverty to simply give up a drug, whether it is alcohol, cocaine or any other drug without replacing it with something else. I think over the years people in poverty have been expected to go along with the traditional treatment plans and then in the end they still have poverty and no goals, and no future, and things haven't changed.

Second, I would like to mention that I think the availability of care—that is to say Medicaid services, WIC services, et cetera—being available and people being eligible for them does not translate into people getting them.

Third, the long-term outcome for these children is just beginning to be recognized. As people this morning have already mentioned, the school systems, the criminal justice systems, our social services systems will be paying the price for these children long after we, as pediatricians, have finished seeing them.

Fourth, crack cocaine is an addiction that is not like any other addiction that we know about. There is no alternative drug to take the place of crack. I have had mothers come to me and say they will go for methadone treatment just to try to get off crack. It doesn't work.

So those are the four things that I think need to be said ahead of time before I start. My clinic is about 8 months old. We have about 80 patients in Buffalo. We are not in an intercity of high predominance, but we are sort of a midwestern city and we are seeing the problem here. The patients that I see are all Medicaid eligible patients, mostly intercity patients, and their mothers.

Our emphasis in beginning this clinic under a maternal child health grant that was funded through a Healthy Tomorrow's program in conjunction with the Academy of Pediatrics last year was to keep families together. I do not think the foster care system can handle or is ready for the numbers of children we are talking about.

In addition, we recognize that child abuse is a significant possibility in some of these families. So we have to keep in mind that our primary goal is to protect the children. Thirdly, we have to intervene as early as possible with these children to make any impact on their development and if they don't come to care and don't get seen they will not be helped.

There is a tremendous financial burden on the centers caring for these children. Our hospital, like every other hospital in the country, is being overwhelmed with the numbers. Unfortunately, the services that make the difference in delivery of health care to these families, such as nursing services, social service, social workers, are not funded through Medicaid. Our grant is patched together through a combination of Federal, State, local and private foundation monies. Continued availability of this funding is uncertain and Medicaid does not provide funding for these necessary psycho-social supports.

The way our clinic runs is that we have one pediatrician and one nurse practitioner who see every patient at least two to three times a month. We are available 24 hours a day, 7 days a week on a beeper so that if there is a crisis or a question the families can reach us. We have resource mothers who are employed by the clinic who are intercity moms who go to the families to make home visits as often as every day if they have to. The mothers are paid for out of our grant. They are paid minimum wage. We advertised for six positions and we got over 100 applications.

There are a lot of people in the intercity who care about this problem and who want to make a difference. I think we ought to think about tapping into those resources. We try to make sure for our mothers that they get one-stop shopping. Most of our mothers are programmed to death. They have to go to foster care to visit their other children; they have to go to WIC to pick up the formula; they have to go to drug treatment in another part of the area; they have to go to parenting classes. They have no cars; they have no transportation; they have no child care and they have other children to take care of.

So it does not surprise me very much that they do not meet all the requirements that they are supposed to meet to keep their children with them. I had one mother who said to me just last week, she said, "They think if they keep us on the bus all day we won't abuse our children."

The CHAIRMAN. If they keep us on a bus all day we won't—

Dr. MONTGOMERY. We won't abuse our children.

So just to summarize very quickly—I can't say everything I want to say, but I want to say these women have not been nurtured, they are poor. They no supports. They have very little capabilities to handle the stresses that are flung at them from day in to day out. If we do not support the mothers very concretely with very hands on assistance, I do not think we have a chance of making a difference. I think if we do not make a difference with the mothers, we don't make a difference with the children.

[The prepared statement of Dr. Montgomery appears in the appendix.]

The CHAIRMAN. I sure cannot disagree with that.

Ms. McGoldrick, if you would proceed, please?

**STATEMENT OF MARGARET M. McGOLDRICK, VICE PRESIDENT
FOR HEALTH AFFAIRS AND ACTING HOSPITAL DIRECTOR,
HAHNEMANN UNIVERSITY HOSPITAL, PHILADELPHIA, PA**

Ms. McGOLDRICK. Good afternoon. My name is Meg McGoldrick and I am the vice president for health affairs at Hahnemann University. Thank you for the opportunity to address you.

Hahnemann University is a leading academic medical center in center city Philadelphia, providing health services, biomedical research, and health education. The introduction of inexpensive crack cocaine on the streets has added a whole new dimension to the incidents, complexity and care of low birthrate infants with complications of substance abuse. At Hahnemann University Hospital a recent 1-year study revealed that 80 percent of the women who delivered in 1989 were indigent; 40 percent of these women tested positive for the use of cocaine within 48 hours of delivery. We expect countless others use cocaine throughout their pregnancy.

Because of the nature of addiction some substance addicted mothers simply abandon their babies at birth. In Philadelphia the Child Welfare Agency or DHS often cannot find appropriate foster care placement for their children. As a result, these babies remain in the hospital as border babies, many times in beds desperately needed for acutely ill children.

Unfortunately, hospitals are not reimbursed for border babies. During one 6-month period, Hahnemann lost \$100,000 caring for border babies. This does not even take into account the ongoing losses we face when the cost of the child's acute care stay exceeds Medicare reimbursement. As an example, in Hahnemann's intensive care nursery the Medicaid loss for 1989 was \$670,000. While the financial cost is exorbitant the greatest tragedy is the impact on the child. He or she is exposed to infections unnecessarily and is at risk for more developmental delays due to the sensory deprivation and the lack of bonding with one consistent care giver.

The DHS, however, has not been able to recruit a sufficient number of trained foster parents or to develop alternatives for these children. In some cases ill-prepared parents assume responsibility for these children. Sadly, countless numbers of these children reappear in our hospital severely abused or with failure to thrive diagnoses.

Let me tell you about two Hahnemann University programs which address the substance-exposed and border baby problem. Our social work services department formalized the special caretakers program. To the best of our knowledge, this is the only program of its type in the country. Under this program our employees serve as foster parents on either a short-term or long-term basis. To date we have placed four babies with our employees; have three other employees certified as special caretakers and have eight additional employees in various stages of the certification process.

We are currently spearheading new recruitment efforts in anticipation of continual and growing needs. Unfortunately, even when our employees express an interest and commitment to taking medically needy children as foster or adoptive parents the system has

been slow to respond. They are forced to fight the Philadelphia and Pennsylvania bureaucracies for weeks or even months.

Hahnemann University employees have found the foster care certification and adoption process to be very difficult to work with, often ignoring the demands and realities of working families.

Our second strategy is encompassed in our children at risk proposal. We have begun the development of a new model program calling for enhanced and expanded services at Hahnemann University Hospital, as well as collaboration and coordination with other community agencies for other critical support. Our proposed model will bring together in one facility out-patient drug treatment and medical services for women and children with social, educational and child care services.

Our proposal is grounded on the principal that a healthy empowered mother is the best assurance of a healthy child. Hahnemann University recognizes that hospitals must step out of their traditional roles and serve as a catalyst for change in health delivery for this disenfranchised population.

The Hahnemann University initiatives are meaningful but modest attempts in the face of shrinking and limited resources. Additional action on behalf of the children is critical. The following suggestions should be considered to address the future of these abandoned infants and to reduce unnecessary health care costs. Funding for the foster care delivery system must be increased. The foster care and adoption system needs to be overhauled in response to the needs of the children and the realities of today's families who are potential foster parents.

Interim care facilities must be developed for healthy babies who await place. And a reimbursement program for hospitals is needed for that period of time in which a child who is no longer medically needy waits for placement by the child welfare system.

On behalf of the infants and children who are the innocent victims of America's drug epidemic, I thank you for your time and attention.

[The prepared statement of Ms. McGoldrick appears in the appendix.]

The CHAIRMAN. Thank you.

Mr. McCoy?

STATEMENT OF SHERMAN P. MCCOY, CHIEF OPERATING OFFICER, HARLEM HOSPITAL CENTER, NEW YORK, NY

Mr. McCoy. Good afternoon. I thank you, Senator Bentsen, for inviting me to this hearing on infants born to drug abuse. I am Sherman McCoy, chief operating officer of Harlem Hospital Center which is a member of the New York City Health and Hospitals Corp. My wife, Patricia, and I are also the adoptive parents of little Sherman McCoy who is a victim of cocaine crack abuse. He is a little noisier today than normally.

Harlem Hospital is a 757-bed, public hospital located in the heart of Harlem; and the Harlem community is beset by some of the worse conditions in New York City and the Nation. And we know what those are related to—infant mortality, unemployment, education attainment, poor housing, medically indigents, et cetera.

Also, the life expectancy for males in Harlem has been documented to be less than that expected for males in the country of Bangladesh.

The problems we face at Harlem Hospital mirror those of the city at large, and the statistics to some are startling. In New York City in fiscal year 1989 there were almost 4,900 children reported to the child welfare administration because of a positive toxicology for drugs. That is up more than 268 percent from 1986. At Harlem Hospital last year we reported 360 children at that one hospital for positive toxicologies.

Harlem Hospital currently has more than 1,300 addicts in methadone maintenance programs and we treat our women who are addicted and pregnant. For the last 3 years more than 20 percent of the babies born at Harlem Hospital have had to spend part of their stay in a neo-natal intensive care unit at an average cost of \$9,000 more than a normal stay for a child in a hospital. At Harlem Hospital Center about 4 percent of the kids who were tested—and all of them were tested—but 4 percent tested positive for the HIV AIDS virus.

The CHAIRMAN. What percent?

Mr. McCoy. Four percent of all of the babies born at Harlem Hospital in 1988 tested positive for the AIDS virus. And in the 15-month period, January 1989 through March 1990, we had 64 admissions of patients to the hospital for AIDS who were less than 10 years old. Our out-patient department serves 150 families with children with AIDS.

The border baby problem at Harlem Hospital has decreased significantly in the last few years because of the efforts by the New York City child welfare administration. In December 1986 we had 119 border babies during that month. And on Monday of this week we had a count of 21 in the hospital. More needs to be done and believe that Senator Moynihan's bill, S. 2536, will help hospitals such as Harlem which serves a disproportionate share of AIDS babies.

I would like to briefly focus on babies born crack involved. As the numbers show, and we have discussed here today, too many women are using illicit substances during their pregnancy, mostly cocaine. And these women, it has been again documented lack prenatal care. As a matter of fact, for a 10-year period in 1976 to 1986 in New York City only 49 percent of the pregnant women cocaine involved obtained any prenatal care. And the impact of such prenatal neglect is the extraordinary need for the use of intensive post-natal medical and social resources.

There has been a dramatic increase in premature and low birth weight babies who require enormous amounts of expensive hospital, in-patient, out-patient and habilitative services. The crack crisis, as you have heard from Ms. Scott and others, also placed an enormous strain on the entire foster care system.

The story of little Sherman is a case in point. Although many children who share his plight are in far worse shape, some are better. According to the record which we reviewed after we received Sherman, his mother smoked crack up until the very moment the ambulance was called. He was born in the ambulance and had to be resuscitated. He was brought to the emergency room

and had to be resuscitated again and found positive for cocaine. He weighed in at less than 1,500 grams and was estimated to be 10 weeks from full term.

He spent approximately 90 days in a neo-natal intensive care unit and about 30 days as a border baby. When we received him at 4 months he weighed a little over 8 pounds. His muscles were hard and resisted stretching. The doctors call this hypertonia. He did not have full voluntary use of his muscles. They call that cerebral palsy. And while he did not have the brain lesions that several researchers have found with crack babies, he was and still is delayed in his development.

Patricia and I learned later that low birth weight infants develop more poorly in IQ and cognitive skills; and we also learned, which was kind of frightening to us, is that low birth weight babies of drug abusing mothers died at a high rate than normal weight babies of non-drug abusing mothers.

In addition, Sherman has gone to physical therapy three mornings a week for the 15 months that we have had him. His mother is his constant companion and as you can see, therapist, teacher and playmate. He proves what research is now reporting, that early intervention can, Senator, offset the problems to some degree that these children cocaine involved and low birth weight will have.

And what are these developmental problems facing crack babies? We have heard about them. But let me just report briefly on a study that was done by Dr. Davis and Dr. Fennoy at Harlem Hospital, who recently presented their findings of 70 children whose mothers admitted to using crack cocaine during their pregnancy.

May I just go 1 minute further, sir?

The CHAIRMAN. Yes, go ahead.

Mr. McCoy. Thank you.

Ninety-four percent had language delays; 63 percent fine motor delay; 37 percent gross motor delay; 30 percent suffered hypertonia; 11 percent had autistic disorders; and 59 percent had behavioral abnormalities.

The problem that we face at Harlem Hospital and I think others have indicated is that of the almost 3,000 births that we had at the hospital more than 400 were estimated to be at risk for delayed development. However, very few were evaluated for potential delay prior to leaving the hospital. We believe that that is a problem.

I have submitted the full written report.

The CHAIRMAN. We will take your entire statement, Mr. McCoy.

[The prepared statement of Mr. McCoy appears in the appendix.]

Mr. McCoy. Okay.

The CHAIRMAN. I have some understanding of the obligations you have undertaken, Mr. McCoy and Mrs. McCoy; and each of you for your commitment and the kind of help that you give to these children. And when you talk about a coordinated area in which to provide the services I couldn't agree with you more—this idea of spending all the time on the bus going from one place to the other.

We had a situation in Houston where on the prenatal health care program the expectant mother went one place and filled out all the forms and took all the time to accomplish that, then had to go to another hospital for the delivery, and had to go through the same bloody process again.

I had a son who got involved. He is a businessman, and he helped bring about a computer linkage amongst the institutions so all of that information that had been prepared was ready at the next place so they didn't have to wait for that. We need to do more of that, obviously. Because these people are of very low income and sometimes limited education, and with all their other responsibilities with families, as you say, they just do not have the time to accomplish all of these things that the bureaucracy demands when the places where the services can be attained are spread about.

Let me ask you what your reaction is. What do you do when you find in the maternity ward all of a sudden you have a mother that is a drug addict? Do you try to get her involved? Do you have a crack bomb? Do you try to get her involved in some kind of a drug-prevention service? Is that a part of what you try to attain? Do you go beyond just taking care of the birth of the baby?

Ms. MCGOLDRICK. Let me respond. In our institution we try to refer these women to programs that are available in the city. Unfortunately, there are only three programs that I am aware of. And for in-patient, residential care there are less than 24 beds that are oriented towards women—pregnant women and/or women with children. And if women do have children they can only bring two children at a maximum to a few of these programs. So that women are unable to access the services because of their current family conditions and the services are limited in the availability to them.

Dr. MONTGOMERY. Our experience in Buffalo is the same. We have a 6- to 8-week wait for a mother who wants to get into drug treatment. And at the end—

The CHAIRMAN. Six to 8 weeks?

Dr. MONTGOMERY. Six to 8 weeks, if she is a Medicaid patient.

The CHAIRMAN. Even though she wants to do it?

Dr. MONTGOMERY. Even though she wants treatment today. And if she gets treatment in 6- to 8-weeks she gets it on a day's notice and has to find child care the same day.

Mr. McCoy. At Harlem Hospital we treat ladies directly who are pregnant and who are drug abusers. So we do not have to refer them anywhere. What we are finding is that our OB service is located in a different location than our pediatric services. What we are doing right now is designing space to put those services together that should be together.

Also, we recognize in New York City that there is not enough residential treatment programs to take care of the patients. So we have already submitted to Dr. Sullivan and Dr. Benny Primm, who was here from NIDA, requests to develop what we call "Harlem House" which is very similar to Odyssey House, for the purpose of taking care of in a residential setting pregnant ladies and their children, prenatal and post-natal.

We do not have the services to take care of as many patients as require those services, nor do we have enough services to take care of as many of these babies like Sherman who require physical therapy, intensive therapeutic day care and nurseries and those kinds of things.

The CHAIRMAN. I find that hospitals, some of them down in Texas with the boarder baby situation, are actually going out and

recruiting for the foster parents, sometimes amongst their own staff.

Mr. McCoy. Right.

The CHAIRMAN. After awhile you run out of staff. It is a incredible responsibility there.

I appreciate very much your testimony. I am sorry that we have had such pressing schedules elsewhere, but you have made a contribution that is helpful to us and we are going to take your entire statements in the record.

Thank you very much.

Mr. McCoy. Thank you, sir.

Dr. MONTGOMERY. Thank you, Senator.

[Whereupon, the hearing was adjourned at 2:01 p.m.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED

PREPARED STATEMENT OF SENATOR DANIEL K. AKAKA

Mr. Chairman, thank you for this opportunity to testify before the Senate Finance Committee about the growing problem of addiction to crystal meth, or "ice," as it is known on the street, and about the damage it inflicts on its youngest victims.

Ice, a crystal form of "speed," is a stimulant that causes a cocaine-like euphoria and a heightened sense of mental alertness and physical activity. Chronic ice use produces powerful adverse psychological effects that last far longer than those experienced with cocaine. These include severe paranoia that sometimes leads to violent behavior and deep depression that can last for days after ice consumption stops.

The ice epidemic has been building in my state of Hawaii over the past several years. Law enforcement and medical experts fear that ice has the potential for overtaking "crack" cocaine as the drug of choice for young people throughout the country. Although both crack and ice may be smoked, the similarity ends there: ice is cheaper—only \$50 will buy enough of the drug to keep someone high for a week; its high lasts anywhere from seven to 30 hours; it leaves its user prone to extreme, uncontrolled violence; and it is often taken in conjunction with other drugs. Furthermore, crystal meth and other forms of this drug are simple to produce and do not require any imported ingredients.

Last year, as a member of the House Select Committee on Narcotics Abuse and Control, I sought the assistance of William Bennett, the Director of National Drug Control Policy in urging the Administration to address the looming ice epidemic. I renewed my plea to Mr. Bennett again this March before a House Appropriations Subcommittee hearing. Unfortunately, it appears that the Administration is continuing to underestimate Hawaii's ice problem, which soon may become everyone's problem. In fact, a National Institute of Drug Abuse (NIDA) study showed that in 1989 there was a 70% increase nationwide in hospitalizations related to ice.

My amendment to S. 1970, the omnibus crime bill, would launch a multi-pronged attack on the use of crystal meth. In the area of enforcement and crime prevention, it would sharply increase the penalties for major and mid-level ice dealers. With regard to treatment, it would direct the NIDA to improve the methods of treating ice addicts and the Department of Health and Human Services to study and develop a protocol for treating newborns afflicted with methamphetamine addiction. Finally, my amendment would develop a model educational program in the state of Hawaii to educate students against the dangers of ice.

Today we will be hearing more about the tragic circumstances of infants and young children born addicted to cocaine. Unfortunately, there is also a new population emerging: "ice babies," born to mothers who are ice abusers. These infants are already permanently damaged or at great risk. Their long-term prognosis is unknown. However, there are early indications of the problems these children face as they grow older, including delayed physical and mental development, severe neurological problems, as well as psychological and behavioral learning problems.

Let me share with you the experience of Earline Piko, a registered nurse who directs substance abuse programs at the Wai'anae Coast Community Mental Health Center located on the Leeward Coast of Oahu. In the thirty years that she has worked with infants and young children, she has never seen children so asocial—without connection to the human race as those born addicted to ice. I shudder to imagine what will become of these children and what will happen to our communities if we do not implement an aggressive and compassionate program to address this problem.

I would like to take this opportunity to describe a new program for ice babies and their mothers directed by Ms. Piko because it is an example of projects that can offer real solutions.

The Hawaii State Child Protective Services reports that cases of mothers and infants testing positive for crystal meth are being reported to them at the rate of thirty per month as of November 1989. They further report that mothers and infants from Wai'anae, a relatively youthful and predominantly Native Hawaiian community, constitute a large number of those identified. Unfortunately, these statistics fail to show the full extent of the problem. It is considerably more widespread than the reports indicate. Testing is not universal; only the primary maternity hospital on Oahu tests and these tests are administered only to those mothers who fitting a socio-economic profile or if a newborn is in obvious distress.

When an infant tests positive for ice, the child is frequently removed from the mother by Child Protective Services and placed in foster care. About half of these children are placed with extended family members or other persons known to the mother. Others become "boarder babies," remaining in the hospital until foster placements are found.

The Wai'anae Coast Community Mental Health Center program seeks to provide alternatives to the separation of mother and ice babies through a residential as well as a community-based day treatment program. Comprehensive services are offered to assist the initial bonding of the mother and child. Services will also provide necessary education, counseling, and support to create an ongoing safe and health environment for the mother and child. Substance abuse treatment for the mother and other family members and health care for the mother and child are integral components of the program.

Hawaii is the only state which has experienced the problem of crystal meth for any period of time. The program have described offers a unique opportunity to examine the short- and long-term effects of the drug on infants, to assess the effectiveness of various levels of intervention, and to develop and test the most effective mix of treatment components.

Initial funding for the program is provided by the Alcohol and Drug Abuse Division of the Hawaii State Department of Health. It is my understanding that a portion of these funds comes from the National Institute on Drug Abuse. Medicaid will be involved in the health care component and the project sponsors will probably apply for Maternal and Child Health assistance in the future.

Mr. Chairman and Members of the Committee, Federal programs, including those under the jurisdiction of the Finance Committee, should expand support for efforts to prevent and treat crack and ice babies. I am hopeful that programs such as the Wai'anae Coast treatment program which strive to assist the whole family to create and maintain a safe, secure and healthy environment for children can show us the way to halt this spreading scourge.

Thank you.

PREPARED STATEMENT OF CHARLES A. BOWSER

Mr. Chairman and Members of the Committee: We are pleased to be here today to discuss our report on the growing and costly problem of substance-abusing mothers and their infants.¹ At your request we have reviewed the extent of the problem, its impact on the health and social welfare systems, and the availability of drug treatment and prenatal care to drug-addicted pregnant women. In brief we found that:

- Tens and perhaps hundreds of thousands of drug-exposed infants are born each year, but the exact number is unknown because hospitals are not identifying many of them.
- These infants constitute a growing national problem necessitating medical and social services that will cost billions of dollars in the years to come. One estimate puts the cost of services for drug-exposed children who are significantly impaired to be as high as \$750,000 for the first 18 years of life.
- Despite the demonstrated ability of prenatal care and drug treatment to reduce the number of infants affected by drug abuse, there is a serious shortage of drug treatment capacity for pregnant women. Of the estimated 280,000 pregnant women nationwide in need of treatment, less than 11 percent receive care.

¹ *Drug-Exposed Infants: A Generation at Risk* (GAO/HRD-90-138, June 28, 1990).

—Less than 1 percent of Federal funds allocated under the Federal anti-drug strategy is specifically targeted at drug treatment for women. For drug-addicted pregnant women, the percentage of Federal expenditures is even less. In my testimony today I will be addressing these issues.

BACKGROUND

One of the most troubling aspects of our current drug epidemic is the number of women who are using drugs. In 1988, some 5 million women reported using illicit drugs, including cocaine, heroin, PCP, and marijuana. The use of drugs during pregnancy is of particular concern because they affect both the mother and the developing infant. Cocaine, for example, may cause constriction of blood vessels in the placenta and umbilical cord, which can result in a lack of oxygen and nutrients to the fetus, leading to poor fetal growth and development. Some infants prenatally exposed to cocaine have also suffered from a stroke or hemorrhage in the areas of the brain responsible for intellectual capacities. Federal support for treating drug addicts is addressed in the 1990 National Drug Control Strategy.² Under this plan over 70 percent of an estimated \$10.6 billion in fiscal year 1991 would be spent on drug-supply-reduction activities; the remainder would be targeted at reducing the demand for drugs. Approximately \$1.5 billion would be spent on drug treatment, with over half of the Federal funds provided through block grants to the states administered by the Alcohol, Drug Abuse and Mental Health Administration.³ The states are required to set aside at least 10 percent of these funds to provide drug-abuse prevention and treatment for women.

Moreover, two federal-state health programs are potentially available to pregnant women who abuse drugs. First, the Maternal and Child Health Services block grant program (MCH) provides grants to the states for health services to low-income persons with the intention of reducing infant mortality and morbidity, frequent consequences of drug abuse by pregnant women. Second, the Medicaid program, which provides Federal financial assistance to the states for a broad range of health services for low-income persons, requires coverage of low-income pregnant women. Those pregnant drug abusers who have low incomes could qualify for services under either program.

In response to the issues raised in your request, we interviewed leading neonatologists, drug treatment officials, researchers, hospital officials, social welfare authorities, and drug-addicted pregnant women. We analyzed data from the National Hospital Discharge Survey and reviewed medical records at 10 hospitals; two in each of five cities—Boston, Chicago, Los Angeles, New York, and San Antonio. The 10 hospitals, which accounted for about 45,000 births in 1989, primarily served a high proportion of persons receiving Medicaid and other forms of public assistance. In addition, we interviewed officials at 10 hospitals that served a high proportion of privately insured patients.

THE NUMBER OF DRUG-EXPOSED INFANTS IS HIGH

Identifying infants who have been prenatally exposed to drugs is key to providing them with effective medical and social interventions at birth and as they grow up. At present, however, the actual number of drug-exposed infants born each year is unknown. The two most widely cited estimates are 100,000 and 375,000. Neither of these estimates is based on a national representative sample of all births.

A major reason that the total number is unknown is that hospitals do not systematically screen and test for maternal drug use. Hospital officials acknowledged to us that under their current procedures, many drug-exposed infants are not being identified.

In reviewing maternal and infant medical records at only 10 hospitals, we found approximately 4,000 infants born in 1989 who had been prenatally exposed to drugs. However, the range in the number of drug-exposed births across hospitals was wide—from 13 per thousand births at one hospital to 181 per thousand at another. This variation may be associated with the procedures hospitals use to detect drug use during pregnancy. The hospital with the lowest recorded incidence of drug-exposed infants did not have a protocol for assessing drug use during pregnancy. At the other nine, protocols to identify drug-exposed infants were based primarily on whether the mother told hospital staff she used drugs and whether the baby exhibited drug withdrawal symptoms.

² The Office of National Drug Control Policy, responsible for developing an annual national anti-drug strategy, was established in 1988.

³ A component of the Department of Health and Human Services.

However, these screening protocols miss many drug-exposed infants. Women are reluctant to admit they use drugs for fear of being incarcerated or having their children taken away. In addition, many cocaine-exposed infants display few overt drug withdrawal signs. Some will show no signs of drug withdrawal, while for others withdrawal signs will be mild or will not appear until several days after hospital discharge. The visual signs of drug exposure vary from severe symptoms to milder symptoms—such as irritability and restlessness, poor feeding, and crying—which would not lead to a suspicion of maternal drug use unless urine testing is conducted.

In cases where more rigorous detection methods have been used, many more drug-exposed infants are identified. A 1989 study at a large Detroit hospital found that 600 drug-exposed infants (or 8 percent of total births) were identified when self-reported drug use by the mother was the basis for screening. However, a more sensitive test for detecting drug use found the incidence of drug-exposed infants at this hospital to be 42 percent, or nearly 3,000 births, in 1989.

DRUG-EXPOSED INFANTS HAVE MORE HEALTH PROBLEMS AND HIGHER COSTS

In our review of medical records at these 10 hospitals, we also found that mothers of drug-exposed infants are more likely to receive little or no prenatal care. Their infants have significantly lower birth weights, are more likely to be born premature, and have longer and more complicated hospital stays.

During my recent visit to a neonatal intensive care unit in Boston, I personally observed the tragedy of infants suffering from the consequences of their mothers' drug addiction. These infants required the assistance of complex high-technology medicine to overcome the effects of drugs. Such treatment, and the extended length of hospitalizations for many, translate into costly care, which is predominately paid for by public funds. In fact, our study revealed that charges for these infants were up to 4 times greater than those for nonexposed infants. Although the long-term physical effects of prenatal drug exposure are not well known, indications are that some of these infants will continue to need expensive medical care as they grow up.

IMPACT ON SOCIAL WELFARE SYSTEM IS PROFOUND

In addition to the costly medical treatment, some infants remain in the hospital because their parents either are unwilling to care for them or they have been determined by child welfare authorities to be unfit to provide for their care. These "boarder babies" often are placed in foster care.

Through our medical records review, we found that a substantial proportion of drug-exposed infants did not go home from the hospital with their parents. Of the 4,000 infants we identified as drug exposed, 30 percent, or 1,200, were placed in foster care. The estimated yearly cost of foster care for these infants alone is \$7.2 million.

The infants who are discharged from the hospital with their drug-abusing parents are at risk of abuse and neglect. The child protection agencies in the five cities in our survey all reported that they are investigating a growing number of child abuse and neglect cases due to substance abuse by the parents. These investigations often lead to foster care placement. Hospital officials are also seeing many children from drug-abusing families admitted and readmitted to their hospitals suffering from physical neglect or injury.

City and state officials we contacted told us that prenatal drug exposure and drug-abusing families are placing increasing demands on their social welfare systems. Although they perceived the problem to be growing, most could not provide statistics on the numbers of drug-related foster care placements. Officials in New York, however, estimate that 57 percent of foster care children come from families that allegedly are abusing drugs.

Because the estimated demand for foster care nationwide increased 29 percent from 1986 to 1989, there is concern as to whether the system can adequately respond to the needs of drug-abusing families. Specifically, problems have been identified with the availability of foster parents who are willing to accept children who have been exposed to drugs, the quality of foster care homes, and the lack of supportive health and social services to families who provide foster care to these children.

In addition to concerns about the safety and care of drug-exposed infants, many may also have long-term learning and developmental disabilities. Without intervention we would expect major problems in school and high dropout rates. The cost of helping these children overcome the effects of drug exposure will vary with the severity of disabilities.

We recently visited a pilot preschool program for mildly impaired drug-exposed children in Los Angeles. To minimize the effects of prenatal drug exposure, the program provides an enriched environment, smaller classrooms, and more direct attention to the children at an annual cost of \$17,000 per child. On the other end of the spectrum, the Florida Department of Health and Rehabilitative Services estimates that for drug-exposed children who show significant physiologic or neurologic impairment, total service costs to age 18 could be as high as \$750,000.

LACK OF DRUG TREATMENT AND PRENATAL CARE IS CONTRIBUTING TO THE NUMBER OF DRUG-EXPOSED INFANTS

To address the problems associated with the growing numbers of drug-exposed infants, pregnant women who use drugs need to be offered comprehensive treatment services. Recent studies have found that significant positive effects in the health of the infant can be achieved if the mother is able to stop drug use during pregnancy. The risk of low birth weight and prematurity that often require expensive neonatal intensive care are minimized by treatment services and prenatal care.

However, in the five cities we visited, drug treatment services were either insufficient or inadequate to meet the demand for services for drug-addicted pregnant women. Many programs that provide services to women, including pregnant women, have long waiting lists. In fact, nationwide, drug treatment services are insufficient. A 1990 survey conducted by the National Association of State Alcohol and Drug Abuse Directors estimated that 280,000 pregnant women nationwide were in need of drug treatment, yet less than 11 percent of them received care.

In addition to insufficient treatment capacity, some programs deny services to women because they are pregnant. A survey of 78 drug treatment programs in New York City found that 54 percent of them denied treatment to pregnant women because of fear of legal liability. Drug treatment providers fear that certain treatments using medications and the lack of prenatal care or obstetrical services at the clinics may have adverse consequences on the fetus.

Other barriers to treatment exist. Pregnant addicted women told us that the lack of child care services often made it difficult for them to seek treatment. These women may also have additional needs—such as parenting, education, and nutritional guidance—that are not provided in most treatment programs. Another barrier to both drug treatment and prenatal care is the potential for criminal prosecution. The increasing fear of incarceration and of losing their children to foster care is discouraging pregnant women from seeking care.

Many health professionals believe comprehensive residential drug treatment that includes prenatal care services is the best approach to helping many women give up drug use during pregnancy. This also assures the developing infant the best chance of being born healthy. However, such programs are scarce. Massachusetts officials told us that the lack of residential treatment slots was a major problem. Only 15 residential slots are available to pregnant addicts statewide. California hospital officials reported a similar problem. When they are unable to place drug-addicted pregnant women in residential treatment, they resort to such options as battered women shelters or nursing homes.

MATTERS FOR CONSIDERATION

In conclusion, the increasing number of drug-exposed infants has become a serious health and social problem that calls for an urgent national response. Expanding drug treatment services might reduce the number of drug-exposed births and alleviate some of the family dysfunction that is contributing to the growing number of child abuse and neglect cases and foster placement.

With additional Federal funding, the large gap between the number of women who could benefit from drug treatment and the number of residential and outpatient slots available could be reduced.

If the Congress should decide to expand the current Federal resource commitment to treatment for drug-addicted pregnant women, several options could be used. These include:

- Increasing the alcohol, drug abuse and mental health services (ADMS) block grant to the states in order to provide more Federal support for drug treatment.
- Increasing the ADMS Women's Set-Aside from 10 percent to assure that expanded treatment services under the block grant are targeted specifically to substance-abusing pregnant women.
- Creating a new categorical grant to provide comprehensive prenatal care and drug treatment services to substance-abusing pregnant women.

- Increasing funding of the Maternal and Child Health Services block grant specifically for substance-abuse treatment for pregnant women.
- Requiring states to include substance-abuse treatment as a part of the package of services available to pregnant women under Medicaid.

These options could require more funds initially, or funding could come from a realignment of the Federal allocation for drug-supply-reduction and demand-reduction activities. We believe that this commitment of funds could save money in the long term as well as improve the lives of a future generation of children.

Mr. Chairman, this concludes my statement. I will be happy to answer any questions you may have.

Attachment.

Perinatal and Developmental Outcome of Infants Exposed to Methadone In-Utero

KAROL KALTENBACH AND LORETTA P. FINNEGAN

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KALTENBACH, K. AND L. P. FINNEGAN. *Perinatal and developmental outcome of infants exposed to methadone in-utero*. NEUROTOXICOL TERATOL 9(4) 311-313, 1987.—The purpose of this research is to delineate the effects of methadone exposure in-utero. Subjects were 141 infants born to drug dependent women maintained on methadone during pregnancy and 127 non-drug exposed comparison infants matched for race, maternal age, and socioeconomic status. Methadone exposed infants had smaller birth weights than comparison infants. Differences were also found in head circumference. However, this difference was not clinically significant but rather reflects the relationship between birth weight and head circumference. No difference was found between groups in mental development. One hundred and five methadone exposed infants and 63 comparison infants were evaluated with the Bayley Scale of Mental Development at 6 months of age. Mean Bayley Mental Development scores for methadone exposed infants and comparison infants were 103 and 105 respectively. These data suggest that while methadone exposure in-utero is associated with lower birth weight and head circumference, by six months of age, these infants do not exhibit any general developmental sequelae.

Methadone exposure in-utero Perinatal outcome Development outcome

THE consequences of maternal drug abuse on the fetus, newborn, and infant have been an area of special concern for the past decade [1,3]. Initial studies showed a high incidence of perinatal mortality and morbidity in infants born to heroin abusers [1, 4, 7]. A number of studies found over half of the infants born to heroin dependent women with no prenatal care to be of low birth weight [1, 3, 7].

The outcome of these findings is that methadone maintenance is often recommended for the care of the pregnant opiate dependent woman. During pregnancy, methadone is given primarily to prevent erratic maternal drug levels so that the fetus is not vulnerable to repeated episodes of withdrawal. Furthermore, women on methadone are more apt to be recipients of prenatal care. It has been shown that methadone maintenance, in conjunction with adequate prenatal care, significantly reduces the incidence of medical and obstetrical complications and prematurity. Studies have also consistently found differential effects of heroin and methadone on birth weight, with higher birth weight infants born to women maintained on methadone [1,9].

However, the outcome of infants prenatally exposed to methadone continues to be an area of concern and uncertainty. A number of prospective studies with comparison groups of non-drug exposed infants have yielded inconsistent data [1, 2, 6-8, 10-12, 14, 15]. Some studies [1,10] found methadone exposed infants to have lower birth weights than comparison infants, while other investigators found no difference in birthweights [12,14]. Others have found smaller head circumferences among methadone exposed infants [1, 10, 12].

Strauss *et al.* [14] found methadone exposed infants and comparison infants to score well within the normal range of development on the Bayley Mental Development Index

(MDI) and Motor Development Index (PDI) at 3, 6 and 12 months of age. However, PDI scores for methadone exposed infants declined with age and were significantly different from comparison infants at 12 months of age. Wilson *et al.* [15] also found no difference in MDI scores between methadone exposed and comparison infants at 9 months of age and lower PDI scores among the methadone exposed infants. While Rosen and Johnson [12] found no difference between groups on MDI and PDI scores at 6 months of age, they found methadone infants to have both lower MDI and PDI scores at 12 and 18 months of age. In comparison, Lodge [11] found no difference between groups on either the MDI or PDI at 6 and 12 months of age; Hans and Jeremy [6] found no difference at 4, 8 and 12 months of age; and Kaltenbach and Finnegan [8] found no differences at 6, 12 and 24 months of age.

These inconsistent findings may be attributable to a number of factors. Mothers in the various studies differed in daily methadone dose, length of methadone maintenance during pregnancy and amount of prenatal care. Infants varied in gestational age, health status at birth and use of pharmacotherapy for abstinence. Some of the differences between groups may also be a statistical artifact because even though the data were reported in age intervals, time was included as a variable in the analysis of only two of the studies [8,14].

The purpose of the present study was to elucidate the effects of methadone exposure in-utero by examining the outcome of infants born to drug dependent women maintained on methadone. All of the drug dependent mothers were enrolled in Family Center, a unique comprehensive program for pregnant drug dependent women. Family Center provides moderate-to-low dose methadone maintenance for

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TABLE I
NEONATAL DATA

	Methadone Exposed Infants (n=141)		Comparison Infants (n=127)	
	Mean	SD	Mean	SD
Gestational Age (weeks)	38.7	1.4	39.4	1.3
Birth Weight (grams)	2953	438.1	3210*	488.2 ± 4.09
Head Circumference (centimeters)	33.3	1.5	33.9*	1.8 ± 3.23

*p < 0.01.

†p < 0.001.

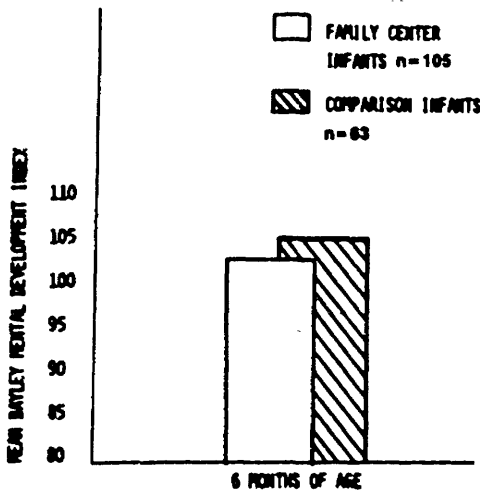


FIG. 1. Infants exposed to methadone in-utero: Developmental outcome at 6 months of age.

opiate dependent women. Prenatal care is provided by obstetricians specifically trained in the field of addiction. In addition to medical services, intensive psychosocial counseling is provided by psychiatrists and social workers. Infants who exhibit withdrawal are treated pharmacologically in the Transitional Nursery following a standard protocol in which a Neonatal Abstinence Scoring System [5] is used to assess the onset, progression and diminution of symptoms of abstinence.

METHOD

The sample consisted of 268 infants, 141 infants exposed to methadone in-utero, and 127 comparison infants born to

non-drug dependent women from comparable socio-economic, racial and medical backgrounds. All mothers received prenatal care and delivered at the same hospital. The mean daily maternal methadone dose at delivery for drug dependent women was 39 mg with a range of 5-85 mg. All infants were term (>36 weeks gestation) and, with the exception of neonatal abstinence among the drug exposed infants, all infants were healthy newborns.

There were an additional 55 Family Center mothers maintained on methadone during pregnancy who did not deliver healthy term newborns. Of these, 24 infants were premature (mean gestational age = 33 weeks); 16 infants were full term but had medical complications; and fetal loss occurred in 15 of the pregnancies. There were no significant differences in mean maternal methadone dose between any of these groups and the healthy full-term group. The study sample consisted of only the healthy term infants in order to control for perinatal factors, other than methadone, that may influence developmental outcome.

Symptoms of neonatal abstinence were repeatedly assessed with a Neonatal Abstinence Score [5] for a minimum of the first five days of life. The need for pharmacologic intervention was indicated when the total abstinence score was 8 or greater for three consecutive scorings, or when the average of any three consecutive scores was 8 or greater. Paregoric and/or phenobarbital were the agents most commonly used for pharmacotherapy.

At 6 months of age infants were assessed with the Bayley Scale of Mental Development. (The MDI has a standard mean of 100 and a standard deviation of 16). An extensive neurological examination, including assessment of intracranial nerves, motor development, reflexes and responses, was administered by a pediatric neurologist. (Since this exam included items from the Bayley Motor Scale of Development (PDI), the PDI was not administered separately).

RESULTS

The neonatal data for the study infants are presented in Table 1. The majority of the methadone exposed infants (70%) exhibited moderate to severe neonatal abstinence and were treated with pharmacotherapy. Methadone exposed infants had smaller birth weights than the comparison infants. No correlation was found between birth weight and maternal methadone dose ($r=0.03$) for the methadone exposed infants.

Methadone exposed infants also had smaller head circumferences than the comparison infants. A positive relationship between head circumference and birthweight was found for both the methadone exposed infants and comparison infants ($r=0.72$, and $r=0.69$ respectively).

Of the 268 infants enrolled in the study, 168 infants (105 methadone exposed infants; and 63 comparison infants) were evaluated at 6 months of age with the Bayley Scale of Mental Development and the comprehensive neurological exam. No difference was found between the groups in mental development or in neurological status. The mean MDI score of the methadone exposed group was 103.53 and for the comparison group, it was 104.39 ($t=0.45$, n.s.). Results of the neurological exam were clinically evaluated and were within normal limits for all children.

DISCUSSION

There are several important implications of these findings. First is the indication that methadone maintenance when provided within the context of a comprehensive program can reduce neonatal mortality and morbidity associated with prenatal drug dependence. The 12% incidence of prematurity, 8% of fetal loss, and 8% of newborns with medical complications are favorable considering that the overall neglect of health care and chaotic lifestyles of drug dependent women predispose them to numerous medical and obstetrical complications and that 50% of infants born to heroin dependent women with no prenatal care are premature.

The finding of lower birth weights for methadone exposed infants has been reported in other studies [1,10]. While this study also found methadone exposed infants to be somewhat taller than comparison infants, it is important to note that the methadone infants were not small for gestational age. The long term clinical implications of small head circumfer-

ences at birth are important since this may be a significant correlate for poor neurobehavioral outcome. Several investigators have reported smaller head size among methadone exposed infants than in comparison infants [1, 10, 12]. While the data from this study are consistent with these other findings, a question must be raised concerning the clinical significance of these differences. The difference in head size can be accounted for by the relationship between head circumference and birth weight found for both groups, i.e., smaller babies had smaller heads. These data indicate that infants born to women maintained on methadone may have smaller birth weights and head circumferences than non-drug exposed infants but that they are not growth retarded.

These data also suggest that at six months of age there are no general developmental sequelae associated with in-utero exposure to methadone; at least for infants who had mothers that received adequate prenatal care, and who were objectively monitored and, when necessary, appropriately treated for neonatal abstinence.

However, delineating the effects of methadone exposure in-utero is a very difficult and complicated task. There are a myriad of confounding variables within this population. A high percentage of women maintained on methadone use, in addition, a number of other drugs such as opiates, diazepam, cocaine, and barbiturates. Likewise, the entire environment and lifestyle of drug dependent women may differ significantly from non-drug dependent women. Subtle protracted effects of methadone exposure may either be exacerbated or ameliorated by variables within the maternal drug population [3]. Treatment for neonatal abstinence is also inconsistent. Measures for determining severity of withdrawal and initiation of pharmacotherapy vary greatly. It is important that future research identify the biological and socio-environmental risk factors within this group so that methadone's position in a continuum of risk factors may be determined.

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Chapter Seven

Influence of Maternal Drug Dependence on the Newborn

Loretta P. Finnegan

INTRODUCTION

The epidemic of drug abuse has increased over the past decade, bringing with it a host of complex problems. Numerous investigators have reported the extremely high incidence of medical and obstetrical complications among pregnant drug-dependent women as well as the high levels of morbidity and mortality among passively addicted newborn infants. Opiate dependence in the pregnant woman is overwhelming not only to her own physical condition but also to that of the fetus and eventually the newborn infant. Maternal narcotic addiction presents a significant health problem because of the high incidence of prematurity and infants who are small for gestation age. The majority of deaths among newborn infants are associated with low birth weight.

Medical complications (see Table 1) and birth weight in infants born to drug-dependent women have been found to be influenced by the adequacy of prenatal care, the presence of maternal obstetrical or medical complications, and the abuse of multiple drugs by the mother (Finnegan, 1978). The problem of infant morbidity becomes particularly apparent when one considers that the

Table 1 Medical Complications in Intravenous Heroin Users

Anemia (iron and folic acid deficiency)	Tuberculosis
Hypertension	Urinary tract infections
Cellulitis	Cystitis
Phlebitis	Urethritis
Subacute bacterial endocarditis	Pyelonephritis
Septicemia	Sexually transmitted diseases
Pneumonia - acute and chronic	Condyloma acuminatum
Hepatitis	Gonorrhoea
Poor dental hygiene	Herpes
Tetanus	Syphilis
	Acquired immune deficiency syndrome

majority of drug-dependent women neglect general health care and prenatal care and tend to abuse more than one drug (see Table 2). Moreover, in addition to having a variety of possible medical complications, infants exposed prenatally to narcotic agents become passively addicted in utero and usually undergo neonatal abstinence syndrome at birth.

Family Center, a comprehensive outpatient methadone maintenance treatment program for drug-dependent women in Philadelphia, recognizes the special needs and goals of the pregnant addict. The program provides patients and their children with medical, psychiatric, and social services as well as a variety of clinical assessments. Comprehensive psychiatric and psychosocial services include evaluation, consultation, referral, crisis intervention, weekly groups, and individual, couples, and family counseling. Vocational services, nutritional counseling, and parenting classes are also included in the treatment of the pregnant addict. Treatment plans facilitate the evaluation of pharmacotherapeutic treatment and rehabilitative goals of both the patient and program through the continued process of documenting, monitoring, and critically assessing and revising the pharmacotherapeutic intervention strategies. The program further

Table 2 Obstetrical Complications in the Heroin-Dependent Woman

Abortion	Placental insufficiency
Intrauterine death	Intrauterine growth retardation
Abruptio placentae	Premature rupture of membranes
Amnionitis	Premature labor
Chorioamnionitis	Postpartum hemorrhage
Septic thrombophlebitis	
Preeclampsia	

provides the mother (and the infant) with a continuous, long-acting pure narcotic (methadone) as opposed to the street addict who encounters unpredictable changes in availability and purity of a shorter-acting agent (heroin) which may result in withdrawal or overdose during pregnancy.

As a result of the clinical practices and follow-up research of Family Center over the past several years, a great deal has been learned about the characteristics and needs of drug-dependent women and about the medical and developmental outcome of their children. These findings have been used to improve treatment delivery to pregnant drug-dependent women, to treat most efficaciously the infants undergoing neonatal abstinence, and to make predictive statements regarding the medical and developmental outcome of children born to drug-dependent women. As a result of the clinical and research activities within Family Center as well as the experiences of other clinicians involved in the field of perinatal addiction, the following presents the available data on the influence of maternal drug dependence on the newborn.

TREATMENT OF DRUG-DEPENDENT WOMEN

It was determined that drug-dependent women have an increased incidence of medical and obstetrical complications (Connaughton et al., 1977), but little information existed on the intrapartum course and management of these patients. Therefore, a study was undertaken to determine if the drug-dependent woman had normal patterns of labor and if standard intrapartum management is appropriate. The study population included 336 women who delivered at Jefferson Hospital between January 1982 and July 1984, of whom 112 were drug-dependent (72% received methadone maintenance). The comparison group of 224 non-drug-dependent women was matched for gravidity, parity, and socioeconomic background. The incidence of premature delivery, abruptio placentae, breech presentation, and intrauterine growth retardation were significantly greater in the drug-dependent women. The average duration of the first, second, and third stage of labor compared well with the normal course of labor and matched the results of the comparison group. Labor abnormalities and cesarean sections were of a greater incidence, but there were more than twice as many forceps deliveries, which coincides with the 40% increased use of epidural anesthesia. Analgesia and anesthesia were in excess of that which is given to the average patient. There were three stillborns, one neonatal death, and one maternal death. Apgar scores and the incidence of fetal distress and meconium staining were identical in the two groups. Postpartum complications were more common in the drug-dependent women, but most were secondary to the use of subclavian intravenous lines inserted owing to the presence of sclerotic veins. These data suggested that high-risk prenatal management and careful monitoring in the intra- and postpartum periods utilizing epidural anesthesia identifies

and usually prevents untoward complications in drug-dependent women (Silver et al., 1987).

Drug-addicted women as a group are not homogeneous, and they may present with multiple psychosocial problems. These include poor self-esteem, periods of serious depression, poverty, legal problems, homelessness, lack of social supports, loss of children to foster care or to others, and ongoing relationships with drug abusing or alcoholic men who are more often than not physically abusive to them.

A relationship between depression and the placement of children in foster care has been studied. Significantly higher depression scores were present among the drug-abusing women whose children were in foster placement or had been referred to a child welfare agency than women who were raising their children. Legal placement of children is a significant factor in depression, however, it is difficult to ascertain whether child placement is an antecedent or consequential variable. Weissman et al. (1976) also studied depressed drug-free women, and found that, during acute episodes of depression, the women were less involved with their children and had impaired communication, increased friction, lack of affection, and greater guilt and resentment. In responding to their children, they were overprotective, irritable, preoccupied, withdrawn, emotionally distant, and/or rejecting.

In response to the varying symptoms and degrees of depression evidenced by Family Center women, the Beck Depression Inventory (BDI) was routinely included as part of the program's intake procedure. Between 1979 and 1984, approximately 250 women were enrolled in Family Center. Of these, a subsample of 149 women completed the BDI. Seventy-five percent of the 149 women reported varying levels of depression, with the following results: 26% had mild depression, 39% were moderately depressed, and 15% were severely depressed. A group of drug-free pregnant women who also took the BDI were used as a control population. Comparison between the two groups indicated that far more Family Center women (75%) than control women (50%) were suffering from depression (Regan et al., 1981).

Because of the psychological stresses seen in drug-dependent women, the Profile of Mood States Inventory was administered (Regan et al., 1985). This permits women to rate the frequency of various moods they have been experiencing over a period of a week and identifies transient, subjective, affective states. The Profile of Mood States provides a score on six mood factors as well as a total mood disturbance score. A study was conducted comparing Profile of Mood States scores in a group of pregnant drug-dependent women ($n = 25$) versus a group of pregnant, drug-free control women ($n = 25$) matched for age and race. The control women were those who attended the regular prenatal clinic. Analysis revealed that the drug-dependent women scored significantly lower than controls on vigor ($t = 2.17, p < .025$) and significantly higher on confusion ($t = 2.48, p < .005$) and depression ($t = 2.76, p < .005$). There

were no differences between drug-dependent and control women in mean fatigue, tension, anger, or total scores. The lack of differences on several mood factors implies distinct similarities in the affect of drug-dependent and drug-free pregnant women of lower socioeconomic status. The relatively high levels of confusion and depression among the drug-dependent women may reflect their illicit drug use or may result from their generally chaotic social environments. Such mood states may lead to parental failures evidenced as child neglect or abuse. Prompt social and psychiatric intervention seems warranted as early in the pregnancy as possible (Regan et al., 1985).

The presence of violence and abuse are pertinent issues in the lives of drug-dependent women. A research study showed that by using an appropriate questionnaire, one could (1) measure episodes and degrees of violence experienced by women, including acts of physical and sexual abuse occurring in childhood or adulthood, and (2) learn if women reporting a history of violence and abuse were more likely to have had children in foster care. Of the 171 women studied, 40% had children in voluntary or involuntary foster placement. Women with a reported history of sexual trauma, particularly if occurring in childhood or repeatedly, were significantly more likely to have children in foster care ($p < .01$). Women who were physically abused (without sexual trauma) as children and/or adults were less likely to have their children in placement. This study suggests that failure to resolve childhood sexual trauma or coping with the trauma by use of illicit drugs disrupts the ability of women to parent their own children. The effects of violence toward women, particularly when they themselves were children, may have untoward effects on their own children (Regan et al., 1985).

INFANT MORBIDITY AND MORTALITY

The majority of medical complications seen in neonates born to heroin-dependent women result from prematurity. Hypoxia resulting from an unstable intrauterine environment may cause meconium staining and later aspiration pneumonia, which in itself causes a marked morbidity and increased mortality (see Table 3).

An extensive study (Ostrea and Chavez, 1979) in Detroit included a review of 830 infants born to opiate-dependent mothers at the Hutzel Hospital. In comparison to a control group of 400 infants, children of the drug-dependent mothers had an increased incidence of low birth weight, small size for gestational age, and low 1- and 5-min Apgar scores. Significant postnatal problems, excluding neonatal withdrawal, included jaundice, aspiration pneumonia, transient tachypnea, hyaline membrane disease, and congenital malformations. Congenital malformations were as varied in the infants of drug-dependent mothers as they were in the controls. Although the incidence of congenital malformations was greater in the infants of drug-dependent mothers than in the

Table 3 Medical Complications in Infants of Drug-Dependent Women

Asphyxia neonatorum
Respiratory distress syndrome
Pneumonia
Hypoglycemia
Hypocalcemia
Hyperbilirubinemia
Intracranial hemorrhage
Intrauterine growth retardation
Meconium aspiration
Acquired immune deficiency syndrome

control population studied, the incidence of 2.4% was not greater than that in the general population.

In Philadelphia (Connaughton et al., 1977), we found that morbidity in infants born to drug-dependent women was directly related to the amount of prenatal care and to the type of maternal narcotic dependence. Nearly 75% of infants born to 63 heroin addicts who had no prenatal care suffered neonatal morbidity. Similarly, 82% of infants born to 78 methadone-dependent women with inadequate care suffered neonatal morbidity. The incidence of neonatal morbidity was somewhat less (69.9%) for infants born to methadone-dependent women receiving adequate prenatal care.

Several investigators (Connaughton et al., 1975; Kandall et al., 1976; Zelson, 1973) have noted that infants born to women who use methadone have somewhat higher birth weights than children born to women using heroin. Relating the birth weights of 377 neonates to a history of maternal narcotic usage, Kandall et al. (1976) revealed a highly significant relationship between the first-trimester maternal methadone dosage and birth weight. This study showed that methadone may promote fetal growth in a dose-related fashion, even after maternal heroin use, whereas heroin itself has been found to cause fetal growth retardation that may persist beyond the period of addiction. In our Philadelphia investigation, concluded in 1977 (Connaughton et al.) the infants whose mothers received comprehensive prenatal care had a lower incidence of lower birth weights, similar in nature to the infants of the control mothers. Of the infants born to the 63 heroin-dependent mothers who received no prenatal care, 47.6% had a low birth weight (under 2500 g). This is in contrast to an 18.8% incidence of low birth weight for the 135 methadone-maintained mothers with good prenatal care.

In a recent study to further investigate the effects of maternal drug use on the development of neonatal complications, infants of drug-dependent women in treatment ($n = 61$) and receiving prenatal care were compared to a drug-free group ($n = 81$) enrolled in the same prenatal clinic in Philadelphia (Berger et

a) , 1986a) Drugs of abuse for the drug-dependent women included both opiates and nonopiates (39%) or nonopiates only (61%). Maternal, intrapartal, and neonatal factors were studied. Maternal age and socioeconomic status were studied and were similar in the two groups. No differences between groups were found in Apgar scores, maternal gravidity and parity, race, and infant sex. Mean birth weight of infants of drug-dependent women was 2959 g. and in the comparison group it was 3230 g. Of the 61 infants born to drug-dependent women, 30% required treatment for abstinence. The drug-dependent women had fewer prenatal clinic visits ($p = < .001$), and length of hospital stay for their infants not treated for abstinence was greater ($p = < .001$). No difference was found in the incidence of intrauterine growth retardation between groups. The incidence of apnea, aspiration pneumonia, and hyperbilirubinemia was greater in infants of drug-dependent women. However, the incidence of meconium in amniotic fluid at the time of delivery was similar in the two groups. There were four SIDS deaths (7%) in infants born to drug-dependent women. The results of this study suggest that infants born to drug-dependent women in treatment and receiving prenatal care are still at risk for increased morbidity and mortality during the immediate neonatal period and in early infancy. Although "adequate" in number, prenatal visits did not occur early in pregnancy, when complications could have been treated and possibly avoided, but during the third trimester, when the possibilities for prevention and intervention were limited.

Other areas of concern with regard to the infant include the infant's response to the birth process. A study was undertaken to investigate the effects of maternal drug use on neonatal resuscitation (Berger et al., 1986b). Infants of drug-dependent women ($n = 56$), were compared to a drug-free control group ($n = 63$). Drugs of abuse for the drug-dependent women included both opiates and nonopiates (57%) or nonopiates only (43%). Socioeconomic status, gestational age, and parity were similar in the two groups. A high incidence of low birth weight was seen in the infants born to drug-dependent women—13 infants versus 7 infants in the control group. Resuscitation was divided into four levels with increasing degrees of complexity: level I—suction bulb and/or suction catheter only, level II—oxygen inhalation and/or positive pressure inhalation in addition to suction, level III—intubation and visualization of the cords in addition to suction and oxygen administration, level IV—external cardiac massage. Infants born to drug-dependent women had a higher incidence of level III and level IV resuscitation. This was found despite the overwhelming number of black infants in the comparison group (black infants are thought to require more intervention possibly owing to lower birth weights and a negative response to perinatal stress). Levels I and II were similarly administered to the two groups of infants. The type of analgesia or anesthesia received by the mothers during the intrapartum course was not related to the level of resuscitation required by the infants. The results of these data suggest that the risk of requiring increased levels of resuscitation at birth is greater for infants born to drug-dependent

women. In the application of these data to current practice, medical facilities that provide care for pregnant drug-dependent women should anticipate problems in the delivery room and establish appropriate emergency procedures in order to provide optimal care for this high-risk population (Berger et al., 1986b).

Infants born to methadone-maintained mothers have been evaluated longitudinally with ophthalmological examinations. Forty infants born to drug-dependent mothers were examined shortly before discharge in the newborn nursery, and 29 of these infants were examined at 6 months, 12 months, and 18 months of age. Seven infants (24%) were diagnosed as having strabismus. Esotropia (convergent deviation) was seen in 3 infants. Mean birth weight for the 7 infants with strabismus was significantly lower than that of the 22 infants without strabismus ($p = .05$). The mean methadone dose at the time of delivery for mothers of infants with strabismus was 47 mg/day, and for mothers of infants without strabismus, it was 39 mg/day. Both groups used other drugs during the pregnancy including heroin, diazepam, marijuana, amphetamines, and nicotine, at least once. The mechanism of this remarkable increased incidence of strabismus (24%) in these infants in comparison to that in the general population (2.8-5.3%) is unknown. However, these data suggest that maternal use of psychoactive agents during pregnancy as well as associated perinatal risk factors may predispose infants to the development of strabismus. These preliminary data should alert clinicians to closely follow all infants prenatally exposed to psychoactive agents with ophthalmological evaluations (Nelson et al., 1987).

Methadone programs are currently encountering a large number of individuals who are using cocaine as well as opiates. Therefore, the number of infants born to women who abuse cocaine continues to increase. Subjects of a study conducted within our drug treatment program in Philadelphia included 237 pregnant women: 91 cocaine-using drug-dependent women, 83 non-cocaine-using drug-dependent women, and 63 non-drug-dependent women. Both drug-dependent groups were abusing a variety of substances, and the majority were on methadone maintenance. The groups were similar for maternal age, socioeconomic status, nicotine use, and parity, but differed in race. Abruptio placentae occurred in 8% of the cocaine-dependent women. Spontaneous abortions, emergency caesarean sections, and meconium staining occurred more often in the cocaine-dependent women than in either of the other two groups. Birth weight and length, head circumference, gestational age, and 1-min Apgar scores were significantly lower in the infants of cocaine-dependent women. No differences existed in the occurrence of congenital anomalies and intracranial hemorrhage. There were more premature deliveries in the cocaine (21%) than in the noncocaine (11%) and comparison (4%) groups.

Mean neonatal abstinence scores, which incorporated 21 physiological and behavioral parameters to quantify symptoms, were lower for the cocaine-exposed infants. Differences were significant with respect to cry, disturbed

tremors, increased muscle tone, excoriations, fever, mottling, and loose stools. The results of this study suggested that (1) cocaine in pregnancy adversely affects maternal and fetal outcome, (2) women who use cocaine during pregnancy have a greater incidence of meconium staining, emergency cesarean section, abruptio placentae, and SGA infants, (3) infants born to women who abuse cocaine have lower birth weight and length, head circumference, gestational age, and Apgar scores at 1 and 5 min, and (4) exposure to cocaine in utero does not appear to increase the incidence of neonatal abstinence symptomatology (Livesey, 1987).

Our most recent evaluation of the perinatal outcome in 196 infants exposed to methadone in utero reveals that 12% were premature, there was a 7.7% fetal loss, 8% were term infants with medical complications, and 72% were term with no medical complications except neonatal abstinence (Kaltenbach and Finnegan, 1987). Twenty-five years ago, when medical scientists did not have the techniques to care for high-risk infants, the majority of infants born to opiate-addicted women did not survive. With the advent of newer techniques for the care of sick newborns, and specifically for those born prematurely, mortality rates during the past decade have decreased markedly. Incidences in 1973 and 1977 had been reported as 3-4.5%. In 1956 a 94% mortality rate in untreated infants and 34% in treated infants was reported (Goodfriend et al.). Currently, if we could reduce the use of multiple drugs, especially cocaine, morbidity and mortality could improve even more dramatically.

Moreover, women who are using intravenous drugs must not share needles and should use "safe sex" practices in order to decrease their chances of contracting the human immunodeficiency virus (HIV). Pregnancies should not occur indiscriminantly, as in the past in these women, since many of their infants, if they are HIV-positive, will also be at risk for the disease. Moreover, at this time, with no curative measure and no vaccine available, mortality in the infants is inevitable.

NEONATAL ABSTINENCE SYNDROME

Onset of withdrawal symptoms in infants exposed to narcotics in utero varies from minutes or hours after birth to 2 weeks of age, but the majority of symptoms appear within 72 h. Many factors influence the onset of abstinence in individual infants, including the type of drugs used by the mother, dosage, timing of the dose before delivery, character of labor, type and amount of anesthesia/analgesia given during labor, maturity, nutrition, and the presence of intrinsic disease in the infant.

Several types of clinical courses may occur (Desmond and Wilson, 1975). Withdrawal may be mild and brief, be delayed in onset, have a stepwise increase in severity, be intermittently present, or have a later biphasic course. The biphasic course includes acute withdrawal followed by improvement, with a later onset of subacute withdrawal. More severe withdrawal seems to occur in

Table 4 Signs and Symptoms of Neonatal Abstinence

Hyperirritability
Increased deep tendon reflexes
Exaggerated Moro reflex
Increased muscle tone
Tremors
High-pitched cry
Increased rooting reflex
Uncoordinated and ineffectual sucking and swallowing reflexes
Regurgitation
Loose stools
Tachypnea
Yawning
Sneezing
Mottling
Fever

infants whose mothers have taken large amounts of drugs for a long time. In general, the closer to a delivery a mother takes heroin, the greater the delay in onset of withdrawal and the more severe the symptoms in her baby. The maturity of the infant's own metabolic and excretory mechanism plays an important role after delivery. Duration of symptoms can extend from 6 days to 8 weeks, and symptoms of irritability may persist for 3 months or more. During the latter period, the infants may have hyperphagia, increased oral drive, sweating, hyperacusis, irregular sleep patterns, loose stools, and poor tolerance to holding or to abrupt changes of position and space.

Neonatal abstinence is described by signs and symptoms of central nervous system hyperirritability, gastrointestinal dysfunction, respiratory distress, and vague autonomic symptoms that include yawning, sneezing, mottling, and fever (Finnegan, 1978, 1984). Initially, the infants appear only to be restless. Tremors begin when the infants are disturbed, and progress to the point where they occur when the infants are not disturbed. High-pitched cry, increased muscle tone, and further irritability develop. When examined, the infants have increased deep tendon reflexes and an exaggerated Moro reflex. The rooting reflex is increased, and the infants are frequently seen sucking their fists or thumbs. Yet when feedings are administered, they have extreme difficulty and regurgitate frequently because of uncoordinated and ineffectual sucking and swallowing reflexes. Because of the occurrence of loose stools, decreased intake, and regurgitation, the infants are susceptible to dehydration and electrolyte imbalance (see Table 4).

Excessive nasal secretions with stuffy nose and rapid respirations, sometimes accompanied by retractions, intermittent cyanosis, and irregular respirations, have been seen in the infants undergoing withdrawal (Glass et al., 1972; Klain et al., 1972; Lin et al., 1979). If the infant regurgitates, aspirates, and

develops pneumonia, severe respiratory embarrassment can occur. During the first week of life, increased respiratory rates associated with hypocapnia and an increase in blood pH can occur as well. Similar signs and symptoms can also be seen in adults drug during abstinence.

Although the frequency of respiratory distress syndrome increases progressively with decreasing gestational age in premature infants, no respiratory distress syndrome was noted among the 33 premature infants born to heroin-addicted mothers at the Harlem Hospital Center (Glass et al., 1971). Newborn infants of opiate-dependent mothers have been found to achieve tissue oxygen unloading comparable to that of a 6-week-old term infant, which suggests that opiates may function as enzyme inducers, resulting in increased blood levels of 2,3-diphosphoglycerate and a decrease in oxygen affinity (Finnegan et al., 1974).

Sequential pulmonary function studies (Lin et al., 1979), performed from birth to 24 h of age in infants of drug-dependent mothers, show what appears to be a transient decrease in lung compliance and tidal volume when compared with normal, control infants. By 3 days of age, lung compliance and tidal volume returned to normal control levels in spite of persistent tachypnea and abstinence symptomatology.

To evaluate brain growth and cerebral ventricular development in infants undergoing abstinence versus those born to a matched group of prenatally drug-free control women both linear array and later, high-resolution real-time sector scanning were used (Pasto et al., 1985, 1986). Cranial ultrasound examinations were performed during the first 3 days of life and at 1 month in 22 infants with neonatal abstinence syndrome. The results were compared to those obtained in 15 control infants who were not exposed to narcotic drugs in utero. Mothers of the drug-exposed infants had been maintained on methadone ($x = 41$ mg daily), and many used unknown quantities of heroin, diazepam, or amphetamines. The ultrasound images were examined for ventricular configuration, intracranial hemidiagneters, area of the thalami, and width of the temporal lobes. At 24 and 72 h and at 1 month of age, significantly more drug-exposed than control infants had a small, lateral (slitlike) ventricular configuration. The intracranial hemidiagneter was significantly smaller in the drug-exposed than in the control infants. All cerebral measurements except the right temporal lobe demonstrated significant growth over the first month of life in both groups of infants. To further evaluate the effects of psychoactive drugs taken during gestation on the developing nervous system, ultrasound studies of the brain were obtained at 2 and 6 months following birth. The 2- and 6-month images failed to reveal significant differences between drug-exposed and control infants.

Slitlike ventricles may be due to either a lack of visualization of fluid space within the ventricles, a diffuse compression of the ventricles bilaterally, a decreased production of cerebrospinal fluid, or increased reabsorption of cerebrospinal fluid. By means of ancillary examinations (computerized tomography

and transfontanel pressure measurements), the pathogenesis of the slitlike ventricles was found to be unrelated to edema or to increased intracranial pressure. Central nervous system irritability seen in neonatal abstinence appears shortly after birth and is frequently manifest for as long as 6 months. The results suggest a relationship between slitlike ventricles and the period of abstinence, although the pathogenesis of the abstinence symptomatology was not defined by the ultrasound studies.

In spite of the above objective findings and the potential for concern, differences in ventricular configuration were not reflected in developmental status at 6 months of age. No differences were found in the Bayley Mental Development Index scores between infants with slitlike ventricles and those with normal ventricles ($r = .98, p > .20$). Furthermore, developmental scores for both groups were well within the normal range of development. Slitlike ventricles at birth do not have an adverse effect on development, at least by 6 months of age, even if resumption of normal ventricular configuration has not occurred (Kaltenbach et al., 1985).

Further elucidation of various aspects of neonatal abstinence have been reported elsewhere (Finnegan, 1985). The clinical assessment and the treatment aspects will not be delineated here but are clearly described in Finnegan (1985).

The majority of infants born to drug-dependent women undergo neonatal abstinence syndrome and often require pharmacotherapy for the treatment of withdrawal symptoms. Phenobarbital, paregoric, and diazepam have been recommended for the treatment of the syndrome. Although some investigators have examined the efficacy of these agents in treating neonatal abstinence syndrome, there are no data regarding the use of specific pharmacologic agents and developmental outcome. This study evaluated 85 infants born to drug-dependent women who were maintained on methadone during pregnancy. Severity of infant withdrawal was assessed with the neonatal abstinence scoring system (Finnegan, 1985). Infants who required pharmacotherapy were randomly assigned to one of four treatment regimens: paregoric, phenobarbital (titration), phenobarbital (loading), and diazepam. When treatment was not successful with the assigned agent, one of the other agents was used. At 6 months of age, the developmental status of infants was assessed with the Bayley Scales of Mental Development. Based on NAS treatment, four groups were delineated: (I) paregoric ($n = 21$); (II) phenobarbital ($n = 17$); (III) more than one agent ($n = 31$), and (IV) no treatment ($n = 16$). (Data for the phenobarbital loading and titration groups were combined, since analysis revealed no differences between groups. All infants who initially received diazepam were included in group III, since diazepam as a single agent was not successful.) Results of one-way analysis of variance revealed no differences in developmental status between groups ($p = < .10, f = .25$). Scores for all groups were well within the normal range of development. Implications of these findings include (1) the severity of withdrawal is not related to developmental outcome when appropri-

ately managed with pharmacotherapy and (2) the use of pharmacotherapy does not adversely affect the developmental outcome and may even help ameliorate the consequences of neonatal abstinence syndrome (Kaltenbach and Finnegan, 1986).

BEHAVIORAL STUDIES IN THE NEONATAL PERIOD

Many investigators (Kaplan et al., 1976a,b, Kron et al., 1976, Lodge et al., 1975; Soule et al., 1974, Strauss et al., 1975) have used the Brazelton Neonatal Behavioral Assessment Scale to quantify the effects of narcotics administered prenatally on human infants. This assessment scale evaluates habituation to stimuli (light and bell), responsiveness to animate and inanimate stimuli (face, voice, bell, rattle), state (sleep, alertness, crying), the requirements of state change (irritability and consolability), and neurological and motor development. Soule et al. (1974) studied the clinical usefulness of this test in control infants and those born to heroin-addicted mothers who were on methadone maintenance. Infants were tested at 48 and 72 h of age. Group differences in the Brazelton scale scores clearly indicated the state of narcotic withdrawal in those infants exposed to methadone. Typically, the infants were state labile. They were more tremulous and hypertonic and manifested less motor maturity than the nonexposed infants. Differences in responsiveness to visual and auditory stimuli were also present. Although quite responsive to auditory stimuli, the methadone subjects responded poorly to visual stimuli. The babies seemed to be uncomfortable when opening their eyes and attempting to focus.

Brazelton studies by Strauss et al. (1975) showed that infants born to narcotic-addicted women were less able to be maintained in an alert state and less oriented to auditory and visual stimuli, with deficits most pronounced at 48 h of age. Although they were substantially more irritable, they were capable of self-quieting in response to soothing intervention. Depending on the extent and duration of these manifestations, it was suggested that there may be long-term consequences for the development of the infant/caregiver interaction patterns.

In addition to the information provided by such studies regarding the differences in behaviors for individual Brazelton scale items, Kaltenbach et al. (1981) investigated the effect of neonatal abstinence on the infant's general ability to interact with the surrounding environment. Infants born to drug-dependent women maintained on methadone during pregnancy and control infants born to drug-free women were assessed on items for the interactive dimension of the Brazelton scale during the first 72 h of life and again 30 days later. This dimension indicates the infant's capacity for attention and social responsiveness. Findings showed that within the first 3 days of life and regardless of whether withdrawal was sufficiently severe to require pharmacotherapy, nearly all the methadone-exposed infants exhibited deficient interactive behavior. After 30 days of age, infants who continued to require treatment also continued to ex-

hibit deficient interactive behavior, whereas infants whose treatment had been completed did not exhibit deficient behavior. Control infants all exhibited normal or superior interactive behaviors. These data corroborate the suggestion of Strauss et al. (1975) that neonatal abstinence syndrome may have deleterious and complex effects on infant/care giver interactions.

Subsequent to the treatment of medical disorders in these infants and following assessment and treatment of abstinence, the majority will be discharged to their drug-dependent mother. Grave concern exists in those responsible for the care of the infants in the hospital, as many characteristics of drug-dependent mothers predispose them to poor parenting.

To identify specific characteristics of drug-dependent women relevant to parenting, a knowledge of child development questionnaire was administered to 60 drug-dependent pregnant women enrolled in Family Center (Kaltenbach et al., 1982). The results indicate that these women have limited knowledge of infant behavior and development. Thirty-two percent of the women answered one-third or more of the questions incorrectly. The most frequently missed items pertained to developmental milestones. Mothers consistently underestimated the age by which a child should be able to walk, talk, follow directions, and have the physiological maturity for toilet training. Such unrealistic and inappropriate maternal expectations may have deleterious effects on mother/infant interaction. Treatment programs for drug-dependent mothers must begin to focus on the mother/infant dyad, identify the socioeconomic risk factors specific to this dyad, and provide appropriate intervention.

Drug addiction per se is not an indication for automatic removal of a child from parental custody. Every effort should be made to involve the mother and the baby's father and/or the extended family in parenting. If further supports are needed, the family can be referred to an agency that can provide services to enhance parenting and prevent neglect or abuse. It is vital that possible risk factors be evaluated as soon as possible after a woman is admitted to a treatment program. Failure to assess risk appropriately and provide social and community supports may place another generation of children at risk.

Although the newborn experiencing intrauterine exposure to narcotic agents may appear normal physically, behaviorally, and neurologically at the time of birth, one cannot assume that no effect has occurred. The effect of pharmacologic agents may not become apparent until later in development. Therefore, long-term follow-up studies of infants prenatally exposed to pharmacologic agents are extremely important.

If the physical, psychological, and sociological issues of pregnant opiate-dependent women and their children are appropriately addressed, the potential physical and behavioral effects of psychoactive drugs on the mother, the fetus, the newborn, and the child may be markedly reduced. The task for clinicians is enormous when contemplating the rehabilitation of such populations, but it must be addressed if we are to decrease the intergenerational transmission of the many problems surrounding drug abuse in pregnancy.

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Cocaine Use in Pregnancy: Perinatal Morbidity and Mortality¹

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CHASNOFF, I. J., K. A. BURNS AND W. J. BURNS. Cocaine use in pregnancy: Perinatal morbidity and mortality. *NEUROTOXICOL TERATOL* 9(4) 291-293, 1987.—With the increasing use of cocaine in the United States, there has been growing concern regarding its effects on the fetuses and neonates of pregnant cocaine abusers. Fifty-two cocaine-using women enrolled in a comprehensive perinatal addiction program were evaluated and compared with 73 women who had used narcotics in the past and were maintained on methadone during pregnancy. The groups were similar in maternal age, socioeconomic status, number of pregnancies and cigarette, marijuana and alcohol use. The cocaine-using women had a significantly higher rate of premature labor, precipitous labor, abruptio placentae, fetal monitor abnormality and fetal meconium staining than the women in the methadone group. Neonatal gestational age, birth weight, length and head circumference were not affected by cocaine use compared to methadone use. However, the Brazelton Neonatal Behavioral Assessment Scale revealed that infants exposed to cocaine had significant depression of organizational response to environmental stimuli (state organization) when compared to methadone-exposed infants. In another aspect of the study, an increased rate of SIDS (15%) was found for 66 cocaine-exposed infants as compared to a 4% rate of SIDS in 50 methadone-exposed infants.

Cocaine Pregnancy Neonatal effects Child development

IN conjunction with the increased use of cocaine in the general population of the United States, the number of cocaine-using pregnant women presenting to the Perinatal Center for Chemical Dependence at Northwestern University has continued to escalate. The present study of a population of cocaine-exposed infants was undertaken to investigate perinatal morbidity and mortality in infants born to cocaine-using mothers.

METHOD

From January 1976 to January 1986, 52 infants were born to cocaine-using women enrolled in the Perinatal Center for Chemical Dependence. Each of these women used cocaine intranasally, intravenously or by freebasing in the first trimester of pregnancy, and 31 (60%) of the women continued to use cocaine throughout the pregnancy. Urine samples were obtained on a regular basis to screen for the use of licit and illicit drugs (opiates, amphetamines, barbiturates, marijuana, benzodiazepines, propoxyphene, cocaine, phenylcyclidine, tobacco and alcohol). Twenty (38%) of the women had presented with evidence of opiate use in addition to the cocaine, and these women were placed on low-dose methadone maintenance. Mean daily methadone dose for these 20 women in the third trimester was 10.5 mg (range 5 to 25 mg).

A comparison group (N=73) was selected from the population of the Perinatal Center representing women of a simi-

lar racial distribution who conceived while addicted to heroin and were converted to low-dose methadone maintenance for at least the last two trimesters of their pregnancies. These women had no history or evidence of cocaine use. Methadone-maintained women were selected as a control group in order to be able to compare two groups of women who were similar in social, demographic and environmental backgrounds as well as being comparable for cigarette, alcohol and marijuana use during pregnancy (Table I). Evidence for use of other substances in either group was sporadic and infrequent. The mean methadone dose in the third trimester for the control group of women was 15.5 mg daily (range 5 to 40 mg). Management of pregnancy and psychotropic intervention was similar for the two groups of women and has been described in previous publications [2,5].

The reproductive histories of all women were reviewed, and labor and delivery data recorded at the time of delivery. All neonates were examined at birth. When the infants were three days old, the Brazelton Neonatal Behavioral Assessment Scale (BNBAS) [1] was administered by trained examiners who were blinded to the infants' prenatal history.

In another aspect of the study, a retrospective evaluation of the incidence of sudden infant death syndrome (SIDS) was performed. We reviewed the charts of 56 infants born between 1980 and 1985 to cocaine-using women enrolled in the Family Addiction Center for Education and Treatment in San Francisco and the first 10 infants born between 1980 and 1983 to cocaine-using women enrolled in the Perinatal Center

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TABLE 1
MATERNAL CHARACTERISTICS*

	Cocaine N=52 mean	Methadone N=73 mean
Age	26.7	26.1
Gravidity	3.5	3.2
Cigarettes/day	12.7	15.7
Alcohol, cc/week	16.7	25.7
Marijuana, joints/month	7.8	4.3

*ANOVA, not significant.

TABLE 3
NEONATAL GROWTH PARAMETERS*

	Cocaine mean	Methadone mean
Weight (g)	3042	2932
Length (cm)	48.9	48.4
Head circumference (cm)	33.1	32.9

*ANOVA, not significant.

for Chemical Dependence in Chicago. We also reviewed the charts of 50 infants delivered to narcotic-addicted, methadone-maintained women enrolled in the Chicago program between 1980 and 1983.

RESULTS

Complications of Labor and Delivery

As in other substance-abusing populations, the cocaine-addicted women had a high incidence of infectious disease complications, especially hepatitis (24%) and venereal disease (10.5%). There was an increase in complications of labor and delivery in cocaine-using women as compared to heroin/methadone-addicted women (Table 2).

Neonatal Outcome

All the infants were of singleton birth, and there was a similar distribution of infants according to sex in each group. A similar number of infants in each group had Apgar scores less than 7 at one and five minutes. Meconium staining occurred in the cocaine-exposed group with greater frequency as compared to the methadone-exposed group of infants (Table 2). There was an increased incidence of premature labor among the cocaine-complicated pregnancies but, in most instances, labor was stopped with bed rest or medication. Mean gestational age was similar for the two groups of infants. There were no statistically significant differences in birth weights, lengths or head circumferences between infants in the two groups (Table 3). No infant in either group required pharmacologic therapy for symptoms of abstinence. Four cocaine-exposed infants had malformations of the genitourinary tract: one with prune belly syndrome, one with a first degree hypospadias and undescended testis, one with bilateral inguinal hernias and one with hydronephrosis.

TABLE 2
COMPLICATIONS OF LABOR AND DELIVERY*

	Cocaine		Methadone	
	N	%	N	%
Premature labor	9	17.3	3	4.0
Precipitous labor	7	13.4	2	2.7
Abruptio placentae	9	17.3	1	1.3
Fetal monitor abnormality	8	15.3	7	9.5
Fetal meconium staining	13	25.0	6	8.2

* χ^2 analysis, $p < 0.05$ for all results.

Eight infants delivered to methadone-maintained women had inguinal hernias. Two infants in the cocaine group suffered a perinatal cerebral infarction related to their mother's cocaine use in the 48 to 72 hours prior to delivery [4].

On the BNBAS, infants who had been exposed to cocaine exhibited a significantly (ANOVA, $p < 0.01$) increased degree of irritability (5.9 vs. 4.7), tremulousness (4.8 vs. 3.5) and state lability (5.1 vs. 4.1) than did the infants delivered to methadone-maintained women. Cluster analysis revealed that the cocaine-exposed infants had a greater deficiency in state control than did the methadone-exposed infants (2.2 vs. 2.0, ANOVA, $p < 0.01$).

Neonatal Mortality

For an initial evaluation of neonatal mortality among cocaine-exposed infants, the histories of 56 infants from a perinatal addiction program in San Francisco, CA (Family Addiction Center for Education and Treatment) and the first 10 infants delivered to cocaine-using women in our program were reviewed. Among the cocaine-exposed infants, ten of the 66 infants died of SIDS, for an overall incidence of 15%. Autopsies on all ten infants revealed no evidence for other causes of death. Of these ten infants, eight were delivered at > 37 weeks gestation, one infant at 36 weeks and one infant at 34 weeks gestation. Six of these infants were black and four were white. The mothers of eight of the SIDS infants had smoked cigarettes and three had used alcohol in addition to cocaine. Mean birth weight of the ten infants was 2818 grams (range 2410-3450 grams). All ten infants had shown signs of at least mild irritability at birth, and two of the infants had been treated with paregoric in the first two weeks of life for neonatal abstinence. The mean age at death for the ten infants was 46 days (range 9-180 days).

Among the 50 narcotic-exposed infants born to methadone-maintained women, two infants died of SIDS, for a rate of 4%. This 4% rate is similar to previously reported rates of SIDS among narcotic-exposed infants (6). Consequently, there is a significantly increased rate of SIDS for cocaine-exposed infants compared to the narcotic-addicted infants ($\chi^2 = 373$, $p < 0.0001$).

DISCUSSION

There is no question that cocaine use by pregnant women has become a major issue of concern of health workers in the United States. However, little information exists as to the exact effects cocaine has upon pregnancy and the developing fetus. Our preliminary study of 23 cocaine-using women and their offspring [3] gave an initial indication that cocaine could

have significant effects on pregnancy outcome. These initial impressions have been borne out in the present study.

For purposes of evaluation of perinatal morbidity and mortality, well-controlled, methadone-maintained women enrolled in the Perinatal Center for Chemical Dependence were used for a control population. Methadone-maintained women comprise the population of drug-dependent women which has been most thoroughly studied (5,10), so by selecting out those women with similar histories of marijuana, alcohol and tobacco use, the effects of these secondary drugs of abuse could be controlled for.

In the present study, the well-maintained methadone group of women had an incidence of complications of labor and delivery similar to that of the general population. However, the cocaine-using women had a higher rate of complications of labor and delivery than the methadone-maintained women. Cocaine acts peripherally to inhibit nerve conduction and prevent norepinephrine reuptake at the nerve terminals, producing increased norepinephrine levels with subsequent vasoconstriction and tachycardia and a concomitant abrupt rise in blood pressure (12). Placental vasoconstriction also occurs (13), decreasing blood flow to the fetus, and with increased norepinephrine levels, an increase in uterine contractility has been reported in human beings (8). The increased incidence of preterm labor, precipitous labor and abruptio placentae is consistent with these pharmacologic actions of cocaine. The high incidence of maternal hemorrhage and postpartum anemia in the cocaine-using women would be expected to accompany these complications of delivery.

Maternal problems at delivery are reflected in the high rate of fetal distress noted in the cocaine-exposed infants, as manifested by fetal monitor abnormalities, low Apgar scores and fetal meconium staining. The perinatal cerebral infarction noted in two infants is a severe example of the morbidity associated with intrauterine exposure to cocaine (4) and is similar to intracerebral insults reported in adults who use cocaine.

The occurrence of genitourinary malformations (one infant with prune belly syndrome (11), one with hydronephrosis, one with hypospadias and one with bilateral inguinal hernias) in four of the cocaine-exposed infants is consistent with animal studies which found an increased incidence of cryptorchidism and hydronephrosis in mice (9). An increased in-

cidence of inguinal hernias in an opiate-exposed population of infants has been previously reported (5), so larger numbers of cocaine-exposed infants will need to be studied before conclusions regarding the association of congenital malformations with cocaine use can be reached.

No interference with intrauterine growth was noted in the infants exposed to cocaine. This is consistent with reported growth patterns of other infants exposed to non-opiates (2,5); however, one might expect intrauterine growth retardation to occur in these infants, given the vasoconstrictive action of cocaine. This is another question that must receive further attention with larger numbers of infants.

The significance of the cocaine-exposed infants' neurobehavioral abnormalities, as documented on the BNBAS, lies in the difficulties these infants present for caretakers attempting to establish an appropriate relationship with the infant. The irritability and tremulousness characteristic of the cocaine-exposed infant interfere with the ability of the infant to interact with or respond to the caretaker. As this occurs, the caretaker becomes more passive in his or her attempts at interaction, thus setting up a cycle of increasing passivity on the part of the both infant and caretaker.

The incidence of SIDS in the general population of the United States is 0.5%. The incidence of SIDS in our methadone-maintained infants was 4%, a rate similar to the 5- to 10-fold increased rate of SIDS among children born to opiate-abusing women (6). There has been no previous information regarding SIDS in populations of infants born to women who used cocaine during pregnancy. Following this initial observation of a high rate of SIDS in our population, methadone-maintained and cocaine-using mothers were instructed in techniques for observation for apnea in their infants. Of the infants born subsequent to the initiation of these instructions, five cocaine-exposed and no methadone-exposed infants had episodes of prolonged apnea (7), requiring resuscitation and hospitalization.

It is apparent from these preliminary studies that cocaine exerts a negative influence on pregnancy and perinatal morbidity and mortality. Continuation of these studies with larger numbers of infants is currently under way to verify these findings and to evaluate the possibility of other problems associated with cocaine use during pregnancy.

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Temporal Patterns of Cocaine Use in Pregnancy

Perinatal Outcome

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Seventy-five cocaine-using women enrolled in a comprehensive perinatal care program were divided into two groups: those who used cocaine in only the first trimester of pregnancy (group 1 [N = 23]) and those who used cocaine throughout pregnancy (group 2 [N = 52]). Perinatal outcomes of these pregnancies were compared with perinatal outcomes of a matched group of obstetric patients with no history or evidence of substance abuse (group 3 [N = 40]). Group 2 women had an increased rate of preterm delivery and low-birth-weight infants as well as an increased rate of intrauterine growth retardation. Group 1 women had rates of these complications similar to the drug-free group. Mean birth weight, length, and head circumference for term infants were reduced in only the group 2 infants. However, both groups of cocaine-exposed infants demonstrated significant impairment of orientation, motor, and state regulation behaviors on the Neonatal Behavioral Assessment Scale.

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THE IMPACT of cocaine on American society has been documented repeatedly in the past few years,^{1,2} but its effect on human reproduction has only relatively recently been appreciated.^{3,4} Women of childbearing age comprise an increasing proportion of all cocaine users in the United States,⁵ but information regarding the effects of cocaine taken during pregnancy on the developing fetus and newborn infant is sparse and thus far has focused only on cocaine users as a group. There is no information regarding the relationship of patterns of cocaine use in pregnancy and differential effects on outcome of pregnancy and the newborn infant. In this report, the cocaine-use patterns of 75 pregnant

women are studied and perinatal outcomes compared with the pregnancy outcomes of a matched group of obstetric patients with no history or evidence of substance abuse.

METHODS

The Perinatal Center for Chemical Dependence at Northwestern University Medical School was established in 1976 to provide a comprehensive program of psychiatric, obstetric, and follow-up pediatric care to substance-abusing pregnant women and their infants. From Jan 1, 1986, to Feb 1, 1988, one hundred thirty-eight women who had used cocaine during their pregnancies received complete prenatal care at the Perinatal Center for Chemical Dependence. Of these women, 109 had no concomitant opiate use. Those women who used opiates with cocaine were eliminated from the study. All women were enrolled by the 12th week of preg-

nancy and received intensive obstetric care through the remainder of the pregnancy. The average number of prenatal visits was 14 (range, nine to 20). The goal of intervention was to bring the women to abstinence. Urine toxicological analysis through Enzyme-Multiplied Immunoassay Technique screening was performed at admission, with positive results confirmed by gas chromatography/mass spectrometry. At each prenatal obstetric visit, urine specimens for toxicological analysis were obtained and current substance abuse was reviewed. History and toxicology studies covered the following substances: caffeine, nicotine, barbiturates, cocaine and its metabolites, opiates, benzodiazepines, propoxyphene, phenylhydrazine, amphetamines, alcohol, and marijuana. All obstetric and neonatal data were collected prospectively.

To specifically evaluate the effect of first-trimester cocaine use vs use throughout pregnancy, women who used cocaine in only the second trimester (N = 2), in only the third trimester (N = 5), in the first and second trimester (N = 10), in the first and third trimester (N = 10), and in the second and third trimester (N = 7) were not included in the present study. The remaining cocaine-using women were divided into two groups. The first group (group 1) consisted of 23 women who used cocaine during the first weeks of pregnancy, but who attained abstinence by the end of the first trimester and reported no further cocaine use throughout their pregnancy, as documented by ongoing chemical dependence evaluation and urine toxicological testing. The second group

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of cocaine-using women (group 2) consisted of 52 women who conceived while addicted to cocaine and continued to use cocaine throughout their pregnancy.

For comparison, a control group with no history or evidence of drug use confirmed on random urine toxicological testing (group 3 [N = 40]) was selected from the general obstetric population receiving care throughout pregnancy at the same hospital. Group matching was performed on the basis of maternal age, socioeconomic class, and tobacco use. No women in any of the three groups were receiving medication or had additional medical problems.

All neonates were examined at birth by a physician blinded to the infant's prenatal history, and weight, crown-to-heel length, and fronto-occipital head circumference were recorded. Gestational age assessment was performed through use of the evaluation of Ballard et al¹ and each infant's birth weight was plotted for gestational age on fetal growth curves developed by Brenner et al.² When the infants were 12 to 72 hours old, the Neonatal Behavioral Assessment Scale (NBAS)³ was administered by trained examiners who were blinded to the infants' prenatal history. Infants delivered prior to 38 weeks' gestation were not included in the NBAS data analysis.

Pregnancy and neonatal data were analyzed by the use of χ^2 analysis for nonparametric data or by a one-way analysis of variance (ANOVA) for parametric data with cocaine use as the independent variable in the three groups. For items that reached statistical significance ($P < .05$) on ANOVA, the Scheffé Procedure was used to identify differences between subsets.

RESULTS

Groups 1, 2, and 3 were similar (by ANOVA) for mean maternal age (25.4 ± 4.2 (SD), 27.5 ± 4.4 , and 26.8 ± 4.8 years, respectively), prenatal weight gain (12.4 ± 4.5 , 12.2 ± 5.4 , and 12.8 ± 5.3 kg, respectively), and cigarettes smoked per day (9.8 ± 9.4 , 10.1 ± 8.1 , and 8.0 ± 10.8 , respectively). Groups 1 (six whites, 11 blacks, and six Hispanics), 2 (18 whites, 28 blacks, and six Hispanics), and 3 (16 whites, 19 blacks, and five Hispanics) were similar for racial distribution, gravidity, and parity (χ^2 analysis).

Women in each cocaine group used an average of $1/3$ g of cocaine (range, $1/4$ to 5 g) with each use. Similar numbers of women in each group snorted (40%) or free-based (50%) the cocaine, while the remaining women used cocaine intravenously. None of the obstetric or neonatal outcomes reported herein were sig-

Table 1.—Prenatal Complications

Complication	Group			P†
	1 (Cocaine*), No. (%) (N = 23)	2 (Cocaine†), No. (%) (N = 52)	3 (Drug Free), No. (%) (N = 40)	
Preterm delivery‡	4 (17)	16 (31)	1 (3)	< .003
Low birth weight‡	0 (0)	13 (25)	2 (5)	< .002
Small for gestational age‡	0 (0)	10 (19)	1 (3)	< .01
Abruptio placentae	2 (9)	8 (15)	0 (0)	< .05

*Cocaine used in only the first trimester of pregnancy.

†Cocaine used throughout pregnancy.

‡ χ^2 analysis.

§Less than 38 weeks' gestation.

¶Less than 2500 g.

‡Less than 10th percentile by birth weight curve of Brenner et al.²

Table 2.—Neonatal Growth Parameters for Full-Term Infants

Parameter	Group			P‡
	1 (Cocaine*), X (SD) (N = 18)	2 (Cocaine†), X (SD) (N = 36)	3 (Drug Free), X (SD) (N = 39)	
Weight, g	3160 (453)	2829 (708)	3436 (628)	< .001
Length, cm	49.3 (2.5)	48 (3.6)	51.1 (2.9)	< .001
Head circumference, cm	33.4 (2.2)	32.7 (2.3)	34.6 (1.6)	< .001

*Cocaine used in only the first trimester of pregnancy.

†Cocaine used throughout pregnancy.

‡Analysis of variance.

§Significant difference from group 3 (Scheffé Procedure).

nificantly affected by the amount, frequency, or route of cocaine use.

Alcohol use was similar in the two drug-using groups. Three women (13%) in group 1 and six women (12%) in group 2 drank more than 60 mL of alcohol per week in the first trimester. Average absolute alcohol used by the three women in group 1 and the six women in group 2 was 39.9 ± 119 and 19.4 ± 41 mL per week, respectively. Incidence of marijuana use was similar for the two drug-using groups, with ten women (43%) in group 1 and 20 (38%) in group 2 using marijuana in the first trimester (mean, 5.0 ± 9.0 and 6.5 ± 15.7 joints per month, respectively). Only one woman in group 1 and two women in group 2 used marijuana or alcohol beyond the first trimester. No woman in group 3 used marijuana or alcohol.

There was no difference in sex distribution or in incidence of low Apgar scores (<7) at one and five minutes between the three groups. Infants born to women who used cocaine throughout pregnancy (group 2) had a significantly ($F(2,112) = 8.9$; $P < .001$) lower mean gestational age (38.0 ± 2.8 weeks) than infants in the drug-free group (39.8 ± 0.7 weeks). However, infants born to women who abstained from cocaine after the first trimester had a mean gestation (38.9 ± 1.5 weeks) that was not significantly different from ei-

ther the drug-free group or infants whose mothers used cocaine throughout pregnancy.

The rate of premature delivery was increased in group 2 compared with group 3 (Table 1), but there was no significant difference in the rate of premature delivery between groups 1 and 2 or groups 1 and 3. The incidence of low birth weight and small-for-gestational-age infants was increased in the group 2 pregnancies (Table 1) as compared with both group 1 and group 3 infants. Use of cocaine in only the first trimester was associated with a rate of abruptio placentae similar to the abortion rate for women who used cocaine throughout pregnancy (Table 1).

Evaluation of neonatal growth parameters for all term (≥ 34 weeks' gestation) infants showed that infants born to mothers who used cocaine throughout pregnancy had a lower mean weight, length, and head circumference at birth compared with the drug-free infants. Infants born to mothers who used cocaine during only the first trimester did not demonstrate significant deficiencies in intrauterine growth (Table 2).

Neonatal complications were found in both of the cocaine-exposed groups. Two infants born to women who used cocaine throughout pregnancy had ileal atresia presenting in the first 24 hours after birth. Six infants born to women

Table 3.—NBAS* Cluster Score Comparisons for Full-Term Cocaine-Exposed and Drug-Free Infants

NBAS Clusters	Group			F Scores
	1 (Cocaine) (N = 16)	2 (Cocaine) (N = 36)	3 (Drug-Free) (N = 37)	
Habituation	4.5	4.7	3.7	$F(2,72) = 1.23$
Orientation	1.6§	2.6§	5.5	$F(2,66) = 27.21§$
Motor	3.4†	4.0§	5.1	$F(2,66) = 25.21§$
State range	3.5	3.6	3.1	$F(2,66) = 3.68§$
State regulation	2.7§	3.5§	5.1	$F(2,66) = 15.45§$
Autonomic regulation	6.1	6.2	6.5	$F(2,66) = 0.71$
Abnormal reflexes	3.6§	3.4§	1.6	$F(2,66) = 7.41§$

*NBAS indicates Neonatal Behavioral Assessment Scale.

†Cocaine used in only the first trimester of pregnancy.

‡Cocaine used throughout pregnancy.

§Significant difference from group 3 (Scheffé Procedure [$P < .05$]).

¶Significant F ratio ($P < .05$).

‡Significant difference from group 2 and group 3 (Scheffé Procedure [$P < .05$]).

who used cocaine throughout pregnancy had seizures during the neonatal period. These six infants were all born with cocaine and active metabolites in the urine at the time of birth. Results of a complete work-up including serum calcium and glucose level measurement, lumbar puncture, and computed tomography of the head were normal for all six infants. Two infants had an abnormal electroencephalogram and the remaining four were normal. Two additional infants in group 2 born to mothers who used cocaine in the two to three days prior to delivery suffered perinatal cerebral infarctions. Genitourinary tract abnormalities occurred in three infants born to mothers who used cocaine only in the first trimester of pregnancy and six infants whose mothers used cocaine throughout their pregnancy. Among these nine infants, two male infants had prune-belly syndrome, one female infant had female pseudohermaphroditism, three infants had hydronephrosis, one infant had unilateral hydronephrosis with renal infarction of the opposite kidney, and two infants had isolated secondary hypospadias.

Infants assessed with the NBAS between 12 and 72 hours of age included 16 whose mothers used cocaine during the first trimester of pregnancy only (group 1), 36 whose mothers used cocaine throughout pregnancy (group 2), and 37 whose mothers were drug free during pregnancy (group 3). These groups were somewhat smaller than other groups that were analyzed for the medical variables because of the elimination of premature infants (gestational age < 38 weeks) from the sample and the fact that some infants were delivered on the weekend and were released from the hospital before they could be assessed with the NBAS.

Neonatal Behavioral Assessment Scale results for the infants revealed

significant differences between the drug-free infants and the two groups of cocaine-exposed infants on a number of variables (Table 3). Infants' performances on a priori clusters established by Lester et al¹¹ indicated that both groups exposed to cocaine demonstrated significant impairment as compared with the drug-free group in the areas of orientation, motor ability, and state regulation and number of abnormal reflexes. Group 2 infants received a significantly higher mean score on the state range cluster than group 3 infants. Group 1 performance on the motor cluster was significantly below that of group 2. No significant differences were found between the three groups on the cluster scores representing habituation, state range, or autonomic regulation.

An examination of the individual orientation cluster scores illustrates the severity of the cocaine-exposed infants' orientation difficulties. All of the 37 drug-free controls (group 3) were able to achieve an alert state and engage in varying degrees of responsiveness with the examiner. By comparison, seven of the 16 group 1 infants exposed to cocaine during only the first trimester and eight of the 36 group 2 infants exposed to cocaine throughout pregnancy were unable to reach alert states at all and consequently were unable to engage in any orientation. There was a significant difference between group 1 and group 3 ($\chi^2 = 15.03$; $P < .0001$) and between group 2 and group 3 ($\chi^2 = 7.10$; $P < .01$) in terms of number of infants who were unable to achieve alert states.

COMMENT

Current studies have shown that a significant number of women in the prime childbearing age range of 18 to 35 years are actively using cocaine.¹ Many of these women become pregnant and continue to use cocaine without realiz-

ing that they are pregnant. Thus, it is important to evaluate the effects of cocaine use in early pregnancy rather than its effects only when used throughout pregnancy. In addition, development of intervention programs for cocaine-using pregnant women will necessarily rely on information regarding the possibility of improved outcome for pregnancies in which a woman stops using cocaine in the first trimester of pregnancy.

In this study, surprisingly, the rate of abruptio placentae did not decrease if a woman abstained from cocaine in the last two trimesters of pregnancy. It has been hypothesized that the high rate of abruptio placentae in cocaine-exposed pregnancies is related to the acute hypertension produced by cocaine use.¹² However, in this study it appears that the damage done to placental and uterine vessels in early pregnancy by the cocaine may place these pregnancies at continued risk even if cocaine use ceases.

Recent studies have found that maternal cocaine use is related to intrauterine growth retardation.¹³ In this study, infants exposed to cocaine throughout pregnancy had a significant decrease in mean birth weight, length, and head circumference compared with the control infants. It has been hypothesized¹⁴ that this decrease in intrauterine growth is related to the intermittent diminution of placental blood flow associated with maternal cocaine use.¹⁵ Infants whose mothers used cocaine only in the first trimester had improved intrauterine growth and, in fact, the infant's weight, length, and head circumference were not significantly reduced from that of drug-free control infants.

The interactive effect of alcohol, marijuana, and tobacco use with cocaine to produce growth impairments in those pregnancies with significant secondary drug use cannot be completely evaluated at this point. It can be said only that the infants exposed to cocaine in the first trimester (group 1) were exposed to similar amounts of alcohol, marijuana, and tobacco as the second group of cocaine infants and use of alcohol and marijuana for the majority of women in the two cocaine groups was minimal compared with cocaine use.

Analysis of outcome data within each cocaine group did not show a significant relationship with amount of cocaine ingested with each use or with frequency of use. However, since the women in this study were enrolled in a chemical dependence program, the amount and frequency of use were relatively high, with a narrow range. Larger numbers of subjects, including those with mini-

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mal cocaine use, will be necessary to study these relationships more fully.

A recent study¹¹ completed at the Perinatal Center for Chemical Dependence demonstrated genitourinary tract malformations in infants exposed to cocaine in pregnancy. In this study, nine infants had such malformations. An increased incidence of neural tube defects has been reported by Bingol et al.¹² No infants in either cocaine-exposed group in this study exhibited neural tube defects, although one infant in our program whose mother used cocaine in the first and third trimesters, and thus was not included in the present study, had a myelomeningocele at birth. Two cases of ileal atresia occurred among the cocaine-exposed infants in this study. The ileal atresia that occurred in two infants could be secondary to intrauterine bowel infarction.¹³

The pharmacologic action of cocaine is consistent with the abnormalities found among the cocaine-exposed infants. Cocaine acts at the nerve terminals to prevent dopamine and norepinephrine reuptake, producing increased circulating levels of these catecholamines.¹⁴ Subsequent vasoconstriction and tachycardia occur. Placental vasoconstriction is marked,¹⁵ decreasing blood flow to the fetus. The fetal hypoxia induced by this vasoconstriction could not only explain the intrauterine growth retardation,¹⁶ but the intermittent vascular disruptions could result in the increased rate of malformations¹⁷ as well.

Cocaine use in young adults has been shown to lower the seizure threshold, placing young adult cocaine users at increased risk for seizures.¹⁸ Six infants among the cocaine-exposed infants had seizures in the neonatal period. All six of

these infants had cocaine or metabolites present in urine at the time of delivery, although the seizures did not necessarily occur when cocaine was present.

Two infants whose mothers used cocaine in the two days prior to delivery suffered cerebral infarctions that were thought to have occurred in the perinatal period.¹⁹ The cardiovascular effects of cocaine have been well documented and myocardial and cerebral infarctions have been found in increasing numbers of young adults who use cocaine.¹⁸

The results of this study confirm earlier findings that exposure to cocaine during the prenatal period leads to significant impairment in neonatal neurobehavioral capabilities.²⁰ This study further indicates that the neurobehavioral response deficiencies occur in the cocaine-exposed infant whether the mother stops cocaine use in the first trimester or uses cocaine throughout the pregnancy. Although NBAS scores tended to be lower in group 1 compared with group 2 infants, there was no statistically significant difference between the two groups except for the motor cluster. Larger groups of infants will need to be evaluated before relative performance between the two groups can be fully delineated.

It appears, however, that cocaine exposure in only the first trimester does place the newborn at risk for neurobehavioral deficiencies compared with drug-free infants. In normal human fetal development, norepinephrine, serotonin, and dopamine are among the first neurotransmitters present at early stages of brain development, having been shown to be present in the 3- to 4-month fetus.²¹ The protective function of the blood-brain barrier is not well developed in the young fetus²², thus, co-

caine may act on fetal brain neurotransmitters in the first trimester and induce subtle behavioral changes evident in the newborn infant. Animal studies with monosodium glutamate and diazepam have shown that neonatal rats exposed to monosodium glutamate early (day 7 to day 20) in gestation demonstrated behavioral deficits in complex discrimination similar to newborn rats exposed to diazepam in late gestation.²³

Cocaine's action in blocking norepinephrine and dopamine reuptake could interfere with some aspects of neuronal development. Grimm²⁴ has hypothesized that such interference could initiate compensatory neurochemical mechanisms that would partially correct for the abnormalities but still leave the infant impaired in his or her ability to cope with complex environmental demands at some point in later life. The neurodevelopmental deficiencies exhibited by the infants exposed to cocaine in only the first trimester lend credence to this hypothesis.

Conclusions developed from this study have implications for both intervention and prevention. For women who become pregnant and are users of cocaine, intervention in early pregnancy with cessation of cocaine use will result in improved obstetric and neonatal outcome. However, prevention programs aimed at educating adolescents and women of childbearing age as to the dangers of cocaine use in pregnancy must be initiated, since even early fetal cocaine exposure places the child at risk for neurobehavioral outcome and may have implications for long-term development.

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United States General Accounting Office

GAO

Report to the Chairman, Committee on
Finance, U.S. Senate

June 1990

DRUG-EXPOSED INFANTS

A Generation at Risk





United States
General Accounting Office
Washington, D.C. 20548

Human Resources Division

B-238209

June 28, 1990

The Honorable Lloyd Bentsen
Chairman, Committee on
Finance
United States Senate

Dear Mr. Chairman:

This report responds to your request, in which you expressed concern over the growing number of infants born to mothers using drugs and the impact this is having on the nation's health and welfare systems. Specifically, you asked that we assess the (1) extent of the problem; (2) health effects and medical costs of infants born exposed to drugs compared with the costs of those who were not; (3) impact of these births on the social welfare system; and (4) availability of drug treatment and prenatal care to drug-addicted pregnant women.

Background

Unlike the drug epidemics of the 1960s and 1970s, which primarily involved men addicted to heroin, the current drug epidemic has affected many women of childbearing age. The National Institute on Drug Abuse (NIDA) estimated that in 1988, 5 million women of childbearing age used illicit drugs.¹ Experts attribute the increase in female drug users to the existence of crack or smokable cocaine, which is readily accessible, a relatively low cost drug, and easier to use than drugs that must be injected. Cocaine, other drugs and alcohol are often used in combination.

Use of cocaine and other drugs during pregnancy may affect both the mother and the developing fetus. Cocaine, for example, may cause constriction of blood vessels in the placenta and umbilical cord, which can result in a lack of oxygen and nutrients to the fetus, leading to poor fetal growth and development.

Although definitive information does not exist about the long-term effects of drug use during pregnancy, researchers have reported that some infants who were prenatally exposed to stimulant drugs like cocaine have suffered from a stroke or hemorrhage in the areas of the brain responsible for intellectual capacities.

¹Frequently used illicit drugs include crack cocaine, heroin, PCP, marijuana, amphetamines, methamphetamines, and barbiturates.

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In addition to the effects of prenatal drug exposure, drug-abusing pregnant women often imperil their health and that of their infants in other ways. These women do not receive the benefits of proper health care. The majority of women of childbearing age who abuse drugs suffer from many social, psychological, and economic problems.

The Office of National Drug Control Policy is responsible for developing an annual national anti-drug strategy.² The 1990 National Drug Control Strategy calls for spending \$10.6 billion in fiscal year 1991, with 71 percent of the funds going to drug-supply-reduction activities and 29 percent to reduce the demand for drugs. Under this strategy, \$1.5 billion would be spent on drug treatment with over one-half of the federal funds provided through the Department of Health and Human Services (HHS) block grants to the states administered by the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA). The states are required to set aside at least 10 percent of these funds to provide drug abuse prevention and treatment for women.

In addition, the Office for Substance Abuse Prevention within ADAMHA has a program that provides demonstration grants to public and private providers for model projects for substance-abusing pregnant and postpartum women and their infants.

Moreover, two federal-state health programs are potentially available to pregnant women who abuse drugs. First, the Maternal and Child Health Services Block Grant program (MCH), authorized by title V of the Social Security Act, provides grants to the states for health services to low-income persons. One of the purposes of MCH is to reduce infant mortality and the incidence of preventable diseases and handicapping conditions among children, frequent consequences of drug abuse by pregnant women. Second, the Medicaid program, authorized by title XIX of the Social Security Act, provides federal financial assistance to the states for a broad range of health services for low-income persons. One group of people that states are required to cover under Medicaid is low-income pregnant women. Those pregnant drug abusers who have low incomes could qualify for services under either of these programs.

Objectives, Scope, and Methodology

We interviewed leading neonatologists, drug treatment officials, researchers, hospital officials, social welfare authorities, and drug-addicted pregnant women to determine: (1) the number of drug-exposed

²The Office of National Drug Control Policy was established by the Anti-Drug Abuse Act of 1988.

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infants, (2) their impact on the medical and social services systems, (3) their health costs, and (4) the availability of drug treatment and prenatal care. We also reviewed the current literature.

We obtained data on drug-exposed births from 1986 through 1988 from HHS to develop a nationwide estimate of the number of drug-exposed infants. The National Hospital Discharge Survey collects information on the diagnoses associated with hospitalization of adults and newborns in all nonfederal short-stay hospitals. Newborn discharge data from the survey for 1986 and 1988 were used to calculate nationwide estimates.

We also selected two hospitals in each of five cities—Boston, Chicago, Los Angeles, New York, and San Antonio—in which we reviewed medical records to determine the number of drug-exposed infants born and to assess differences in hospital charges between drug-exposed and nonexposed infants. These 10 hospitals, which accounted for 44,655 births in 1989, primarily served a high proportion of persons receiving Medicaid and other forms of public assistance. Births at these hospitals ranged from 5 percent of all infants in New York City to 42 percent of all births in San Antonio. We considered an infant to be drug-exposed if any of the following conditions were documented in the medical record of the infant or mother: (1) mother self-reported drug use during pregnancy, (2) urine toxicology results for mother or infant were positive for drug use, (3) infant diagnosed as having drug withdrawal symptoms, or (4) mother was diagnosed as drug dependent.³ We also interviewed officials at 10 other hospitals in these cities that serve predominantly non-Medicaid patients, but we did not review patient medical records. Our methodology is discussed more fully in appendix VI.

Our work was performed from January through April 1990 in accordance with generally accepted government auditing standards. The results are summarized below and are discussed more fully in appendixes I through IV.

Many Drug-Exposed Infants Who Might Need Help Are Not Identified

Identifying infants who have been prenatally exposed to drugs is the key to providing them with effective medical and social interventions at birth and as they grow up. Such identification is also necessary to understand the nature and magnitude of the problem in order to target drug treatment and prenatal care services to drug-addicted pregnant women and other services to infants.

³Alcohol use during pregnancy was not included in our definition of maternal drug use.

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There is no consensus on the number of infants prenatally exposed to drugs each year. The administration's 1989 National Drug Control Strategy reported that an estimated 100,000 infants were exposed to cocaine each year.⁴ The president of the National Association for Perinatal Addiction Research and Education estimates as many as 375,000 infants may be drug exposed each year. Neither estimate, however, is based on a national representative sample of births.

Our analysis of the National Hospital Discharge Survey identified 9,202 infants nationwide with indications of maternal drug use during pregnancy in 1986.⁵ By 1988, the latest year that data were available, the number had grown to 13,765 infants.⁶ However, this represents a substantial undercount of the total problem because physicians and hospitals do not screen and test all women and their infants for drugs.

Research has found that when screening and testing is uniformly applied, a much higher number of drug-exposed infants are identified. For example, one recent study documented that hospitals that assess every pregnant woman or newborn infant through rigorous detection procedures, such as a review of the medical history and urine toxicology for drug exposure, had an incidence rate that was three to five times greater than hospitals that relied on less rigorous methods of detection.⁷ The average incidence of drug-exposed infants born at hospitals with rigorous detection procedures was close to 16 percent of those hospitals' births, as compared with 3 percent at hospitals with no substance abuse assessment.

A study conducted at a large Detroit hospital accounting for over 7,000 births used meconium testing,⁸ a more sensitive test for detecting drug use. The incidence of drug-exposed infants at this hospital was 42 percent or nearly 3,000 births in 1989. In contrast, when self-reported drug

⁴The strategy does not mention the number of infants exposed to other drugs.

⁵The estimate ranged from 7,178 to 11,226 at a 95-percent confidence interval.

⁶The estimate ranged from 8,269 to 19,271 at a 95-percent confidence interval.

⁷This survey identified drug-exposed infants based on discharge codes indicating that the infant was affected by maternal drug use or showed drug withdrawal symptoms. Discharge codes refer to the International Classification of Diseases, Ninth Revision, Clinical Modifications (ICD-9-CM, 3rd edition codes 760.70, 760.72, 760.73, and 779.5).

⁸Ira J. Chasnoff, "Drug Use and Women: Establishing a Standard of Care," *Prenatal Use of Licit and Illicit Drugs*, ed. Donald E. Hutchings, New York: New York Academy of Sciences, 1989.

⁹Meconium is the first 2- to 3-day stool of a newborn infant.

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use by the mother was the basis for identifying drug-exposed infants, only 8 percent or nearly 600 infants were identified.¹⁰

Likewise, our work indicates that the National Hospital Discharge Survey undercounts the incidence of drug-exposed births. In our examination of medical records at 10 hospitals, we identified approximately 4,000 drug-exposed infants born in 1989. Our estimates ranged from 13 drug-exposed births per thousand births at one hospital to 181 per thousand births at another.

The wide range in the numbers of drug-exposed infants we found may be associated with differences in the hospitals' efforts to identify drug-exposed infants. One hospital, for example, did not have a protocol for assessing drug use during pregnancy. This hospital had the lowest incidence of drug-exposed infants. The other 9 hospitals' protocols required testing primarily if the mother reported her drug use or the infant manifested drug withdrawal signs. Hospital officials acknowledge that these screening criteria allow many drug-exposed infants to go undetected in the hospital. This is because many drug-exposed infants display few overt drug withdrawal signs and many women deny using drugs out of fear of being incarcerated or having their children taken from them.

We also found that in hospitals serving primarily non-Medicaid patients, screening for drug exposure was even less prevalent. In our interviews with hospital officials at these hospitals, one-half of the hospitals did not have a protocol for identifying drug use during pregnancy. Some hospital officials told us that the problem of prenatal drug exposure was not considered serious enough to warrant implementing a drug testing protocol.

However, one recent study has found that the problem of drug use during pregnancy is just as likely to occur among privately insured patients as among those relying on public assistance for their health care. This study anonymously tested for drug use among women entering private obstetric care and women entering public health clinics for prenatal care and found that the overall incidence of drug use was

¹⁰ Enrique M. Ostrea, Jr., *A Prospective Study of the Prevalence of Drug Abuse Among Pregnant Women: Its Impact on Perinatal Morbidity and Mortality and on the Infant Mortality Rate in Detroit*, July 13, 1989, preliminary report.

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similar between the two groups (16.3 percent for women seen at public clinics and 13.1 percent for those seen at private offices)'' (See app. I.)

Drug-Exposed Infants Have More Health Problems and Are More Costly

Drug-exposed infants are more likely than infants not exposed to drugs to suffer from a greater range of medical problems and in some cases require costly medical care. We compared the medical problems and costs of infants prenatally exposed to drugs, with those who were not, at four hospitals. At these four, we determined that at least 10 percent of the infants were prenatally exposed to drugs.¹² The mothers of the drug-exposed infants were more likely to have had little or no prenatal care, and the infants had significantly lower birth weights, were often premature, and had longer and more complicated hospital stays than other infants.

Given these medical problems, hospital charges for drug-exposed infants were up to four times greater than those for infants with no indication of drug exposure. For example, at one hospital the median charge for drug-exposed infants was \$5,500, while the median charge incurred by nonexposed infants was \$1,400. Charges for drug-exposed infants at these hospitals ranged from \$455 to \$65,325. Because more than 50 percent of all patients received public medical assistance at 7 of the 10 hospitals in our study, much of these charges were covered by federal assistance programs.

Although the long-term physical effects of prenatal drug exposure are not well known, indications are that some of these infants will continue to need expensive medical care as they grow up. Because of the uncertainty of the long-term consequences of prenatal drug exposure, the future costs of caring for these children are unknown. (See app. II.)

¹²Ira J. Chasnoff, Harvey J. Landress, and Mark E. Barrett, "The Prevalence of Illicit Drug or Alcohol Use During Pregnancy and Discrepancies in Mandatory Reporting in Pinellas County, Florida," *The New England Journal of Medicine*, Vol. 322, Apr. 28, 1990, pp. 1272-06.

¹³The other six hospitals did not have enough cases to enable us to analyze differences in hospital charges and other characteristics of drug-exposed infants and those not exposed to drugs.

Impact on Social Welfare and Educational Systems Could Be Profound

Drug-exposed infants often present immediate and long-term demands on the social welfare system. Officials at several of the hospitals in our review stated that they are experiencing a growing number of "boarder babies"—infants who stay in a hospital for nonmedical reasons often related to drug-abusing families. Boarder babies are reported to the social welfare system for foster care placement.

We also found that a substantial proportion of drug-exposed infants did not go home from the hospital with their parents. An estimated 1,200 of the 4,000 drug-exposed infants born in 1989 at the 10 hospitals in our review were placed in foster care. The cost of 1 year of foster care for these 1,200 infants is about \$7.2 million.

Not all drug-exposed infants enter the social services system at birth; some are discharged from the hospital to drug-abusing parents. These infants may later enter the social services system because of the chaotic and often dangerous environment associated with parental drug abuse—an increasing source of child abuse and neglect. For example, cocaine use was found to be significantly associated with child neglect in a recent study of child-abuse investigations in Boston. Hospital officials told us that they are seeing more young children from drug-abusing families admitted to hospitals because they suffered physical neglect or maltreatment at the hands of someone on drugs.

City and state officials we contacted told us that prenatal drug exposure and drug-abusing families are placing increasing demands on their social welfare systems. Although they perceived the problem to be growing, most could not provide statistics on the numbers of drug-related foster care placements. Officials in New York, however, estimate that 57 percent of foster care children come from families that allegedly are abusing drugs.

Because the estimated demand for foster care nationwide has increased 29 percent from 1986 to 1989, there is concern as to whether the system can adequately respond to the needs of drug-abusing families. Specifically, problems have been identified regarding the availability of foster parents who are willing to accept children who have been exposed to drugs, the quality of foster care homes, and the lack of supportive health and social services to families who provide foster care to these children.

Although definitive information is not yet available, many drug-exposed infants may have long-term learning and developmental deficiencies.

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that could result in underachievement and excessive school dropout rates leading to adult illiteracy and unemployment. As increasing numbers of drug-exposed infants reach school age, the long-term detrimental effects of drug exposure will become more evident. The cost of minimizing the long-term effects of drug exposure will vary with the severity of disabilities. For example, at a pilot preschool program for mildly impaired prenatally drug-exposed children in Los Angeles, the per capita cost is estimated to be \$17,000 per year. The Florida Department of Health and Rehabilitative Services estimates that for those drug-exposed children who show significant physiologic or neurologic impairment total service costs to age 18 could be as high as \$750,000. (See app. III.)

Lack of Drug Treatment and Prenatal Care Is Contributing to the Number of Drug-Exposed Infants

To prevent the problem of drug-exposed infants, women of childbearing age must abstain from using drugs. To reduce the impact of drug-exposure, pregnant women who use drugs should be encouraged to stop and be given needed treatment.

Drug Treatment Services Do Not Meet the Need

Recent studies show that if women are able to stop drug use during pregnancy, there will be significant positive effects in the health of the infant. The risks of low birth weight and prematurity, which often require expensive neonatal intensive care, are minimized by drug treatment before the third trimester.

Many programs that provide services to women, including pregnant women, have long waiting lists. Treatment experts believe that unless women who have decided to seek treatment are admitted to a treatment facility the same day, they may not return. However, women are rarely admitted the day they seek treatment. One treatment center in Boston received 450 calls for detoxification services during a 1-month period. The callers were told that it usually took 1 to 2 weeks to be admitted. They were also instructed to call back every day to determine if a slot had become available. Of the 450 callers that month, about one-half never called back and about 150 were eventually admitted to treatment.

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Nationwide, drug treatment services are insufficient. A 1990 survey conducted by the National Association of State Alcohol and Drug Abuse Directors, Inc. (NASADAD), estimates that 280,000 pregnant women nationwide were in need of drug treatment, yet less than 11 percent of them received care.¹³ Hospital and social welfare officials in each of the five cities in our review also told us that drug treatment services were insufficient or inadequate to meet the demand for services of drug-addicted pregnant women.

In addition to insufficient treatment, some programs deny services to pregnant women. A survey of 78 drug treatment programs in New York City found that 54 percent of them denied treatment to pregnant women. One of the primary reasons treatment centers are reluctant to treat pregnant women relates to issues of legal liability. Drug treatment providers fear that certain treatments using medications and the lack of prenatal care or obstetrical services at the clinics may have adverse consequences on the fetus and thereby expose the providers to legal problems.

Many other barriers to treatment exist. For example, pregnant addicts we interviewed told us that because they had other children, the lack of child care services made it difficult for them to seek treatment. Most treatment programs do not provide child care services.

Another barrier to treatment for women is the fear of criminal prosecution. Drug treatment and prenatal care providers told us that the increasing fear of incarceration and losing children to foster care is discouraging pregnant women from seeking care. Women are reluctant to seek treatment if there is a possibility of punishment. They also fear that if their children are placed in foster care, they will never get the children back.

Prenatal Care Is Needed

Prenatal care can help prevent or at least ameliorate many of the problems and costs associated with the births of drug-exposed infants. Through the three basic components of prenatal care: (1) early and continued risk assessment, (2) health promotion, and (3) medical and psychosocial interventions and follow-up, the chances of an unhealthy infant are greatly reduced. Hospital officials told us that in addition to not seeking prenatal care, some drug-using women are now delivering

¹³The report did not reveal the extent to which these women sought treatment.

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their infants at home in order to prevent being reported to child welfare authorities.

Many health professionals believe comprehensive residential drug treatment that includes prenatal care services is the best approach to helping many women stop using drugs during pregnancy and providing the developing infant with the best chance of being born healthy. However, such programs are scarce.

Massachusetts officials told us that the lack of residential treatment slots was a major problem. Only 15 residential treatment slots are available to pregnant addicts statewide. California officials made similar comments. These officials also reported that when they are unable to place drug-addicted pregnant women in residential treatment, they try to place these women in battered women shelters or even in nursing homes. (See app. IV.)

Conclusions

Despite growing indications of a serious national problem, hospital procedures do not adequately identify drug use during pregnancy. Consequently, there are no reliable data on the number of drug-exposed infants born each year. However, based on our review at hospitals in five cities, we believe the number of drug-exposed infants born nationwide each year could be very high.

A drug-exposed infant has short- and long-term health, social, and cost implications for society. These infants are more likely to be born premature, have a lower birth weight, and have longer hospital stays requiring more expensive care. Some of them will need a lifetime of medical care; others will have considerable developmental problems, which may impair their schooling and employment.

Preventing drug use among women of childbearing age would reduce the number of infants born drug exposed. Providing drug treatment and prenatal care could significantly improve the health of infants born to women who use drugs and could reduce the risk of long-term problems. Yet in the five cities in our review, drug treatment was largely unavailable and many women giving birth to drug-exposed infants are not receiving adequate prenatal care.

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Matters for Consideration by the Congress

Because the increasing number of drug-exposed infants has become a serious health and social problem, we believe an urgent national response is necessary. Specifically, outreach services should be provided so that pregnant women in need of prenatal care and drug treatment can be identified. For these women, comprehensive drug treatment, and prenatal care must be made available and accessible.

With additional federal funding, the large gap between the number of women who could benefit from drug treatment and the number of residential and outpatient slots currently available could be reduced. If the Congress should decide to expand the current federal resource commitment to treatment for drug-addicted pregnant women, there are several options that could be followed. These include:

- Increasing the alcohol and drug abuse and mental health services (ADMS) block grant to the states in order to provide more federal support for drug treatment.
- Increasing the ADMS Women's Set-Aside from 10 percent to a higher percentage to assure that expanded treatment services under the block grant are targeted specifically to substance-abusing pregnant women.
- Creating a new categorical grant to provide comprehensive prenatal care and drug treatment services to substance-abusing pregnant women.
- Increasing funding of MCH specifically for substance-abuse treatment for pregnant women.
- Requiring states to include substance-abuse treatment as part of the package of services available to pregnant women under Medicaid.

Although these options would require more funds in the short term, we believe that this commitment could save money in the long term as well as improve the lives of a future generation of children.

Copies of this report will be sent to the appropriate congressional committees and subcommittees; the Secretary of Health and Human Services; and the Director, Office of Management and Budget, and we will make copies available to other interested parties upon request.

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If you have any questions about this report, please call me on (202) 275-5451. Other major contributors to the report are listed in appendix VII.

Sincerely yours,

Janet L. Shikles

Janet L. Shikles
Director for Health Financing
and Policy Issues

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Abbreviations

ADAMHA	Alcohol, Drug Abuse and Mental Health Administration
ADMS	alcohol and drug abuse and mental health services
GAO	General Accounting Office
HHS	Department of Health and Human Services
MCH	Maternal and Child Health Services Block Grant program
NASADAD	National Association of State Alcohol and Drug Abuse Directors, Inc.
NIDA	National Institute on Drug Abuse

Appendix I

The Number of Drug-Exposed Infants May Be Seriously Underestimated

The identification of infants who have been prenatally exposed to drugs is key to understanding the magnitude of the problem and providing effective medical and social interventions for these infants. However, there is no consensus on the number of drug-exposed infants born in the United States each year. A comprehensive nationwide study to specifically determine the incidence of drug-exposed births has not been done. Additionally, hospitals' procedures allow many drug-exposed infants to go undetected.

The Number of Drug-Exposed Infants Could Be High

Based on data from the National Center for Health Statistics' National Hospital Discharge Survey, which includes a representative sample of all births, an estimated 9,202 drug-exposed infants were born in 1986 in the United States.¹ By 1988, the latest year that data were available, the number had grown to 13,765 infants.² However, this is likely to be a substantial undercount of the problem. At present, physicians and hospitals do not routinely screen and test all women and their infants for drugs. Recent studies have found that when screening and testing are uniformly applied, a much higher number of drug-exposed infants is identified.

One study found that hospitals that assess every pregnant woman or newborn infant through a medical history and urine toxicology had an incidence rate that was three to five times greater than hospitals that relied on less rigorous methods of detection.³ The average incidence of drug-exposed infants born at hospitals with rigorous detection procedures was close to 16 percent of all births as compared with 3 percent of births at hospitals with no substance-abuse assessment.

Likewise, our work indicates that the National Hospital Discharge Survey underreports the incidence of drug-exposed births. Based on our review of the medical records for both the women and their infants at 10 hospitals, an estimated 3,904 drug-exposed infants were born at these hospitals in 1989. (See table I.1.)⁴ Estimates of the number of these infants ranged from a low of 13 per 1,000 births at one hospital to a

¹The estimate ranged from 7,178 to 11,226 at a 95-percent confidence interval.

²The estimate ranged from 8,259 to 19,271 at a 95-percent confidence interval.

³Ira J. Chasnoff, "Drug Use and Women: Establishing a Standard of Care," Prenatal Use of Licit and Illicit Drugs, ed. Donald E. Hutchings. New York: New York Academy of Sciences, 1989.

⁴Appendix V provides more detailed information on the degree of drug-exposed infants identified at the 10 hospitals.

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high of 181 births per 1,000 at another. Maternal cocaine use was estimated to range from less than 1 percent to 12 percent among the hospitals.

Table I.1: Drug-Exposed Infants Born at
10 Hospitals, 1989

Location/hospital	Estimated no. of drug-exposed infants per 1,000 births	Total no. of births	Estimated no. of drug-exposed infants
Boston			
1	72	3,294	237
2	89	1,438*	128
Chicago			
1	181	3,604	652
2	47	4,250*	200
Los Angeles			
1	148	8,020	1,187
2	54	8,175	441
New York			
1	127	3,147	400
2	118	3,726	440
San Antonio			
1	31	5,688	176
2	13	3,312	43
Total		44,655	3,904

*The actual number of births is not available; therefore, the total number of births for the year is estimated.

Hospitals Lack Systematic Procedures to Identify Drug- Exposed Infants

We also found that the wide range in the number of drug-exposed infants we identified at the different hospitals in our review may be associated with the effort taken by hospitals to identify drug-exposed infants. For example, one of the 10 hospitals did not have a protocol for assessing drug use during pregnancy. This hospital had the lowest incidence of drug-exposed infants. Protocols at the remaining 9 hospitals did not require systematic screening and testing of every mother and infant for potential substance use or exposure. Instead, the protocols primarily required testing if the mother reported her drug use or if drug withdrawal signs became manifest in the infant.

Hospital officials acknowledge that these screening criteria allow many drug-exposed infants to remain unidentified in the hospital. For example, women often deny using drugs because they do not want to be

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reported to the authorities for fear of being incarcerated or having their children taken from them.

In addition, many cocaine-exposed infants display few overt drug withdrawal signs. Some will show no signs of drug withdrawal, while for others withdrawal signs may be mild or will not appear until several days after hospital discharge. The visual signs of drug exposure vary from severe symptoms to milder symptoms of irritability and restlessness, poor feeding, and crying. Since these milder symptoms are nonspecific, maternal drug use may not be suspected unless urine testing is conducted.

Even when hospitals do conduct urinalysis, drug use may go undetected if drug concentrations within the body are too low. Urinalysis can only detect drugs used within the past 24 to 72 hours. According to recent studies, hair analysis and meconium analysis, two testing methods for detecting drug use, have advantages over urinalysis because they are more accurate or can detect drug use over a longer period of time after drug use has occurred.¹⁷ One of the studies, conducted at a large urban hospital in Detroit accounting for over 7,000 births annually, used meconium analysis to detect drug use during pregnancy.¹⁸ Preliminary results revealed that 42 percent of infants were found to be drug-exposed in 1989.¹⁹ However, the hospitals in our review that conducted testing for drug exposure relied exclusively on urinalysis.

When an infant does not show signs of drug withdrawal or the mother does not self-report drug use, a physician may consider other factors as presumptive of drug exposure during pregnancy and recommend that drug testing be conducted. Such factors or characteristics have been found to occur more often among drug-exposed infants than infants not exposed to drugs and include (1) inadequate prenatal care (defined as four or fewer prenatal care visits for a pregnancy of 34 or more

¹⁷Meconium is the first 2- to 3-days' stool of a newborn infant.

¹⁸Karen Graham and others, "Determination of Gestational Cocaine Exposure by Hair Analysis," *Journal of the American Medical Association*, Vol. 262 (Dec. 15, 1989), pp. 3328-30.

¹⁹Enrique M. Ostrea, Jr., "A Prospective Study of the Prevalence of Drug Abuse Among Pregnant Women: Its Impact on Perinatal Morbidity and Mortality and on the Infant Mortality Rate in Detroit (July 13, 1989, preliminary report)." *GAO/HRD-90-188 Drug-Exposed Infants*.

²⁰Ostrea, "A Prospective Study of the Prevalence of Drug Abuse Among Pregnant Women."

²¹The 42 percent of births identified as drug exposed using meconium testing compares with 8 percent identified based on the mother's self-reporting drug use.

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weeks),¹⁰ (2) low birth weight (defined as less than 5.5 pounds), and (3) low gestational age or prematurity (defined as less than 38 weeks)¹¹ (See table I.2.)

We were able to obtain data from 9 of the 10 hospitals in our review on the degree to which infants had these characteristics. We identified an estimated 4,381 infants with two or more characteristics of possible drug exposure. The last column of table I.2 shows the number of infants with two or more drug-exposure indicators who were not tested for drug exposure at the 9 hospitals where we obtained data. We estimate that at these hospitals during 1989, there were 2,791 potentially drug-exposed infants who were not tested, based on our review of hospital medical records.

¹⁰Institute of Medicine, Infant Death: An Analysis by Maternal Risk and Health Care: Contrasts in Health Status, ed. D.M. Kossner, Vol. I (Washington, D.C.: National Academy of Sciences, 1973), pp. 58-59.

¹¹Gestational age refers to the period of time, normally 40 weeks, from conception to an infant's birth.

¹²Maternal demographic characteristics and socioeconomic status effect birth outcomes. Infant mortality and low birth weight rates are higher for young, uneducated, unmarried, non-white women with limited financial resources.

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The Number of Drug-Exposed Infants May Be
Seriously Underestimated

Table I.2: Estimated Number of Infants
With Indicators of Possible Drug
Exposure Not Tested in Nine Hospitals,
1989

Location/hospital	No. of infants with			
	Less than 6 prenatal visits ^a	Birth weight less than 5.5 lbs	Gestational age less than 36 weeks	Two or more risk factors
Boston				
1	69	563	682	478
2				
Chicago				
1	342	299	620	267
2	72	136	574	123
Los Angeles				
1	513	176	401	176
2	1,120	335	801	441
New York				
1	126	283	469	242
2	414	197	514	209
San Antonio				
1	642	574	910	580
2	116	335	643	275
Total	3,814	2,898	5,814	2,791

^aWe included women with pregnancies of 33 or fewer weeks; however, they comprised a small portion of the sampled births ranging from 3 to 11 percent of the samples at the 9 hospitals.

^bData were not available for this hospital to make the analysis.

We also found that some hospitals where we identified low percentages of drug-exposed infants tended to have high percentages of infants with two or more indicators of possible drug exposure who were not tested (See table I.3.) For example, one hospital tested no infants with these indicators of possible drug exposure; this hospital also had the fewest (1.3 percent) estimated drug-exposed infants.

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Table I.3: Percentage of Infants With Two or More Indicators of Possible Drug Exposure Who Were or Were Not Tested and the Percentage of Drug-Exposed Infants at Nine Hospitals

Figures are percentages

City/hospital	Infants tested	Infants not tested	Drug-exposed infants
Boston			
1	11	89	7.2
Chicago			
1	31	69	18.1
2	61	39	4.7
Los Angeles			
1	78	22	14.8
2	30	70	5.4
New York			
1	40	60	12.7
2	46	54	11.8
San Antonio			
1	9	91	3.1
2	0	100	1.3

In our interviews with hospital officials at 10 additional hospitals that predominantly serve privately insured patients in these five cities, we found that one-half of the hospitals did not have a protocol for identifying drug use during pregnancy. Some hospital officials estimated drug-exposed infants represented less than 1 to 3 percent of births at their hospitals. Therefore, they did not consider prenatal drug exposure to be serious enough to warrant implementing a drug testing protocol.

One recent study found, however, that illicit drug use is common among women regardless of race and socioeconomic status. This study anonymously tested for drug use among women entering private obstetric care and women entering public health clinics for prenatal care and found that the overall incidence of drug use was similar among both groups of women (14.8 percent overall, 16.3 percent for women seen at public clinics, and 13.1 percent for those seen at private offices).¹¹

¹¹Ira J. Chasnoff, Harvey J. Landress, and Mark E. Barrett. "The Prevalence of Illicit Drug Use or Alcohol Use During Pregnancy and Discrepancies in Mandatory Reporting in Pinellas County, Florida." *The New England Journal of Medicine*. Vol. 322 (Apr. 26, 1990), pp. 1202-06.

Drug-Exposed Infants Are Likely to Have Costly Health Problems

Infants prenatally exposed to drugs are more likely to need more medical services than infants whose mothers did not use drugs during pregnancy. It is more common for drug-exposed infants to be born prematurely and have low birth weights. They are more likely to have medical complications and longer hospitalizations resulting in higher hospital charges. Median hospital charges for drug-exposed infants were up to four times greater than for nonexposed infants.

Drug-Exposed Infants Are More Vulnerable at Birth

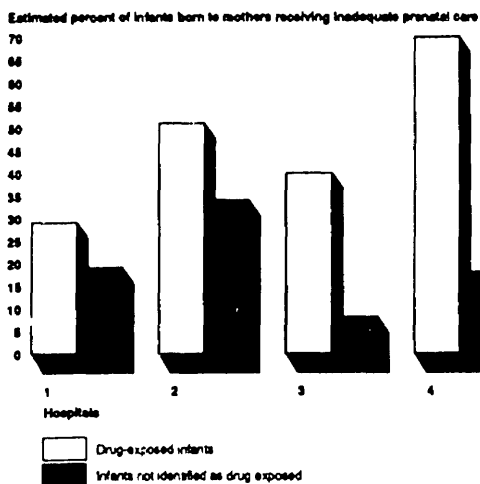
Because drug-exposed infants are born with significantly more medical problems, they experience more expensive hospitalizations. The most frequent effects of drug exposure on infants are low birth weight and prematurity. Comparing drug-exposed infants with those with no indication of drug exposure at 4 hospitals, we found differences in prenatal care received, birth weight, gestational age, intensity of care, and hospital length of stay.¹

The proportion of infants born to drug-using women receiving inadequate prenatal care ranged from 29 to 70 percent of births compared with 8 to 34 percent of births to women who did not use drugs and received inadequate prenatal care. (See fig. II.1.)

¹Of the 10 hospitals we reviewed, 4 had a 10-percent or higher incidence of infants born drug exposed. At these hospitals we had a sufficient number of cases with which to conduct more detailed analysis of the differences between hospital charges and other characteristics of drug-exposed infants and those not exposed to drugs.

Appendix II
 Drug-Exposed Infants Are Likely to Have
 Costly Health Problems

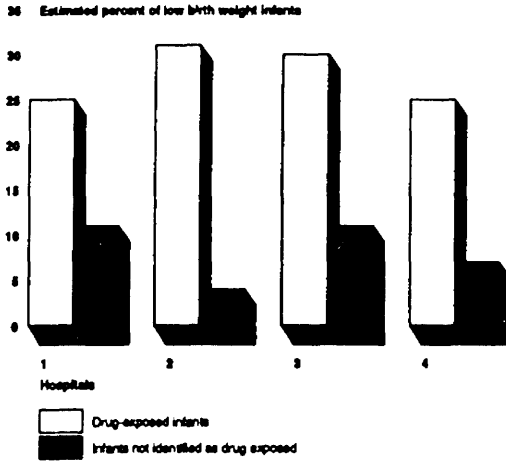
Figure II.1: Mothers of Drug-Exposed Infants Are More Likely to Obtain Inadequate Prenatal Care (Comparison at 4 Hospitals)



Low birth weight, defined as weighing less than 5.5 pounds, is a major determinant of infant mortality and places the survivors at increased risk of serious illness and lifelong handicaps. We found significantly higher percentages of drug-exposed infants weighing less than 5.5 pounds than those born to women not identified as using drugs during their pregnancy. In fact, the proportion of drug-exposed infants of low birth weight was at least twice as great as infants not identified as drug exposed. The rate of low-birth-weight infants ranged from 25 to 31 percent among drug-using women and 4 to 11 percent for women not identified as using drugs. (See fig. II.2.)

Appendix II
 Drug-Exposed Infants Are Likely to Have
 Costly Health Problems

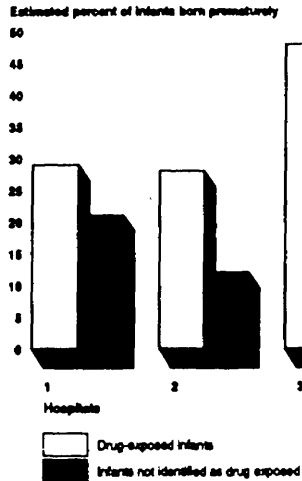
Figure II.2: Drug-Exposed Infants More Often Have a Low Birth Weight as Compared With Nonexposed Infants (Comparison at 4 Hospitals)



Infants are typically born 40 weeks after conception. Those born before 38 weeks are considered premature. Premature infants are frequently handicapped by physical limitations, which vary depending on the degree of prematurity. These handicaps may lead to increased mortality and morbidity. Generally, we found that drug-exposed infants were about twice as likely to be premature as infants not exposed to drugs. (See fig. II.3.)

Appendix II
 Drug-Exposed Infants Are Likely to Have
 Costly Health Problems

Figure II.3: Drug-Exposed Infants Are
 More Likely to Be Born Prematurely Than
 Nonexposed Infants
 (Comparison at 4 Hospitals)



Finally, at two of the four hospitals, a significantly greater percentage of drug-exposed infants needed intensive care services during their hospital stay. Drug-exposed infants were also more likely than those not identified as drug exposed to remain in the hospital for 5 or more days.

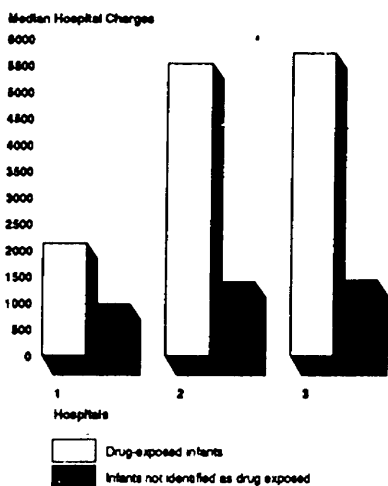
Hospital Charges Are Higher for Drug-Exposed Infants

The health problems of drug-exposed infants and their longer and more complicated hospitalizations are often reflected in higher hospital charges. We were able to compare hospital charges between drug-exposed infants and infants with no indication of drug exposure in their medical records at three hospitals.² As shown in figure II.4, hospital charges for drug-exposed infants were up to four times greater than those for infants with no indication of drug exposure. For example, at one hospital the median charge for drug-exposed infants was \$5,500, while the median charge incurred by nonexposed infants was \$1,400.

²At 1 of the 4 hospitals, however, separate hospital charges for mothers and infants were not available.

Appendix II
 Drug-Exposed Infants Are Likely to Have
 Costly Health Problems

Figure II.4: Drug-Exposed Infants Incur Higher Hospital Charges Than Nonexposed Infants (Comparison at 3 Hospitals)



Over \$14 million was spent on the care of drug-exposed infants at 3 hospitals where we were able to obtain data. (See table II.1.) Hospital charges for drug-exposed infants at these hospitals ranged from \$455 to \$65,325.

Because more than 50 percent of patients received public medical assistance in 7 of the hospitals in our study, a large part of these costs was covered by federal assistance programs.

Table II.1: Estimated Hospital Charges for Drug-Exposed Infants at Three Hospitals in 1988

Hospital	Estimated no. of drug-exposed infants	Mean charge	Estimated total hospital charges
1	1,187	\$6,914*	\$8,206,918
2	400	8,939	3,575,600
3	440	6,520	2,868,800
Total	2,027		\$14,651,318

*The charges at this hospital are based on a flat per diem rate and, therefore, may be underestimated.

Appendix II
Drug-Exposed Infants Are Likely to Have
Costly Health Problems

Although the long-term physical effects of prenatal drug exposure are not well known, indications are that some of these infants will continue to need expensive medical care as they grow up. Because of the uncertainty of the long-term consequences of prenatal drug exposure, future medical costs of caring for these children are unknown.

Prenatal Drug Abuse Has Increased Demand for Social Services

State, city, and hospital social services officials unanimously reported to us that parental drug abuse has created additional demands on the social services system. These demands include the need for foster placements for the infant upon discharge from the hospital. They also include investigations of drug-related neglect and abuse that in some cases result in the child's removal from the home. Additionally, studies have shown that some drug-exposed infants will suffer long-term medical and psychological effects from drug exposure. These problems may lead to learning disabilities, causing higher school drop-out rates and eventual unemployment.

Many Drug-Exposed Infants Enter Foster Care

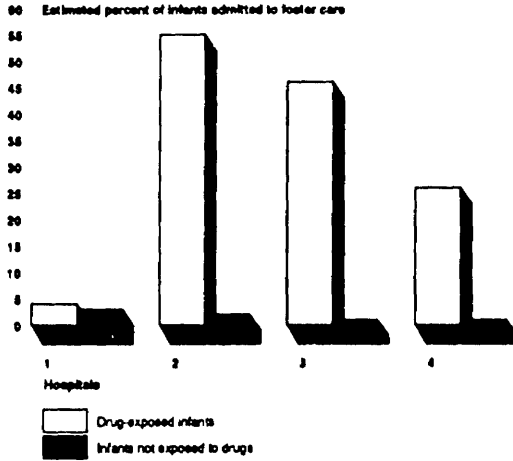
We found that drug-exposed infants were significantly more likely, compared with infants not identified as drug-exposed, to stay in the hospital after their mother was discharged. While these longer stays were primarily attributed to medical reasons, some hospital officials stated they are experiencing a growing number of infants staying in the hospital for nonmedical reasons. Commonly called "boarder babies," the parents or relatives of these infants are often not willing to accept the baby or, in other cases, social service workers have determined that the home environment is not acceptable for the infant because of parental drug abuse. Officials from 5 of the 10 surveyed hospitals stated that their hospitals were experiencing increased demands for services for boarder babies.

In addition to providing services to boarder babies, social service agencies must also provide services to drug-exposed infants referred by hospitals. In three cities that are required by state law to refer drug-exposed infants to child welfare authorities the number of infants referred during recent years has increased dramatically. In New York, referrals increased by 268 percent over the 4-year period 1986 to 1989. For approximately the same period, referrals in Los Angeles increased by 342 percent and in Chicago, by 1,735 percent.¹

For infants who do not leave the hospital with their mother, additional costs are incurred in foster care services. At 3 of the 4 hospitals, 26 to 58 percent of drug-exposed infants were in need of foster care. In contrast, only 1 to 2 percent of infants born to a mother with no indication of drug use required foster placement. At the fourth hospital few infants were placed in foster care. (See fig. III.1.)

¹Texas officials told us that their state does not have a legal requirement that drug-exposed infants be reported, and in Massachusetts officials said that until 1990 cocaine-exposed infants did not have to be reported.

Figure III.1: Drug-Exposed Infants Are More Likely to Be Admitted to Foster Care Than Nonexposed Infants (Comparison at 4 Hospitals)



Although we could compare drug-exposed infants to infants not identified as drug exposed at only 4 hospitals, we were able to estimate the number of drug-exposed infants entering foster care at 9 hospitals. At these 9 hospitals, the cost of providing basic foster care for 1 year to 1,194 infants, would be over \$7.2 million. Basic per capita foster care costs in the cities in our survey ranged from \$3,600 to \$5,000 annually; specialized foster care, which includes homes that provide some medical monitoring or group residential facilities, may cost between \$4,800 and \$36,000.

Number of Child Abuse and Neglect Cases Increasing

Because drug-exposed infants are often born with special problems, they may be more difficult to care for even under the best circumstances. Some of these children are placed directly from the hospital into foster homes where the foster parents are often unaware of the children's problems and are not trained to care for their specialized needs. Others return home to families that have trouble providing adequate care because, in many instances, drug abuse continues to dominate family life.

Appendix III
Prenatal Drug Abuse Has Increased Demand
for Social Services

A drug-exposed, low-birth-weight infant may be irritable, cry excessively, have difficulty bonding with the mother, and have problems feeding. Many drug-using mothers may be compromised in their ability to interact with their infant or to understand and respond to their infants' basic needs. Many of these women also have health and emotional problems. The combination of the infant's and the mother's problems place the infant at high risk for child abuse and neglect.

An indicator of a chaotic and dangerous home environment is the extent to which the social services system is called on to intervene to protect children from the drug-abusing lifestyles of their parents. Child welfare services officials from the five cities we visited stated that they are investigating more drug-related cases of child abuse and neglect each year. Many of these investigations result in foster care placement specifically for children under the age of 2. Child welfare officials in San Antonio told us that 40 percent of all referrals made to child protective services involve drug or alcohol abuse in the family. In Los Angeles, up to 90 percent of referrals involved substance-abusing families.

The Massachusetts Department of Social Services reports a higher incidence of severe injuries to young children and more families where the use of drugs and alcohol is being identified as a precipitating factor in family violence. In 1989, the department conducted a study to determine the association of drug and alcohol use with child abuse and neglect.² The study found that illicit drug or excessive alcohol use was a factor in 64 percent of case investigations. Cocaine use was found to be significantly associated with child neglect. Neglect was defined as a lack of supervision, food, clothing, medical care, and other necessities. In the most severe cases there were reports of no food, milk, or diapers in the house; medical neglect to the extent of nontreatment of serious and acute injuries and illnesses; extremely dirty living quarters; and an absence of care and supervision for children under the age of 5.³

Hospital officials also told us that they are seeing an increasing number of young children from drug-abusing families admitted to the hospital because they suffered neglect or maltreatment at the hands of someone on drugs. Officials described various incidents of children dying due to

²Julia Herskowitz and others, "Substance Abuse and Family Violence, Part I, Identification of Drug and Alcohol Usage During Child Abuse Investigations in Boston" (Massachusetts Department of Social Services, June, 1989)

³Herskowitz, pp 4-8

physical abuse or a drug overdose from inhalation or ingestion of crack cocaine.

Foster Care Placements Increasing

A high proportion of child protective service investigations of abuse or neglect involving drug abuse results in foster care placement. In fact, the estimated nationwide demand for foster care has increased by 29 percent from 1986 to 1989. In 1989, 360,000 children were estimated to be in foster care across the country. Much of this increase is attributed to substance abuse in families.

According to social service officials in the five cities we visited, family drug-abuse problems are a contributing factor in the placement of children in foster care. In New York, a review of a statewide random sample of foster care children found that 57 percent of these children came from families allegedly abusing drugs.

Foster care placements have increased substantially for children under the age of 1 and 2 in the states we visited. Social service officials attribute this increase to drug-abusing families. In Massachusetts, the number of children under age 2 admitted to foster care increased by 73 percent over the past 2 years. In New York City, children under age 2 accounted for 36 percent of foster care admissions in 1989. In Illinois, infants younger than 1 year old in foster care increased 284 percent from 1985 to 1989.

Because the demand for foster care has increased nationwide, concerns have been raised about the social services system's ability to respond to the needs of drug-abusing families. Specifically, problems have been identified regarding the availability of foster parents who are willing to accept children who have been exposed to drugs, the quality of foster care homes, and the lack of supportive health and social services for families who provide foster care to these children.

Drug-Exposed Infants Are Vulnerable to Developmental Problems That May Affect Learning

Definitive information about the future of drug-exposed infants does not exist. The oldest of drug-exposed infants in strict clinical trials designed to examine the long-term physical effects of prenatal drug exposure, such as developmental deficiencies, are under the age of 3. In addition, long-term studies of drug-exposed children have not adequately controlled for the amount of drug use, the intensity or frequency of use, or the type of drug used. Nor have studies indicated when drugs were used during the pregnancy.

Appendix III
Prenatal Drug Abuse Has Increased Demand
for Social Services

Results from studies to date indicate that the symptoms will vary among drug-exposed children. Some children show few symptoms after the drugs leave their system and others are expected to show neurological symptoms throughout their lives. Consequently, the needs of these infants will vary—from greater assistance and intervention for some, to lesser assistance for others.⁴

Recent studies and surveys of neonatal programs suggest that some infants will suffer from central nervous system effects, including neurobehavioral deficiencies.⁵ Researchers have reported that some infants identified through urine screens as positive for cocaine had suffered hemorrhages in the areas of the brain responsible for intellectual capacities.^{6,7}

Observations of toddlers born to drug-using mothers imply future educational problems based on these children's difficulties with concentration and learning. Research at the University of California at San Diego showed that

- 25 percent of drug-exposed children had developmental delays, and
- 40 percent experienced neurologic abnormalities that might affect their ability to socialize and function within a school environment.

The study also found that as these children grew older their abilities did not develop normally in the dimensions of language, adaptive behavior, and fine motor and cognitive skills.⁸

A school environment that is poorly prepared to respond to the developmental disabilities of these children may allow them to go unresolved. As an increasing number of drug-exposed children reach school age, this problem should become more evident. One test of this may occur next

⁴Richard P. Barth, "Educational Implications of Prenatally Drug Exposed Children," Social Work in Education, in press

⁵Hallum Hurt, "Medical Controversies in Evaluation and Management of Cocaine-Exposed Infants" (1989), pp 3-4

⁶Deborah A. Frank, Briefing for the Comptroller General of the United States, Boston City Hospital, February 24, 1990

⁷Suzanne D. Dixon, "Effects of Transplacental Exposure to Cocaine and Methamphetamine on the Neonate" The Western Journal of Medicine (Apr. 1988), pp 436-42

⁸Interview with Suzanne D. Dixon, Director of Well Baby Clinic, University Medical Center, University of California at San Diego, February 14, 1990

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Prenatal Drug Abuse Has Increased Demand
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year when a large number of children born to the early wave of crack cocaine users will reach kindergarten age

One researcher has estimated that 42 to 52 percent of children exposed to drugs and alcohol will require special educational services.⁹ The degree of services needed and their cost will vary depending on the severity of impairment. For example, the Los Angeles Unified School District began a pilot program in 1987 for mildly impaired preschool children prenatally exposed to drugs. The cost of providing the enriched school environment provided in the pilot program is approximately \$17,000 a year per child. At least one comprehensive estimate, developed by the Florida Department of Health and Rehabilitative Services, indicates that total service costs for each drug-exposed child that shows significant physiologic or neurologic impairment, to the age of 18 years, will be \$750,000.

⁹Judy Howard, "Developmental Patterns for Infants Prenatally Exposed to Drugs", Fact sheet presented to the California Legislative Ways and Means Committee, Perinatal Substance Abuse Educational Forum, February 23, 1989

Appendix IV

Lack of Drug Treatment and Prenatal Care Contributing to the Number of Drug- Exposed Infants

Many women are unaware of the effects of drugs on the health of their infant. Other women are aware of the consequences of drug use and would like to stop their addictive behavior. However, their efforts to get help may be unsuccessful due to insufficient drug treatment capacity. In addition, there are many barriers blocking access to basic health services and drug treatment for drug-abusing pregnant women. One major barrier is the fear women have that if they seek treatment they may be incarcerated or their children will be taken from them.

Lack of Treatment for Drug-Addicted Pregnant Women

The best way to prevent the problem of drug-exposed infants is to prevent drug use among women of childbearing age. Pregnant women who use drugs should be encouraged to stop in order to reduce the potential problems associated with prenatal drug exposure. According to one researcher, if women stop using cocaine before the third trimester the risks of low birth weight and prematurity, which often require expensive neonatal intensive care, are greatly reduced.¹

Nationwide, however, drug treatment services are insufficient. A 1990 survey by the National Association of State Alcohol and Drug Abuse Directors, Inc. (NASADAD), found that an estimated 280,000 pregnant women nationwide were in need of drug treatment, yet less than 11 percent of them received care.² Hospital and social welfare officials in each of the five cities in our study also told us that drug treatment services were insufficient or inadequate to meet the demand for services for drug-addicted pregnant women.

In addition to insufficient treatment, some treatment programs deny services to drug-addicted pregnant women. A survey of 78 drug treatment programs in New York City found that 64 percent of them denied treatment to women who were pregnant. One of the primary reasons that programs are reluctant to treat pregnant women relates to issues of legal liability. Drug treatment providers fear that certain treatment medications and the lack of prenatal care or obstetrical services at the clinics may have adverse consequences on the fetus and thereby expose the providers to legal problems.

Many programs that provide services for women, including pregnant women, have long waiting lists. Treatment experts believe that unless

¹ Deborah A. Frank, Briefing for the Comptroller General of the United States, Boston City Hospital, February 24, 1990.

² The report did not reveal the extent to which these women sought treatment.

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women who have decided to seek treatment are admitted to a treatment facility the same day, they may not return. However, women are rarely admitted on the day that they seek treatment. One treatment center in Boston received 450 calls for detoxification services during a 1-month period. The callers were told that no slots were available and that it usually took 1 to 2 weeks to be admitted. They were also instructed to call back every day to determine if a slot had become available. Of the 450 callers that month, about one-half never called back and about 150 were eventually admitted to treatment.

Many other barriers to treatment exist. Historically, treatment programs were designed to treat the addiction problems of men. Thus, many programs are not tailored to meet the needs of pregnant women. For example, pregnant addicts we interviewed told us that because they had other children the lack of child care services made it difficult for them to seek treatment. Pregnant addicts may have additional needs, such as prenatal care and parenting, educational, and nutritional guidance, that are not provided in most treatment programs.

Another barrier to treatment for women is their fear of criminal prosecution. Drug treatment and prenatal care providers told us that the increasing fear of incarceration and loss of children to foster care is discouraging pregnant women from seeking care. Women are reluctant to seek treatment if there is a possibility of punishment. They also fear that if their children are placed in foster care, they will never get the children back.

Many health professionals believe that comprehensive residential drug treatment, including prenatal care, is the best approach to helping many women abstain from using drugs during pregnancy and assuring that the developing fetus has the best chance of being born healthy. Residential treatment allows for several needs to be addressed at the same time, thus reducing problems of fragmentation and inaccessibility of services. For example, the interconnected problems of homelessness, substance abuse, maternal and child health, and parenting are addressed in the few residential programs that exist. In addition, these programs limit access to drugs and remove women from the environments in which they became dependent.

However, residential treatment programs for women are scarce. In Massachusetts, residents have access to only 15 residential treatment slots for pregnant women in the entire state. Social service officials at one

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California hospital expressed their frustration with the lack of residential drug treatment programs and other programs that could provide a stable environment to a pregnant addict. When they are unable to place drug-addicted pregnant women in residential treatment they try alternatives, including battered women shelters or even nursing homes.

Prenatal Care Improves Birth Outcomes

When both drug treatment and prenatal care services are provided for drug-addicted pregnant women, the results are dramatic. The three basic components of prenatal care are: (1) early and continued risk assessment, (2) health promotion, and (3) medical and psychosocial interventions and follow-up. One intervention program reported a significant drop in low-birth-weight babies born to drug-abusing mothers who had been provided with drug treatment and prenatal care.³ The incidence of low birth weight among infants born to drug-abusing mothers receiving such care dropped from 50 to 18 percent.

Early and comprehensive prenatal care is associated with lower rates of infants born with low birth weight. Our work and that of others showed that the incidence of low birth weight among drug-exposed infants is high. Low birth weight is the most significant factor in determining infant death and disability as well as higher health costs. Prenatal care increases the chances that healthier infants will be born.

Prenatal care is a cost-effective program. The Office of Technology Assessment estimates that for every low-birth-weight birth averted by earlier or more frequent prenatal care, the U.S. health care system saves between \$14,000 and \$30,000 in short- and long-term health care costs associated with low birth weight. These savings are great compared with the average cost for professional services associated with prenatal care that can run as low as \$600.

According to the National Commission to Prevent Infant Mortality, the barriers to accessing prenatal care are formidable, including financial, policy, system, provider, and patient barriers. In addition, others report that drug-addicted pregnant women refrain from seeking prenatal care because they fear that punitive actions will be taken if they are found to have used or abused drugs during pregnancy. Several hospital and

³Loretta P. Finnegan, M.D., Executive Director of Family Center, Professor of Pediatrics and Professor of Psychiatry and Human Behavior, Jefferson Medical College of Thomas Jefferson University, Philadelphia, Pennsylvania, Testimony before the Subcommittee on Children, Family, Drugs, and Alcoholism, Committee on Labor and Human Resources, United States Senate, February 6, 1980

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public health officials believe that punitive actions, such as incarceration of drug-abusing pregnant mothers, have a negative impact on the lives of these women and their children.

Hospital officials told us that in addition to not seeking prenatal care, some women are now delivering their infants at home in order to prevent the state from discovering their drug use. An example was given of one mother who delivered her baby at home and subsequently called the hospital for medical advice because the infant had become very sick. The mother was finally persuaded to bring the infant into the hospital. The consequent care of this baby was very costly.

Appendix V

Percentage Distribution of Infants Exposed to Drugs, Including Cocaine

Figures are percentages

Hospital	Drug-exposed infants	Sampling error ^a	Cocaine-exposed infants	Sampling error ^a
1	1.3	1.0	0.3	0.4
2	3.1	1.6	0.8	0.8
3	4.7	2.0	2.7	1.5
4	5.4	2.3	3.9	1.9
5	7.2	2.4	4.5	1.9
6a	8.9	.	.	.
7	11.8	2.9	11.0	2.8
8	12.7	2.9	8.5	2.4
9	14.8	3.8	11.6	3.4
10	18.1	4.2	8.6	2.9

^aFrom this hospital we identified drug-exposed infants from the universe of births and, therefore, there is no sampling error. We were unable to distinguish the type of drugs used.

^bSampling errors are at the 95 percent confidence level.

Appendix VI

Objectives, Scope, and Methodology

To develop a national estimate of drug-exposed infants we obtained data from the National Hospital Discharge Survey conducted by IHS's National Center for Health Statistics for the years 1980 to 1988. The National Hospital Discharge Survey is based on an annual survey of a representative sample of U.S. hospitals. The survey collects information on the diagnoses associated with hospitalization of adults and newborns in all nonfederal short-stay hospitals. Newborn discharge data for 1986 and 1988 were used to calculate national estimates. Data before 1986 were considered nonreportable due to a small number of sample cases of newborns with a drug-related discharge diagnosis.

To determine the extent of drug-exposed infants we reviewed medical records at 2 hospitals in each of five cities—Boston, Chicago, Los Angeles, New York, and San Antonio. Mostly located in the inner city, 8 of these hospitals serve a high proportion of low-income patients likely to need federal assistance and supportive services. The remaining 2 hospitals did not serve a high proportion of low-income patients, but received referrals from other hospitals in their respective cities of potentially complicated births, including drug-using pregnant women. Our review of medical records at the 10 hospitals (2 hospitals in each of these cities) covered a representative sample of 44,655 births in 1989.

Hospital Selection Criteria

Our hospital selections were based on a high incidence of births per year and the availability of a neonatal intensive care unit in addition to location and numbers of Medicaid patients. Table VI.1 compares the number of births at the hospitals we selected with other hospitals in the five cities, and table VI.2 provides patient profile information for the selected hospitals.

Table VI.1: Comparison of Births at Hospitals in GAO Study With Total Births in the Respective Cities, 1988

City	All hospitals		Hospitals in GAO study	
	No. of hospitals with bassinets	No. of births	No. of births	Percent of all births in city
Boston	5	19,500	4,969	25.5
Chicago	30	49,168	7,200	15.7
Los Angeles	27	81,379	15,231	19.9
New York	41	119,320	6,432	5.4
San Antonio	10	22,061	9,331	42.3

Appendix VI
Objectives, Scope, and Methodology

Table VI.2: Profile of Patients at Selected Hospitals

City/Hospital	Race			Insurance status	
	Black	Hispanic	White	Medicaid	Private
Boston					
1	20.9	5.5	67.3	34.0	59.9
2	64.6	18.7	12.1	51.4	13.0
Chicago					
1	57.0	34.1	7.8	75.0	15.9
2	18.7	4.7	70.7	15.8	83.3
Los Angeles					
1	19.8	79.1	0.5	74.9	1.8
2	4.3	83.2	9.0	88.6	1.3
New York					
1	31.8	56.7	8.4	63.9	29.3
2	30.8	59.9	5.0	70.8	12.9
San Antonio					
1	5.5	80.2	13.6	46.1	8.7
2	7.5	84.5	7.7	64.2	32.0

At these hospitals we conducted a detailed review of a random sample of medical records of mothers and their infants who were born between January 1 and June 30, 1989, to estimate the number of drug-exposed infants.¹ We considered an infant to be drug-exposed if any of the following conditions were documented in the medical record of the infant or mother: (1) mother self-reported drug use during pregnancy, (2) urine toxicology results for mother or infant were positive for drug use, (3) infant diagnosed as having drug withdrawal symptoms, or (4) mother was diagnosed as drug dependent. We also interviewed hospital personnel to obtain their procedures for identifying drug-exposed infants.

To assess the medical and social impact of these births, we interviewed hospital, state, and local social services representatives regarding the impact of drug-exposed infants on the medical and social services systems. In our discussions with these officials we also determined the extent to which drug-addicted pregnant women are receiving drug treatment.

¹At each of 9 hospitals, we randomly selected 400 mothers' medical records and the corresponding medical records for their infants. At the 9 hospitals the percentage of medical records unavailable for review ranged from less than 1 to 7 percent. At the tenth hospital, we did not review medical records but received a data tape with information on all births occurring during the first 6 months of 1989.

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Objectives, Scope, and Methodology

We also interviewed officials at 10 additional hospitals in these cities to determine the extent of drug-exposed infants at these hospitals. These hospitals serve predominantly private-pay clientele. We did not review medical records to determine the extent of drug-exposed infants at these hospitals.

To gain further insight as to the consequences of maternal drug use, we interviewed leading drug treatment experts, neonatologists, researchers, social welfare officials, and drug-addicted pregnant women. We also reviewed research conducted to determine the incidence of drug-exposed infants and the effects of drugs on the health of mothers and infants.

Appendix VII

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PREPARED STATEMENT OF SENATOR BILL BRADLEY

Mr. Chairman, as a member of the National Commission to Prevent Infant Mortality, I have been deeply involved in the problems of infants and children in this country. For the past three years, we have taken several important steps to address a problem that can only be characterized as a national disgrace. More children die in this country before the age of one than in 20 other industrialized countries in the world. Many others are born low birth weight and with significant disabilities that will hamper their abilities to realize their full potentials in life. Much of this misery is preventable with early, adequate and coordinated prenatal care.

Mr. Chairman, I have been proud of our efforts in the Congress to remove significant financial barriers to early, adequate and coordinated prenatal care through the Medicaid program. Last year, we also began the task of breaking down other, non-financial barriers to preventive prenatal care. We started the process of developing an effective Maternal and Child Health Handbook that can be used to educate women about the growing life inside and the responsibilities for nurturing the child. We tried to attack bureaucratic barriers by creating one-stop shopping programs and pushing home visitation as a strategy for reaching hard to reach women. Finally, we attacked the problem of the lack of enough providers of care by taking the first step to insure adequate reimbursement for services.

But Mr. Chairman, with all these efforts, the task of improving the care we deliver to women and their children and the challenge of dealing effectively with the unconscionably high infant mortality rates in this country, will not be an easy one to meet. Drug abuse during pregnancy, both of legal and illegal substances, pose a problem to those who strive to make progress. Cigarette smoking contributes to at least 25% of all low birth weight infants. The National Commission to Prevent Infant Mortality has estimated that if all women were to stop smoking during their pregnancies, 10% of all infants dying before the age of 1 would live. An estimated 40-80,000 babies are born each year with enough exposure to alcohol to go through alcohol withdrawal. Many develop growth and mental retardation as a result.

But the harmful effects of these legal drugs during pregnancy has been quickly overshadowed lately by the enormous problems faced by infants exposed to the host of illicit drugs that have become popular in America. Crack (cocaine), ice (methamphetamine), snow (heroin), angel dust (PCP) and smoke (marijuana) all present potent threats to the well being of the mother and the innocent child exposed. In 1988, an estimated 5 million women, 9% of American women of childbearing age admitted to using an illegal drug. One million women admitted to using crack/cocaine. It is no wonder that our foster care system is overwhelmed, our hospitals are full of crack exposed children who have no where to go, and family structures that have traditionally been important supports are beginning to crumble.

I welcome the opportunity to hear from this distinguished panel. I hope to hear not only descriptions of the magnitude of the problem, but also effective strategies that we may adopt for dealing with these problems.

PREPARED STATEMENT OF SENATOR JOHN H. CHAFEE

Mr. Chairman, I commend you for holding this hearing on "Crack Babies." I hope this hearing will help us learn more about the effects of "crack" cocaine on so many of our children, both from health and development perspectives.

The future of our country depends on how well we educate and care for our children. Our children be physically and mentally prepared to not only keep America economically competitive, but also must be able to provide a safe and stable environment for their own children.

We cannot ask our children to keep the American dream alive if we don't give them a fighting chance to reach their full potential. We must plan for the future by taking a good hard look at the status of our children today.

I am fearful that we are raising a generation of children composed in part of youngsters ill equipped to form familial bonds, to be receptive to formal and informal education, and to lead successful and productive lives. I am referring to "crack babies" and other children afflicted with Fetal Alcohol Syndrome or other diseases caused by the alcohol or drug use of a pregnant woman.

We cannot afford to lose these children. Nor can we continue to witness more crack babies being born without making every possible effort to provide proper prenatal care to low-income women and drug treatment whenever necessary.

Why do eleven percent of pregnant women in America expose their children to drugs. We must understand what causes these women to place their drug addiction before the life of their child. Only if we know the causes can we help prevent chil-

dren yet unborn from having to face the problems that these drug-exposed babies must face.

We must also determine what problems the 375,000 children affected by prenatal drug use have, and how we might best help them develop beyond their physical or mental limitations. We have the technology to save the life of an infant born weighing one pound. Yet, we don't have the social services in place to support them once they leave the pediatric ward.

Of course, I am sure you all know that by approving S. 384, my Medicaid reform legislation, we would be providing assistance to many of these crack babies because they do have developmental disabilities. . . . But since I am sure that this Committee will be addressing S. 384 in the very near future, I will leave that discussion for another day. . . .

I am delighted, Mr. Chairman, that you have brought witnesses clearly knowledgeable on this issue, most notably Secretary Sullivan. I look forward learning more about how to prevent prenatal alcohol consumption and drug use, and also how we might best be able to assist those children already affected.

Thank you Mr. Chairman.

PREPARED STATEMENT OF SENATOR CHRISTOPHER J. DODD

Mr. Chairman and distinguished members of the Committee, I appreciate the opportunity to speak to you about a subject of much concern to me as Chairman of the Subcommittee on Children, Family, Drugs, and Alcoholism. The plight of children who are innocent victims of substance abuse draws from us many emotions, from deepest pity to sharpest anger. It challenges our ability and commitment to reach out to even the most troubled parents. I strongly believe, however, that our success in responding to the problem will be measured more by our compassion than our condemnation. This week I am introducing the "Children of Substance Abusers Act of 1990" which is based on the principle that extending help early and providing comprehensive health and social services is the best way to protect children and preserve families.

Mr. Chairman, many children of substance abusers become visible to us only when they enter the foster care system, an area about which I know you and this Committee have much concern. I won't recite all the statistics about drug-exposed infants. But testimony from my own hearings suggests staggering costs to society—as much as \$20 billion for infants born exposed to cocaine in just one year. And what of the children themselves? We are only beginning to glimpse what the future holds for them. So far, research suggests a cluster of subtle developmental problems. Head Start teachers tell me they already are seeing a pattern of behaviors including short attention spans, delayed speech, and combative or exaggerated behavior that can be traced to drug exposure.

The impact of substance abuse on children extends far beyond drug-exposed infants. The National Committee for the Prevention of Child Abuse estimates that 675,000 children annually are seriously mistreated by a caretaker who is a substance abuser. The abuse these children experience is more severe and the neglect more complete than anything seen in the past.

I certainly do not have to tell this Committee about the alarming rise in foster care placements, fueled in many areas of the nation by substance abuse. And small wonder, since the resources to preserve these families often do not exist. Drug and alcohol treatment programs tailored for women with children are scarce and society has little understanding of the special supports these families need. We all recognize that, sadly, some children must be removed from their homes. But it is tragic when children must be removed because we as a society are unwilling to invest in certain families, writing them off as unworthy of our support.

The "Children of Substance Abusers Act of 1990" will begin to make that investment. The heart of the bill is a Children of Substance Abusers, or COSA, program that would provide \$100 million for comprehensive services to children and their families. This bill is unique in its extension of help beyond the perinatal period and its inclusion of any child of a substance abuser. It thus provides a continuum of health and social services ranging from parenting education to pediatric care. A primary goal of the COSA program is to preserve families, but children cared for by relatives, foster parents, and adoptive parents also are included.

We cannot wait, however, until an infant is born addicted to reach out to at-risk families. Thus, the COSA bill includes a \$50 million home visiting program targeted to pregnant women and women who are substance abusers. Home visitors provide help ranging from information on parenting and child development, to a ride to the

doctor's office, to simply giving support and encouragement. These programs have repeatedly been shown to work. A recent study in the medical journal *Pediatrics* found that home visiting contributes to improved child health and maternal-child interaction. Most important, the home visiting services, with the supportive services in the COSA program, are first steps in building a continuum of services for children and families.

Other parts of the COSA bill strengthen provisions in the Alcohol, Drug Abuse, and Mental Health Block Grant directed at women. The bill doubles the block grant's set-aside for women, increasing it from 10 to 20 percent. Finally, the bill requires states to provide treatment on demand for pregnant women and women with children or take steps to reach this goal.

I have spent a great deal of time over the past six months visiting comprehensive treatment programs. I have talked with recovering substance abusers and professionals who work with them and their children. I have learned that parental substance abuse forces wrenching choices about the future of individual children and their families. But one theme has echoed throughout. If we make the investment, if we provide the services and the support and above all the hope, some of these families—not all by any means, but some of them—will make it and be able to stay together. If we do not, then the chilling notion we hear more and more often of a generation of children being raised in orphanages may well come true. And that will be the most wrenching choice of all. I hope that our committees can work together to make sure this does not happen.

PREPARED STATEMENT OF CHARLES E. HAYWARD

Mr. Chairman, thank you for this opportunity to testify before you today. I am Charles E. Hayward, Secretary of the Delaware Department of Services for Children, Youth, and Their Families. I am here today on behalf of the American Public Welfare Association's National Council of State Human Service Administrators and National Commission on Child Welfare and Family Preservation.

The American Public Welfare Association (APWA) is a 60-year-old nonprofit, bipartisan organization, representing the cabinet-level officials in the 50 states responsible for administering publicly-funded human services, including the child welfare, foster care, independent living and adoption assistance programs.

The National Commission on Child Welfare and Family Preservation was established by APWA to assess the issues facing our nation's child welfare systems. Composed of 26 members, we are a diverse group of administrators including cabinet level human service commissioners, local public welfare administrators, public child welfare directors and APWA Board members. Our charge is to propose legislative and program recommendations to recast Federal law and state policies in light of the new realities of child welfare.

Mr. Chairman, I want to thank you for your efforts on behalf of children and your long-standing concern for society's most vulnerable children, those at risk of abuse or neglect. Your attention to these children today is of special importance: simply put, the child welfare system in America is under siege. Last year, we received over 2.4 million reports of abuse and neglect—an increase of 118 percent since 1980. We also placed more children in foster care than at any time since the early 1980s. In fact, the number of children being placed in substitute care increased by 80,000 over the last three years. By the end of 1989, 360,000 children lived apart from their parents, with some children having no hope for being reunited with their families.

Many of the children coming into our care are different from those we saw just five years ago. They are more troubled, more seriously abused, and far poorer. Their lives have been damaged by drugs, sexual abuse, serious physical or mental health difficulties, AIDS, and developmental disabilities. Persistent poverty governs their lives. Over half the reports of child abuse and neglect—the largest single category—involve deprivation of necessities. From a policy perspective, providing adequate food, shelter, health care, clothing and supervision is as much a matter of "wallet" as it is a question of will.

Drugs are also to blame for the spiraling number of children being removed from their homes. Children from families with drug and alcohol problems and babies and infants with drug-addicted mothers are *the most serious problem* facing child welfare agencies today. Available resources fall far short of meeting the challenge: these families require more comprehensive services and more specialized skills than child welfare agencies can offer today. Agency staff lack adequate training, medical information, and access to drug treatment services for troubled families. Foster parents lack adequate training, support services and reimbursement.

The situation threatens to get much worse. The Inspector General recently concluded that over 100,000 cocaine babies were born in the U.S. in 1988 and that by the year 2000, there are likely to be from 500,000 to 4 million drug-exposed children.

Although the majority of infants born exposed to crack cocaine return home with their birth mothers, there is a strong probability that a large number of these drug-exposed infants will later require foster care or specialized services. Experience has already taught us that these children cannot thrive in a home environment that lacks special care. And the difficulty of caring for these children in these numbers will confound an already exhausted pool of foster homes and parents.

Mr. Chairman, I'm afraid that the country is not prepared for the problems these children face, nor for the full magnitude of the problem they pose to all of us now and in the future. One real challenge for policymakers and administrators at the Federal, state and local level is the simple but critical lack of solid national information on the effect of the current drug epidemic on the child welfare system. The few national estimates we have vary widely and make it difficult for us to plan effectively to meet the crisis.

APWA recently conducted a national survey of state child welfare agencies to collect statistical data on children referred to the child protective services system because of parental substance abuses and alcoholism. We found that many states do not have the capacity in their current information systems to produce data in this area, in part because of the newness of the drug problem.

We did collect some key statistical data from several large states—New York, California, Illinois and Florida—significant because one out of every three children in substitute care lives in New York or California. Overall, nearly two out of every three children in care come from the 10 most populous states.

- In *New York*, for example, the child substitute care population has increased by 18,242 children or 66.3 percent in just two years, from an overall population of 27,504 in 1986 to 45,476 in 1988. By 1989, New York's substitute care population increased another 21 percent to a total of 55,359 children.

Parental substance abuse was a significant factor: *between FY 87 and FY 88, parental substance abuse was the primary service need in 57 percent of the cases, while parental alcoholism was found in 29 percent of the cases.*

A preliminary finding of a study of placements in relatives' homes under way in New York shows that *nearly 90 percent of the children now placed in the homes of relatives came from families with some "drug involvement."*

- In *Illinois*, the number of alleged child abuse/neglect reports increased by 32.7 percent between FY 86 and FY 88. *The number of "substance affected infants" increased over the same period 403 percent.* Although a small number of the confirmed CPS cases, the proportion of infants in this category increased significantly as well, by 285.7 percent.

Illinois's child substitute care population also rose steadily over the same period from 14,472 in FY 86 to 19,296 in FY 89, or 33.3 percent.

- In the state of *California*, the number of CPS reports increased 36.6 percent from FY 86 to FY 88. During these same years, the number of children with parental alcohol or drug dependency involved in CPS cases increased by 55,312 children from 66,841 in FY 86 to 122,153 in FY 88—*an 82.8 percent increase in three years.*

The substitute care population in California increased dramatically during this period. There were 47,327 children in care at the end of FY 86, but by the summer of 1989, the number rose to 66,763—an increase of 41.1 percent.

Although these numbers from large states are striking, this problem is a *national* one. Although our overall numbers in Delaware are relatively small, there was an increase in abuse and neglect reports of 30 percent between 1982 and 1988. We are also greatly affected by what is happening in Philadelphia, where poverty and substance abuse are driving families apart. Forty percent of Philadelphia children live in poverty. Fifty-three percent of all births are to unmarried women. Philadelphia city officials estimate that from 60 to 80 percent of their abuse and neglect cases are substance abuse related. The Philadelphia Department of Human Services serves 27,000 children each year, 5,600 in substitute care. If the current trend continues city officials estimate that by 1994 there will be 9,200 children in dependent placements—an increase of 165 percent.

Mr. Chairman, child welfare agencies were not designed, nor are they funded and staffed, to be able to take on the task of solving the problems of poverty and drugs. Currently, our state child welfare agencies provide only three services on a full, statewide basis: child protective services involving family maltreatment, family foster care, and special needs adoption assistance. Nevertheless, for some, we have become the social agency of *first* resort. Families with problems, no matter what the

source—whether it is unemployment, poverty, homelessness, substance abuse—are ending up at the public child welfare agency.

America lacks a comprehensive social service system that provides necessary support to families to help keep children and their parents together. Because families have nowhere else to go, child welfare has also become the agency of *last resort*: when mental health, education, alcohol and drug abuse, or health agencies are unable to provide needed services to children and their families, these families, sooner or later end up in the public child welfare system.

A major reason public child welfare agencies have been unable to provide a complete array of services to children and their families is the lack of resources. P.L. 96-272 held the promise of funding a full array of services, including prevention, early intervention, in-home family-based services, reunification and after care services. But that Federal commitment never materialized; the promise was not kept. Child welfare services, including child protection, foster care and adoption assistance today are funded largely with *state* dollars.

Mr. Chairman, the state of New York will spend approximately the same amount for its child welfare program this year—about \$1.4 billion—that the United States government will spend for foster care in all 50 states and the territories. Together, California and New York will spend more than *double* what the Federal Government spends for all child welfare services. Today there is *no* real national financial commitment to child welfare.

APWA took a critical look this year at state plans under Title IV-B of the Social Security Act. They represent the only existing source of aggregate information about state child welfare service programs for the years since the passage of P.L. 96-272. The state plans are accompanied by annual child welfare expenditure estimates that are, as far as we know, the only available source of child welfare expenditure data. Unfortunately, it has been six years since the Federal Children's Bureau has analyzed any state IV-B data and issued a report. To my knowledge, they have never analyzed the expenditure data submitted by the states in their annual summaries. We can only hope that HHS is gearing up to handle what will be an onslaught of new data from the mandatory foster care data collection system you sponsored in 1986.

The breakdown of state and local versus Federal expenditures for child welfare may surprise you. According to summary data for 31 states, excluding New York and California, of the \$3.5 billion that is expected to be spent on child welfare services this year, the Federal government's share will amount to about 40 percent; the largest burden—almost 60 percent—will fall to the states.

State and local funds are expected to pay for 68 percent of all foster care maintenance; 65.4 percent of all adoption services and programs; 57.2 percent of foster care services; and 49.3 percent of all preventive and supportive services.

Of the total child welfare budget, Title IV-B will make up 4.1 percent of that total; Title IV-E will account for 11.8 percent; and Title XX and other Federal sources, will equal 26.7 percent.

We believe these numbers actually *overestimate* the Federal government's contribution because much of the Title XX dollars are actually spent on child care services. We will be submitting a report to the Committee shortly with our analysis of the IV-B plans that will address this issue. But suffice to say, *child welfare in the United States is largely a state funded system.*

In fact, administration funding requests for Title IV-E foster care and adoption assistance programs during the past decade have been dismally inadequate. Although Congress enacted Title IV-E as an entitlement program, legislative language in the appropriations bill requires that annual appropriations be made to fund the program. *HHS has consistently underestimated the costs of the program in its budget request to Congress.* This budgetary practice has resulted in huge shortfalls to states who have had to carry the costs of the Federal share of the program as well. *At one point in 1989, states were owed as much as \$800 million.*

Title IV-B has also been severely underfunded. This program was to be the basis for states to develop a service delivery system that covered the full array of services needed by troubled families. Federal appropriations to states have been so small that they can do little more than help meet the crisis in child protective services.

States use approximately 25 percent of Title XX funds directly for child welfare and child protection services. Yet Title XX funding declined in real terms by almost \$2.4 billion between 1978 and 1988, a reduction of 46 percent. If you adjust for population growth, the funding levels actually fell during this period by 51 percent.

Funding is certainly a critical issue for state child welfare agencies. Equally important is the need for systematic reform of the child welfare system. We have become little more than emergency rooms responding—as we will continue to do—to

reports of child abuse and neglect. We are using our limited resources to provide the most expensive treatment and intervention approaches in acute family crises. In short, we are doing too little too late. We need to do more. The future of America's families is at stake.

Mr. Chairman, we know what to do. We need to support our troubled families in positive ways before a crisis occurs. We need to develop a social service system that prevents child abuse and neglect; that keeps families from breaking apart; and that supports families so that children need not be removed from their parents. Communities, as well as social services agencies, must be involved in providing families a range of supports including appropriate health, mental health and educational services. The goal of these services is to offer help before family crises occur.

We must fulfill the promise of P.L. 96-272 to provide child-focused family services when a crisis does happen. We have seen intensive short-term interventions work when caseloads are low and resources are flexible. Support for healthy family development is an ideal and a goal, and one that can be achieved with adequate Federal support. Seventeen states already have family preservation services of one type or another and many more expect to begin implementing programs over the next few years. We must also fulfill the promise of being able to provide our children in foster care with the necessary supports to assure their healthy development as productive citizens.

This fall APWA will release its preliminary recommendations for major child welfare reform. The proposals will stress the importance of providing supports to families not only when they are in acute crisis—as our present child welfare system attempts to do—but *before* family crises occur. It will propose a model designed to strengthen family life—when a family has problems and when a family simply needs help with child rearing. The goal of this model will be to help families maintain stability and permanence.

Thank you. I will be happy to answer any questions you have.

PREPARED STATEMENT OF RICHARD I. LOWENSOHN

Mr. Chairman and Members of the Committee: My name is Richard Lowensohn. I am the Chief of Obstetrics at the Oregon Health Sciences University, where I am an Associate Professor. I am the director of the Substance Abuse Family Evaluation (SAFE) Clinic for treatment of substance abusing pregnant women, located at the University, and am the Chair of an Oregon task force which has been examining this issue for the past year and a half.

My testimony will deal with the approach used by our clinic and our results, its value as a model for use in other settings, and then with the cost of such care and funding issues.

Substance abuse has increased in Oregon, as with the rest of the country. Last year 532 infants were referred at birth to Children's Protective Services due to drug abuse, up from 65 infants in 1984—an increase of 818% in only five years. The incidence of abuse among pregnant women is probably 15 to 20%, based upon several different studies in and around Oregon. Although cocaine is the most popular drug of abuse, Oregon is also the 3rd largest producer of marijuana and of amphetamines in the country, as well as a strong consumer of alcohol.

The SAFE program opened in December of 1988 in response to this problem, as a joint effort by the Departments of Obstetrics and Psychiatry. The primary focus is prenatal and obstetrical care, with a comprehensive program of substance abuse counseling, psychiatric evaluation, nutrition, childbirth and parenting education, supported by childcare and assistance with transportation. Missing so far from our program is any access to drug-free housing or job training, both of which are essential for a complete program.

Our typical patient lives with a substance abusing partner. She has another child, no independent income, less than a full high school education and no job skills of any kind. She has no independent transportation and no child care opportunities. Cocaine is the drug of choice for half of our patients, and is the second drug of choice for another 20%. Almost all patients also use alcohol and marijuana, and the majority of our patients use more than three drugs on a regular basis.

To enter residential drug treatment, a woman must give up custody of her other children, since few, if any such programs have facilities for them. The SAFE program treats pregnant women on an outpatient basis, allowing them to retain custody of their children. This is not a perfect solution, however, as they are still often in need of drug-free housing in order to escape from the cycle of drug use and abuse.

Since the SAFE clinic opened, 62 Portland-area women have participated in the drug treatment program. 30 have delivered their babies, 9 have dropped out, and 23 continue active participation during their pregnancy. Of the 30 women who have delivered, half stopped their drug use completely and had no drugs in their urine at delivery, another quarter used significantly less drugs through the pregnancy, and one quarter continued with their usual drug use.

To participate in SAFE, a woman must simply have a known history of substance abuse, be no more than 35 weeks pregnant, live in or be referred from within the tri-county (Multnomah, Clackamas and Washington) area of Portland, and be willing to cooperate with the program. The presence of other medical conditions do not exclude a woman from participation.

Patients for the SAFE clinic can refer themselves or be referred by nurses and physicians throughout the Portland area, or by referral from the court system.

The SAFE program begins with an eight week series of group therapy and education sessions and a comprehensive individual evaluation. The patients then continue to receive their obstetrical care within the SAFE clinic, as well as continuing group therapy. The clinic also provides childbirth education, nutritional evaluation and education, and limited social service support. Parenting classes and full social service support are necessary to accomplish the goal of converting the woman from her entrenched substance abuse to a drug-free pregnancy, birth, and lifestyle once the baby is born.

After the birth of the infant, well-baby care is given through pediatric nurse practitioners with the supervision and support of a pediatrician with experience and interest in child abuse problems. Group therapy sessions after delivery focus on parenting issues as well as substance abuse. A description of each component of the SAFE treatment program follows my statement.

Of the 30 babies born to women being treated for drug abuse prevention through SAFE, half appeared to be completely free of any drugs at delivery. The fact that these infants were born healthy and not in need of intensive treatment nor observation is certainly one indication of SAFE's success. We have had very limited success with long-term followup of the infants, so I am unable to provide information about their eventual outcome. I can tell you that we have had only one infant taken from its parents and placed in a foster home thus far—another indication of SAFE's effectiveness. The infants of those mothers who have stayed clean through their time with us seem to be healthy and functioning well at birth.

The SAFE clinic provides a good model for how to approach this difficult problem. Because dealing with the non-medical issues of drug addiction can be so overwhelming for these women, they must be addressed at the same time as drug treatment. Nevertheless, unless the medical care is the *primary* focus, we find that the women have no motivation to show up. Women are concerned with the health and well-being of their unborn child; many of these women are not used to seeking routine care for themselves, and once the child is born, the mother often loses interest in continuing to receive substance abuse treatment, parenting training, or social services for herself.

Costs for clinic personnel and space are almost \$9,000 monthly (\$8,909). We bill State Medicaid for prenatal care and substance abuse treatment on those women who qualify on the basis of low income. We billed \$537 for prenatal care last month and expect to receive \$403 from that, and have averaged \$1700 per month in Title IX slot fees for the substance abuse treatment. Currently about three quarters of our participants qualify for Medicaid under the expanded eligibility for pregnant women which took effect April 1, thanks to the efforts of this Committee. Prior to that time, only 50% of our women were able to qualify for Medicaid during this critical time in their unborn child's life.

As you can see, the funds available through Medicaid and Title XIX add up to about \$2100 monthly. This leaves a shortfall of almost \$7000 each month. This is paid for to great extent by donated funding. This includes two local March of Dimes chapter grants, totaling less than \$18,000, another \$15,000 from the State Department of Human Resources, and most importantly, donations in kind of donated personnel time and space from the clinical departments at the University.

While our program is not cheap, the alternative is much more costly. If we do not provide this care, a Florida study has estimated that each infant reported to Children's Protective Services will cost an average of \$8,000 for the first year of life alone. At that rate, it would have cost \$240,000 for the first year of care alone for the 30 infants delivered through our SAFE clinic so far. SAFE's total annual operating costs are less than half of that amount, and the comparative savings, both in financial and human terms, are another measure of its effectiveness in dealing with this problem. First year costs, however, do not begin to address the true scope of the

problem. Much of what we fear from cocaine, alcohol, amphetamine and marijuana abuse is behavioral damage, which will be most obvious and costly when these children drop out of school, fail to hold jobs, and/or commit crimes as adults.

Programs similar to Portland's SAFE clinic do not exist in sufficient number or size in any part of Oregon, and I doubt that they do in any state in the country. The components of our program are typically handled by a varied and often uncoordinated grouping of agencies. These can include the county health clinic, the welfare office, the children's protective services office, the state office of alcohol and drug treatment, a WIC office, and the county housing authority, to name a few. In order for treatment programs to be effective, funding must be developed that both defines and requires coordination of care through one central agency, which I feel should be the medical care site. We are asking too much from women with as little personal organization as we see in active substance abusers to negotiate through a maze of agencies to get the help that they need to stop using drugs.

Although we have generous eligibility requirements for Medicaid during pregnancy in Oregon, this disappears 60 days after birth. We have been successful with many women in achieving our original goal, which was to help a woman achieve a drug-free pregnancy and have a healthy baby. What we need to do now is continue to provide the drug treatment and social services that help these women make the transition away from using drugs to cope with life's problems, and toward responsible parenting. Parenting is a challenge for anyone, but if you throw in an irritable, difficult to satisfy drug-damaged baby and a drug-using environment, you can easily see that this is a setup for child abuse. Unless we can keep these families in treatment for at least one year after birth, I am afraid that we may still have many damaged children.

More programs like SAFE should be developed and funded through both the public and private sectors. In addition, demonstration projects adding job training and drug-free housing to drug treatment programs need to be established. We have shown that programs like SAFE can be effective in achieving the goal of helping a woman have a drug-free pregnancy and a healthy baby. Now it is time to set a new goal of helping these women make the permanent transition to responsible parenthood by providing coordinated, comprehensive services over the longer term.

Thank you for taking an interest in this problem. I would be happy to answer any questions you may have at this time.

THE SAFE PROGRAM

Orientation

The first session serves several purposes. During that time, we:

- Gather identifying information
- Obtain specific history of previous substance use
- Obtain specific current drug use history
- Give a brief education concerning the effects of substance use on the developing fetus
- Identify recent stressors
- Explain what the clinic has to offer
- Place an emphasis on the nonjudgemental attitude of the clinic
- Review the ground rules and contract for care
- Fill out a contact sheet

Obstetrical services

Following this, the women are given appointments with the obstetrician at the normal frequency recommended by the American College of Obstetrics and Gynecology: they have visits every four weeks until 28 weeks, then every two weeks until 36 weeks, then weekly.

Substance abuse counseling

Counseling sessions occur at least twice per week, in addition to the obstetrical visits. During the counseling visits the women continue their evaluation by the substance abuse counselor, with the following components:

- Discussion of family history
 - general background and relationships
 - physical, emotional, sexual abuse history
 - substance abuse history
 - family treatment needs
- Discussion of previous psychiatric history
- Social history

support systems
 use of public resources
 financial
 educational
 legal

Present living situation

relationship to father of pregnancy
 substance abuse in present environment
 substance use by significant other
 other children

Circumstances regarding pregnancy

was it planned?
 what are her attitudes toward pregnancy?
 what are her future plans?

Mental status examination

Psychiatric/personality evaluation

IQ/CQ examination
 SCL-90 examination

Childrens Services Division involvement

Nutritional, social, psychiatric services

Additionally, the women receive nutritional assessment and counseling, social service referrals, and group psychiatric therapy each week. Whenever possible, the patient is seen at each visit by the same nurse, allowing some long-term relationships to develop.

Group Therapy

The initial group therapy sessions last for eight weeks. The therapy is intended to effect changes in knowledge and attitudes . . . e.g. perception of maternal responsibility; awareness of hazards; fear of outcome.

The sessions are set up as follows:

SESSION 1

Group Process

- (1) Brief introduction to the group process
 - honesty
 - participation
 - patience
 - discomfort
 - benefits
- (2) Individual thoughts on the pregnancy, group, etc.
- (3) Discuss the goals of the individual and of the group

Educational materials presented

- (1) Movie about pregnancy and delivery
- (2) Didactic discussion of physiology of pregnancy
 - conception
 - fetal development
 - placental function
 - birth
 - feelings of mothering

SESSION II

Group Process

- (1) Individual goals
- (2) Difficulties to be encountered

Educational materials presented

- (1) Early pregnancy class information
 - self care
 - nutrition
 - exercise

SESSION III

Group Process

- (1) Discussion of addiction and family relationships to other problems:
 - distress

denial
rationalization

Educational materials presented

- (1) Movie about addiction and impact on family
- (2) Family and recovery process

SESSION IV

Group Process

- (1) Discuss the film
- (2) Effect on individual goals

Educational materials presented

- (1) Movie "Innocent Addict," "The Mind"
- (2) Discuss specific relationships of drugs to pregnancy
- (3) Discuss the impact of drugs on emotional adjustments to pregnancy

SESSION V

Group Process

- (1) Denial
- (2) Need for supports
- (3) Peer pressures

Educational materials presented

- (1) Movie "Joshua's Window"
- (2) Discuss disease/psychological aspects of addiction

SESSION VI

Group Process

- (1) Bring-together group support
- (2) Rediscussion of group and individual goals
- (3) Discuss the effect of others involved with patients life

Educational materials presented

- (1) Movie "No More Shame"
- (2) Expectations of women
- (3) Substance abuse blocking access to resources
- (4) Self medication

SESSION VII

Group Process

- (1) Discussion

Educational materials presented

- (1) Support group's concepts
- (2) The 12 steps
- (3) Spirituality
- (4) Personal growth

SESSION VIII

Group Process

- (1) "Where do we go from here?"
- (2) Use of ongoing treatment groups (ATTC, NA, AA, etc.)
- (3) Use of other community support systems
- (4) Family
- (5) Long term goals

Educational materials presented

- (1) Relapse cycle
- (2) The three-headed dragon
- (3) Stress impacts
- (4) Leisure time

For the remainder of the pregnancy, group therapy in a separate group composed of women who have attended all eight focused sessions continues to address substance abuse and pregnancy issues, but in a less structured way. Following delivery, the patients are followed in groups consisting of other postpartum women, to allow more of a focus on parenting issues. The groups continue for two years postpartum.

Followup Coordinator

At the time of the first visit, our original design called for a followup coordinator to be assigned to the patient. The purpose of this individual is to be a tracker of appointments for the patient, and to help her to reach them. She is essentially a medical case worker, and helps the patient interact with the social service support network to arrange transportation, child care, etc., as needed to allow the patient to show up for care. This would involve making a home visit to evaluate the patient's environment, and will extend to the level of calling early in the morning to remind the patient of her appointments and review how the patient will overcome any obstacles to appearing. Additionally, the community health nurses, who would normally perform a home visit on these patients following delivery, would be contacted at this time, and would begin regular home visits prenatally. This would allow the followup coordinator to have a realistic, objective assessment of the patient's environment and support facilities available to her. Due to a lack of funds, however, such an individual does not yet exist in our program, and our clinic manager performs these duties within the limits of her available time. We do not currently perform the home visits, and have no money to reimburse the community health nurses for prenatal visits.

Laboratory Studies

Laboratory studies during the pregnancy include all those which are standard for a high risk population. The patients are counseled regarding HIV testing, which is encouraged. At 16 weeks (for those who register in time), a maternal serum alpha feto protein is drawn, and at 28 weeks a glucose screen utilizing a 50 gram glucose load is performed. Urine is taken weekly prenatally, monthly postpartum, and screened for drugs. Ultrasound evaluations will be done of each fetus in each trimester. A neurobehavioral examination is done on each fetus after 28 weeks.

Patient Visits

At the time of birth, a visit by clinic staff is made in the hospital, to review discharge plans. The patient along with her infant are automatically enrolled in the infant followup program. In this portion of the program, well-baby care is provided by a nurse practitioner, functioning under the guidance of a pediatrician within the faculty of Oregon Health Sciences University. They have visits at 1 week, 1,3,6,12,18, and 24 months, and yearly thereafter.

SAFE SUBSTANCE ABUSE IN PREGNANCY CLINIC ESTIMATE OF MONTHLY COST OF OPERATION

	Percent of time	Salaries and fringe benefits	Direct costs	Totals
Obstetrics				
Director.....	10	\$724		
Obstetrician.....	20	604		
Clinic Manager.....	60	1,083		
Nurse.....	35	1,385		
Nutritionist.....	12	413		
Childbirth Ed.....	3	117		
Receptionist.....	33	695		
Supplies.....			100	
Telephone.....			120	
Space.....			125	
Dept. Total.....		\$5,021	\$345	\$5,366
Psychiatry				
Director, ATTC.....	10	\$396		
Med. Direct, ATTC.....	10	585		
Subst Ab Cnstr 1.....	20	445		
Subst Ab Cnstr 2.....	40	890		
Admin Assistant.....	10	261		
Dept. Total.....		\$2,577		\$2,577
Pediatrics				
Ped Nurse Pract.....	10	260		
Dept. Total.....		\$260		\$260
University Hospital				
Phys Therapist.....	5	189		

**SAFE SUBSTANCE ABUSE IN PREGNANCY CLINIC ESTIMATE OF MONTHLY COST OF OPERATION—
Continued**

	Percent of time	Salaries and fringe benefits	Direct costs	Totals
Discharge Planner	3	117	400	
Space				
Hosp Total:		\$306	\$400	\$706
Total Monthly Cost:				\$8,909

PREPARED STATEMENT OF SHERMAN P. MCCOY

Good morning. Thank you Mr. Chairman for inviting me to this hearing on infants born to drug abuse. I am Sherman McCoy, chief operating officer of Harlem Hospital Center, a member institution of New York City Health and Hospital Corporation. My wife, Patricia and I are also the adoptive parents of brave little Sherman, Jr., who is a victim of cocaine/crack abuse.

Harlem Hospital is a 757 bed acute care public hospital located in the heart of Harlem. The hospital is a premiere center for urban health care. We specialize in treating the modern day ills of aids, substance abuse and mental illness. Our patients are drawn from the poorest blocks in the city—and they have been poorly served by the medical community their entire lives. Our patients lack access to the community-based primary and preventive services that are so essential to the early identification and management of illness.

The Harlem community is beset by some of the worst conditions in New York City and the Nation. These include:

- High infant mortality
- High unemployment
- Low educational attainment
- Poor housing
- High numbers of medically indigent
- A life expectancy for males that has been documented to be less than that expected for males in the country of Bangladesh; and
- The young, poor and uninsured, minorities and women, disproportionately suffer the consequences of drug abuse. As a result, they are placed at much higher risk for economic failure and serious health problems (including aids).

The problems we face at Harlem Hospital mirror those of the city at large. And the statistics are startling:

- In fiscal year 1989, there were 4,875 babies reported to the Child Welfare Administration (CWA) because of a positive toxicology for drugs—14 percent more than the year before, and 268 percent more than in 1986 when tracking began.
- At Harlem Hospital, a child is born with a positive toxicology almost every single day of the year.
- In the past two years, the number of babies born in the city's public hospitals increased 7 percent. During the same period, the number of newborns with positive drug toxicology rose 38 percent.
- At the city's eleven public acute care hospitals, almost 60 percent of the infants awaiting placement for ten days or more had substance abusing mothers.
- For the last three years, more than 20 percent of the babies born at Harlem Hospital have had to spend some part of their stay in neonatal intensive care units. Discharges from these units cost about \$9,000 more, on average, than for normal newborn units.
- At Harlem Hospital center in 1988 about 4 percent of children born tested positive for HIV. The vast majority of these cases became infected due to either direct or indirect maternal IV drug use.
- In the 15-month period of January, 1989 through March, 1990, Harlem Hospital had 64 admissions for patients with aids or aids related complex (ARC) who were less than 10 years old. Our outpatient departments serve 150 families with children with aids. Along with those who hold a lighted candle against the consuming dark-

ness, we await more effective medical treatments and research breakthroughs in the battle against aids.

There is one area where we have experienced a measure of relief from the vicissitudes of the current health care environment.

The New York City child welfare administration has done a very good job in reducing the number of boarder babies. As many of you know, this term refers to those infants who spend more than 10-days longer than medically required in the hospital awaiting placement. Vigorous placement efforts have reduced Harlem hospital's boarder baby complement from a total of 119 in December 1986 to 21 on June 25, 1990.

Much more needs to be done. Senator Moynihan's legislation to provide Medicaid care for HIV positive individuals (S. 2536) is desperately needed. It would provide much needed relief to hospitals such as Harlem, which serve a disproportionate share of AIDS/HIV patients. In addition, it which would make it easier for state Medicaid programs to offer home and community based health services for children with aids, including respite care, personal care, services for foster care givers and case management. This will enhance our ability to place children, to improve the quality of the placement and to reduce the high cost of hospital care.

I'd like to focus briefly on babies born crack addicted. As the numbers show, too many women are using illicit substances during their pregnancies. The drug of choice is cocaine. And these same women lack adequate, even any, prenatal care. A survey of birth certificate data in New York City in the decade from 1976 to 1986 shows that only 49 percent of pregnant cocaine users obtained any prenatal care. The impact of such prenatal neglect is the extraordinary need to intensive postnatal medical and social resources.

There has been a dramatic increase in premature and low birth weight babies who require enormous amounts of expensive hospital inpatient, outpatient, and rehabilitative services. The number of low birth weight babies increased by 19,290 in New York City from 1985 to 1987. The crack crisis has also placed enormous strain on the entire foster care system. Crack babies enter the world with severe deficits and face a future filled with medical, psychological and social problems.

The story of my adoptive son is a case in point, although many children who share this plight are in far worse shape. My wife, Patricia, and I decided to adopt a child and we were very happy when the adoption agency informed us in April, 1989, that a normal baby boy awaited discharge to us from a hospital nursery. Only later did we learn of the information in Sherman, Jr.'s medical record—a grim record of survival against incredible odds:

- His mother smoked crack up to the very moment the ambulance was called.
- He was born in the ambulance and resuscitated.
- He was brought to the emergency room and resuscitated again and found positive for cocaine.
- He weighed in at less than 1,500 grams (very low birth weight) and was estimated to be about 10-weeks from full term.
- He spent approximately 90 days in the neonatal intensive care unit and about 30 days as a boarder baby. He weighed a little over eight pounds at the age of four months, and his muscles were hard and resisted stretching—the doctors call this hypertonia.
- He did not have full voluntary use of his muscles—cerebral palsy.
- While he did not have the brain lesions that several researchers have found with crack babies, he was, and still is, delayed in his development.

Patricia and I cried after the first set of evaluations, given what was expected for him in his development and what we have later learned. We learned that low birth weight infants develop more poorly in I.Q. and cognitive skills. We also learned that normal weight babies born to drug using mothers have more than triple the risk of dying in the first year than normal weight babies whose mothers do not abuse drugs. Little Sherman, Jr. has gone to physical therapy three mornings per week for the fifteen months that we have had him. His mother is his constant companion, therapist, teacher and playmate. Little Sherman, Jr. proves what research is now reporting—that early intervention can, to some degree, offset the problems that these children, cocaine involved and low birth weight, will have. What are the developmental problems facing crack babies? Several physician researchers have reported in the last year, including two pediatric development specialists, Dr. Davis and Dr. Fennoy of Harlem Hospital, who recently presented their findings of 70 children whose mothers admitted to using cocaine during their pregnancy. (Some also admitted to other substances.) The mean age at the time of referral to the spe-

cialists was nineteen months. 44.5 percent of these babies had been premature births.

- 94 percent had language delay,
- 63 percent had fine motor delay
- 37 percent had gross motor delay
- 54 percent had social skill delay
- 59 percent had behavioral abnormalities
- 11 percent had autistic disorders
- 30 percent suffered hypertonía

This new crisis of increasing numbers of crack babies is putting a new strain on Harlem Hospital. Of almost 3,000 annual births, more than 400 are estimated to be at high risk for delayed development. Very few are evaluated for potential delay prior to leaving the hospital. The pressure then falls on the caretaker or foster parent. We need to gain the resources to fix that. The hospital is not equipped and staffed to treat its current workload of identified babies and children with these problems. Their needs are overwhelming the staff and many children are referred to other agencies, such as United Cerebral Palsy, even when we know that they have a waiting list and are located more than 100 city blocks from our community.

The studies show that early intervention can work by increasing I.Q. levels, improving social skills and behavior, and improving physical problems. All of these will increase the likelihood of these children assuming a valuable role in society as adults. We must move as quickly as possible as a nation to put treatment, staff and programs in place for these children. We need an immediate response; we can't let them slip through the safety net.

Because of the deleterious health consequence of drug abuse, we need to integrate comprehensive programs for drug treatment and primary medical care with physical and occupational therapy, early childhood education, speech and hearing therapy, nursing, psychology, social work and other support services.

Mr. Chairman, few of the cocaine affected babies in this country will have the opportunity that little Sherman has. Many are now reported as entering school this fall without the ability to compete and perform with their classmates at the *kindergarten level*. And the school systems may not be prepared to respond to their special needs.

We need to treat persons addicted to crack, males and females, pregnant or not. As the senior Senator from New York, Mr. Moynihan, has advocated, we need to ensure that there is payment through the Medicaid program for treatment of addicted persons.

Reducing the impact of drugs on the health status of the infants and children in the Harlem community is a complex matter. The president of the New York City Health and Hospital Corporation, J. Emilio Carrillo, M.D., has recognized this and is spearheading a Harlem health initiative which will bring together and focus public and private resources to improve the conditions as reflected by the statistics reported earlier in this testimony.

Long range, the issue needs to be addressed through a broad program of education, employment, housing and health initiatives. However, there are immediate problems that can be addressed. Existing drug treatment programs are inadequate to meet current demand. These programs are virtually non-existent for some groups, such as women with children, pregnant drug abusers, adolescents, and drug abusers with aids.

Thank you for the opportunity to meet with you today.

PREPARED STATEMENT OF MEG MCGOLDRICK

INTRODUCTION

Good morning. My name is Meg McGoldrick and I am vice president for health affairs at Hahnemann University. Thank you for your interest in infants born to substance-abusing parents and the challenges that Hahnemann University Hospital faces in meeting their specialized needs.

Hahnemann University is a leading academic medical center in center city Philadelphia providing health services, biomedical research and health education. Hahnemann University has been serving the Delaware Valley since its founding in 1848. In addition to our 616-bed hospital, which was designated the first adult level one trauma center in southeastern Pennsylvania, our University includes a Medical School, Graduate School and School of Health Sciences & Humanities. During the

1989 fiscal year, the hospital treated 19,788 inpatients, 269,602 outpatients and 26,432 people in the Emergency Department. At the same time, over 2,000 students were enrolled in our three schools. Additionally, we have two clinical campuses for teaching purposes; one is at Crozier-Chester Medical Center in Chester, Pennsylvania, and the second is at Lehigh Valley Hospital in Allentown.

Hahnemann University Hospital is a tertiary care facility, providing services to the most seriously ill and injured patients. We have a 20-bed maternity unit with 20 full-term bassinets. We provide neonatal intensive care to as many as 21 infants at a time and have a 38-bed pediatric unit that includes seven pediatric intensive care beds.

While there are several other tertiary care hospitals in the city and still more throughout the state, Hahnemann has the highest case mix index in the entire Commonwealth. In other words, Hahnemann University Hospital ranks first in all of Pennsylvania in treating the most severely ill and injured patients covered Scare.

Among Hahnemann University Hospital's inpatients, 24 percent are on Medicare, 30 percent receive Medicaid, 19 percent are covered by HMOs, and 27 percent fall into other payor categories, with 4 percent of this last category being self-pay. Most likely, we will receive no payment at all from this 4 percent of self-pay patients. In addition, for 89 percent of patients, Hahnemann is on a fixed rate of pay for their care, regardless of actual costs to provide the service.

Low Birth-Weight Babies—An Overview

The problems of low birth-weight babies are not new to inner-city hospitals like Hahnemann. Since providing appropriate prenatal care dramatically reduces the incidence of low birth-weight babies, Hahnemann and other members of the medical community have continually worked with various agencies and clinics to ensure this care is given.

But these efforts are only successful when utilized. As a result, Philadelphia has the third highest infant mortality rate of the nation's 10 largest cities.

Complex research and treatment, however, is helping keep low birth-weight babies alive, and they can often go on to develop normally. Unfortunately, many have varying medical problems requiring highly sophisticated care. Sometimes the babies overcome these problems prior to leaving the hospital. But frequently they go home needing complex 24-hour care. With time, these children may—or may not—overcome their physical and mental problems.

Low Birth-Weight Babies and Substance Abuse

The introduction of inexpensive crack cocaine on the streets has added a whole new dimension to the incidence, complexity and care of low birth-weight infants with complications of substance abuse.

A recent study of eight Philadelphia hospitals conducted by the Philadelphia Perinatal Society and the Philadelphia Department of Health found that in 16.3 percent of the deliveries, the women had used cocaine within 48 hours of delivery. Countless others used illegal substances throughout their pregnancies.

At Hahnemann University Hospital, a recent one-year study revealed that 80 percent of the women who delivered in 1989 were indigent, covered by Medicaid or with no health care coverage at all. Of these women, 40 percent tested positive for cocaine being present in their blood at the time of delivery.

Treatment and Care of Substance-Exposed Babies

As you can well imagine, the care of low birth-weight babies require a very special adult—one with the ability to attend constantly to complicated physical and, often, psychological needs on a short or long-term basis. The caregiver must be able to provide medication on schedule and provide around-the-clock complex medical care such as suctioning, feeding precautions to avoid aspiration, changing colostomy bags, and feeding through gastrostomies.

In addition to the medical problems associated with low birth-weight, the demands of substance-exposed babies are well above those of the average infant (which are significant and overwhelming to many adults even without complications) and can be less rewarding than average as the infant may be less responsive emotionally than a normal child. In addition to the medical problems found with low birth-weight, substance-exposed babies tend to be highly irritable and unresponsive to normal methods of comfort and have difficulty bonding.

Unfortunately, mothers addicted to illegal substances, particularly cocaine, are ill-prepared to care for their newborns. Those who are impoverished, without family support and resources, are even less likely to be able to provide the care needed by these very sick, irritable and demanding children. At Hahnemann University Hospital and throughout Philadelphia, some substance-addicted mothers, having received

little or no prenatal care, simply abandon their children at birth. Some leave well before they are considered medically fit for discharge; others are found taking cocaine in their hospital beds. We have had women leave the hospital—presumably to get drugs—after yanking intravenous tubes out of their arms and with stitches from Caesarean sections not adequately healed. Repeated cocaine use undermines maternal biological instincts. Hence, the results are dramatic, such as women abandoning their babies, etc.

Boarder Babies

In Philadelphia, babies who are not medically needy, whose parents or relatives cannot or will not care for them, are considered boarder babies. These infants are the responsibility of the Philadelphia Department of Human Services (DHS). Many are cocaine and low birth-weight babies. Often the DHS cannot find appropriate foster care placement for these children. As a result, these babies remain in the hospital, many times in beds desperately needed for acutely ill children. I want to emphasize that although these babies may be medically needy, they do not require hospitalization, nor is the hospital an appropriate setting for them.

In Philadelphia, there was an 82 percent increase in the number of medically needy children requiring placement between 1986 and 1987 (from 127 to 212). The Philadelphia DHS has been unable to keep up with the demands for foster care, in spite of efforts to develop specialized foster care placement. Local hospitals estimate that there are 40 infants on any given day waiting for a DHS placement. During a six-month period from July 1989 to December 1989, Hahnemann had a total of 132 days in which nine healthy babies remained in hospital beds, with no reimbursement to the institution. This represents an average loss of \$700 to \$800 per day, per child, or a total of \$100,000 for that six-month period. This does not even take into account the ongoing losses we face when the cost of the child's acute stay exceeds Medicaid reimbursement. As an example, in Hahnemann's Intensive Care Nursery, the Medicaid loss for 1989 was \$670,740.

While the financial cost is exorbitant, the greatest tragedy is the impact on the child. He or she is exposed to infections unnecessarily and is at risk for more developmental delays due to the sensory deprivation and the lack of bonding with one consistent caregiver. The DHS, however, has not been able to recruit a sufficient number of trained foster parents to care for these children. In addition, there is no alternative interim or residential care facility in the Philadelphia area that could provide a healthy environment for these children who no longer need hospital care, yet have chronic health problems.

This situation is a painful one for both doctors and nurses who care for children languishing in hospital beds with no consistent caregivers or stimulation, let alone toys and clothes.

In some cases, the DHS' inability to locate appropriate foster homes for at-risk children in a timely manner actually allows ill-prepared parents an opportunity to assume responsibility for these children and to take them home under DHS-sanctioned plans. It is a well-documented fact that medically needy, premature infants are at greater risk for child abuse and neglect. For 1987, the Philadelphia DHS estimated that 60 to 80 percent of all reported cases of neglect and abuse of children in Philadelphia were cocaine-related. The delay in securing supportive in-home services for medically and socially needy children and the voluntary nature of these services further placed the children at risk of abuse and/or neglect. Sadly, countless numbers of these children reappear in our hospital, severely abused or with failure-to-thrive diagnoses.

HAHNEMANN UNIVERSITY STRATEGIES

Special Caretaker Program

Almost two years ago when our Hospital experienced the initial surge of abandoned babies, Hahnemann employees noticed the plight of these infants and responded in a compassionate and proactive way. In response, our Social Work Services Department formalized and structured the employees' interest and motivation to provide homes to these children by forming "The Special Caretakers Program" in 1988. To the best of our knowledge, this is the only program of its type in the country. Under this program, our employees serve as foster parents on either a short- or long-term basis. Since these individuals are already "in-house," Hahnemann is able to provide initial intake, participate in training, orient them and provide psychological support for them. The training, in particular, is crucial, since, although these babies no longer require hospitalization, most still have medical, neurological or psychological problems that must be addressed. Thus, they require specially trained foster caretakers. One employee is attempting to take steps to adopt a toddler and

his sitter, both abandoned at birth by their poly-addicted mother. Another employee, who is a nurse, took care of a toddler who was ventilator-dependent and gave her the only home she would ever know before she died last year of her multiple medical problems.

To date, we have placed four babies with employees, have three other employees certified as special caretakers and have eight additional employees in various stages of the certification process. We are spearheading new recruitment efforts in anticipation of continual and growing needs.

While this is a small start, it is a beginning. Unfortunately, even when our employees express an interest and commitment to taking medically needy children as foster or adoptive parents, the system has been slow to respond. They are forced to *watch* these children remain in hospital beds while fighting the Philadelphia and Pennsylvania bureaucracy for weeks or months. At times, our employees have even been discouraged by Philadelphia DHS workers from trying to care for the children. The intake, foster care recruitment, placement search, and permanency planning functions of the child welfare system are disjointed. This fragmentation leads to duplication of effort and little coordination of case planning. This has only exacerbated an already horrendous situation.

Hahnemann University employees have found the foster care certification and adoption process to be very difficult to work with, often ignoring the demands and realities of working families. Training is many times provided on short notice during working hours, and sessions are offered infrequently, sometimes as seldom as twice a year. The demands on potential foster parents are found to be unreasonable and insensitive. The consequences feel punitive to an interested foster parent who is told to wait another month, even another year, while watching the child they would like to care for languish in the hospital. The system is antiquated and fails to meet the needs of the children it is designed to protect. We can only wonder and watch in horror as potential placements for needy children are lost.

Children-at-Risk Proposal

We have begun the development of a new model of health care delivery for socially-at-risk women and children cared for at Hahnemann. This program calls for enhanced and expanded services at Hahnemann University Hospital, as well as collaboration and coordination with other agencies for other critical support services.

Our proposed model will bring together, in one facility, medical services for women and children with social, educational, and child care services. A cornerstone of the program is the availability of outpatient drug treatment in combination with prenatal care and child care services. In addition to basic medical services including prenatal, gynecological, and pediatric, we plan to link patients to the center through home visitation, and nutritional and transportation services. The model program will offer supervised child care for women in outpatient treatment, parenting education, and a therapeutic nursery school program for our babies in need. We intend to introduce vocational training, remedial education, housing and legal service support in this center.

Our proposal is grounded on the principle that a healthy, empowered mother is the best assurance of a healthy child. Hahnemann University recognizes that hospitals must step out of their traditional roles and serve as a catalyst for change in health delivery for this disenfranchised population. We believe we can bring together, at the service delivery level, different institutions, agencies and social service systems serving the same group but for different reasons, to improve the lives of our children. Hahnemann University Hospital has begun the search for private and government funding to support this demonstration model.

Recommendations

Here at Hahnemann, we cannot accept the current delays in securing placements for medically and socially needy children. As health-care consumers, we all value the cost effective management of our health-care resources. For children to remain in hospitals beyond any medical necessity is a gross misuse of shrinking health-care resources. As caring professionals, we are horrified at the impact of the placement delay on the children. A tertiary-care facility cannot substitute for a caring home nor can we continue to deplete those resources required for other acutely ill children.

The Hahnemann University initiatives are meaningful but modest attempts in the face of shrinking and limited resources. Additional action is critical. The following suggestions should be considered to address the future of these abandoned infants and to reduce unnecessary health care costs:

1. Funding for the foster care delivery system must be increased.

2. The foster care and adoption system needs to be overhauled in response to the needs of the children and the realities of today's families.

3. Interim care facilities must be developed for healthy babies who await placement.

4. My final suggestion is to implement a reimbursement program for hospitals for that period of time in which a child who is no longer medically needy waits for placement by the child welfare system.

In closing, technological advances have saved children who previously would not have survived. We now have the obligation to protect these children and to meet their complex needs. On behalf of the infants and children who are the innocent victims of America's drug epidemic, I thank you for your time, and attention today.

PREPARED STATEMENT OF MAUREEN MONTGOMERY

INTRODUCTION

Mr. Chairman, my name is Dr. Maureen Montgomery, and I am an assistant clinical professor of pediatrics at the State University of New York School of Medicine in Buffalo. More to the point for today's discussion, I am also associated with The Children's Hospital of Buffalo, where I serve as co-coordinator of the new Infants of Substance-Abusing Mothers (ISAM) Clinic. It is an honor to appear before you this morning on behalf of my 39,000 colleagues in the American Academy of Pediatrics, who are dedicated to the promotion of maternal and child health.

At the outset, Mr. Chairman, I want to express to you and to the members of this panel the Academy's deep appreciation of your emphasis on these urgent issues affecting addicted women and their children. As a nation, we have not yet begun to come to terms with our tragic proliferation of drug-exposed infants and children, but this public hearing—and this Committee's jurisdiction, especially with respect to Medicaid, foster care and the maternal and child health block grant—offers real promise of progress.

For pediatricians, that promise is all-important. There are indications today that perhaps one of every 10 infants is exposed to illicit drugs during pregnancy. More and more infants are being admitted to special-care nurseries for complications caused by their intrauterine drug exposure.

Yet preliminary findings from a recent survey by the National Association of Children's Hospitals and Related Institutions suggest that neither systems are currently in place nor adequate resources are being made available today to meet the needs of this growing patient population. I come before you as an advocate for these infants and children, and for their mothers, whose persistent substance abuse problems our society simply must learn to address more sensitively—and more successfully.

THE PROBLEM

The situation in Buffalo is acute—our community has some of the most adverse health status and socioeconomic problems in the state. Infant mortality rates and low birthweight deliveries are extremely high. The rate of prematurity in Buffalo in 1986 was 9.5 percent, the highest in the state. As of August, 1987, there were 467,000 children of substance abusers in New York State alone. And research indicates that without effective intervention many of the current children of substance abusers are themselves likely to fall prey to drugs.

Pediatricians, caught in the crossfire of this latest epidemic, continue to face two basic problems: (1) infants exposed to substance abuse in the prenatal period are at high risk for a host of medical problems, and (2) the mothers are often unable or unprepared to parent.

ISAM

In response to these concerns associated with the increasing number of drug-exposed infants in and around Buffalo, the ISAM Clinic was launched eight months ago under a "Healthy Tomorrows for Children" grant, awarded by the Federal bureau of maternal and child health in conjunction with the Academy. ISAM is a primary care pediatric clinic designed to provide services to children who are exposed to drugs prenatally in order: (1) to prevent abuse, (2) to increase the skills and understanding of both parents and foster parents who have these children in their care, and (3) to reduce developmental delays in participating children.

The model includes a range of services designed to provide concrete assistance to these high-risk mothers and infants, including intensive medical evaluation and follow-up, parenting classes, home-based intervention and linkage to appropriate social service agencies in the community. Since its inception, the program has developed a protocol with local child protective services that includes a contract between the mother and CPS which mandates that she will take the baby for appropriate medical care. (The ISAM Clinic is strongly suggested as the source for that primary care in order to ensure that the infants in fact receive intended services.)

METHODOLOGY

Primary care under ISAM is provided by a pediatrician and a nurse practitioner on a schedule even greater than the frequency of visits recommended by AAP guidelines. This includes parent education classes in conjunction with well-child visits and periodic neurodevelopmental and behavioral assessments. There is 24-hour coverage for emergencies and advice.

Home-based support is carried out through weekly visits by the "resource mothers" and through their attendance with the parents at all parent-education classes. (These culturally similar "resource mothers" are recruited from Buffalo neighborhoods and are trained to provide surrogate parenting. They are women of the same race as the mother, and who have proven abilities to care for and nurture children. They support and serve as role models to substance-abusing mothers in an effort to avoid foster-care placement.)

Children's Hospital currently has a strong link with Child Protective Services through its High Risk Clinic and the Norman S. Ellerstein Center for the Prevention of Child Abuse and Neglect. Signs of child abuse or non-compliance with the treatment program are to be identified through frequent home and office visits, and are promptly followed up and reported.

CONSIDERATIONS FROM THE COMMUNITY-BASED PERSPECTIVE

It is clear that any programs which hope to succeed in caring for children of substance-abusing mothers must be carefully tailored to meet the unique needs of this vulnerable population. Consider the following:

(1) There is probably a high incidence of multiple diagnoses among these mothers (e.g., drug dependency, AIDS, sexually transmitted diseases, psychiatric illnesses such as depression and borderline personalities). Effective interventions will require the incorporation of mental health principles and professionals into every aspect of the program.

(2) There is a tremendous financial burden on centers caring for these infants and their mothers. Based on our experience and that of many other programs around the country which have dealt with poor, undereducated, high-risk populations and their relative success at parenting their children, it is apparent that service delivery is extremely labor-intensive.

The services which appear to be most crucial, those of nursing coordinators and social workers, are not routinely funded through the reimbursement process. These are precisely the services that make a difference in terms of quality of care and ability to assure long-term follow-up, without which any valid outcome measure is impossible.

ISAM is patched together through a combination of Federal, state, local and private foundation grants. Continued availability of grant funding is uncertain, and Medicaid does not provide funding for these necessary psychosocial supports.

(3) The vast majority of mothers (more than 95 percent) in this population are poor, inner city minority women who live in drug-infested neighborhoods without amenities which most of us would consider among the bare necessities of life. Approximately one-third do not have a refrigerator; many have no phone, and move frequently. Safe child care and transportation are major issues. Concern about the safe arrival of the public assistance check is real. Many of the mothers are "over-programmed," i.e., obligated to attend parenting classes, undergo drug treatment, visit other children in foster care, and keep appointments for WIC, public assistance, housing, etc.

Most of the women have had late or no prenatal care, and therefore the paperwork is not in place for their infants to be immediately placed on Medicaid or WIC. (There is a six-to eight-week lag, during which period the infant's nutrition is dependent on the mother purchasing the formula herself.) In addition, a large number of women freely admit that they discovered their pregnancy late, beyond the time when they could have obtained a legal abortion, which many of these women say

that they would have had. Even these women, however, clearly want to keep their infants once they are born.

A large number of these women have themselves been victims of domestic violence, child abuse, prostitution or incarceration—they are without hope and without goals. They have no ability to delay gratification and are entirely fatalistic. Many women, even after being informed of the real risk of "crib death" among cocaine-exposed infants, turn down the offer of a home monitor because they believe "what will be, will be."

These mothers have few supports; daily stress has become unmanageable; their lives are out of control. They have pressing needs and are often inept at using available support systems, formal or informal. They need help just to use help. Traditional programs which offer services encumbered by bureaucracy, and which do not take into account the obstacles faced by these depleted families, are doomed to failure. We must rid ourselves of the notion that the women who are most in need of help will simply partake if the services are there. In the long run, unless we get women to appreciate their own individual responsibilities, nothing we do in clinic will work. **SUCCESSFUL PROGRAMS MUST MEET THESE FAMILIES MORE THAN HALFWAY.**

(4) As part of our program, we attempt to meet every mother in the hospital before she and the baby are discharged in order to introduce ourselves and the "resource mother." The baby's first postnatal appointment is within 7-10 days of discharge, and then every two to three weeks thereafter for the next several months. Consequently, we get to know them and they get to know us early on, and there is an attachment which ensues naturally. The resource mother visits frequently for the first month, almost daily, to develop a relationship that grows beyond the clinic. Ideally, no resource mother in the program is responsible for more than three families at once.

In addition, the team social worker meets with each family at each visit, and teaches a mother-support group on a weekly basis. The support group focuses on issues relating to parenting, caring for a new baby, family stresses, etc. By deliberately avoiding the issues of drug dependency, the classes have allowed the women themselves to broach their problems with substance abuse—as well as the implications for their children.

(5) There are crises in social service delivery systems. There is currently in Buffalo a six- to eight-week delay for emergency housing. Most emergency shelters will not allow children. There is a six- to eight-week waiting period for Medicaid-eligible patients requiring inpatient detoxification. These programs are traditionally geared toward drug-using males, and make no provision for mothers who must find emergency child care at a moment's notice. None of the inpatient programs in Buffalo today provides residential care for mothers and their children. One inpatient program has made pregnant women a priority. Many of the women in ISAM have in the past been inpatients in drug treatment programs for acute detoxification. All have stated that the outpatient programs, following their hospitalizations, have been thoroughly unsatisfactory.

(6) Foster care is strained to the limit. Most foster care families in our clinic are close relatives of the natural mother, e.g., the baby's grandmother or aunt. These families are being overwhelmed by the sheer numbers of children being placed. In addition, many children are placed back with their natural mothers within the first year of life, often after the mothers' drug dependency has not been successfully overcome, and without the infants having formed any bond whatsoever with their mothers.

CONCLUSION

Mr. Chairman, I have not conveyed to you this morning an optimistic picture. Conditions today among women and their drug-exposed infants are dismal and getting worse. They cry out for attention. As promising as our own modest community-based program may be, I have to emphasize that effective outcome measures will require long-term evaluation and follow-up. Service delivery is critical, not only on moral grounds but for scientific purposes. If they find it unsatisfactory or inappropriate, these mothers and children will be extremely difficult to track. But there are innovations which are cost-effective, and which we can promote now. More than 100 women, for example, many of them themselves on public assistance, applied to serve as ISAM resource mothers. This component of the program is vital—yet minimum wage—and well may warrant wider application.

It is our hope that this Committee in its wisdom can sort out these and other promising opportunities for public policy in behalf of addicted women and drug-ex-

posed infants, and then exert its leadership behind necessary legislation. The Academy will be there in support.

Attachment.

UNIVERSITY AT BUFFALO,
Buffalo, NY, July 3, 1990.

Senator LLOYD BENTSEN, *Chairman,*
Senate Finance Committee,
Senate Office Building,
Washington, DC.

Dear Senator Bentsen: It was an honor to testify before the Senate Finance Committee on behalf of the American Academy of Pediatrics, and the National Association of Children's Hospitals and Related Institutions (NACHRI) and most especially on behalf of drug addicted women and their children.

I applaud your efforts and those of the other members of the Committee who are grappling with these urgent, complex, and life threatening issues. The epidemic of drug exposed infants will have consequences which we are only beginning to realize, as all who spoke so eloquently stated.

Based upon my experience, working with these mothers, foster mothers and children, I would like to add some brief thoughts which occurred to me while listening to the many excellent witnesses.

First on the subject of socio demographics of the drug exposed infants and mothers. A recent report in the *New England Journal of Medicine* by Ira Chasnoff, M.D. (4/26/90), concludes that the overall prevalence of illicit drug and alcohol use among pregnant women in Pinellas County, Florida is 14.8 percent. Overall there was little difference in prevalence rates of drug use between women seen in public clinics and those seen in private offices, or between white and black women. However, there is a striking difference between the most common drugs used among the women, and between the socio economic status of black and white women. That is, black women were much more likely to be poor (63.3% vs. 27%) and more likely to use cocaine (7.5% vs. 1.8%). White women were more likely to use marijuana (cannabinoids).

This data is very similar to early studies including one done at the Children's Hospital of Buffalo which document an overall prevalence rate of illicit drug use among all pregnant women of approximately 13% (approximately 35% cocaine). It is critically important to recognize the differences between marijuana and cocaine in terms of addictive potential, fetal injury, life style and risk taking behaviors in the individual drug user. The recent increase in serious child abuse, foster care placement, congenital AIDS infection and significant fetal damage is directly attributable to the rapidly increasing use of cocaine (especially crack cocaine) among pregnant women. These women are primarily poor minority women whose children therefore suffer the double impact of drugs and poverty.

Data collection is very difficult in this population. Prenatal screening will only identify those women seeking medical care. Many pregnant drug users (especially crack cocaine) never receive prenatal care. Urine screens are limited since they do not indicate the frequency of use or the amount used. History taking in this population is unreliable. Therefore, the studies by Chasnoff et al are very valuable in elucidating the differences among different drug using groups. The reported differences in drug use between high and low income users is highly statistically significant and is potentially much greater than is reported if we assume that many crack addicts do not seek prenatal care.

We have spent the past 9 months providing primary pediatric care to an ever increasing caseload of cocaine exposed infants. Over 90 of our patients and their mothers are poor and reside in the inner city of Buffalo. There is a serious shortage of drug treatment facilities for these women—many of whom have been inpatients for drug detoxification in the past. Most truly want their children—only a few do not. Some are unable to parent and their children will require foster care and adoption. Many of the mothers have been victims of child abuse, domestic violence, prostitution, and some have been incarcerated.

As I stated in my testimony, there is a six to eight week wait for inpatient drug treatment services for these mothers, and the added burden of finding satisfactory child care at the same time. Many live from day to day, without furniture, appliances, phones or support. They are unprepared for the complexities of multiple service providers at different locations around the city.

There is certainly no stereotypic cocaine addicted mother just as there is no classic cocaine baby syndrome. There are only thousands of mothers and babies who

desperately need services now and who are looking to us to speak for them. They will require compassionate and comprehensive services, and assertive guidance by experts in the fields of mental health, drug addiction, social services and child welfare. Interventions will need to be culturally sensitive and concrete.

Our program relies heavily on home visits by neighborhood minority women who have become part of our health care team. This model of home visitors to our mothers has been used for over 100 years in England, and was shown recently by Olds et al (1986) to significantly decrease rates of child abuse and neglect in high risk families in the U.S. We were overwhelmed by the response from inner city women who applied for positions of Resource Mothers (over 100 applications for 6 positions).

Our small project is only a beginning, but by building on the strengths of neighborhood residents, it reinforces positive role models in the inner city. We are currently preparing to analyze our data to further report the socio demographics, educational history and drug patterns of the mothers of our 100 patients. We will be tracking the outcome of the children over the next 5 years to determine the effectiveness of our comprehensive service delivery system and extensive outreach.

As a nation, we cannot ignore our continuing failure to be effective advocates for children, particularly those growing up in social disadvantages. It is our collective duty to support these very fragile infants and mothers, rather than to blame them when they fail.

We would be most anxious to provide further details of our program or any additional information related to this topic at your request. We will be in Washington in early August for the NACHRI meeting and look forward to hearing from you.

Sincerely,

MAUREEN MONTGOMERY, M.D.,
Co-Director, *Infants of Substance
Abusing Mothers (ISAM) Clinic.*

[SUBMITTED BY SENATOR DANIEL PATRICK MOYNIHAN]

DEPARTMENT OF HEALTH AND HUMAN SERVICES,
Washington, DC, May 23, 1990.

Hon. DANIEL P. MOYNIHAN,
U.S. Senate,
Washington, DC.

Dear Senator Moynihan: I am writing to convey our concern that there may be some misunderstanding about Medicaid coverage for crack cocaine addiction. The intent of this letter is to clarify what coverage does exist under the Medicaid program. To the extent individuals are eligible for Medicaid and need inpatient hospital care, it is covered under the Medicaid program. For mandatory Medicaid benefits, such as inpatient hospital services, our regulations explicitly prohibit States from using a recipient's diagnosis, type of illness, or condition as the basis for arbitrary limiting or denying coverage.

A State may determine that the hospital setting is not appropriate for the treatment of certain conditions. However, it is simply not true that Federal Medicaid policy will not permit payment to hospitals for treatment of crack cocaine addiction.

In fact, the Medicaid program offers a wide range of benefits which may be of use to crack cocaine addicts. Beyond payment for inpatient and outpatient hospital treatment which are mandatory benefits, States also have the option to include clinic and rehabilitative services in their Medicaid benefit packages. These services provide outpatient care that could range from short episodes to full day treatment programs.

Although the above services are allowable for all States, they are optional. Each State designs its own program, building on the basic Federal requirements. States establish their own regulations and instructions and construct eligibility, coverage, and payment rules with which they operate their programs. Thus, general statements about Medicaid must be quite general to be applicable across the board.

Another difficulty in discussing an issue like treatment of crack cocaine addiction is that Title XIX of the Social Security Act provides coverage for generic services rather than coverage for specific diagnoses or conditions. Thus, when a specific condition is discussed, it is necessary to determine the appropriate services the State Medicaid program offers that can be used to treat the symptoms of the condition. In raising the question of hospital care and crack cocaine addiction, the issue must be posed as follows—what, if any, type of inpatient hospital care is medically appropri-

ate for the treatment of crack cocaine addiction? This is a question that must be answered by the individual State in developing its Medicaid coverage package.

Medicaid has one statutory restriction that is of particular relevance to the coverage of substance abuse services. Title XIX precludes the payment for services to individuals between the ages of 22 and 65 in institutions for mental diseases (IMDs). Under the International Classification of Diseases, Clinical Modification (ICD-9-CM), alcohol and drug abuse are classified as mental disorders. Consequently, facilities that exclusively treat psychiatric or substance abuse disorders are considered by Medicaid as IMDs. This restriction in Medicaid coverage relates to the long standing State role in supporting mental health and substance abuse treatment services and operating State mental institutions.

While recognizing the States' primary role in providing services in these areas, the Federal Government does target substantial support to States for the prevention and treatment of substance abuse through many activities, most notably the Alcohol, Drug Abuse, and Mental Health Services Block Grant. This grant program provides funds to the States to enhance and expand alcohol, drug abuse, and mental health services according to individual State needs. In response to the National Drug Control Strategy, the drug abuse portion of this block grant has been significantly increased this year. The Alcohol, Drug Abuse, and Mental Health Administration also has funds available through several categorical programs which target pregnant women and their infants as well as high-risk populations.

Like you, Dr. Sullivan and I remain strongly committed to fighting drug abuse and reducing the demand for drugs. Should you or your staff require further information on this matter please contact me or Thomas Gustafson, Acting Director, Office of Policy Analysis, of my staff. He may be reached at (202) 245-0500. We welcome your interest in this area, and look forward to working with you on matters of mutual concern.

Sincerely,

GAIL R. WILENSKY, *Administrator.*

PREPARED STATEMENT OF LOUISE SCOTT

Hi! My name is Louise Scott and I have been an approved foster parent for the Division of Child Protective Services for the past 6 years in Delaware, and have nine years of foster parenting experience previously in Virginia. I have had approximately 20 children placed with me ranging in age from 3 days old to 18 years. I have provided a home to a teenaged mother and her baby, a sibling group of 3 ranging in age from 1 to 5, delinquent girls, sexually abused girls, infants born drug addicted, physically abused children, emotionally abused children, and children with developmental delays. I also have my own personal experience in the foster care system in New York having grown up in numerous foster homes and group homes, from the age of 9 months until I reached the age of majority at 18. My last foster family is still very much a part of my life, but I have also come to grips with my past, and am reunited with my biological mother and other family members.

In addition to my experiences as a foster child and foster parent, I hold a Bachelor's Degree in Human Resources Management and am a Licensed Practical Nurse. I have also been a Youth Advocate for the past 3 years to delinquent girls. Thus, I am very knowledgeable about the foster care system from various perspectives, and serve as an advocate for children in this system.

I've been a foster parent for 15 years and the children entering the foster care system today are much more difficult than the children of 15 years ago. For example, adolescents entering care today tend to be more angry, exhibit more difficult behaviors, have low self-esteem, and street-wise attitudes that make them appear to be incorrigible. We have seen recently drug addicted babies entering foster care. These babies are hard to live with because they are constantly irritable, non-responsive to normal bonding, developmentally delayed, and constantly crying. These babies require special holding and handling techniques. As toddlers, they are more active, aggressive, restless, and destructive. These children need foster parents who can provide therapeutic as well as custodial care.

I would list the following as major suggestions for improving Delaware's foster care system:

- **PROFESSIONALIZATION OF FOSTER PARENTS**—Each foster parent should be recognized as a professional team member by social service agencies and the community. Since the foster parents are the people who live with the children day in and day out, they have a lot of input as to what their strengths and needs are.

Foster parents should have an integral part in the development of all planning for children placed in their homes. In Delaware, foster parents are encouraged to take an active role in the planning document, The Plan For Child In Care.

- **RESPIRE**—All parents need a break from their children from time to time. Foster parents often do not have the resources financially or socially to find babysitters for their foster children, particularly those with physical, emotional, or mental handicaps. Oftentimes, placement disruption could be avoided by giving foster parents a break from the daily stress and pressure of caring for children with a variety of problems and needs. Currently Delaware is developing a respite program for families with special needs children under a Federal grant. This is a step in the right direction but it is important that this program gets refunded and gets expanded to all children in foster care. Respite care can decrease placement disruption for foster families and maltreatment in biological families. In addition, for children in foster care who do not have regular visitation with their own families, respite can serve as a special place of their own to visit.

- **TRAINING**—Additional training for foster parents is needed to deal with the difficult children who are entering today's system.

- **IMPROVED ACCESS TO RESOURCES**—At the present time there are resources available to our foster children, that are unknown to foster parents and often by the time the information is available, there are no slots available. Agencies could buy memberships to various community programs such as boys/girls clubs, YMCA'S, YWCA'S, community centers, etc. specifically for children in foster care. In addition there could be an agency advocate for foster parents who would be responsible for making community and agency resources known to foster parents who currently only hear of them through word of mouth if at all. In addition, there should be a fund available to foster parents to enroll their foster children in community activities like the ones mentioned above as well as other special events, sports teams, lessons, etc. These are activities that families normally provide to their own children.

- **INDEPENDENT LIVING**—I would like to see the Independent Living Program expanded to offer a less structured program where the money that is currently given to relatives, foster parents, or other caretakers is used to procure living units subsidized by the agency to place the adolescents who are suitable for independence. A mentor could then report back to the agency on the progress of the participants and make an agreement with the private landlords to continue rental to the young adult upon their reaching the age of majority. Placement of the child in this type of program could give the agency up to 2 years of providing support, close monitoring, and preparation before they were truly on their own. In addition, this would serve the population of children who are no longer in school because they are of legal age to drop-out and are unemployed. These children are very difficult to place because most foster parents are uncomfortable in accepting them for placement. (One of the requirements for admission into the program would be that the child is working towards return to school or employment).

- **INCREASE IN BOARD PAYMENTS**—Currently foster parents are paid for room and board based on the 1985 USDA Standards for raising a child at *low cost*. As it now stands, foster parents are unable to do for foster children what they do for their own children. In addition, low rates are cited as one of the major reasons for difficulty in recruiting additional foster parents.

PREPARED STATEMENT OF LOUIS W. SULLIVAN

Good Morning, Mr. Chairman, Mr. Packwood and members of the Committee. A little over a month ago I had the opportunity to come before this Committee to discuss the profound impact that the use of tobacco has on the health of our nation's youth. I am pleased that you have invited me here again to testify before you. Today's topic is an overwhelming concern. The effects of substance abuse on mothers, which has been so dramatically escalated by "crack" cocaine use, and the impact of addiction on the health and well being of infants and children are among the greatest tragedies caused by America's problem of drug and alcohol abuse.

Today I will discuss with you our understanding of:

- the gravity and scope of this terrible problem;
- our approach to the problem and some of the specific programs that are in place; and
- activities that I have inaugurated to help find effective solutions to the problem.

I know the Committee is deeply committed to meeting the challenge presented by not only substance abusing women and their children, but by the drug problem in general. I firmly believe that the Administration is meeting these challenges effectively. America has undergone and is undergoing some fundamental changes regarding its tolerance for the use and abuse of drugs. America is fighting back, and the reason why is not complicated: no caring person, especially a health professional, can stand by and watch the devastation that drug abuse has brought upon us. Drugs and alcohol abuse are destroying families and long held American values, and they are even destroying what we had long thought was a natural bonding between mother and infant.

Mr. Chairman, the clearest, and most important message I have this morning, not only for the Congress but for America's women, is that substance abuse by mothers can have long lasting harmful effects on their children and in some instances it may be fatal. Drug and alcohol use by pregnant women and the consequent ill effects on their children represent a burden they and all Americans will carry into the future.

SCOPE OF THE PROBLEM

For most of us, the heart wrenching stories that we have read in our nation's newspapers on the destructive impact of drugs on mothers and their children are almost unbelievable.

• In Philadelphia a 31-year old mother wound up in a city shelter with her three children after being evicted from a house for not paying her rent. The mother was quoted as saying, "I sold the food out of my refrigerator to get high, I sold my clothes, the TV, the washing machine and all our furniture to get high. The kids hardly ate. I saw what I was doing to my kids, but getting high was more important than taking care of my family."

It is even more shocking, Mr. Chairman, to see the effects of substance abuse first hand. I know you, Mr. Chairman, and other members of the Committee have had similar experiences. On a recent visit to the newborn care unit in Broward County General Hospital in Fort Lauderdale, Florida I saw some of our country's finest health-care professionals caring for newborns who, in too many cases, had been affected by a mother's drug use. Eight of the babies I saw that day were exposed to cocaine before birth. The consequence of maternal cocaine use can be a lifetime of pain.

One baby I saw had received intensive care and other services that cost \$698,000 over a seven-month period. Here, Mr. Chairman, is a copy of that hospital bill.

This, Mr. Chairman, represents an extreme case. But the size of this bill is a measure of a huge amount of pain and suffering—unnecessary pain and suffering—endured by that infant. This pain could have been avoided, had the mother's drug addiction been prevented. The cost of this human tragedy is immeasurable in terms of both human misery and monetary expenditures. As a physician and as a father, I know that the condition of these children and the underlying causes are a grievous offense against a basic value we hold so dear the care and nurturing of our children.

One of the principal roles of my Department is the development and dissemination of knowledge to solve problems. For the one we are discussing today, fulfilling this role is critical. For example, estimates of the number of infants that are born exposed to substance abuse range from 30,000 to about 100,000 (the latter figure is cited in the National Drug Control Strategy) with some going even higher. These estimates are based on extrapolations of local studies. HHS is currently attempting to get a better handle on the scope of the problem through national epidemiological surveys. Understanding the scope of the problem is essential to understanding the task before us.

While we do not have perfect national data, I want to share with you some of the information we do have on this problem. Data from the 1988 National Household Survey on Drug Abuse indicate that of the 59 million women of child-bearing age in this country, over 5 million currently use an illicit drug, including 1 million cocaine users and 4 million marijuana users. Other studies have indicated that between 7 and 15% of all births in four selected major cities involved drug use by the mother.

The HHS Inspector General has just completed three studies of this issue at my request, which I am releasing today: (1) *Crack Babies*; (2) *Crack Babies: Selected Model Practices*; and (3) *Boarder Babies*. The first report reviews the situation in 12 major cities. The Inspector General found that there is no typical crack exposed baby. Some babies are born with clear symptoms of maternal drug use. Others appear normal at birth and thus may not be immediately identified as having been exposed to drugs. These children may experience developmental problems months or years later.

From other localized studies we have learned that drug abusing mothers are not necessarily young teenagers. One study in Massachusetts found that 72% of the pregnant addicts treated were not first-time mothers, and their average age was 24. In addition, this problem is not just limited to low-income or minority women. Our data from the National Household surveys show that it affects all socio-economic classes and races. Another study found that a key determinant of how much drug use was identified by hospitals was how hard they looked for it.

We want to encourage hospitals and physicians to improve identification of these infants. With that goal in mind, I am directing the Public Health Service to work with appropriate professional health care societies and provider organizations to consider the development and use of improved testing protocols for infants subjected to drug or alcohol abuse.

Mr. Chairman, although we know that rates of infant mortality and morbidity are linked to substance abuse by childbearing women, we need to know more about the precise effects of drug exposure on infants. We are supporting research on this issue. Similarly, we need to learn more about the safest and most effective ways to treat drug abusing women. HHS is working to improve the quality and effectiveness of drug abuse treatment in general. We have made pregnant women a special focal point within this effort. Pregnant women and mothers can present special challenges for treatment programs. In particular, treatment of a pregnant woman with any disease poses safety issues related to the child she carries. At the National Institute on Drug Abuse we are supporting such efforts as research demonstrations on treating women and a medication development program.

PREVENTION AND TREATMENT

While our knowledge is at this point imperfect, we cannot wait for all the answers before we work with States, localities and individuals to prevent drug abuse by pregnant women and to treat women and their children.

The best thing a pregnant woman can do is to stay healthy while pregnant—to avoid drugs, alcohol, tobacco and any other substance which will harm her baby. We must do all we can as government, private organizations, and most importantly as individuals to encourage healthy habits. The Federal Government and state and local governing bodies are responding to the drug war, but we need the special help of the American people when it comes to mothers and their children.

One thing I am asking our fellow citizens to do is this: anyone who knows a drug- or alcohol-using pregnant woman has the duty to warn her away from these substances and if necessary help her toward treatment. This is especially the responsibility of the baby's father.

Drug abuse prevention efforts and messages have logically focused heavily on youth—and that is appropriate. Research is showing, however, that a significant portion of substance abusing mothers are not teenagers, but adults. Thus, we need now to broaden our prevention efforts.

I am therefore asking the Public Health Service to educate the general public, and especially those most at risk, about the tragedies associated with substance abuse by pregnant women. This public education effort will build upon the momentum of our smoking prevention efforts.

We know pregnant women need drug abuse treatment and prenatal care and my goal is to ensure that appropriate treatment is available. Several important Federal treatment efforts are now underway.

First, within our basic block grant to States providing support for drug abuse treatment and prevention there is a dedicated pool of funds for services especially for pregnant women and women with dependent children. Reports recently received from States indicate that this 10% set-aside is helping to increase the availability of treatment programs for women. To further improve drug treatment efforts supported through the block grant, we have submitted a proposal that would require the approval of State drug treatment plans as a condition for State receipt of block grant funds. The set-aside and our proposed treatment plans are particularly important for substance abusing pregnant women.

A second treatment initiative is the HHS special demonstration grants program for Pregnant and Post-partum Women and their Infants. I believe these demonstration projects are especially promising. The model projects are run by public and private organizations; they are located in community, inpatient, outpatient and residential settings; and they focus on education, prevention and treatment of women by providing a comprehensive program. Special priority is given to projects addressing the needs of low-income women, especially those who use crack cocaine. By the

end of 1990 we expect to fund about 100 demonstration grants, which at full operation are expected to reach approximately 60,000 women. This program, which began in 1989 with a budget of \$5 million, is now at \$32 million and the President has requested \$38 million for 1991.

One demonstration funded under this program is the Family Services Center in San Antonio, Texas, which provides services to 120 substance-abusing women and their infants. Each program participant is assigned to one of the three specially designated clinics where she receives medical care, group counseling, and educational services. In addition, each participant is assigned a nurse or social worker who provides monthly home visits and functions as a personal advocate for, and an assistant to, the families. After the birth of the infant, the clinic provides well-child care, parent education, and substance-cessation assistance. Visits to the women's homes continue, the home environment is assessed; community resources are utilized; and infant development is monitored periodically to age three.

These are the kinds of programs—locally designed by creative, committed people—that can make a difference. Good ideas can be shared and replicated at other sites. That is what we hope to do with the Pregnant and Post-Partum Women and Infants demonstration grants program. These projects expand treatment capacity in the short run and, over time, can help improve treatment effectiveness and quality.

There is another innovative program that I understand the Committee will hear about this morning. Dr. Richard Lowensohn of Portland, Oregon will be describing the program he directs: the Substance Abuse Family Evaluation Clinic at Oregon Health Sciences University. This non-residential program pulls together medical and other support services to provide a comprehensive program. It uses local and donated funds to build on existing State and Federal Government resources, including Medicaid, to tackle this problem. It is another example of a promising locally-developed program model. The HHS Inspector General has identified others in the Model Practices report released today.

Third, beyond the substance abuse and associated care provided through these special projects, are the broader prenatal care and other services targeted on all low-income women, including substance abusers, through the Maternal and Child Health Block Grant and the Medicaid program.

I believe that we can do more to ensure that these treatment resources are brought to bear on this problem. In particular, States and localities may not fully understand the role that Medicaid can play under current law. And there may be misperceptions caused, in part, by the complexity of the program and by recent eligibility changes for pregnant women.

Therefore, I have asked the Health Care Financing Administrator to work with the States to make sure they fully understand how the Medicaid program can be used to support drug abuse treatment for pregnant women, including, for example, treatment services provided in small residential facilities. I am also asking that HCFA work with the Alcohol, Drug Abuse and Mental Health Administration to assure that the provider community also understands Medicaid's role. States have considerable latitude to cover inpatient hospital and outpatient drug abuse treatment services. Recent eligibility changes for pregnant women broaden the population that can be served.

In addition, we are looking for ways to urge the States and private providers to give priority in treatment admissions to pregnant women and women with young children. We will also be working with the medical and social services communities to improve outreach to women of childbearing age to encourage them to seek treatment.

CHILD WELFARE

I would like to focus now on the specific programs that are targeted to substance-exposed children. However, it is important to note that through our basic programs in foster care, child abuse and neglect, Head Start, Aid to Families with Dependent Children, the Family Support Act, and Medicaid, HHS provides general support to States and families. These programs provide a basic infrastructure which can be used to help address the needs of children and families suffering from substance abuse.

The emergence of drug exposed children poses new challenges for the dedicated individuals who provide child welfare and foster care services. Drug abuse has strained the capacity of the child welfare and foster care systems. We clearly need to search for ways to improve child welfare services, to support foster parents and relatives of affected children, and to increase the stability and quality of these children's lives. With that in mind, we have asked for \$47 million in additional funding

this year for child welfare services, contingent upon limitations in the growth of foster care administrative costs.

Within the context of designing more creative approaches, we are currently implementing the Abandoned Infants Assistance Act which will provide approximately \$10 million in both 1990 and 1991 for demonstration grants and other efforts to help prevent the abandonment of infants or young children, and address the needs of those who are, or might be abandoned, especially those infants born to mothers who are addicted to drugs, who have AIDS, or are HIV-positive.

A new initiative within our Administration for Children, Youth, and Families is our 1991 proposal for an additional \$6 million in the Child Welfare Research and Demonstration Program for innovative projects that demonstrate ways to meet the immediate non-medical needs of infants born to crack-cocaine using mothers and HIV-infected babies. These efforts will help us understand how to better structure the service system for these children.

While society's goal must be to keep families together whenever possible, we must be prepared to act quickly when it becomes clear either that a child is in immediate danger of harm, or that there is virtually no hope of family reunification. In the latter case, adoption is the solution and should be promoted. I am urging States to look at their processes for terminating parental rights to make sure that, in those circumstances when preservation of the family is not an attainable goal, we are using all means available to expeditiously place a child in a nurturing environment.

THE FUTURE

Mr. Chairman, I have provided an overview of the Department's current strategies of—research, prevention efforts, increasing capacity to treat women, and stimulating the development of innovative interventions for mothers and children. We have come to appreciate the range of resources and expertise that must be brought to bear on this problem—and to value the key role of local innovation in developing successful first steps.

Here is one more example. The Women's Annex in Tacoma, Washington, provides transitional housing for women recovering from drug and alcohol abuse and their children. To live in the Annex, women must have attended or be attending drug treatment and be in school or working. The houses are designed to offer a supportive home environment for women and their children. Services include child care, access to employment and education resources and referral information. The women may stay as long as necessary to maintain substance-free sobriety and work towards independence.

Mr. Chairman, I think it is especially important to point out that the Women's Annex was initially funded by a local attorney who acquired seven houses and renovated them into housing for women recovering from crack addiction. The services are now funded through private contributions and the Washington State Division of Alcohol and Substance Abuse.

Innovative programs like these are going to help us chart a course for helping substance abusing women and their children. Simultaneously, we need to put in place prevention efforts that send a clear message that substance abuse during pregnancy is doubly harmful. It can harm a child in addition to the adult.

Mr. Chairman, this concludes my remarks. Again, I thank you for this opportunity to speak before the Committee, and I would be happy to respond to any questions you may have.

MINORITY WOMEN OF CHILDBEARING AGE USING DRUGS

Currently there are no national estimates available for the number of *minority pregnant women* using drugs during pregnancy. Data from the 1988 National Household Survey on Drug Abuse show that of the 59 million women in the childbearing age group (15-44 yrs), there were 45 million white, and 14 million women in the minority groups (Blacks 8; Hispanics 5; and 'Others', 1 million). (See attached.) *Of the approximately 14 million minority women*, 1.3 million were current users (past month use) of an illicit drug, 6 million were current users of alcohol, 3.7 million smoked tobacco, 900,000 used marijuana, and 300,000 used cocaine.

As seen in the table titled "Percent of Females of Childbearing Age Who Use Selected Substances by Race/Ethnicity," past month (or current) use of any illicit drugs does not differ by race/ethnicity. Race/ethnicity does appear, however, to be related to the use of the individual substances displayed. A lower percentage of Hispanic women of childbearing age, as compared to black or white females, are past month users of marijuana. However, a higher percentage of Hispanic females, as compared to black or white females, used cocaine in the past year. White women of

childbearing age are more likely than black or Hispanic women to be past month users of alcohol and cigarettes.

PERCENT OF FEMALES OF CHILDBEARING AGE (15-44 YEARS) WHO USE SELECTED SUBSTANCES, BY RACE/ETHNICITY: 1988

(Percent of Females 15 to 44 Years of Age)

Race/Ethnicity	Past month use of any illicit ¹	Past month use of marijuana	Past year use of cocaine	Past month use of alcohol	Past month use of cigarettes
Females:					
White.....	8.7	6.3	4.6	58.5	32.5
Black.....	8.8	6.4	4.2	41.2	28.0
Hispanic.....	8.7	5.1	5.8	41.5	24.2

¹ Includes use of marijuana, hashish, inhalants, hallucinogens, cocaine, heroin, and nonmedical use of stimulants, sedatives, tranquilizers, or analgesic.

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Estimates (x1000) of Childbearing Age Women Using Drugs*

RACE	Total Pop Est	ANY ILLICIT DRUG		Year	COCAINE		Year	MARIJUANA		Year	ALCOHOL		Year	CIGARETTES	
		Year	Month		Year	Month		Year	Month		Year	Month		Year	Month
WHITE	45208	8563 18.94%	3923 8.68%	2061 4.56%	685 1.52%	5976 13.22%	2862 6.33%	35586 78.72%	26438 58.38%	17983 39.78%	14690 32.50%				
<u>MINORITIES</u>	14397	2253 15.64%	1309 9.09%	722 5.01%	303 2.10%	1708 11.86%	903 6.27%	8636 59.98%	6093 42.32%	4408 30.61%	3742 25.99%				
BLACK	7747	1148 14.82%	633 8.82%	327 4.23%	131 1.70%	914 4.72%	494 6.38%	4586 59.19%	3194 41.23%	2521 32.54%	2167 27.97%				
HISPANIC	5237	817 15.61%	454 8.69%	305 5.83%	114 2.18%	575 11.00%	266 5.08%	3093 59.07%	2171 41.46%	1515 28.93%	1265 24.17%				
OTHERS	1412	287 20.34%	170 12.00%	88 6.24%	56 4.02%	217 15.9%	141 10.03	955 67.66%	727 51.49%	371 26.30%	308 21.86%				
<u>TOTAL</u>	<u>59605</u>	<u>10816</u>	<u>5232</u>	<u>2783</u>	<u>988</u>	<u>7684</u>	<u>3765</u>	<u>44222</u>	<u>32531</u>	<u>22391</u>	<u>18432</u>				

*Source:

NIDA's 1988 National Household Survey of Drug Use (Computer run 7/2/90).

Of the 59 million women in the childbearing age (15-44 yrs) group, there were 45 million white, and 14 million minorities women (Blacks 8; Hispanics 5; and 'Others', 1 million).

Of the 14 million minority women, 1.3 million were the users of any illicit drug, 6 million were the current users (past month use) of alcohol, 3.7 million smoked tobacco, 900,000 used marijuana and 300,000 used cocaine.

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**CRACK BABIES:
SELECTED MODEL PRACTICES**

23

**Richard P. Kusserow
INSPECTOR GENERAL**

INTRODUCTION

PURPOSE

This report describes selected model practices which may be effective in assisting drug-exposed babies and their families.

These models were encountered during an inspection examining how crack babies affect the child welfare system. The findings from the Crack Babies inspection are contained in a separate report.

BACKGROUND

During the Crack Babies inspection, we found that public and private agencies are struggling to cope with the increased volume of drug-exposed infants and the multiple service needs of their families. Services are provided to families considered to be at "high-risk." Some indicators of high-risk family circumstances are poverty, substance abuse, family disruption, and abuse or neglect.

Agencies identified many service problems. Some agencies have problems providing early intervention services, comprehensive case management, and caseworker training. Study respondents are also concerned about the special educational needs of these children and the lack of interagency coordination.

In this report, we describe practices being used by public and private agencies, and State and local governments to address some of these problems.

The Crack Babies inspection found that the problems caused by crack are inseparable from the larger issue of prenatal exposure to other drugs including alcohol. Accordingly, programs and procedures described in this report are not limited to those dealing with crack or cocaine exposure.

METHODOLOGY

We collected information in 12 metropolitan areas during the last quarter of 1989. Respondents included child welfare administrators and caseworkers, hospital social services staff, private agency representatives, foster parents, State and local officials, and national experts. These respondents identified programs and procedures which they considered effective in assisting drug-exposed babies and their families. While all programs cited in this report were contacted and most were visited, we did not attempt to assess their effectiveness.

CATEGORIES OF MODEL PRACTICES

This report is a selection of model practices which may be effective in assisting drug-exposed babies and their families.

Practices are presented in eight categories:

- I. COMMUNITY OUTREACH AND EARLY INTERVENTION
- II. COMPREHENSIVE SERVICES IN ONE LOCATION
- III. EDUCATION FOR DRUG-EXPOSED CHILDREN
- IV. CASE MANAGEMENT
- V. PROFESSIONAL TRAINING
- VI. MANAGEMENT PRACTICES
- VII. INTERAGENCY COORDINATION
- VIII. PRIVATE INITIATIVES

More information on these practices can be obtained from contacts listed in the appendix.

I. COMMUNITY OUTREACH AND EARLY INTERVENTION

Community outreach involves going into neighborhoods to find drug abusing women and their children. The next step is to encourage them to use available medical and social services. Aggressive outreach gets women and children to services they would not otherwise receive. Early intervention means identifying problems in their early stages and providing appropriate services in order to prevent serious problems.

The following four programs provide outreach and/or early intervention to families in their communities.

The Maternity Outreach Mobile (MOM) Project is administered by the Department of Human Services (DHS), Commission on Public Health, Office of Maternal and Child Health, in the District of Columbia. The MOM Project conducts early identification and treatment of high-risk populations through screening, referral, and follow-up. The project is a response to the high infant mortality rates in the District.

The MOM targets pregnant women, parenting women, and infants in high-risk areas. The van canvasses neighborhoods, parks, and shopping areas looking for mothers and infants. It also takes referrals from DHS and a variety of other sources.

Outreach workers in the van try to enroll high-risk women and infants into the MOM project. The workers then refer women for care to the nearest health center or health care provider. The MOM van staff also take women to appointments and follow-up to be sure women are using the services.

St. Lukes/Roosevelt Hospital Center, New York City, has two programs within its Community Services for Children and Families: the Prevention Unit and the First Step Unit. Since the units are affiliated with the hospital, their clients have access to the wide range of services offered by the hospital.

The New York City Child Welfare Administration (CWA) contracts with both units and provides a large portion of their funding. The First Step Unit also receives 25 percent of its budget from private sources and foundations.

The Prevention Unit serves multi-problem families, most of whom are referred by CWA. At least 6 of their 42 families must be "boarder baby" prevention referrals. The unit is staffed by social workers, psychologists, and volunteer home visitors.

The Prevention Unit seeks to prevent foster care placement, decrease the incidence of child abuse and neglect, improve the parents' ability to deal with psycho-social crises, and promote the personal development of parents and children. The staff assumes case management and clinical responsibility for the family with personalized coordination strategies. The coordinated services include counseling, crisis intervention, home visits, and parent-child interaction therapy.

The First Step Unit serves 24 pregnant teenagers and teenage mothers with infants. Staffed by social workers and volunteer home visitors, the unit seeks to improve parenting skills, reduce psycho-social stress, foster personal development, increase self-esteem, and reduce potential foster care placement. The home visitors help increase the mother's knowledge of the physical and emotional needs of her baby. The staff supports the mother in dealing with conflict and stress, and motivate her to consider the choices for her future.

The Harbor/UCLA Medical Center in Torrance, California has a Substance Abusing Mothers (SAM) Clinic. The SAM Clinic provides support and care to pregnant women addicted to illicit drugs. Eighty percent of the infants born to women attending the clinic have been drug-free at birth. The infants have a reduced incidence of prematurity and low-birth weight, shorter neonatal stays, fewer perinatal deaths, and a decreased need for foster care as compared to other babies born to addicted women not in this program.

Staff include a clinic coordinator, perinatologist, developmental psychologist, psychiatrist, dietician, and nurse educator, as well as pediatricians, OB-GYN housestaff, and certified nurse midwives. The services provided are prenatal care, pediatric care, social service case management, chemical dependency treatment, parent education, support groups, individual and group counseling, community outreach, and family planning. The funding for these services comes from the county Drug Abuse Program and State funds set aside for hospitals in targeted counties.

There is also a clinic for children of substance-abusing mothers that does developmental testing and assessment. Babies are followed at 4-month intervals during their first year and 6-month intervals thereafter.

The Center for Family Life in Brooklyn, New York is a multi-service agency serving the Sunset Park community of Brooklyn, a poor neighborhood of some 98,000 people.

While its primary focus is to sustain children in their own homes through a variety of supportive services, it recently developed a pilot foster family program in which foster families are matched with natural families within the same neighborhood when placement is necessary. Supported by a contract with the New York Child Welfare Administration, the program's purpose is to reduce the trauma of separation for children who have to be removed, to keep siblings together, and to offer more intensive services aimed toward family reunification. After children are returned to their parents, the family is encouraged to remain connected with the Center for ongoing support and risk reduction. The Center has found neighborhood foster family homes for 64 children and has returned 33 to their parents.

The Center's family services include individual, group, and family counseling; psychological and psychiatric assessments; an infant/toddler/parent program; foster grandparents; employment services and job placement; emergency food; an advocacy clinic; and extensive school-based activities. The latter include school-age child care services at two schools, as well as two teen centers and summer day camp programs.

The Center for Family Life has developed services that directly meet the needs of its neighborhood clients. It is involved in developing the community as well as with individual and family clients. This commitment is reflected in the Center's policy of being available to the neighborhood 7 days and evenings a week.

II. COMPREHENSIVE SERVICES IN ONE LOCATION

Central locations offering comprehensive services are a preferred approach for reaching and serving drug-addicted women and their families. Service needs include medical care, counseling, and social services. The facilities provide services directed at the multi-dimensional needs of drug-affected families. The availability of a variety of services at one location makes it easy and convenient for families to accept services.

Descriptions of three facilities which provide comprehensive services to drug-addicted women and their children follow.

Martin Luther King Jr. Hospital in Los Angeles, California is a county facility where four programs are available for drug-exposed babies and their families. These programs are part of an umbrella program called Shield for Families.

The first program, Project Support, provides prenatal care and outpatient drug treatment to clients referred primarily by the hospital. The California Department of Children's Services (DCS) can mandate individual participation in the program by means of a court order. The county Drug Abuse Program provides funding.

The second program, High-Risk Infant Follow-up, is a clinic that provides medical care for infants and ensures they receive necessary services. It is for children from 0 to 5 years of age who have developmental needs or are at high-risk. Children are referred from other Shield for Families' programs as well as by DCS, hospitals, and other foster care agencies. The program is funded by the county Department of Health Services.

The third program is Assistance and Relief to Kids (ARK), a child abuse project for high-risk women funded by the State. Upon recommendation from DCS, the courts can order mothers to attend the program. The ARK program receives its funding from a State-administered Federal grant for model programs dealing with child abuse.

The fourth program, Eden Infant, Child and Family Development Center, consists of early developmental assistance for drug-exposed newborns and their families with special needs. The program's funding comes from the United Way, DCS, and the county Drug Abuse Program. Eden offers center and home-based programs focusing on parental skill development. Mothers participate in both for a total of 1 year.

The center-based program includes parenting classes, counseling, psychological evaluations, and Cocaine Anonymous meetings. Eden's home-based program includes further counseling, implementation of new parenting skills, and application of new management skills. It also includes family assessment with an individualized treatment plan developed with family input

Family Health Center in Miami, Florida is a treatment community for female substance abusers which allows mothers to keep their children with them while attending the program. The Center offers comprehensive primary care and addiction services which include outpatient services, day treatment, and residential components. Currently there are 15 residential beds, with 25 more being planned.

The Center receives funding from the U.S. Department of Health and Human Services and the Florida Department of Health and Rehabilitative Services. The residential program lasts 6 to 9 months, is self-paced and employs a token system. The token system allows patients to earn points needed to move through treatment phases.

The residential program's goal is cognitive growth. In addition to drug treatment, enrollees receive vocational training, tutoring for high school equivalency diploma, parenting and nutrition classes, psychological counseling, AIDS prevention training, transitional housing, child care, and health care. Women attend physical fitness and art classes, along with community social events and Narcotics and Alcoholics Anonymous meetings.

To graduate, a woman must be employed for 90 days, have \$500 saved, possess facility-approved housing, and have or be working toward her high school diploma. After graduation, participation is required in an outpatient program which includes random drug testing. Center staff conduct follow-up if the women do not attend.

The Women's Annex in Tacoma, Washington provides transitional housing for women (and their children) recovering from drug and alcohol abuse. To live in the Annex, women must have attended or be attending drug treatment and be in school or working. The Annex consists of seven houses with a resident manager and case manager on-site at all times. The staff assist women in securing services and resources they need to stay drug-free.

The houses are designed to offer a supportive home environment for women and their children. Services include child care, transportation, recreation, and workshops. Women also have access to employment and education resource and referral information. The women may stay as long as necessary to maintain drug-free sobriety and work towards independence. More information on Women's Annex is provided in Section VIII, Private Initiatives.

III. EDUCATION FOR DRUG-EXPOSED CHILDREN

Serious concerns exist about the future impact of drug-exposed babies on school systems. Drug-exposed babies are considered likely to have developmental, behavioral, psycho-social and learning problems which school systems and preschool programs will face. With early intervention, many professionals believe these children can be mainstreamed. Both programs described below provide a structured educational program for preschool children.

The Los Angeles Unified School District has a pilot research program for drug-exposed children which uses special local and State education funds. Since its inception in 1987, 31 children between the ages of 3 and 6 have participated.

The program targets marginal children, i.e., those who may ultimately be integrated into regular classrooms. Children are referred to the program by the Department of Children's Services, foster parents, and relatives. Upon referral, the staff perform an initial child assessment to determine if the program is appropriate. The program's initial goals are to develop strategies for teaching regular teachers about the unique needs of drug-exposed children, and determine if there are similar characteristics among drug-exposed children. As stated in the program manual, "There is no typical profile of a drug-exposed child, and as such, each child must be educated as an individual with particular strengths and vulnerabilities."

Three other program aims are:

- to identify preschool children at risk for behavioral and developmental learning problems due to prenatal drug and/or alcohol exposure;
- to develop effective strategies and provide structured learning experiences to promote cognitive, communicative, psycho-social and motor development of children prenatally exposed; and
- to facilitate the successful transition of prenatally exposed children to a regular education setting or to the least restrictive special education program.

The program provides morning classes that last 3 hours and 20 minutes for preschool-age children and full-day classes for children 5 years and older. The staff include a social worker, psychologist, doctor, and three teachers. Each teacher handles 6 to 8 children, providing consistency and reliability through daily routines. This approach strengthens a child's self-control and builds a sense of mastery over the environment.

The child's home life is also considered an essential part of the curriculum; home visits and parent education classes are conducted. When needed, the family is offered mental health services. Parental confidence and competency are increased through intervention strategies which strengthen the positive interaction between child and family.

Head Start is a child development program for preschool children from low-income families. It is funded by the U.S. Department of Health and Human Services, Office of Human Development Services. Projects are administered at the local level.

In recent years, Head Start programs around the country report they are serving increasing numbers of dysfunctional families, many with drug abuse problems. Head Start families may have special needs and experience difficulty coping with aspects of daily living. A number of Head Start programs have created unique local partnerships with mental health centers and child welfare agencies to address these problems. A survey of problems and model programs is contained in the November 1989 OIG report, "*Dysfunctional Families in the Head Start Program: Meeting the Challenge*," (OAI-09-89-01000).

IV. CASE MANAGEMENT

Quality case management can help ensure that drug-addicted mothers and their children receive essential services. Case management means guiding families to services including health care, counseling, physical therapy, drug rehabilitation, parenting classes, and vocational training.

Two programs which provide both case management and direct services to drug-addicted mothers and their babies are described below.

The *Center for the Vulnerable Child (CVC)* in Oakland, California provides case management to high-risk children. Two CVC goals are to "meet the health care, developmental and social needs of vulnerable children" and to "coordinate services to provide comprehensive care." The CVC services are funded primarily through money from private foundations.

The Chemical Addiction Recovery Efforts (CARE) Clinic is one CVC program. The clinic serves chemically dependent women and their drug-exposed infants. A pediatrician, nurse, and therapist/case manager with special chemical dependency expertise staff the clinic.

The CARE Clinic provides both medical and counseling services. Medical services include pediatric care, developmental assessment, and parent training. Staff specialists visit homes to teach families about the recovery process and their infant's development. Mothers also gain support through individual counseling, group meetings, and family therapy.

The case manager's role adjusts to client needs. The case manager may serve "as problem solver, role model, advocate, broker, assessor, planner, service monitor, record keeper, therapist, collaborator, and detective." Further, the case manager consults with specialists and community providers to offer mother and child a variety of services.

The *Perinatal Outreach Project* in Washington, D.C. provides in-home skilled nursing, social services, and professional therapeutic services to prenatal and postpartum patients and at-risk newborns. The Project served approximately 800 clients in 1989. An estimated 80 percent of the babies served were from drug-affected families. The project is managed by Children's Home Health Care Services with funding from the D.C. Commission of Public Health, Office of Maternal and Child Health. Clients are referred by local hospitals and the Department of Human Services.

Outreach staff track mother and child to ensure they are getting adequate medical care. The Project also helps prevent duplication and fragmentation of services to this high-risk population. Staff nurses conduct an average of three to five in-home visits per month. During these visits, they teach women about prenatal and postpartum care and child rearing.

The staff counsel individuals about educational, financial, social service, and employment needs, and assist families in accessing medical and food supplement programs. They also identify programs and make appropriate referrals based on individual family needs.

V. PROFESSIONAL TRAINING

Professionals who work with drug-addicted women and drug-exposed children have specific training needs. The training components cited below include recognizing substance abuse and identifying the medical and social services needs of drug-exposed babies and their families.

The National Association for Perinatal Addiction Research and Education (NAPARE) has developed and disseminated training curricula for social service and health care professionals. They have offered to share this curricula with child welfare agencies and physicians' associations. Recognizing that professionals often take inadequate substance-abuse histories, NAPARE emphasizes the need to take comprehensive substance-abuse and lifestyle histories. The curricula includes guidelines for recognizing, assessing, and treating substance-abuse cases. It is designed for physicians, social service and drug and alcohol caseworkers, and family court judges and attorneys.

The University of California at Los Angeles developed Project TEAMS (Training, Education and Management Skills) to train workers to deal with the special needs of drug-exposed babies placed with foster parents and relative caregivers. The TEAMS "curriculum supports a service delivery model which is interdisciplinary in practice, interagency in focus, and holistic in its approach towards infant, family, and caregiver needs."

Project TEAMS was funded by the National Center on Child Abuse and Neglect from April 1986 through May 1988. The project has since been expanded to include biological parents and is supported by the Los Angeles County Board of Supervisors and the Department of Children's Services. Project TEAMS also has a contract with the county to train physicians about issues concerning drug-exposed babies.

Currently, the U.S. Department of Education's Handicapped Children's Early Education Program is funding an expansion of the program to provide training and technical assistance to public and private agencies working with chemically dependent families in communities throughout California. The program creates skilled interdisciplinary teams of child protective services workers and public health nurses. These teams, in turn, help caregivers create healthy, nurturing environments for their drug-exposed infants.

Training for the child protective workers and public health nurses lasts 6 months. The first phase of instruction concerns the effects of substance-abuse on the developing fetus, infant, child, parents, and entire family. This phase also involves establishing guidelines for assessment, intervention, and interagency collaboration.

The second phase is a clinical component consisting of case management, individual consultations, and monthly small-group consultations. Teams conduct home visits with infants and caregivers. The trainees also attend group meetings to discuss issues relating to these babies and their foster parents.

VI. MANAGEMENT PRACTICES

Several States and local governments have established management practices to improve tracking and supervision of child welfare cases involving drug exposure. These practices include automated central registries, special drug baby units, and fast tracking of the legal process. Although several States and cities have these practices, only one example of each is cited.

Many States have central registries where child abuse and neglect cases are reported. In Florida, these cases are referred to the Department of Health and Rehabilitative Services (HRS). The *Florida Abuse Registry* was established by Departmental directive in October 1988 to provide a single statewide 800 toll-free number for reporting all suspected child abuse and neglect cases. The HRS regulations require centralized reporting of all newborns "who are born to mothers who are addicted or have abused drugs during the childbearing period." The Department also requires that drug-affected families and substance-abusing pregnant women "be given the highest priority in service provision."

The *Department of Children's Services (DCS)* in Los Angeles has established two *high-risk drug baby units*. The units perform three functions: emergency response, custody investigations, and family maintenance. They operate on a vertical case model, where each caseworker performs all three functions in order to ensure consistency in case management.

When an infant is first referred, DCS intake evaluators use a special high-risk intake form. When information obtained meets selected criteria, the baby is referred to the high-risk unit for assessment.

In the unit, social workers use a special risk assessment guide for infants prenatally exposed to drugs. The guide, along with personal interviews, aids in determining the infant's placement. If the infant cannot be safely released to the mother, a custody petition is filed in court. If the child is allowed to go home with the mother, a family maintenance plan is developed.

A legal process known as "*fast tracking*" has been implemented in Dade County, Florida. The process helps expedite the less complex dependency cases through the court system by prescribing specific time slots for child welfare cases. This results in quicker placement decisions. Fast tracking is a coordinated effort among Florida's Department of Health and Rehabilitative Services, the Juvenile Justice System, and the State Attorney General's Office.

VII. INTERAGENCY COORDINATION

Interagency coordination is necessary to ensure that services to families are available, accessible, and not duplicated. Lack of coordination among service providers is a major problem case managers face in offering multiple services to drug-affected families. The following two programs are using interagency coordination to address the issues and consequences of drug use in their communities.

The *Illinois Model* is an innovative interagency coordinated effort to address the needs of cocaine and other drug-exposed infants. The agencies participating in and funding the project are the Illinois Department of Children and Family Services, the Illinois Department of Alcoholism and Substance Abuse, and the National Association for Perinatal Addiction Research and Education (NAPARE). The three agencies use an education, prevention, referral, and coordinated intervention strategy.

The Illinois Model has "reduced systems barriers to integrated services and made available a full complement of services to high-risk families." The Model has provided integrated medical, substance-abuse, and social services to over 400 mothers and infants since 1986.

One of the model's components is a confidential, toll-free "Cocaine Baby" Helpline. The helpline provides information and referral to individuals in five midwestern states. The toll-free number is staffed by a pediatrician and a pediatric nurse practitioner who refer women to clinics and physicians for medical care and drug treatment.

The agencies have co-sponsored three national training conferences and developed a national newsletter to provide an educational forum about cocaine use and pregnancy. The NAPARE has also developed curricula to train medical, social service, and substance-abuse professionals to recognize, refer, and treat cocaine-affected infants.

The *Governor's Commission for a Drug Free Indiana* was established by executive order in May 1989 to examine Indiana's overall drug problem with special emphasis on local issues such as crack abuse. Commission members have diverse backgrounds in youth services, law enforcement, business, education, child welfare and protection services, medicine, drug and alcohol abuse and treatment, and other social services.

The commission serves as an umbrella organization to support local coordination and initiatives in the war against drugs. It tracks local funds, informs the Governor of local needs, and advises localities of State legislative initiatives.

Funding is drawn from a variety of Federal and State programs including the Alcohol, Drug Abuse, and Mental Health block grant, Criminal Justice block grant, National Highway Safety funds, and Indiana's Drug Free Communities grant program.

VIII. PRIVATE INITIATIVES

Several programs visited during the Crack Babies inspection were initiated with private funds. These programs were private sector responses to current social problems. Two of the three programs described now receive some public funding.

The Women's Annex (previously described) was funded by a local attorney who acquired seven houses and renovated them into housing for women recovering from drug addiction. Several of the houses were formerly crack houses. The services are funded through private contributions and the Washington State Division of Alcohol and Substance Abuse.

The Children's Home Society of Miami, Florida offers a variety of services for infants and children to age 18. They provide pregnancy counseling, adoption services, residential foster care, foster homes for children with AIDS, emergency shelters for infants and children, social services for developmentally delayed children, and group homes for teens. Their services are now under contract with the Florida Department of Health and Rehabilitative Services.

In 1986, Burger King, with help from other local businesses, built the facility containing their administrative offices and an emergency shelter. Funds to construct the infant center were donated by a local foundation. A significant portion of the Society's operational costs are paid for with United Way funds and private contributions.

The California Medical Center in Los Angeles runs a program called Rebirth for substance-abusing mothers and their infants. The program provides education on maternal drug abuse to mothers in hospitals. Rebirth also trains caregivers on the special needs of the drug-withdrawing infant. A nurse conducts follow-up home visits to check the infant and answer any questions. The program, which receives no public money, is funded by the California Community Foundation and private donations.

APPENDIX

CONTACTS:**I. COMMUNITY OUTREACH AND EARLY INTERVENTION**

- Maternity Outreach Mobile Project**
Patricia Thompkins
Office of Maternal and Child Health
Commission of Public Health
Department of Human Services
1660 L Street, NW
Washington, DC 20036
(202) 673-4551

- St. Lukes/Roosevelt Hospital Center**
Joanne Johnson-Hershman
West 114th Street and Amsterdam Avenue
New York City, NY 10025
(212) 523-2122

- Harbor/UCLA Medical Center -
Substance Abusing Mothers Clinic**
M. Lynn Yonekura, M.D.
1000 West Carson Street
Torrance, CA 90509
(213) 533-3565

- Center for Family Life**
Sister Mary Paul, DSW
345 43rd Street
Brooklyn, NY 11232
(718) 788-3500

II. COMPREHENSIVE SERVICES IN ONE LOCATION

- Martin Luther King Jr. Hospital**
Xylina Bean, M.D.
12021 South Wilmington Avenue
Los Angeles, CA 90059
(213) 603-4657

- ❑ Family Health Center
Toni Shamplain
5361 NW 22nd Avenue
Miami, FL 33142
(305) 637-6400
- ❑ Women's Annex
Jacquelyn Norman
2024 South J Street
Tacoma, WA 98405
(206) 383-0104

III. EDUCATION OF DRUG-EXPOSED CHILDREN

- ❑ Los Angeles Unified School District
Dr. Phillip Callison
Assistant Superintendent
Division of Special Education
450 North Grand
Los Angeles, CA 90051
(213) 625-6701
- ❑ Head Start
Clennie Murphy, Jr.
Head Start Bureau Associate Commissioner
P.O. Box 1182
330 C Street, SW
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(202) 245-0572

IV. CASE MANAGEMENT

- ❑ Center for the Vulnerable Child
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Children's Hospital Medical Center
747 52nd Street
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(415) 428-3783
- ❑ Perinatal Outreach Program
Linda Maurano
Children's Home Health Care Services
111 Michigan Avenue, NW
Washington, DC 20010
(202) 939-4917

V. PROFESSIONAL TRAINING

- National Association for
Perinatal Addiction Research and Education**
Judy Burnison
11 East Hubbard Street
Suite 200
Chicago, IL 60611
(312) 329-2512

- Project T.E.A.M.S.**
Judy Howard, M.D.
UCLA Department of Pediatrics
Intervention Program
1000 Veteran Avenue
23-10 Rehabilitation Center
Los Angeles, CA 90024-0797
(213) 825-4821

VI. MANAGEMENT PRACTICES

- Florida Abuse Registry**
Judy Rosenbaum
Senior Management Analyst
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401 NW 2nd Avenue
10th Floor, South Wing
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(305) 377-5301

- Los Angeles Drug Baby Units**
Gerhard Moland
Children's Services Administrator
Department of Children's Services
Exposition Park Office
3965 Vermont Avenue
Los Angeles, CA 90037
(213) 730-3442

- Florida Fast Tracking**
Charles Edelstein
Consultant to the Chief Judge
Juvenile Justice Center
3300 N.W. 27th Avenue
Miami, FL 33142
(305) 638-6185

VII. INTERAGENCY COORDINATION

- **The Illinois Model**
National Association for
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Chicago, IL 60611
(312) 329-2512

- **Governor's Commission for a Drug Free Indiana**
Joseph Mills
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VIII. PRIVATE INITIATIVES

- **Women's Annex**
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- **Children's Home Society**
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- **California Medical Center**
Minda Ofiano
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(213) 748-2411

CRACK BABIES

Richard P. Kusserow
INSPECTOR GENERAL

OEI-03-89-01540

JUNE 1990

EXECUTIVE SUMMARY

PURPOSE

This report examines how crack babies are affecting the child welfare system in several major cities.

BACKGROUND

Crack is cocaine in a smokeable form. It first appeared in the United States during the mid-1980's. Although crack is only one method of ingesting cocaine, we use the terms crack and cocaine synonymously in this report as their detection in the body does not differ.

The National Institute on Drug Abuse (NIDA) estimates that over 6 million women of child-bearing age are using illegal substances; for 1 million this means cocaine. The President's National Drug Control Strategy estimates that 100,000 cocaine exposed babies are born each year.

Prenatal cocaine exposure can lead to premature birth, low birthweight, birth defects, and respiratory and neurological problems. Crack babies have a significantly higher rate of Sudden Infant Death Syndrome (SIDS) than babies who have not been prenatally drug-exposed. While most experts believe that many crack babies will suffer developmental disabilities, the full range of long-term effects of prenatal cocaine exposure is not known.

When crack babies are identified, local child welfare agencies are usually notified to provide protective services, social services, or foster care. However, these agencies are often unable to meet the needs of crack babies and their mothers.

While some State and local governments have done studies on aspects of the crack baby problem, little data is currently available at the national level. Several studies are underway at the Federal level to gain insight into this problem.

METHODOLOGY

We conducted on-site interviews in 12 metropolitan areas during the last quarter of 1989. Respondents included child welfare administrators and caseworkers, hospital social services staff, private agency representatives, foster parents, State and local officials, and national experts.

We also reviewed numerous studies and public documents on this subject.

FINDINGS***We Are Only Seeing Part Of The Problem.***

- Eight cities identified 8,974 crack baby cases in 1989; costs of delivery, perinatal care and foster care, for those babies who need it, would approximate \$500 million.
- There is no typical crack baby.
- Most crack babies are not identified at birth.
- Crack babies face future problems.

An Already Overburdened Child Welfare System Struggles To Cope.

- Crack baby cases are complicated and time-consuming.
- Prenatal drug exposure may not be treated as child abuse.
- Several child welfare agencies are using new approaches to deal with crack baby cases.
- Hospitals are beginning to perform child welfare functions in some cities.
- Interagency coordination helps child welfare agencies cope.
- Comprehensive case management is essential in helping crack-addicted mothers and their babies.

Most Crack Babies Go Home, But Many Go Into Foster Care.

- About 50 to 75 percent of babies go home with mother or a relative.
- Up to 50 percent go into foster care.
- Some go to emergency or congregate care.
- Few crack babies have been adopted.

People Are Worried About The Effects Of Prenatal Exposure To All Drugs, Not Just Crack.

- Crack is not the only drug threat to the lives of crack mothers and their babies.
- Respondents want leadership and action.

RECOMMENDATIONS

State And Local Governments Should:

- Encourage outreach and community involvement with aggressive campaigns emphasizing the dangers of prenatal drug and alcohol exposure;
- Reduce placement barriers by reviewing and revising existing laws and policies on abandonment, termination of parental rights, and interracial placement;
- Develop guidelines and training for child welfare staff;
- Establish reporting and tracking systems;
- Expand interagency mechanisms to coordinate services and integrate funding.

The Office Of Human Development Services Should:

- Identify and disseminate practices considered effective in dealing with drug-exposed baby cases;
- Focus service strategies on serving the family;
- Evaluate obstacles to placement including policies on family reunification, voluntary termination of parental rights, and restrictions on foster care and adoption.

The Office Of Human Development Services And The Public Health Service Should:

- Coordinate Departmental activities relating to drug-exposed babies and their families;
- Conduct short- and long-term research on the effects of prenatal exposure, treatment models, and placement outcomes;

- Promote drug abuse training in medical schools, hospitals, and child welfare agencies;
- Promote prevention through public outreach and informational materials.

The Public Health Service And The Health Care Financing Administration Should:

- Continue to support targeted, intensive outreach and prenatal care for substance-abusing pregnant women and their babies.

COMMENTS

We received comments on the draft report from the Office of Human Development Services (HDS), the Public Health Service (PHS), the Health Care Financing Administration (HCFA), and the Assistant Secretary for Planning and Evaluation (ASPE). Respondents were generally supportive of our findings and recommendations. Suggestions to strengthen recommendations and a number of technical corrections have been incorporated into the report. We also expanded discussion on some issues in response to comments from all respondents. The full text of comments received appears in the appendix.

INTRODUCTION

PURPOSE

This report examines how crack babies are affecting the child welfare system in several major cities. A companion report identifies programs and procedures considered effective in working with crack-addicted mothers and their babies.

BACKGROUND

Crack is cocaine in a smokeable form. It first appeared in the United States during the mid-1980's. Although crack is only one method of ingesting cocaine, we use the terms crack and cocaine synonymously in this report as their detection in the body does not differ. The National Institute on Drug Abuse (NIDA) estimates that over 6 million women of child bearing age are using illegal substances; for 1 million this means cocaine. The President's National Drug Control Strategy estimates that 100,000 cocaine-exposed babies are born each year.

Prenatal cocaine exposure can lead to premature birth, low birthweight, birth defects, and respiratory and neurological problems. Crack babies have a significantly higher rate of Sudden Infant Death Syndrome (SIDS) than babies who have not been prenatally drug-exposed. While most experts believe that many crack babies will suffer developmental disabilities, the full range of long-term effects of prenatal cocaine exposure is not known. Four Department of Health and Human Services agencies are directly affected by the increase in crack baby births: the Office of Human Development Services (HDS), the Public Health Service (PHS), the Health Care Financing Administration (HCFA), and the Social Security Administration (SSA). These Federal agencies fund services for crack-addicted mothers and their babies through a variety of programs, most operated at the State and local level.

When crack babies are identified, local child welfare agencies are usually notified to provide protective services, social services, or foster care. However, these agencies are often unable to meet the needs of crack babies and their mothers.

Most crack mothers are not teenagers. Most often, they are between their early 20's and 30's, with an average age of 25 to 28 years. Usually, they have between two and four other children. Crack babies reported to the child welfare system are primarily black, with a smaller number of Hispanics and even fewer whites.

While some State and local governments have studied this issue, little data is currently available at the national level. Both HDS and PHS have studies underway to gain insight into the problem. The General Accounting Office (GAO) is also studying the costs of services for this population. In addition, the Office of Inspector General (OIG) is conducting two related inspections: on the termination of parental rights and laws regarding prenatal exposure to substance abuse.

METHODOLOGY

We conducted on-site interviews with over 200 respondents in 12 metropolitan areas during the last quarter of 1989. The sites included: Chicago, Fort Wayne, Los Angeles, Miami, New York City, Newark, Oakland, Philadelphia, Phoenix, San Francisco, Tacoma, and Washington, D.C. We selected these sites to give a perspective on how cities of varying size and location were being affected by crack baby births.

Respondents included child welfare administrators and caseworkers, hospital social services staff, private agency representatives, foster parents, and State and local officials. We also interviewed national experts and reviewed studies and public documents on the subject.

FINDINGS

WE ARE ONLY SEEING PART OF THE PROBLEM

The scope of the problem is wide-ranging.

Only two-thirds of the cities we visited could provide the number of crack babies reported to the child welfare system. These eight cities handled 8,974 crack baby cases during the previous year. These cities represent 20 percent of the population of U.S. cities of more than 50,000. Many crack cases are unreported. Some respondents estimate that only half of the crack babies are reported. The actual figures we obtained, coupled with the underreporting phenomenon, are consistent with President Bush's National Drug Control Strategy report which estimates 100,000 cocaine babies born per year.

We estimate the cost for hospital delivery, perinatal care, and foster care through age 5, for those children who need it, for just these 8,974 identified babies will approximate \$500 million.

Crack babies may also require other services. The Florida Department of Health and Rehabilitative Services estimates an annual cost of over \$40,000 per child to get crack babies ready for school. If other States in our study were to provide similar services for these 8,974 identified babies, the additional costs for developmental intervention, education, and health services through age 5 could be as high as \$1.5 billion.

While these calculations do not include any costs for services which may be required by some crack-exposed children after age 5, such costs will also be substantial. In Pennsylvania, for example, one year of special education in a class for a learning disabled child costs \$7,900. A year of residential treatment and special education for an emotionally disturbed child costs \$25,000 to \$47,500. The average episode of juvenile detention lasts 15 days and costs about \$2,250. If a juvenile requires residential drug treatment, costs can be \$15,000 or more.¹

The NIDA is currently supporting research on the costs to communities of providing comprehensive services to addicted pregnant women and their children. Additional research is planned on costs and benefits of foster care.

There is no typical crack baby.

There is no typical set of signs or patterns by which to identify a cocaine-exposed infant. A Los Angeles County study found that 70 percent of crack babies are full term.² One expert suggests that because the babies appear healthy, doctors frequently do not detect the subtle signs of cocaine exposure. Therefore, some babies are discharged without being recognized as drug-exposed.

Crack babies are more likely to be born premature and to have special medical needs. Experts report that crack babies are nearly 4 times more likely to be born with low birth weights (under 2500 grams or about 5.5 pounds) than babies not exposed to drugs in utero.³

An estimated 18 percent of crack babies are born premature with complications and require extended intensive care.⁴ One respondent told us that modern technology allows physicians to save many babies who would not have survived even a few years ago. This is especially true of the very low birth weight babies (500-1500 grams, about 1 to 3 pounds).

Some crack babies require special medical attention after hospital discharge. These children are designated as medically needy and require special services from their mothers or foster families.

Most crack babies are not identified at birth.

Inconsistent testing is one reason many crack babies are not identified at birth. According to respondents, public hospitals are the only ones testing; most private hospitals and physicians do not test. While no State visited mandates universal testing of mothers for controlled substances, Indiana does require testing if there is suspicion of drug exposure. One hospital in our sample tests all newborns.

The majority of hospitals in our survey rely on mothers to self-report drug use. At least four use this as their primary method of identification. Some respondents criticize using this method exclusively. A survey in one Florida hospital found only 27 percent of the pregnant women testing positive for drug use at labor and delivery had admitted their use.⁵

Five of 13 hospitals visited use specific testing protocols, and these vary in detail and scope. Testing criteria can include suspected drug use, lack of prenatal care, premature delivery, neonatal intensive care admission, and indications of a sexually transmitted disease. Some respondents are concerned that reliance on self-reporting and the absence of specific testing protocols mean that low-income and minority women are being tested while white and middle class women are not. This results in more minority and low-income babies being identified as drug-exposed.

Even when tests are conducted, they provide only limited information. Most tests can detect cocaine in the system for only 24 to 48 hours.

Crack babies face future problems.

When considering how society will deal with crack babies, some respondents emphasize that the environments in which these children are raised will play a major role in their development. In one expert's view, the real issue is how much damage is actually attributable to the child's home environment as opposed to in utero exposure to drugs.

Many respondents are concerned that drug-exposed babies will suffer long-term problems. They caution that the effects of cocaine exposure may not appear until the age of 2 or 3. These effects may include neurological and behavioral problems, attention deficits, and developmental delays.

Many respondents worry what will happen when crack babies reach school. Those who have worked with crack babies say the children will have severe learning disabilities as they grow older. We were told, "These children need special education. If they don't get that, we'll see them in juvenile court later." The Los Angeles Unified School District has developed a special curriculum for drug-exposed babies at the preschool level. A similar program exists in Chicago.

Many children are staying in foster care longer. As recently as 1985, nationwide median foster care stays ranged from 9 months, for those who had left foster care, to 1.5 years, for those who still remain. However, officials from 2 cities in our survey reported the current average length of stay as 3 years and 4.8 years respectively.

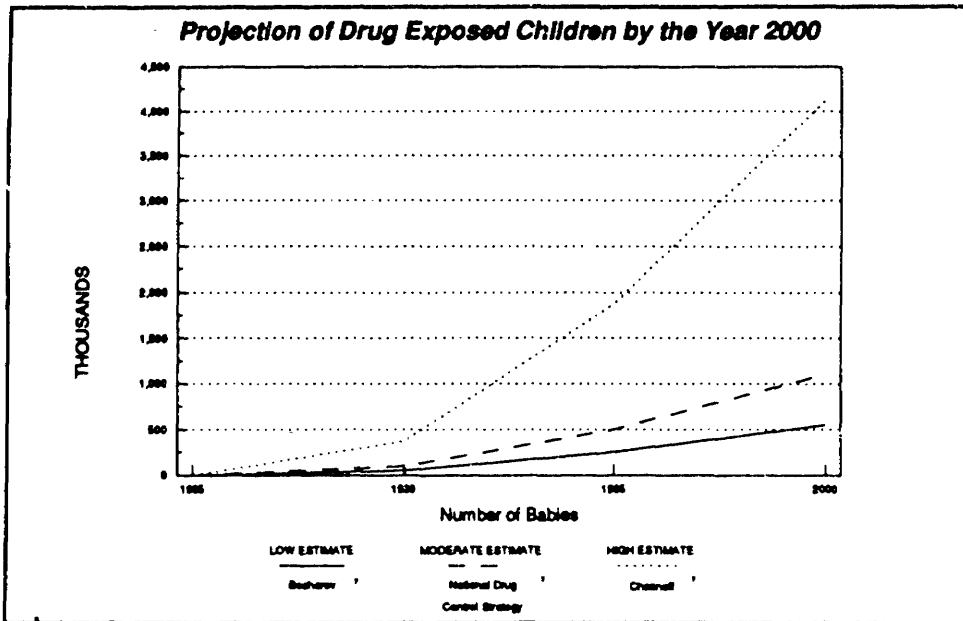
Children are also entering foster care at a younger age. According to a recent New York State report, "In 1980, only 19 percent of the foster care caseload was under 5. Today it is over 50 percent, primarily due to crack."⁶

According to several respondents, crack babies have more problems bonding than other babies. Researchers report that even in the care of their natural parents or a permanent foster parent, crack babies have difficulty bonding. Some researchers attribute a portion of this problem to organic damage caused by the drug exposure.

The following graph depicts the potential population of drug-exposed children born this decade, based on current annual estimates of crack-, cocaine-, and drug-exposed births.⁷

While the projections shown assume no change in annual drug-exposure birthrates, there are indications the number of drug-exposed births is increasing. In California, three hospitals report the number of drug-exposed births have at least doubled since 1986. One of these reports an 84 percent increase in 2 years.

Interviewees tell us the aftershocks of the crack epidemic will be felt by society for many years. As one respondent said, "Even if we stopped crack use right now, we would still be dealing with its effects in some way for the next 50 to 75 years. The ramifications are forever...it's a horrible cycle!"



AN ALREADY OVERBURDENED CHILD WELFARE SYSTEM STRUGGLES TO COPE.

Crack baby cases are complicated and time-consuming.

In most cities visited, an increasing majority of child welfare cases are drug related. The New York City Mayor's Task Force on Child Abuse and Neglect reported a 72 percent increase in child abuse related to drug dependency, primarily crack, from 1985 to 1988.

State officials contend that crack baby cases are more complex than other child welfare cases. One official said, "Crack users represent a different kind of [protective services] case. There is a lot more abandonment and violence." Crack baby cases require extensive tracking and follow-up. This can be difficult for caseworkers to provide when confronted with the realities of an already overwhelming caseload.

Drug use can supercede all other aspects of the lives of crack-addicted mothers. In the words of one caseworker, working with the mothers "is like beating your head against a brick wall...because you are dealing with someone who has no control over her life. She's worried about her next hit."

Caseworkers can spend days tracking mothers who give false addresses to hospitals and then abandon their babies. Other time-consuming activities include finding emergency placements, foster care, parental drug treatment, and services necessary for special needs children.

Child welfare casework is a dangerous job, according to several respondents. Caseworker home evaluations can involve entering hostile situations, unescorted and without radio contact. Personal danger, stress, and relatively low pay contribute to caseworker burnout or resignation. One city official reported half of the staff had been working less than 1 year. In another city, the average tenure of a child protective worker is 2 years. High turnover results in lack of service continuity and complicates legal proceedings because several caseworkers may work on a case over the years.

We found large child welfare worker caseloads in many cities. For example, one child welfare agency official reported an average caseload of 49 children for foster care and 161 for protective services. The Child Welfare League of America recommends not more than 17 active cases for workers dealing with abused or neglected children and their families.

Prenatal exposure to drugs may not be treated as child abuse.

Babies who test positive for controlled substances are not always reported to child welfare officials. The actions taken depend on how a State defines child abuse or neglect. These terms are not interchangeable and the distinction can be significant. The Office of Inspector General is currently conducting a study to assess how State legal definitions affect the handling of prenatal drug exposure cases.

Indiana law provides that a child born addicted to drugs can be considered abused or neglected. In Fort Wayne, the baby and any siblings are placed in protective custody pending an investigation. An Illinois law effective January 1, 1990 states that prenatal drug exposure is evidence of neglect.

Only four States visited require hospitals to report a positive toxicology to the child welfare agency or a central State registry. Some hospitals in other sites visited make referrals voluntarily. At one site, hospitals have been instructed by the child welfare agency to report cases only when the mother could not care for her child. In another city, drug exposure cases are investigated only if accompanied by other factors, such as mother self-identification or prior abuse reports.

Several child welfare agencies are using new approaches to deal with crack baby cases.

Some cities have organized high-risk drug baby units to provide intake and risk assessment for drug-exposed infants. The caseworkers assigned to these units are specially trained to deal with the needs of the substance-abusing mother and her child. In at least one city, caseworkers in these units have reduced caseloads.

One child welfare agency has decentralized services into zones and community districts. Caseworkers are now physically located closer to the families they serve. This enables caseworkers to provide better support for families and become more familiar with local services.

Cities are providing more caseworker training; New York City trained 1,264 new caseworkers in 1989. Many respondents felt that child welfare workers need more training to identify and assess the needs of substance abusers and their children. Other respondents said caseworkers need formal guidelines for making decisions regarding termination of parental rights.

Hospitals are beginning to perform child welfare functions in some cities.

Several hospital officials told us that because child welfare agencies are overwhelmed, they are taking action. They say hospitals cannot afford the financial losses that result from extended unnecessary stays. In some cities, hospitals now actively recruit foster parents, especially among their own staff. Some hospitals now make placement recommendations to child welfare.

Staff at several hospitals now locate, provide, and coordinate services for crack-addicted mothers and their babies. Other hospitals have begun to track clients after discharge.

Interagency coordination helps child welfare agencies cope.

Lack of coordination is the most difficult problem faced in providing services to crack babies and their families, according to many respondents. One interviewee said, "Interagency case management is the key to addressing this issue, if anything works."

Some States and private agencies are tackling the issue of coordination. Illinois has a program of collaboration among child welfare, alcoholism and substance abuse, and related programs. The coordinated effort has "reduced systems barriers to integrated services and allowed for a full complement of services to be made available to high-risk families."⁸

The family court division, attorney general's office, and child welfare agency in Miami coordinate services by "fast tracking" cases through the system. Fast tracking is a process where the courts agree to set aside specific times to hear dependency cases. Miami officials report that this process has allowed for more and faster placement decisions.

In many sites, governors or mayors have created task forces to address the crack baby problem. Staffed by private citizens, government officials, and medical and child development experts, the task forces identify and pull together service providers, recommend policies, and integrate monies for services to high-risk families.

Comprehensive case management is essential in helping crack-addicted mothers and their babies.

Case management consists of guiding families to services such as early intervention, education, health care, counseling, physical therapy, drug rehabilitation, and parenting classes. Respondents say that requiring clients to seek out supportive services on their own does not work with crack addicts. Client needs are so complex and their addiction so overwhelming that professional case management is needed.

The case manager is an advocate who leads families through the system. In the words of one respondent, it is unrealistic to expect a crack-addicted mother to meet the "demands of 8 to 10 different service providers simultaneously." A case manager can guide and motivate mothers and supervise care of the children. Case management is widely seen as the responsibility of the child welfare agency.

Successful case management requires that services be readily accessible, according to many respondents. They emphasized the need to locate services in the community and provide transportation and child care. Their most frequent comment was that central locations with multiple services work best; "one stop care," said one caseworker.

Even when services are available, however, crack mothers don't always participate. According to respondents, crack addiction results in demanding, impatient behavior. Crack mothers sometimes deny they have a problem and refuse services altogether.

MOST CRACK BABIES GO HOME, BUT MANY GO INTO FOSTER CARE.

Most babies go home with mother or a relative.

Although few statistics are kept, respondents offered personal insights into the demographics of crack baby families. Usually 50 to 75 percent of identified crack babies go home with their mother or a relative, although the range is 50 to 95 percent at the sites visited. At two sites, a baby is put into temporary protective custody (for up to 72 hours) while the child welfare agency investigates.

Maternal grandmothers are the relative most likely to take the baby. Most child welfare workers try to place a baby with the grandmother before making any other kind of placement. Respondents at five sites say grandmothers, who often care for several children, are overwhelmed by the needs of drug-exposed babies. Officials report fathers are rarely involved with the custody of the baby.

Some relatives receive foster care reimbursements. Most child welfare agencies prefer relative to foster placements, but relatives often cannot afford to take care of the babies. New York City provides State-approved relatives with foster care reimbursements, but opinions on this approach vary. While some believe this approach is fairer and results in better monitoring, others say such programs delay reunification of mother and baby, create family antagonism, and perpetuate the baby's foster care status. At least one respondent said it creates opportunities for fraud.

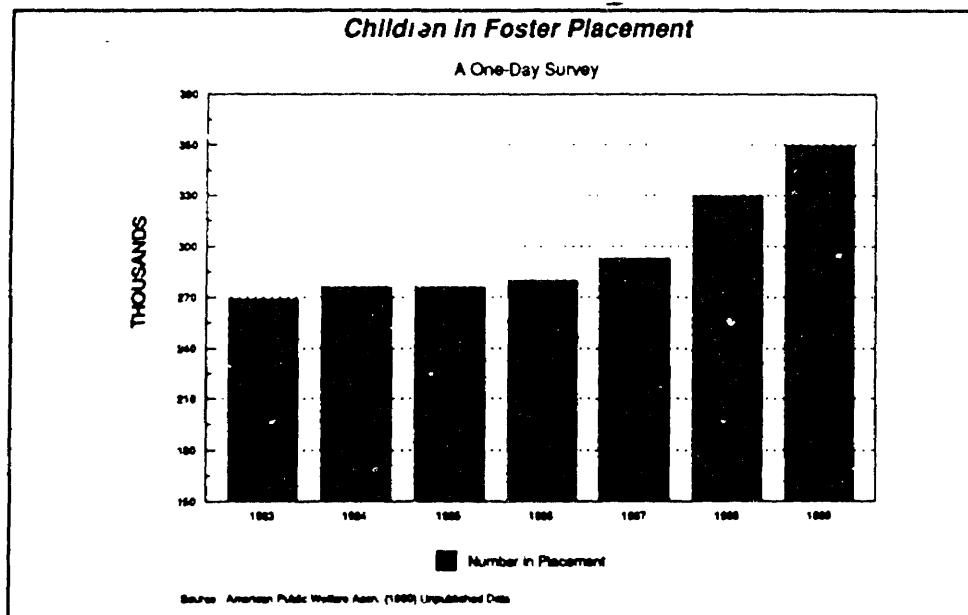
When mothers enter drug treatment centers that do not accept infants, their babies go to relatives or foster care. The restrictions against infants may be due to insurance liabilities and the traditional adult orientation of treatment programs. Some mothers must attend out-patient drug treatment programs as a condition for keeping their babies. Respondents tell us some mothers drop out of treatment or resume using drugs, but most treatment programs do not track recidivism among the mothers.

Many babies go into foster care.

Most officials estimate 30 to 50 percent of identified crack babies go into foster care, although a range of 5 to 50 percent was reported. According to some officials, children may be left with their natural parents because no foster placements are available.

Officials in Chicago, Newark, and Washington, D.C. report critical foster care shortages, but others are coping. Fort Wayne and Phoenix have little difficulty finding foster families. Both cities have comparatively small numbers of drug-exposed babies.

As shown in the chart below, the number of children in foster care placements has increased. On a given day in 1982, there were 262,000 children in placement; 280,000 in 1986; 293,000 in 1987; 330,000 in 1988; and an estimated 360,000 in 1989.



Respondents speculate the increase of children in foster care is due to increased parental drug abuse, but this cannot be confirmed. Data to demonstrate this connection is not collected nationwide by child welfare agencies.

Low reimbursement was the most commonly cited reason for a shortage of foster parents. Respondents say reimbursements are too low to attract full-time foster parents, especially for medically needy babies.

Rate schedules are complex and lack uniformity. Variables affecting rates include the child's age and health, the placement agency, and the services or products that qualify for reimbursement. For example, one city has eight categories of reimbursement for infants who do not require consistent medical attention and four categories for infants who do require consistent medical care. Within each category, child welfare has the flexibility to determine the exact reimbursement rate. Overall, reimbursement ranges from \$3,233 to \$30,730 annually.

Respondents also report shortages of black foster parents and homes that accept infants. In five cities respondents report a particular shortage of homes for infants with special needs. In one State that restricts interracial placements, the babies are predominantly black, but there is a shortage of black foster parents. To deal with the demand, some agencies put more children in each foster home, shift children between homes, separate siblings, and place children in group homes.

Respondents told us repeatedly that foster parents need training and support services. According to one respondent, there is a correlation between such training and a foster parent's willingness to continue. Others commented that foster parents need day care (regular and therapeutic), transportation, respite, and better access to physical and mental health services for their foster children.

In several cities, outreach efforts have produced good results. Strategies frequently incorporate newspaper stories, radio and TV talk shows, and paid advertising. Other recruitment approaches include teaming private foster care agencies with specific hospitals, offering bonuses to foster parents who recruit other foster parents, and working with local churches and community groups. Child welfare agencies and private agencies are also expanding the pool of potential foster parents by accepting singles and full-time employees.

Although outreach efforts often result in an outpouring of community response, the number who actually become foster parents is lower than the number who apply. Some applicants are disqualified while others lose interest. Respondents also say there are obstacles to increasing the pool of foster parents and keeping them. These include requirements that foster parents live within certain geographic limits and restrictions on interracial placements.

On the other hand, some respondents say that standards for foster parents have declined. According to a West Coast caseworker, applicants with "marginal" qualifications who would have been turned away a few years ago are now being accepted.

A few go to other care settings.

Crack babies are occasionally placed in other arrangements, such as emergency or congregate care. Emergency care is a temporary placement pending return to a parent or placement in foster care. Emergency care can be a small group home, a large shelter, or a foster family. When a long-term placement cannot be made, caseworkers may be forced to move babies

from one emergency placement to another. Two cities reported that they need but do not have emergency placement facilities.

Congregate care is usually a permanent group home. While used mostly for older children, some babies have been placed in such care. Officials in one city received strong public criticism of the care provided to babies in congregate care. As a result, all babies originally placed in congregate care have been placed in foster homes. Washington, D.C. is now building two group homes for infants to cope with critical foster care shortages.

We encountered strong opinions about congregate care. Of 58 respondents who commented, nearly half (27) believe congregate care can work as a substitute for foster care as long as the homes are small, keep siblings together, and are managed professionally. Twenty-one respondents think congregate care is a bad idea; 10 have mixed opinions.

A few babies go with their mothers to residential drug treatment centers. Mothers and babies stay at these centers from 6 to 24 months, depending on the program and the mother's treatment needs. Seven cities visited have at least one such center, and respondents say many more are needed.

Some babies remain in the hospital even though medically ready for discharge. Known as "boarder babies," these infants stay in the hospital due to legal complications, questions about parents' ability to care for them, or lack of care alternatives. Respondents from five cities with boarder babies say they are able to make placements in a timely manner. Four other cities report they are not able to make timely placements. The three remaining cities did not raise the issue. More information on this issue is presented in our companion report, "Boarder Babies."

Few crack babies have been adopted.

While respondents prefer adoption to permanent foster care, opinions on adoption versus family reunification differ widely. Many respondents said the existing policy goal of family reunification is unrealistic for many crack babies and simply prolongs the adoption process. But others feel strongly that child welfare's goal of family reunification should remain.

The adoption process is long, difficult, and expensive. According to a recent report from a children's advocacy group, caseworkers guiding the process need to be more aggressive "to challenge the hurdles of the adoption process, to face a court which seems reluctant to approve adoption, ...to [confront] the parent, and to negotiate the obstacles of the agency process itself."⁹

Most prospective parents want babies. Officials tell us that termination of parental rights is usually contested, and although the process can theoretically be completed in 18 months, the reality is at least 3 years. By then, these children are less likely to be adopted; they are not babies anymore.

Respondents cited other hindrances to adoption. One referred to a law which requires a 72-hour waiting period for a mother to voluntarily relinquish parental rights. This respondent added that a crack mother may decide to relinquish her rights when her baby is born, then leave the hospital and disappear. Neither hospital nor child welfare staff can locate her. When this happens, the baby cannot be made available for adoption until the legal process is complete.

Another long-standing barrier to adoption is the bias against interracial placement. Some respondents say white families don't want black babies; others say States and agencies are slow to approve interracial adoptions.

Many respondents believe that even if parental rights were terminated, most crack babies would not be adopted. One caseworker frankly said there are not enough people willing to adopt "these kind of children." Prospective parents fear long-term effects of crack and potentially expensive medical, educational, or psychological needs. Adoption subsidies for hard-to-place children, available in all States, are being used in some cities visited.

PEOPLE ARE WORRIED ABOUT THE EFFECTS OF PRENATAL EXPOSURE TO ALL DRUGS, NOT JUST CRACK.

Crack is not the only drug threat to the lives of crack mothers and their babies.

On the West Coast, the next drug crisis is already here. Child welfare agencies are preparing for babies born to users of a methamphetamine derivative called "ice." Although ice is more expensive than crack, the long-lasting high makes it attractive to drug abusers. Methamphetamine is known to produce rapid, extensive fetal damage.

Many respondents, especially on the East Coast, were concerned about the overlap of AIDS and crack. In the words of one official, "You can't separate the crack baby problem from the AIDS problem." The overlap of AIDS and drugs for these infants often means we are dealing with the same risk groups, offering the same messages, and often providing services to the same babies.

Respondents said many crack-addicted women engage in high-risk behavior and bear AIDS-infected babies. Fully 70 percent of pediatric AIDS cases are the result of drug abuse by the mother or her sexual partner. A local health official said, "AIDS is now the largest killer among young women [here]. We may not have to worry about [crack baby] mothers; they'll all be dead."

Respondents want leadership and action.

Respondents repeatedly called for strong leadership, accurate information, and heightened public awareness. They point out that crack addicts use so many other drugs and alcohol that it is futile to target just crack. Although there is no clear consensus on exactly what to do, people express a sense of urgency.

One suggestion by respondents was to establish a national commission on prenatal drug exposure. Many respondents point to the success of the National AIDS Commission in raising awareness and educating the public about prevention. They urged the HHS Secretary to take this proposal to the President. These respondents see a national commission as a way to galvanize public attention, promote greater participation by State and local governments and the private sector, and generate potential solutions. It was suggested that this commission be drawn from the public and private sector, and include representatives from a wide variety of disciplines, such as education, health, child welfare, substance abuse, justice, and housing.

RECOMMENDATIONS

We agree with respondents that the problems of crack babies are inseparable from the larger issue of prenatal exposure to all drugs and alcohol. We also recognize that the impact of infants prenatally exposed to drugs extends beyond the purview of this Department. While we recognize that some policy issues remain unresolved, our recommendations focus on actions which we believe can be accomplished without additional authorities or significant funding.

STATE AND LOCAL RESPONSIBILITIES

1. ***Encourage outreach and community involvement.*** State and local governments should conduct aggressive outreach to provide prenatal care for at-risk pregnant women. These efforts must emphasize the dangers of prenatal drug or alcohol exposure. Community and religious groups should be involved in identifying and helping mothers and children at risk. It is important to work with local black and Hispanic leaders.
2. ***Reduce placement barriers.*** State and local agencies should reduce barriers to placing drug-exposed infants into foster care and adoptive homes. This includes reviewing and revising existing laws and policies on abandonment, termination of parental rights, and interracial placement. Courts should establish "fast track" procedures to expedite child welfare cases involving drug abuse.
3. ***Develop guidelines and training.*** States should develop guidelines for child welfare agencies to follow in responding to drug exposure cases and in training caseworkers to handle such cases. Guidelines should cover risk assessment, family reunification, and termination of parental rights. Caseworkers should be trained in identifying substance-abuse behaviors, recording drug histories, and documenting evidence for court.
4. ***Establish reporting and tracking systems.*** States should establish criteria for identifying and reporting prenatal drug exposure as child abuse. Existing State child abuse reporting and tracking systems should be expanded and computerized. The information should be used not only for legal purposes, but also for the provision of health care and education.
5. ***Expand interagency mechanisms.*** State and local governments should develop initiatives such as task forces to coordinate services and integrate funds. These initiatives should involve courts and prosecutors to review policies and expedite legal proceedings involving drug-exposed babies and their families.

DEPARTMENT OF HEALTH AND HUMAN SERVICES RESPONSIBILITIES

Office of Human Development Services

1. ***Disseminate effective practices.*** The Office of Human Development Services (HDS) should identify practices, programs, and laws or regulations considered effective in dealing with drug-exposed baby cases and disseminate this information to State and local governments. The HDS should also undertake studies to evaluate the effectiveness of these practices.
2. ***Focus service strategies on serving the family.*** Because of the rapidly growing number of drug-exposed babies, most will be raised in their natural families. Many families already have multiple problems, which will be compounded further by having to deal with the problems faced by drug-exposed babies. In developing its service strategy for these babies, the HDS should place priority on providing needed interventions with the family, to help ensure that drug-exposed children can grow up in caring and supportive family environments.
3. ***Evaluate obstacles to placement.*** The HDS should evaluate obstacles to foster and adoptive placements, especially as they relate to drug-exposed babies. This examination should include current policies regarding family reunification, voluntary parental termination, and restrictions on foster care and adoption.

Office of Human Development Services and the Public Health Service

1. ***Coordinate Departmental activities.*** The HDS and the Public Health Service (PHS) should coordinate Departmental activities relating to drug-exposed babies and their families. This recommendation could be achieved through the expansion of the informal interagency coordination activities of HDS and PHS. Representatives from the following HHS components should be included:
 - Office of Human Development Services
 - Public Health Service
 - National AIDS Program Office
 - PHS Panel on Women, Adolescents, and Children with HIV Infection and AIDS
 - Alcohol, Drug Abuse and Mental Health Administration
 - Bureau of Maternal and Child Health and Resources Development, Health Resources and Services Administration
 - National Institute on Child Health and Human Development, National Institutes of Health

- Family Support Administration
- Health Care Financing Administration
- Social Security Administration
- Assistant Secretary for Planning and Evaluation

2. **Conduct short- and long-term research.** The HDS and the PHS should conduct both short- and long-term research on the effects of prenatal exposure to drugs, including crack cocaine, on babies and their mothers.

Specific areas for short-term research include:

- determining optimal treatment for cocaine-addicted mothers during pregnancy to ensure the birth of a minimally affected infant;
- examining the risk factors responsible for drug abuse so effective prevention can be implemented; and
- establishing a monitoring system to survey the extent of the crack epidemic, especially among women of child-bearing age.

Specific areas for long-term research include:

- studying the long-range effects of prenatal drug exposure on physical, psychological, and neurological development. Longitudinal research on these topics could conceivably take up to 15-20 years on the same subjects, with annual or semi-annual reports of findings required;
- evaluating long-term outcomes of various treatment modalities in reducing or eliminating drug use by women of child-bearing age who are addicted to crack cocaine or other drugs; and
- assessing permanent placement options and outcomes for drug-exposed babies as compared to other babies and children in the custody of child welfare agencies. The long-term resources required (staffing as well as funding) for each of these groups could also be compared.

3. **Promote drug abuse training.** The HDS and the PHS should promote drug abuse training in the following areas:

- Medical schools and hospitals - Most physicians are not trained to recognize the signs of drug use. As a result, physicians are failing to identify many pregnant women who are using drugs as well as newborns exposed in utero. Medical school

and continuing education curricula could include: identifying drug abuse behaviors, documenting drug and lifestyle histories, and recommending appropriate drug treatments.

- **Child welfare agencies** - Model training materials should be developed and disseminated to State and local child welfare agencies. These materials could include: techniques to recognize and assist drug-abusing families and their children and examples of successful case management techniques. Training materials should also address parallel service delivery problems such as providing prenatal care in drug treatment programs and drug treatment in prenatal care programs.

4. ***Promote prevention through public outreach and informational materials.*** Existing anti-drug messages do not sufficiently emphasize the dangers of prenatal drug exposure. A comprehensive strategy should be developed to target all women of child-bearing age, including teenagers, as well as junior high and middle school students. Model brochures (including easy to read, illustrated formats) and public service announcements are among the possible approaches.

Public Health Service and the Health Care Financing Administration

1. ***Continue to support targeted outreach and prenatal care.*** The PHS and the Health Care Financing Administration should continue to support targeted, intensive outreach intervention and prenatal care for substance abusing pregnant women and their babies. This includes identifying and disseminating practices which encourage community involvement in prenatal care outreach and education.

COMMENTS ON THE DRAFT REPORT

Comments received from HDS, PHS, HCFA and ASPE were generally supportive of our findings and recommendations. All respondent comments reflected a thoughtful review of the draft and many excellent suggestions were made. Many have been incorporated into the final report. In addition, the full text of the comments received has been included in the appendix. The reader will find much additional useful information in these comments.

The HDS and ASPE requested more detail on our cost estimates for hospital delivery, perinatal care, and foster care through age 5. We will provide this information to them.

The HDS felt that while the selection of cities as the source of information for the report was reasonable, there was an implication that the problem of infants exposed to crack was an urban phenomenon. We believe that the purpose statement of the study clearly defines that we examined the affect of crack babies on the child welfare system only in several major cities.

The HDS also felt the report would be strengthened by providing further documentation. We have responded by indicating the sources of data in charts and by providing specific citations in footnotes. Since we interviewed several respondents in each city, we did not feel that an itemization of the number would add significantly to the report.

The ASPE suggested adding hospital staff to our State and local recommendation on development of guidelines and training for child welfare staff. Our recommendations to HDS and PHS already address promotion of such training in medical schools and hospitals, and we believe this is the most effective approach for addressing these areas with health professionals.

With respect to our recommendation on interagency coordination, PHS and ASPE pointed out that crack baby issues relate to public health as well as social services. We agree, and have modified our recommendation to reflect the cross-cutting nature of the problem.

The PHS suggested that the report focus on cocaine rather than just the crack form of cocaine. As stated in the report, we have used the terms crack and cocaine synonymously as their detection in the body does not differ and many respondents addressed their comments using the terms interchangeably.

Another area of PHS concern was that the report failed to discuss the availability of drug treatment programs for pregnant women. We have included descriptions of such programs and other types of services directed to the drug exposed children and families in our companion report "Crack Babies: Model Programs."

The PHS also provided several technical comments, many of which were incorporated in the report.

The HCFA suggested we reword our recommendation on expanded availability of prenatal care to at-risk mothers and their babies. We agree and have made the suggested change.

However, because of space considerations we have not included the American Bar Association's monograph *Drug Exposed Infants and Their Families: Coordination Responses of the Legal, Medical and Child Protection System* which PHS provided with its comments.

ENDNOTES

1. Villanova University, Human Organization Science Institute, unpublished data, 1990.
2. D. McAllister, County of Los Angeles, Department of Health Services, Drug Abuse Program Office, *1987 Drug-Related Costs in the County of Los Angeles*, September 1988, p. 17.
3. State of New York, Senate Committee on Investigations, Taxation, and Government Operations, *Crack Babies: The Shame of New York*, December 20, 1989, p. 4.
4. (McAllister, 1988, p. 17)
5. E.S. Bandstra, B.W. Steele, G.T. Burkett, D.C. Palow, N. Levandoski, and V. Rodriguez, "Prevalence of Perinatal Cocaine Exposure in an Urban Multi-Ethnic Population," *Pediatr Res*, April 1989 as cited in the U.S. Congress, House of Representatives, Select Committee on Children, Youth and Families, *Born Hooked: Confronting the Impact of Perinatal Substance Abuse*, (Washington, D.C.: GPO, 1989), p. 6.
6. State of New York, Senate, Committee on Investigations, Taxation, and Government Operations, *Crack Babies: The Shame of New York*, December 20, 1989, p. 5.
7. D.J. Besharov, "The Children of Crack: Will We Protect Them?," *Public Welfare*, Fall 1989, p. 7.

National Drug Control Strategy, The White House, September 1989, p. 44.

I.J. Chasnoff, M.D., National Association for Perinatal Addiction Research and Education, *A First: National Hospital Incidence Survey*, 1989.
8. State of Illinois, Department of Children and Family Services, Illinois Department of Alcoholism and Substance Abuse, and the National Association for Perinatal Addiction Research and Education, *The Illinois Model: A Statewide Collaborative Program for Alcohol and Other Drug Using Pregnant Women*, p. 3.
9. Philadelphia Citizens for Children and Youth, *In Their Second Best Interest*, 1989, p. 30.

APPENDIX

OPDIV COMMENTS ON THE DRAFT REPORT

DEPARTMENT OF HEALTH & HUMAN SERVICES

RECEIVED
 OFFICE OF INSPECTOR
 GENERAL
 Washington, D.C. 20201

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MEMORANDUM

TO: Richard P. Kusserow
Inspector General

FROM: Assistant Secretary for Planning and Evaluation

SUBJECT: Crack Babies Report 05-89-01540

Overall I found this report informative, supporting many of the anecdotes we have been hearing about these children. I do, however, have several comments which I note below.

Issues not Mentioned:

I suggest that you note somewhere that existing evidence indicates that many (though certainly not all) of these children will have long term needs. In addition, it looks as though we can help these children compensate, but cannot cure, their deficits.

Your discussion of testing and tracking these children might also mention the growing tendency by local and state officials to prosecute pregnant women. I believe this very punitive approach is counter productive because its most likely effect will be to drive drug abusing women away from prenatal care, further damaging the child.

Regarding Specific Statements in the Report:

On page 3, paragraph 2 you estimate the cost of caring for the children you observed through age 5 to be \$500 million. I find this figure confusing without further explanation regarding your assumptions. For example, what proportion are you assuming will be in foster care? It would also be helpful to cite a comparison figure regarding normal children.

In the final paragraph on page 3 and the first paragraphs on page 4 you note, quite appropriately, that few of these children are being identified. What you fail to point out, however, but that we find to be an important issue, is that the lack of appropriate testing guidelines seems to result in discrimination against minority and low income women. Therefore, more minority and low income children are identified.

Page 2 - Richard P. Kusserow

Your discussion of identifying these children (page 3-4) might also mention that it is difficult to identify them as they grow up because of the limits of existing developmental tests.

Certainly, they cannot identify cause. In addition, most such tests are structured, catering to the strengths of these children. The deficits we are finding in these kids are primarily in their abilities to structure their own activities and emotions without help. They perform in the low normal range on structured tests. It is in unstructured activities (like play and interacting with other children and adults) that their problems show up.

On page 5 you note infant attachment problems among many of these children placed in foster care, particularly if the infant has been moved from home to home. I share your concern but note that several researchers have also found attachment problems in these children when they remain with their biological parents or a single caretaker. A portion of the problem may be organic rather than environmental, relating to the damage done by the drug.

The chart at the bottom of page 5 fails to recognize the issue which you note later (on page 13) that while crack is today's drug of choice among certain populations, "ice" or something else will soon come along to replace it. Straight line projections of the number of crack babies is therefore somewhat misleading.

Regarding Your Recommendations:

I would add to your recommendations of State and Local Responsibilities (page 14) the active establishment and promotion of drug use prevention and drug treatment programs. This is especially important for women of childbearing age. Most anti-drug messages are now aimed at teenagers, and as your report notes, these are not teenage mothers. In addition, few treatment programs are set up to treat pregnant women or mothers effectively. For example, few provide child care. (A recent study found that 87% of the existing drug treatment programs in New York City would not treat pregnant, Medicaid eligible crack users.)

Your State and Local Recommendation number 4 notes the need for better reporting and tracking of these children. I would also add the need for better identification of drug exposed infants, including crack and other drugs. While you note in Recommendation 3 the need for training and guidelines for child welfare workers, it is hospital staff who must first identify these mothers and children. As your report notes, only 1/3 of the hospitals you visited had testing protocols in place. As noted above, this leads to racial and socioeconomic discrimination.

Page 3 - Richard P. Kusserow

You offer a list of recommendations regarding Federal activities which are needed. While it is an appropriate list, I would suggest that you also mention existing activities which address many of the needs you mention. Your staff are aware of a recent report written by my staff which outlines many of these efforts.

Your Recommendation number 4 for the Office of Human Development Services (page 15) suggests the need for interagency coordination of activities regarding these children and families. While we agree with that assessment, we are less certain to which agency the lead should be assigned. This is both a public health issue and a social services one. The lead could appropriately come from a variety of sources. In addition, I believe that the Social Security Administration should be added to your list of agencies which should be involved because of their role in funding services for these children (particularly through the SSI disabled children program).


Martin H. Gerry



DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of
Human Development ServicesAssistant Secretary
Washington DC 20201

APR 30 1990

TO: Richard P. Kusserow
Inspector General

FROM: Assistant Secretary
for Human Development Services

SUBJECT: Office of Inspector General Draft Report on "Crack
Babies," OEI-03-89-01540

Thank you for the opportunity to review the draft report of the Office of Inspector General (OIG) entitled "Crack Babies."

The report provides valuable information and a good overview of the scope of the problem of infants exposed to crack cocaine and of its impact on child welfare and other systems (e.g., medical, rehabilitation, mental health, juvenile justice) either currently or projected into the future. We note that the findings are generally consistent with those being reported by other investigators on a national and regional basis. There is also agreement with the consensus of the respondents interviewed for the report that the problem of infants exposed to crack cocaine is interrelated with the larger issue of prenatal exposure to other drugs and alcohol as well as AIDS (page 13).

We do, however, have several concerns. First, page 3 of the report states that "We estimate the cost for hospital delivery and perinatal care, and foster care through age 5 for just these 8,974 identified babies approximate \$500 million." We suggest that these costs be broken down and justified so that they can be better understood. We are concerned, for example, about the five year projected length of stay in foster care. In addition, the initial draft of the OIG report factored in costs for a nine day hospital stay for healthy babies, which considerably exceeds the norm of three days or less.

Second, while the selection of cities as the source of information for the report was reasonable, the implication is that the problem of infants exposed to crack cocaine is an urban phenomenon. The

Page 2 - Richard P. Kusserow

staff of the Children's Bureau are beginning to receive reports from small towns and rural areas which indicate that the problem has spread to these areas of the country. Officials in the State of Wisconsin, for example, indicate that one reason that the problem of infants exposed to crack cocaine may be underreported in such areas is that the babies are frequently referred to developmental disabilities programs, rather than to child protective services for assistance. These officials indicate, moreover, that the increase in the problem in rural areas of the State is equal to or greater than in the city of Milwaukee.

Third, the report would be strengthened by the provision of documentation. For example, the number of respondents interviewed by site should be provided, as should the sources for the information presented in the charts on pages 5 and 10. In addition, the data presented on page 9 of the text and in the chart on page 10 relate to a one day count of children in foster care, not to entry rates for the years 1983-1986, the last years for which Voluntary Cooperative Information System (VCIS) data are currently available.

Moreover, in discussing the stresses being placed on the child protection system, the report did not note that the system was already overburdened, due to high caseloads and inadequate resources, prior to the advent of the phenomenon of infants exposed to crack cocaine. Although some difficulties were identified in the adoption process, adoption is a reasonable approach for infants exposed to crack cocaine with no parents or relatives. Adoption subsidies are currently available in all States.

Finally, while we recognize that the OIG's recommendations must relate to the Department, we would suggest that some mention be made of the fact that the impact of infants exposed to crack cocaine extends beyond the purview of the Department of Health and Human Services to encompass education, housing, law enforcement and other Federal, State and local agencies.

Again, thank you for the opportunity to review the report.


Mary Sheila Gail



DEPARTMENT OF HEALTH & HUMAN SERVICES

Health Care
Financing Administration

Memorandum

Date APR 18 1990

From Gail R. Wilensky, Ph.D. *GW*
Administrator

Subject OIG Draft Report - Crack Babies, OEI-03-89-01540

To The Inspector General
Office of the Secretary

We have reviewed the subject draft report. It examined how crack babies have affected the child welfare system in 12 metropolitan areas.

Though the report makes several recommendations to local, State and Federal agencies, only one recommendation is addressed to HCFA. The report recommends that HCFA and the Public Health Service (PHS) continue to support expanded availability of prenatal care to at-risk mothers and their babies. We believe that the wording of the recommendation is too vague. Rather than expansion, we support targeted or intensive outreach intervention and prenatal care for substance abusing pregnant women. We are already engaged in identifying and disseminating practices which encourage community involvement in prenatal care outreach and education, as this recommendation further suggests.

In addition to the drug abuse training cited on page 16, we believe Departmental efforts must also address parallel service delivery problems. Prenatal care services or linkages must be provided in drug treatment programs, and drug treatment services or linkages must be provided in prenatal care programs.

Finally, we have one technical comment. The PHS components listed on page 15 should be clarified to read:

- Bureau of Maternal and Child Health and Resources Development, Health Resources and Services Administration
- National Institute of Child Health and Human Development, National Institutes of Health
- Alcohol, Drug Abuse and Mental Health Administration
 - National Institute on Drug Abuse
 - Office of Substance Abuse Prevention
 - Office for Treatment Improvement

Thank you for the opportunity to review and comment on this draft report. Please advise us whether you agree with our position at your earliest convenience.



DEPARTMENT OF HEALTH & HUMAN SERVICES *Division / HED file*
Public Health Service *Buchel*

Memorandum

APR 20 1990

Date
From Assistant Secretary for Health

Subject OIG Office of Evaluation and Inspections Draft Report "Crack Babies," OEI 03-89-01540, February 1990

To Inspector General, OS

Attached are the PHS comments on the findings and recommendations contained in the subject OIG draft report. We concur with the recommendations directed to PHS to (1) conduct long-term research on prenatal exposure, treatment models, and placement outcomes; promote training in medical schools and child welfare agencies; and promote prevention through public outreach, and (2) continue to support prenatal care expansion.

James O. Mason
James O. Mason, M.D., Dr.P.H.

Attachment

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COMMENTS OF THE PUBLIC HEALTH SERVICE ON THE OFFICE OF
INSPECTOR GENERAL'S (OIG) DRAFT REPORT
"CRACK BABIES," OEI 03-89-01540, FEBRUARY 1990

General Comments

The OIG reports that we are only seeing part of the problem. There is no typical crack baby and most are not identified at birth. We concur that tests can detect cocaine in the mother for only 24 to 48 hours after use. However, new methods are becoming available to measure cocaine in meconium and in hair. These tests, if positive, would indicate prolonged use of cocaine during pregnancy.

Although the report recognizes polydrug abuse and related problems (e.g., AIDS), the review addresses issues only in terms of crack-cocaine. Given the limitations to this narrower focus, we believe the report should concentrate on "cocaine" rather than on the "crack" form of cocaine. Although the report's title will attract attention, we believe the use of the terms "crack" and "cocaine" synonymously may lead to inaccurate and perhaps misleading statements on prevalence since there is no way to differentially identify crack cocaine use from the use of other forms of cocaine. This is because presence in the human body does not differ by form at intake.

In addition, when addressing the impact of crack-using mothers on the child welfare system, there are clinical indications that when a woman uses the rapidly and highly addicting "crack" form of cocaine, she may more rapidly become mentally incapacitated and unable to stop using it, than if she used some other form of cocaine.

Another point we wish to highlight is that the report fails to discuss the availability of drug treatment programs for pregnant women. We believe that there should be coordination among substance abuse treatment, primary and prenatal care and HIV infection prevention programs.

There is a need to address pediatric AIDS and drug-exposed babies as part of the same problem. The overlap between the problems of AIDS and drugs for these infants means we are usually dealing with the same risk groups, offering the same messages, and often providing services to the same babies.

Fully 70 percent of pediatric AIDS cases are a result of the drug abuse of the mother or her sexual partner. Recognition of this fact should be reflected in the report, particularly recommending Federal, State, and local coordination of these pediatric HIV/AIDS activities.

Page 2

The Surgeon General and the Director, National AIDS Program Office co-chair a PHS Panel on Women, Adolescents, and Children with HIV Infection and AIDS. This panel is comprised of all the PHS agencies and the Office of Population Affairs, and addresses many of the same problems identified in this report. Therefore, any DHHS effort to address the problems of drug-exposed infants should include this panel.

The following are our comments on the OIG recommendations.

OIG Recommendation

STATE AND LOCAL RESPONSIBILITIES

Establish reporting and tracking systems. States should establish criteria for reporting prenatal drug exposure as child abuse.

PHS Comment

We concur. However, the recommendation only centers on legal issues and this information should be used concurrently to provide appropriate health education and care.

OIG Recommendation

DEPARTMENT OF HEALTH AND HUMAN SERVICES RESPONSIBILITIES

Disseminate effective practices. The Office of Human Development Services (HDS) should identify practices, programs, and laws or regulations considered effective in dealing with drug-exposed baby cases and disseminate this information to State and local governments.

PHS Comment

We concur. However, in addition to the identification of practices considered effective, evaluation of their effectiveness must be considered at the same time.

OIG Recommendation

Coordinate Departmental activities. The HDS should coordinate Departmental activities relating to drug-exposed babies and their families.

PHS Comment

We believe that PHS rather than HDS should be the lead OPDIV to coordinate Department activities relating to drug-exposed babies and their families. There is a need for education and

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support through family planning centers and prenatal programs. We advocate this position because drug-exposed babies and their families encounter numerous medical problems. We believe that these problems are primarily medical or public health issues, and not foster care or child abuse matters.

OIG Recommendation

Office of Human Development Services and the Public Health Service

1. *Conduct long-term research.* The HDS and the PHS should conduct long-term research on the effects of prenatal exposure to drugs, including crack cocaine, on babies and their mothers.

PHS Comment

We concur. In this regard, the Health Resources and Services Administration's (HRSA) Maternal and Child Health Research Grant Program permits principal investigators to submit applications for long-term research on "drug-exposed" babies. If a proposed research project in this area proves viable, it is considered for funding.

However, short-term research is also indispensable. We suggest added bullets to state:

- o short-term research should determine the optimal treatment to cocaine-addicted mothers during pregnancy to ensure the birth of a minimally affected infant.
- o research examining the risk factors responsible for drug abuse is needed if effective prevention is to be implemented.
- o national surveillance systems should exist to monitor the extent of the crack epidemic, specifically during pregnancy.

OIG Recommendation

2. *Promote drug abuse training.* The HDS and the PHS should promote drug abuse training in:
 - o Medical Schools, and
 - o Child welfare agencies.

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PHS Comment

We concur. The following sets forth our activities in these areas.

o Medical Schools

The Bureau of Health Professions, HRSA, recently awarded a contract to the Society of Teachers of Family Medicine. The purpose of this contract is to train approximately 180 family-medicine physician faculty how to teach residents about substance abuse.

The Bureau of Health Professions also awarded a contract to sponsor a Physician Consortium on Substance Abuse Education. The Consortium is comprised of representatives from academic and professional organizations responsible for the education and training of physicians. The purpose of the consortium is to refine and implement strategies which will enhance and build on existing medical education strategies for removing barriers to prevention and early identification of substance abuse.

o Child Welfare Agencies

The Maternal and Child Health (MCH) Block Grant Program may indirectly, through the States, allocate MCH funds to child welfare agencies for drug abuse training.

OIG Recommendation

3. *Promote prevention through public outreach and informational materials.*

PHS Comment

We concur. However, the education should be expanded to courses in junior high schools and middle schools since prevention must begin early.

The Office of Maternal and Child Health, HRSA, is working with the Office for Substance Abuse Prevention, ADAMHA, on a joint demonstration grant program to local communities focusing on "prevention and treatment of drug use during pregnancy." To date, a total of 45 demonstration projects providing training in developing new intervention techniques in high-risk population areas have been funded.

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OIG Recommendation

Public Health Service and the Health Care Financing Administration

Continue to support prenatal care expansion. The PHS and the Health Care Financing Administration should continue to support expanded availability of prenatal care to at risk mothers and their babies.

PHS Comment

We concur. HRSA's Office of Maternal and Child Health is working with HCFA to expand availability of prenatal care to more pregnant women, including those with "drug-exposed" children.

Technical Comments

The title of this report, "Crack Babies," is erroneous and misleading. The appropriate terminology, which is used by experts and professionals in the field, is "drug-exposed" or "drug-affected infants." It is recommended that the title be changed throughout the report to "drug-exposed babies."

Crack is only one method of ingesting the drug cocaine. It is virtually impossible to determine whether these babies were, in fact, exposed to crack, intra-nasally ingested (snorted) cocaine, or if the mother used a combination of drugs during her pregnancy. The current research available indicates that most "crack" users are poly drug users, combining cocaine with other drugs. By focusing only on "crack" babies, a narrow and inaccurate perception of the problem is created. Any references to drug use among women, such as that on page 1, "crack addicted mothers," should be changed to "drug-addicted mothers."

Pages 1 and 1, "BACKGROUND"

The first paragraph should be changed to read "The National Institute on Drug Abuse (NIDA) estimates that over 6 million women of child bearing age...." instead of the 5 million cited in the report. The estimate is based on data from the National Household Survey, 1988.

Page 1, Fifth Paragraph

The report's exclusive focus on crack suggests there is relatively low use of crack cocaine among teenage mothers. This "finding" could be misleading in that a clinically

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significant number of teen age women are abusing many drugs, including other forms of cocaine. These young women are or soon might become pregnant and thus will endanger the lives of their yet-to-be-born children. These teenagers require a wide range of services that are designed to take into account their developmental as well as their obstetrical needs.

Page 3, "The scope of the problem is wide ranging."

In the second paragraph, OIG reports ". . . the cost for hospital delivery and perinatal care, and foster care . . . approximate \$500 million."

Although in this report the costs of foster care, hospital delivery, and short-term perinatal care have been pooled, it might be more informative to discuss hospital delivery and perinatal care apart from the cost of foster care. Information on cost to support hospital delivery and perinatal care is now available. This is in contrast to the paucity of information on the actual cost of providing quality care in foster homes over indefinite periods of time.

In response to these questions, NIDA is currently supporting research demonstration studies that soon will provide more detailed information on the cost to communities to provide effective comprehensive services, with and without case management systems in place, to addicted pregnant women and their children. Although no studies have as yet been submitted, NIDA is actively encouraging clinical investigators to design studies that will critically examine the current foster care system in terms of cost and beneficial effects.

Page 3, "There is no typical crack baby. Most are not identified at birth."

In the first sentence, OIG states that most crack babies look healthy and are therefore difficult to identify. We believe it may be more correct to state the following:

"There is no typical set of adverse signs or drug-induced pattern by which to identify either a cocaine- or a crack cocaine-fetally-exposed infant."

Several reasons account for this lack of differentially discrete pattern of effects:

- (1) Most women are polydrug abusers rather than cocaine-only, and therefore clinicians have identified many overlapping patterns.

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- (2) In most cases, it is impossible to get an accurate drug use history from the mother, at least accurate enough to relate a specific neonatal clinical pattern with the mother's use of a specific drug like cocaine.
- (3) There still is too small a number of cases where accurate drug use histories do exist to form the basis upon which to make a differential diagnosis.
- (4) Very subtle signs of cocaine exposure in utero are difficult to detect at the present time because of a lack of clinical instruments and procedures.

NIDA is currently supporting studies that aim to describe the effects of cocaine exposure on the fetus, newborn, and developing child as well as research in the development of clinically sensitive and useful diagnostic instruments and procedures.

Page 5, the chart "Projection of Drug Exposed Children by the Year 2000"

The source for the data used in the projection chart is not provided.

Page 13, "PEOPLE ARE WORRIED ABOUT PRENATAL EXPOSURE TO ALL DRUGS, NOT JUST CRACK."

Further elaboration is necessary on this statement.

Page 14, "STATE AND LOCAL RESPONSIBILITIES"

"2. Reduce placement barriers." To date, many of the ideas put forth to reduce placement barriers by ". . . reviewing and revising existing laws and policies on . . . termination of parental rights. . ." have addressed the issue of unfit motherhood from the perspective of removing the baby, and perhaps the other children, from the mother. Unfortunately, termination of parental rights may result in fewer women voluntarily coming for prenatal-postnatal care or for treatment for their addiction (see attached copy of the American Bar Association's monograph Drug Exposed Infants and Their Families: Coordination Responses of the Legal, Medical and Child Protection System). Although temporary placement for children is often necessary, community efforts and resources should be directed toward methods to increase the number of addicted women of childbearing age coming into the medical, social service, and drug treatment programs that are currently available.

Page 15, "4. Coordinate Departmental activities."

Under the bullet Public Health Service, the National Institute on Drug Abuse and the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA) are listed as being equal organizations of PHS. NIDA is an Institute of ADAMHA. Also, there are other organizations within PHS, ADAMHA, HRSA, and the National Institutes of Health which have responsibility relating to the subject matter of this report. HRSA's Bureaus of Health Care Delivery and Assistance and Health Professions should be included along with the Office of Maternal and Child Health in the PHS representatives for the Department activities. Therefore, this part should read as follows:

- National AIDS Program Office
- PHS Panel on Women, Adolescents, and Children with HIV Infection and AIDS
- Alcohol, Drug Abuse and Mental Health Administration
 - National Institute on Drug Abuse
 - Office for Substance Abuse Prevention
 - Office for Treatment Improvement
- Health Resources and Services Administration
 - Bureau of Health Care Delivery and Assistance
 - Bureau of Health Professions
 - Office of Maternal and Child Health
- National Institute on Child Health and Human Development, National Institutes of Health



DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of Inspector General

Memorandum

Date

From

 UN 28 1989

 Richard P. Kusserow
 Inspector General
Subject: **OIG Management Advisory Report: "Boarder Babies" (OEI-03-89-01541)**

To

 Mary Sheila Gall
 Assistant Secretary for
 Human Development Services
PURPOSE

This management advisory report describes the extent of the boarder babies problem in several cities around the country.

BACKGROUND

A boarder baby is an infant who remains in the hospital even though medically ready for discharge. Babies stay in the hospital due to legal complications, questions about the parents' ability to care for the babies, and a lack of care alternatives.

We obtained new information on boarder babies as a by-product of a broader inspection on crack babies undertaken during the last quarter of 1989. We conducted site interviews with over 200 respondents in 12 metropolitan areas: Chicago, Fort Wayne, Los Angeles, Miami, New York City, Newark, Oakland, Philadelphia, Phoenix, San Francisco, Tacoma, and Washington, D.C. We selected these sites for a perspective on how cities of varying size and location are affected by crack baby births.

Respondents included child welfare administrators and caseworkers, hospital social services staff, private agency representatives, foster parents, and State and local officials who had a working knowledge of crack babies and boarder babies. We also interviewed a number of national experts.

FINDINGS**boarder babies usually have serious medical problems**

Most boarder babies show fetal exposure to drugs. Independent studies and an expert interviewed estimate about 80 percent are drug exposed; overwhelmingly the drug is cocaine, or "crack".

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However, some hospitals and caseworkers report that it is not the drug exposure which makes these babies difficult to place, it is their severe medical and physical handicaps. These problems can be due to birth defects, opportunistic infections, prenatal exposure to drugs (including alcohol), or a combination of factors.

A 1988 1 day census in Philadelphia hospitals indicated 55 boarder babies awaiting placement. Six of these babies were listed as healthy. Forty-three had primary problems such as congestive heart failure, seizures, Down's syndrome, respiratory problems, and failure to thrive. Although many of these babies may have been hospitalized only six were boarder babies based solely on their prenatal cocaine exposure.

There are complex legal obstacles to placement

Legal abandonment must be proven before placement can be made. Once a child has been declared a dependent of the court, it can take 12 to 18 months to begin the process of terminating parental rights. While most boarder babies are placed during this period, the situation is complicated by other laws.

For example, respondents in Washington, D.C. report that temporary emergency care orders signed by the mother expire in 90 days. After 90 days, the child welfare agency loses legal custody. If the mother can't be located, the child has no legal status. Without legal status, permanent placement cannot be made.

In some instances, if no legal status for protective custody has been established, a hospital may have to release a baby upon the mother's request. In other cases, if the mother can be located, a hospital may lack legal authority to release a child even to a relative. Babies lacking legal status can remain hospitalized after being medically ready for discharge.

Some cities are effectively dealing with the boarder baby problem.

In the course of the Crack Babies inspection, some respondents raised the issue of boarder babies. In five cities (Los Angeles, Miami, New York City, San Francisco, and Tacoma), respondents report that they have boarder babies but are able to make timely placements.

Four cities (Chicago, Newark, Philadelphia, and Washington, D.C.) report that they are not able to make timely placements. Respondents in three cities in our sample (Fort Wayne, Oakland, and Phoenix) did not raise the issue.

New York City reported a total of 12,954 boarder babies during the 31-month period February 1987 to August 1989. The number of boarder babies during this period ranged from 312 to 547 per month.

Page 2 Mary Sheila Gall

At the same time, the length of overstay in the hospital was reduced from 38 days to 5 days. (Overstay is defined as the number of days the child remains hospitalized after being medically ready for discharge.) New York City reports this reduced length of overstay is being maintained.

In Miami, the number of boarder babies per day declined from 36 to 2 between March and June 1989. The average length of hospital overstay was reduced from 11.3 to 2.4 days.

Cities that are dealing with their boarder baby problem often use emergency foster care placements. These placements, sometimes involving shifting babies from home to home, can last up to 2 years before permanent foster care placements are made. Additionally, some cities report using congregate care, increased foster parent recruitment and training, media promotions, and special placement teams.

RECOMMENDATIONS

We found that boarder baby problems are serious but localized. Some cities have developed mechanisms for addressing this problem. We believe it should be possible to capitalize on these successes. We therefore recommend that:

1. The Office of Human Development Services and the Public Health Service identify effective practices in those cities which have reduced their boarder baby problem and disseminate this information to other cities which need it.
2. The Public Health Service support research on ways to reduce boarder baby hospital stays. This could be done, for example, through the Early Childhood Intervention program.

Implementation of these recommendations could result in reduction of hospital overstay and faster placement of boarder babies into appropriate care settings.

In accordance with the Department's conflict resolution procedures, please provide a plan of action for implementing these recommendations within 60 days of receiving this memorandum, or explain why it is not possible to do so.

If you have any questions, please have your staff call Alan Levine at FTS 619-3409.

COMMUNICATIONS

STATEMENT OF THE AMERICAN CIVIL LIBERTIES UNION

INTRODUCTION

Mr. Chairman, members of the Committee, we appreciate the opportunity to present the views of the American Civil Liberties Union on the question of constructive and constitutional approaches to address the problem of pregnant women with drug addiction problems. The American Civil Liberties Union is a non-partisan organization with more than 275,000 members devoted to protecting the Bill of Rights. The ACLU opposes punitive approaches whether civil or criminal of drug-addicted women who choose to continue their pregnancies.

Although criminal prosecutions of women for their behavior during pregnancy were once rare, an increasing number of women are being arrested under unprecedented interpretations of child abuse and drug trafficking statutes. These prosecutions are contrary to both the Constitution and common sense. The ACLU has been involved as counsel or consultant in virtually all of the approximately fifty cases in which women have been charged with crimes for their behavior during pregnancy.¹ These prosecutions have done nothing to reduce the rate of drug use and succeeded in doing only one thing: frightening women away from what little drug treatment and prenatal care may be available.

The ACLU has also been involved in some of the hundreds of cases in which women have lost custody of their children based on nothing more than a single positive drug test at the time of the birth of their child. This automatic removal of newborns violates women's constitutional rights, and senselessly destroys families without ensuring a healthier, safer or better environment for the newborn. In addition, the threat of loss of custody, like the criminal prosecutions, deter pregnant women from seeking what help is available to them. That is why positive toxicologies taken of newborns at birth should be used for medical intervention only, not for the removal of a newborn after an investigation unless there is additional independent evidence of parental unfitness. Similarly, mandatory reporting laws that require hospitals and social workers to make positive test results available to state prosecutors or child welfare authorities violate patients privacy rights and undermine efforts to provide help to pregnant women with alcohol and drug dependency problems.

Criminal Prosecutions:

The Women and the Crimes They Are Charged With

Most of these cases have involved allegations of illegal drug use during pregnancy, but they are not limited to pregnant women who engage in illegal behavior. For example, in Laramie, Wyoming, Diane Pfannenstiel, a pregnant woman, was arrested for child abuse when she admitted to the police that she had been drinking alcohol. Pfannenstiel had appeared at a police station to file a claim against her husband for battering her because she was concerned that his continued abuse would endanger her pregnancy.² In 1985, Pamela Rae Stewart was charged with "failing

¹ The first widely publicized criminal prosecutions of pregnant women occurred in the mid 1980's; today there are at least fifty cases around the country and the trend toward more prosecutions continues. See Appendix A, ACLU State by State Case Summary of Criminal Prosecutions Against Pregnant Women. According to an article in U.S.A. Today, "experts expect hundreds more cases." *It's the tip of iceberg in protecting infants*, U.S.A. Today, Aug. 25, 1989.

² *State of Wyoming v. Pfannenstiel*, No. 1-90-8CR (Laramie, Wyo. complaint filed Jan. 5, 1990); Charles Levendosky, *Turning Women into 2-legged petri dishes*, *Sunday Star Tribune*, Jan. 21, 1990 at A8.

to follow her doctor's advice" to stay off her feet, to abstain from sexual intercourse, to refrain from taking street drugs, and to seek immediate medical attention if she experienced difficulties with the pregnancy.³ The only illegal act alleged was the use of "street drugs," based on the presence in her blood of a substance that could have come from an over-the-counter antihistamine. The prosecutors later admitted that her noncriminal behaviors were the basis for the prosecution because drugs had little, if anything, to do with the baby's injuries.⁴

The ACLU's national survey of these prosecutions confirms that women of color, poor women, and battered women are primarily the victims of these prosecutions. Eighty percent of the forty-seven cases in which the race of the woman could be identified involve women of color.⁵ The figure reflects the selective nature of these prosecutions. Drug use cuts across socio-economic and racial lines. A study conducted in Pinellas County, Florida, by the National Association for Perinatal Addiction Research and Education (NAPARE) found that, while substance abuse was equally prevalent among white and black women, a black woman who uses drugs or alcohol during pregnancy is almost 10 times more likely to be reported to state authorities than a white woman.⁶ The result of NAPARE's study and the ACLU survey indicates that racial and economic bias play a significant role in determining who is reported to authorities and who is punished.

In addition, a significant number of the women arrested for their actions during pregnancy were in abusive relationships. Newspaper and court reports have documented that four of the white women prosecuted were beaten by their boyfriends; the actual number is likely higher.⁷ In none of these cases have men whose violence threatened the health of the fetus been charged with child endangerment.

The majority of the women charged with drug-related offenses have been charged with criminal child abuse or endangerment rather than delivery of drugs to a minor. To date, however, no court has upheld the application of a criminal child abuse or endangerment statute to a pregnant woman who uses drugs. Nine of these cases have been dismissed and at least fourteen more are pending. The only case successfully prosecuted, *State v. Johnson*, involved a charge of delivery of an illegal substance to a minor. The state successfully argued that Johnson delivered the drug through the umbilical cord during the seconds after the newborn's delivery but while the cord was still attached. The ACLU is now representing Johnson in her appeal of the conviction.

Several women, however, have pleaded guilty to various charges, some unrelated to drugs, and were nevertheless sentenced to imprisonment for the duration of their pregnancies.⁸ Other women have spent time in jail before indictment. For example, in Charleston, South Carolina, women who come into the public hospital for prenatal care or delivery are selectively tested for drugs; the names of those who test positive are turned over to the police, who then come to the hospital. The women, who are still recovering from the delivery, are handcuffed and taken to jail, where

³ *State of California v. Stewart*, No. M508197 (San Diego Mun. Ct. 1987); M. Konon, *Data access to fetus case put on hold*, San Diego Tribune, Oct. 24, 1986 at B1, B12.

⁴ J. Schacter, *Help is Hard to Find For Addict Mothers*, Los Angeles Times, Dec. 12, 1986, §II at 2.

⁵ Women of color have also been found to be disproportionately subject to court-ordered obstetrical interventions. A national survey of court-ordered obstetrical interventions (including forced caesarean sections) found that 81% of the women involved were African-American, Asian, or Hispanic. All of the women were treated in a teaching-hospital clinic or were receiving public assistance. See Kolder, Gallagher, & Parsons, "Court-Ordered Obstetrical Interventions," 316 *New England Journal of Medicine*, 1192-96 (1987).

⁶ I.J. Chasnoff, *The Prevalence of Illicit Drug or Alcohol Use During Pregnancy and Discrepancies in Mandating Reporting in Pinellas County, Florida*, 322 *New Eng. J. Med.* 1202 (Apr. 26, 1990); *Study: Race affects drug-abuse testing*, Miami Herald, Sept. 19, 1989, at 2B; *Black cocaine mothers likely to be turned in*, The Orlando Sentinel, Nov. 21, 1989; R. Winslow, *Black Pregnant Women Far More Likely Than Whites To Be Reported For Drug Use*, Wall Street Journal (Apr. 27, 1990);

⁷ *State of Alaska v. Grubbs*, No. 4FA S89 415 Criminal (Sup. Ct. Aug. 25, 1989); *State of Wyoming v. Pfannenstiel*, No. 1-90-8CR (Laramie County Ct. complaint filed Jan. 5, 1990); Charles Levendoaky, *Turning Women into 2-legged petri dishes*, *supra* n.2; *Commonwealth of Mass. v. Pelligrini*, No. 87970 (Mass. Super. Ct. filed Aug. 21, 1989); Tom Coakley, *Suspect is said to be battered, frightened*, Boston Globe, August 23, 1989 at 22; *State of California v. Stewart*, No. M508197 (San Diego Mun. Ct., Feb. 26, 1987); Angela Bonavoglia, *The Ordeal of Pamela Rae Stewart, Ms.*, Aug. 1987 at 92, 95.

⁸ See e.g., *United States v. Vaughn*, No. F-2172-88B (D.C. Super. Ct., Aug. 23, 1988); *State of Florida v. Black*, No. 89-5325 (Escambia County Cir. Ct., Jan. 3, 1990); *State of Florida v. Hudson*, No. K88-3435-CFA (Fla. Cir. Ct. July 26, 1989).

they stay until they can make bail. At least one woman arrived at the jail bleeding from the delivery; she was told to sit on a towel.⁹

None of these women were arrested for the crime of possession of illegal drugs. Instead, they were arrested for a new and independent crime: continuing their pregnancy while addicted to drugs. Because women are discriminated against in drug treatment programs and because it is virtually impossible to stop using drugs without that help, these prosecutions, in effect, punish women for their decision to continue a pregnancy. These prosecutions thus violate constitutional privacy and liberty guarantees that protect the right to decide "whether to bear or beget a child."¹⁰ The ACLU supports a women's constitutional right to decide whether or not to terminate a pregnancy free of governmental interference or coercion. The ACLU therefore opposes not only these criminal prosecutions but also the discriminatory treatment of pregnant women by drug abuse treatment programs and the termination of parental rights based on nothing more than a single positive toxicology.

PROSECUTIONS SEEK TO PUNISH WOMEN FOR NOT GETTING TREATMENT, YET THERE ARE VIRTUALLY NO DRUG ABUSE PROGRAMS THAT ACCEPT PREGNANT WOMEN

Prosecutors argue that the purpose of these arrests is not to get women to end their pregnancies but to stop using drugs. Ending an addiction, however, without help is virtually impossible. According to Martha Neccioli, a clinical nurse who counsels pregnant women seeking drug treatment, "very few women can stop on their own."¹¹ As you have heard in testimony, overcoming an addiction problem, for pregnant women as for others, is a long and difficult process fraught with numerous obstacles.

Nevertheless, women face a legacy of discrimination in access to drug abuse treatment programs: "... [T]he particular treatment needs of addicted women, including pregnant addicts, have been largely ignored."¹² As Representative George Miller concluded after Congressional research and hearings on the subject, "Women who seek help for drug addiction during pregnancy cannot get it."¹³ The fact that women are literally turned away from treatment has been documented extensively in New York City¹⁴ and is true nationwide. Ann O'Reilly, Director of Family and Children's Services for the San Francisco Department of Social Services stated, "If these mothers were walking away from treatment, I might feel differently, but they are not walking away from treatment—they're walking away from waiting lists."¹⁵ The length of waiting lists for treatment centers frequently extends beyond the pregnant woman's due date, thus rendering the benefits of treatment meaningless to fetal health.¹⁶ Furthermore, if not barred explicitly from a program, the lack of child care often "effectively precludes the participation of women in drug treatment."¹⁷

Because drug treatment centers discriminate against women who seek help, the ACLU has filed a law suit against four private alcohol and drug treatment programs in New York City.¹⁸ The ACLU is representing three alcohol or drug dependent women and the class they represent. Two of the four program defendants have settled; the two others claim that their discriminatory practices are justified by the lack of obstetrical services. But there are obviously more humane and practical alternatives to outright exclusion. For example, they could develop a referral network

⁹ Ellen Goetz, Hilary Fox, *ACLU Reproductive Freedom Project Initial Report Poor and Pregnant? Don't Go to South Carolina*, (Feb. 1, 1990).

¹⁰ *Eisenstadt v. Baird*, 405 U.S. 438, 453 (1972); *Cleveland Bd. of Educ. v. LaFleur*, 414 U.S. 632, 640 (1973).

¹¹ Malaspina, *Clean Living*, *Globe Magazine*, Nov. 5, 1989 at 20. (Hereinafter "Clean Living").

¹² *Pregnant Addicts and Their Children: A Comprehensive Care Approach* 21 (R. Brothman, D. Hutson & F. Suffet eds. 1984)

¹³ *Born Hooked: Confronting the Impact of Perinatal Substance Abuse: Hearing Before the Select Committee on Children, Youth and Families* (opening statement of Congressman George Miller, Chairman Select Committee on Children, Youth and Families), 101st Cong., 1st Sess. 2 (April 27, 1989).

¹⁴ Chavkin, W., M.P. *Testimony Before the House Select Committee on Children, Youth and Families* (April 27, 1989); Chavkin, *Help, Don't Jail, Addicted Mothers*, *New York Times*, August, 1989 at A21.

¹⁵ LaCroix, *Birth of a bad idea: jailing mothers for drug use*, *The Nation*, May 1, 1989.

¹⁶ McNulty, *Pregnancy Police: The Health Policy and Legal Implications of Punishing Pregnant Women for Harm to Their Fetuses*, 16 N.Y.U. Rev. of Law and Social Change 277, 302 (1988), (hereinafter "Pregnancy Police").

¹⁷ See *N.Y. Times*, July 18, 1989, § 1, at 21.

¹⁸ *Elaine W. v. North General*, Index No. 6230/90 (N.Y. Sup. Ct., filed Nov. 23, 1989).

for obstetrical care, or hire an obstetrician. In fact, programs typically refer clients with specialized health problems to outside health care providers.

Although pregnancy is often a special motivating factor in encouraging women to seek help, they are turned away during what some view as a unique "window of opportunity." One prominent expert, Dr. Richard Brotman, has noted that hospitals may view pregnant addicts as difficult, noncompliant patients.¹⁹ Other treatment programs apparently fear liability for any harm treatment may cause a fetus.²⁰ Yet no program has ever been sued by a post-partum woman or child after having received treatment and the traditional informed consent doctrine should protect physicians and hospitals who properly advise patients of the risks associated with, and the alternatives to drug treatment.

Even when women can secure treatment, recovery may be constrained by the nature of the addiction itself, a process which has confounded generations of doctors and scientists. Addiction typically involves loss of control over use of a drug and continued involvement with a drug *even when* there are serious consequences.²¹ Drug dependency and alcoholism include tolerance development,²² and are influenced by genetic predispositions and environmental factors outside of the addicts' control.²³ Moreover, stringent eligibility requirements for social services and lack of coordination among programs hinder families from receiving the continuum of services needed.²⁴ To treat pregnant addicts as indifferent and deliberate wrongdoers is to misunderstand the nature of addiction.

A. Prosecutions Punish Women For Continuing Their Pregnancies

State of Florida v. Johnson illustrates that what is at issue is not a pregnant woman's right to use drugs or to engage in any other particular behavior during her pregnancy but rather her right to procreate.²⁵ The prosecutor described Johnson's crime not as the delivery of drugs, but as the delivery of her child: "When she delivered that baby, she broke the law in the State." The court agreed, noting that Jennifer Johnson "made a choice to become pregnant and to allow those pregnancies to come to term." *State v. Johnson*, No. E89-890-CFA.²⁶

Thus, a woman unable to get help for her addiction or who is in the middle of the "long-term process" of overcoming an addiction problem may be held criminally liable simply for becoming pregnant and continuing it to term. The woman accused of prenatal child abuse or drug delivery may be able to avoid prosecution or imprisonment only by obtaining an abortion. In Washington, D.C., a woman mysteriously "miscarried" days before a hearing. The judge had previously threatened to put her in jail because he believed she was using drugs while pregnant.²⁷ Abortions coerced by threats of prosecution and imprisonment cannot be condoned.²⁸

¹⁹ *Pregnant Addicts and Their Children: A Comprehensive Care Approach*, 22-23 (R. Brotman, D. Hutson & F. Liffett, ed. 1984).

²⁰ See also, *Pregnancy Police* at 301 n.167 ("Most centers worry about the liability, so as soon as they discover a woman is pregnant, they refuse her or throw her out of the program. . . . Even emergency detoxification programs don't want pregnant women.") See also *Chaukin, W., M.D. Testimony Before House Select Committee on Children, Youth and Families* (April 27, 1989).

²¹ S. Cohen, M.D., *The Chemistry of Addiction* 59 (Care Institute 1988).

²² *Id.*

²³ *Id.* at 87-98.

²⁴ *Pregnant Addicts and Their Children: A Comprehensive Care Approach*, 22-23 (R. Brotman, D. Hutson & F. Liffett, ed. 1989).

²⁵ *State of Florida v. Johnson*, No. E89-8900-CFA, (Fla. Cir. Ct. July 13, 1989), appeal docketed, No. 89-1765 (Fla. Dist. Ct. App. Aug. 31, 1989).

²⁶ Although there have been nearly 50 arrests and prosecutions of women for their behavior during pregnancy, *Johnson* was the first to be convicted after trial. Ms. Johnson cannot be here today to speak for herself because her sentence includes what is effectively a gag order on all public presentation or comment on her case.

²⁷ Letter from Sam W. Burgan, Esq. to Lynn Paltrow, Jan. 22, 1990 (on file with the ACLU Reproductive Freedom Project.)

²⁸ Some women, however, do freely choose to have an abortion because they feel they cannot responsibly continue their pregnancies while suffering from an addiction or other health problem. As one woman explained:

In February, 1982, I had an abortion . . .

I was 38 years old, married with two children. We were and are still a typical suburban family—as far as the outside world can see. But life was not ordinary for us in 1982. I was (I am) chemically addicted to the drug alcohol. Beginning in October, 1981 I made my first feeble attempts at recovery from alcoholism . . . I wandered in and out of AA meetings . . .

In the midst of this roller coaster ride of addiction—in February, 1982, I realized I could be pregnant . . . I was frantic, frightened, drained physically, emotionally, spiritually from my

Continued

B. Prosecutions Deter Women From Seeking Help

In reality, prosecutions and convictions deter pregnant women from getting what little health care is available. As Senator Herbert Kohl stated at Congressional hearings on perinatal substance abuse, "[m]others—afraid of criminal prosecution—fail to seek the very prenatal care that could help their babies and them."²⁹ Women are also discouraged from seeking help because of the fear that they will lose custody of their children. According to Ricardo Quiroga, who is helping to set up an alcohol recovery house for Hispanic women with children in Massachusetts, women "don't want to seek help for fear they will lose their children."³⁰

Each time a woman is arrested for her prenatal behavior other women are discouraged from seeking help. For example, at the time of Pamela Rae Stewart's arrest, health care workers in San Diego testified that the number of women who had a history of drug and/or alcohol use who received late or no prenatal care increased.³¹ After Ms. Stewart's arrest, women explicitly expressed concern to their health care providers that they might be turned in to the police. Some women who had contacted health care workers for help refused to come in at all because of their fear of prosecution.³² Women's relationships with their therapists also suffered, because the women were afraid of being prosecuted and incarcerated for the very problem for which they had sought help.³³

In May of 1989, Melanie Green was arrested in Rockford, Illinois on charges of involuntary manslaughter because her baby died shortly after birth, allegedly as a result of Green's purported cocaine use.³⁴ The grand jury ultimately refused to indict Melanie Green, but her arrest and the publicity surrounding it seriously impeded efforts to get women to seek and stay in prenatal health care and drug abuse treatment programs.³⁵ The Perinatal Center for Chemical Dependence at Northwestern University, School of Medicine (the "Center"), received numerous calls from women with drug problems who were frightened that they would also be arrested. These women, who had been receiving prenatal care at the Center, wanted to stop seeing the doctors to whom they had confided their drug problems rather than risk possible prosecution.³⁶

Similar problems occurred in Minnesota, which recently enacted a law that mandates reporting pregnant women who have or are believed to have used a controlled substance during pregnancy to the local welfare agency.³⁷ According to NAPARE, this statute is already deterring some women from seeking prenatal care. Indeed, several women who were reported to the welfare agency have simply dropped out of sight. NAPARE is currently seeking funding to determine the precise extent to which Minnesota's new law is causing women to avoid prenatal care.³⁸

C. Prosecutions Undermine Doctor-Patient Trust

Those women who do seek care are often too frightened to speak openly to their doctors about their problems. In Florida, for example, after "[u]niformed officers wearing guns entered Bayfront Medical Center . . . to investigate new mothers suspected of cocaine abuse," doctors reported that they could no longer "depend on the

alcoholism. I could not manage my *own* life. The prospect of a baby was overwhelming! . . . I chose to have an abortion . . .

I continued efforts toward recovery, and with the help of support of AA, I have not had a drink since April 13, 1982.

Brief for the *Amici Curiae* Women Who Have Had Abortions And Friends Of *Amici Curiae* In Support of Appellees at L-216 by Sarah E. Burns, NOW Legal Defense and Education Fund. *Webster v. Reproductive Health Services*, 109 S. Ct. 3040 (1989) (No. 88-605).

²⁹ *Missing Links: Coordinating Federal Drug Policy for Women, Infants and Children: Hearing before Senate Comm. on Governmental Affairs, 101st Cong., 1st Sess. (July 31, 1989) (Opening Statement of Senator Herb Kohl) at 5 (hereinafter "Missing Links.")*

³⁰ *Clean Living, supra* n.12 at 20.

³¹ Declaration of Lydia Roper L.C.S.W., *State v. Stewart*, M508197 (San Diego Mun. Ct.).

³² Declaration of Cathy Hauer, M.S., *State v. Stewart*, M508196, (San Diego Mun. Ct.).

³³ Physician failure to maintain patient confidentiality has been identified as one of the barriers to pregnant women seeking prenatal care. Curry, *Nonfinancial Barriers to Prenatal Care*, 15 *Women & Health* 85, 93 (1989).

³⁴ *Illinois v. Green*, (Winnebago County Cir. Ct. 1989).

³⁵ Affidavit of Ira J. Chasnoff, M.D., *State v. Hardy*, 89-2931-FY (Muskegon County Dist. Ct. Mich.).

³⁶ *Id.*

³⁷ See APPENDIX B; RECENT STATE DEVELOPMENTS.

³⁸ *Id.*

mothers to tell them the truth about their drug use . . . because the word ha[d] gotten around that the police will have to be notified."³⁹

For those women who are willing to risk contact with the health care system, good communication between physician and patient is crucial, particularly in the prenatal context.⁴⁰ A physician must be able to fully discuss with the pregnant woman many sensitive matters. For purposes of both maternal and fetal health, the doctor and patient must be able to discuss whether the pregnant woman is at risk of herpes infection, whether she is taking illegal drugs that may harm her fetus, or whether she and the fetus are at risk of AIDS due to unprotected sex or intravenous drug use.⁴¹ Thus, rather than undermining confidentiality with the threat of criminal prosecution or mandatory reporting laws (see *infra* pp. 19-22) states should take steps to enhance the confidentiality of the physician-patient dialogue concerning health risks. As one physician explained, "[t]he promise of confidentiality permits people to trust . . . that information revealed to a physician in the course of a medical encounter will not be disseminated further. In this way, patients are encouraged to communicate honestly and forthrightly with their doctors."⁴²

D. Prosecution Does Not Improve The Health Of Women Or Their Babies

In a recent U.S. Supreme Court decision, the court recognized that "addicts may be unable to abstain even for a limited period of time" to avoid detection of their drug use.⁴³ Moreover, the "poverty, rootlessness, and personal inadequacy, which are the bottom of [the drug dependency], are scarcely deterrable by the threat of criminal conviction."⁴⁴

If prosecutions actually frightened women into going cold turkey (and they don't) abrupt withdrawal from certain drugs such as heroin, could cause fetal death.⁴⁵ Putting women in prisons where drugs may still be available,⁴⁶ and where there is neither drug abuse treatment nor prenatal health care, will not further any legitimate health interest.⁴⁷

Rather than promoting any legitimate state interest, much less a compelling one, these prosecutions are undermining public health, a fact reflected by the increasingly outspoken opposition of public health organizations to these prosecutions. For example, fourteen public health and public interest groups, including the American Public Health Association, the American Society of Law & Medicine, the National Association of Alcoholism and Drug Abuse Counselors, the American Society of Addiction Medicine, and NAPARE, recently sought to file *amicus* briefs in support of Jennifer Johnson's appeal of her conviction. These groups share the assessment of the Committee on Ethics of the American College of Obstetricians and Gynecologists, which opposes "legal actions against women because they are pregnant and engage in behavior possibly detrimental to the fetus."⁴⁸

³⁹ *Angry Doctors Cut Drug Tests After Police Interview Moms*, St. Petersburg Times, May 13, 1989, at 1B.

⁴⁰ Curry, *Nonfinancial Barriers to Prenatal Care*, 15 *Women & Health* 85 (1989); *President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, Making Health Care Decisions: The Ethical and Legal Implications of Informed Consent in the Patient-Practitioner Relationship*, Vol. 1 at 69-70 (1982).

⁴¹ Brief *Amicus Curiae* written by the American Public Health Association, et al., in support of Appellant in *State v. Johnson*. This *amicus* brief is on file with the ACLU Reproductive Freedom Project.

⁴² Siegler, *Confidentiality in Medicine—A Decrepit Consent*, 307 *New Eng. J. Med.* 1518, 1519 (1982).

⁴³ *Treasury Employees v. Von Raab*, 489 U.S.—, 103 L.Ed.2d 685, 709 (1989).

⁴⁴ S. Kadish, *Blame and Punishment* 29 (1987). See also F. Allen, *The Borderland of Criminal Justice* 8-9 (1964) ("No one can seriously suggest that the threat of fines and jail sentences actually deters habitual drunkenness or alcoholic addiction.").

⁴⁵ Finnegan, *Substance Abuse: Implications for the Newborn*, reprinted in *Contemporary OB/GYN* 182, 184 (Mar. 1988).

⁴⁶ Andrew H. Malcolm, *Explosive Drug Use Creating New Underworld in Prisons*, *The New York Times*, Dec. 30, 1989, at 1.

⁴⁷ According to Ellen Barry, Director of San Francisco's Legal Services for Prisoners with Children, "incarceration of a pregnant woman is a potential death sentence to her unborn child." *Pregnancy Police: the Health Policy and Legal Implications of Punishing Pregnant Women for Harm to Their Fetuses*, 16 *N.Y.U. Rev. of Law & Soc. Change*, 277 at 308 n.209. See also Barry, *Quality of Prenatal Care for Incarcerated Women Challenged*, 6 *Youth L. News* 1, 2-3 (Nov.-Dec. 1985).

⁴⁸ Correspondence from Elaine Locke, Associate Director, The American College of Obstetricians and Gynecologists, to Kary Moss and Lynn Paltrow, Dec. 4, 1989; A.C.O.G. Committee on Ethics, *Committee Opinion: Patient Choice: Maternal Fetal Conflict*, Number 55 (Oct. 1987) See APPENDIX C: Public Health and Public Interest Groups Opposed to Prosecution of Women who Continue Their Pregnancies despite addiction problems.

E. Civil Neglect Proceedings

In the courts hundreds of women have lost custody of their children because their newborns tested positive for drugs at birth.⁴⁹ These neglect proceedings, usually premised solely on the basis of a positive toxicology taken of a newborn at birth, raise similar constitutional and health concerns as those presented by the criminal prosecutions.

A positive toxicology only indicates that a drug was ingested within the last twenty-four to seventy-two hours. It does not distinguish between a one-time user and an addict. One can only speculate as to how many good parents occasionally drank a beer or used marijuana, for example, prior to the birth of their children. Moreover, false positives in drug tests are quite common and the prevalence is magnified by human error.

Even an accurate positive test result, however, does not predict future harm to the child, and therefore cannot alone be evidence that a child is in "imminent danger," the condition necessary in most states to justify removal of the child from the parents.⁵⁰ Moreover, use of a positive toxicology to trigger removal is contrary to laws that mandate that preventive services be provided prior to removal in order to keep the family together.

Positive toxicologies taken of newborns at birth should be used for medical intervention only, not for removal without additional information or proof of parental unfitness. Social service agencies should consider a broad range of environmental factors relating to a parent's ability to care for a child and they should assess the entire home environment. Anything less than a thorough evaluation of the family may cause its unnecessary break-up.

The acute shortage of foster care, particularly in major urban areas, must also be factored in when considering separating children from parents. A pilot program in Los Angeles found, for example, that the thirteen children in the program whose mothers had used drugs during pregnancy had been placed in a total of 35 foster homes before reaching the age of three. When foster care resources are scarce, removing a child from the mother's custody may not best serve the interests of the child; the child's living condition may worsen rather than improve.⁵¹ Accordingly, positive test results should not trigger presumptions of neglect invoking state child protective services without a more probing review of parental fitness.

F. Mandatory Reporting Laws

Another recent development that has the effect of penalizing alcohol and drug dependent women is the increased use of civil reporting laws that require hospitals and social workers to make positive test results available to state prosecutors and child welfare authorities. Constitutional liberty and privacy guarantees, as well as privacy statutes in some states, however, should prohibit hospitals from revealing patients' medical histories to county prosecutors or social service agencies.⁵²

The patients' privacy right, defined by the Supreme Court in *Whalen v. Roe* as "their interest in the nondisclosure of private information and also their interest in making important decisions independently,"⁵³ encompasses a patient's right to nondisclosure of his or her medical history.⁵⁴ Medical records are ordinarily entitled to

⁴⁹ See e.g., *In re Mark S.*, N.Y.L.J. _____, (Fam. Ct. Nassau County, 1989); *In re Troy D.*, 263 Cal. Rptr. 869 (Cal. App. 4th Dist. 1989).

⁵⁰ See, e.g., N.Y. Family Court Act §1012 *et seq* (New York) The "imminent danger" standard evolved in the early 1970's as a response to imprecise language that focused primarily on parental conduct, thus permitting intervention based on community values without consideration of the harm to the child. As a result, children were often taken away from adequate homes because they were reared in ways that conflicted with majoritarian notions. A positive toxicology alone cannot indicate, as is now generally required, whether the child is at risk of future harm.

⁵¹ See Armstrong, L., *Solomon Says: A Speakout on Foster Care* (Pocket Books 1989).

⁵² Unfortunately, courts are not following the law. In *In re Troy D.*, 263 Cal. Rptr. 869, 872 (Cal. App. 4th Dist. 1989), for example, the court rejected plaintiff's argument that the hospital had violated the California Confidentiality of Medical Information Act by releasing her medical records. The court did not see any important public policy served by preventing disclosure of the newborn's records.

⁵³ *Whalen v. Roe*, 429 U.S. 589, 600 (1977).

⁵⁴ See also *United States v. Westinahouse Electric Corp.*, 638 F.2d 570 (3rd Cir. 1980) (medical files); *Hawaii Psychiatric Society v. Ariyoshi*, 481 F.Supp. 1028, 1039 (D. Haw. 1979) Johnsen, D., "The Creation of Fetal Rights: Conflicts with Women's Constitutional Rights to Liberty, Privacy and Equal Protection," 95 *Yale L.J.* 599, 606-607 (1986); McNulty, M., "Pregnancy Police," *NYU Review of Law and Social Change* 277, Vol. XVI (1989).

a high degree of protection, and courts have upheld the sanctity of the doctor-patient relationship in the face of threats presented by reporting requirements.⁵⁵ This right may be infringed only upon the showing of a compelling state interest,⁵⁶ and can be undertaken only through the narrowest means consistent with the maintenance of the state's legitimate interests.⁵⁷

No compelling state interest can reasonably support disclosure of drug tests to the police or welfare agencies. The state's interest in protecting potential life is very limited and, moreover, would not be served by mandatory reporting requirements. *Roe v. Wade*, 410 U.S. 113 (1973). Moreover, the state has no legitimate interest in obtaining the information for the purpose of punishing pregnant women for their status as addicts.⁵⁸ See *infra* §III. Reporting drug test results also interferes with physicians' ethical and legal obligations to protect confidences told to them by a patient.⁵⁹ And, like criminal prosecutions, mandatory reporting penalizes poor women and women of color more than any other group. In a number of jurisdictions, women in government-subsidized facilities are routinely tested for drug use when women who can afford private health care are not similarly tested. Women who cannot afford prenatal care may be labelled "high risk" and tested without their consent, even if their failure to obtain care is the result of poverty. Similarly, hospital practices vary from area to area, leaving tremendous leeway as to who gets turned in to social services or county attorneys.⁶⁰

III. CIVIL AND CRIMINAL LAWS PUNISHING A DRUG ADDICTED WOMAN FOR CONTINUING HER PREGNANCY ARE UNCONSTITUTIONAL

Criminal prosecutions and neglect proceedings brought against of pregnant women violate basic principles of due process. Prosecutors justify criminal cases premised on a woman's drug use during pregnancy with the claim that any person who uses illegal drugs commits a crime. But in none of these cases has the state charged that the woman actually committed the underlying crime of drug possession. Similarly, though it is well known that smoking during pregnancy is harmful to the fetus, no child protection worker would seek to take away a newborn based solely on a woman's nicotine addiction.

Moreover, it is abundantly clear that the legislatures never intended the statutes on which these prosecutions and neglect proceedings have been based to create a duty of care owed by pregnant women to the fetus, enforceable through the criminal law. Women have been arrested under criminal child support statutes and for child abuse, child neglect, manslaughter, and delivery of illegal substances to minors and have been subjected to parental termination proceedings based solely on the basis of a single positive toxicology of a newborn at birth. All of these statutes were created to provide state protection from harm to persons occurring after their birth. Thus, at a minimum these women's due process rights have been violated because there was simply no notice that these laws would apply to them.⁶¹

⁵⁵ See *Thornburgh v. American College of Obstetricians and Gynecologists*, 476 U.S. 747 (1986), later proceeding, *American College of Obstetricians and Gynecologists. Pennsylvania Section v. Thornburgh*, 656 F.Supp. 879 (E.D. Pa. 1987) (striking down statutory provisions requiring reporting of information about women obtaining abortions); *Jones v. Superior Court*, 119 Cal. App.3d 534, 174 Cal. Rptr. 148 (1981).

⁵⁶ *Caesar v. Mountanos*, 542 F.2d 1064, 1069 (9th Cir. 1976), cert. denied, 430 U.S. 954 (1977).

⁵⁷ *Shoemaker v. Handel*, 608 F.Supp. 1151, 1159 (D.C.N.J. 1985), later proceeding, 619 F.Supp. 1089 (D.C.N.J. 1985), aff'd, 795 F.2d 1136 (3d Cir. 1986), cert. denied, 479 U.S. 986 (1986).

⁵⁸ *Robinson v. California*, 370 U.S. 660 (1962).

⁵⁹ This obligation arises from the physician's duty to "do no harm" (primum non nocere) a duty from which all other duties flow. See Jonsen, *Do No Harm*, *Annals Int. Med.* 1978.

⁶⁰ In *In re Noah D.*, Super. Ct. No. 150835 (Sup. Ct. 1989), for example, one woman was subjected to drug testing only because she had not secured prenatal care in the immediate area.

⁶¹ Most courts confronted with requests to interpret statutes contrary to their legislative intent, have refused to extend the statutes to apply to women who give birth to drug-exposed or prenatally-injured babies. See *State v. Gethers*, No. 89-4454CF10A (Fla. Cir. Ct. Nov. 6, 1989) (refusing to extend aggravated child abuse, a crimes against "persons" statute, to actions "directed against a fetus which only later results in an injury to a 'person'"); *State v. Gray*, No. CR88-7406 (Ohio C.P. July 13, 1989) (refusing to extend child endangering statute to include the fetus or prenatal conduct) *State v. Andrews*, No. JU 68459 (Ohio C.P. June 19, 1989) (refusing to usurp legislature's role by extending the child endangering law) *People v. Stewart*, No. M508097 (San Diego Nun. Ct. Feb. 23, 1987) (finding criminal child support statute that explicitly covered "a child conceived but not yet born" was not intended to impose additional duties on pregnant women); *Reyes v. Superior Court*, 75 Cal. App. 3rd 214 (1977) (holding that child endangering statute did not include a woman's prenatal conduct.).

The criminal cases also raise serious questions about prosecutorial ethics. The American Bar Association Standards for Criminal Justice states that "the duty of the prosecutor is to seek justice, not merely to convict."⁶² The provision concerning noncriminal disposition of cases also states that "prosecutors should be familiar with the resources of social agencies. . . ." ⁶³ But when prosecutors know or should know that drug abuse treatment for women is unavailable and that the statutes they are using were not enacted to punish addicted women for becoming pregnant, how are the interests of justice being served? Statements like one made by the Muskegon County Michigan attorney that the "main concern is to send a message to drug abusers that they should seek treatment before the criminal justice system has to become involved"⁶⁴ seem self-serving at best when treatment is unavailable in the first place.

Moreover, prosecutions of pregnant women and civil proceedings for removal of newborns cannot rationally be limited to illegal conduct because many activities that are legal can damage developing babies. Women who are diabetic or obese, women with cancer or epilepsy who need drugs that could harm the fetus, and women who are too poor to eat adequately or to get prenatal care could all be characterized as "fetal abusers." So, too, could women who fly to Europe⁶⁵ and clean their cat's litter box.⁶⁶ As the Supreme Court of Illinois observed:

If a legally cognizable duty on the part of mothers were recognized, then a judicially defined standard of conduct would have to be met. It must be asked, by what judicially defined standard would a mother have her every act or omission while pregnant subjected to State scrutiny? By what objective standard could a jury be guided in determining whether a pregnant woman did all that was necessary in order not to breach a legal duty to not interfere with her fetus' separate and independent right to be born whole? In what way would prejudicial and stereotypical beliefs about the reproductive abilities of women be kept from interfering with a jury's determination of whether a particular woman was negligent at any point during her pregnancy?⁶⁷

Because no woman can provide the perfect womb, criminal prosecutions come dangerously close to turning pregnancy itself into a crime.

But aren't some behaviors, like illegal drug use, so clearly harmful that they can be singled out? Neither drugs nor any other substance can be considered in isolation. The extent of harm from a particular drug varies depending on the quantity of the drug, its form, the point in the pregnancy in which it is used, the health of the woman, and her access to prenatal health care. According to a 1985 Orlando, Florida report on prenatal care, "[i]n the end, it is safer for the baby to be born to a drug-abusing, anemic or diabetic mother who visits the doctor throughout her pregnancy than to be born to a normal woman who does not."⁶⁸

In *In re J. Jeffrey*,⁶⁹ a probate court judge removed a child from its mother for neglect several months after its birth based on her alleged use of "illegal drugs." The petition claimed that during the last few weeks of her pregnancy the woman had taken four non-prescription valium to relieve the pain from injuries she had sustained in an automobile accident; the infant was born showing a positive toxicology but was not addicted. The woman had no history of drug addiction and the later drug screens to which she agreed were negative. In addition, she had no history of neglect or even of previous contact with protective services for her two other children. Nevertheless, it took over a year for the woman to get her baby back. This case illustrates that line-drawing at illegal drug use will not protect pregnant women and their children from unjustified and counterproductive state intrusion.

⁶² Standard 3-1.1(c).

⁶³ Standard 3-3.8.

⁶⁴ Jacquelyn Boyle, *ACLU to defend mom on charge of delivering crack-addict baby*, Detroit Free Press, Oct. 28, 1989.

⁶⁵ Wald, *Radiation Exposure is Termed a Big Risk for Airplane Crews*, New York Times, Feb. 14, 1990 at 1A. Because of concern about the effect of radiation from the sun and the stars on airline crews and passengers, Dr. Gineran, a researcher, advised: "If I were a woman in the critical period of pregnancy for retardation, I would tend to avoid flights to Europe." *Id.*

⁶⁶ Pregnant women who come into contact with cat feces or raw meat can be exposed to toxoplasmosis. This parasitic disease can cause serious damage to the developing baby often resulting in abortion, prematurity, or death. A.F. Guttmacher, *Pregnancy, Birth and Family Planning*, 188-89 (1984).

⁶⁷ *Stallman v. Youngquist*, 531 N.E.2d 355, 360 (Ill. 1988).

⁶⁸ *Taxpayers Pay for Lack of Prenatal Treatment*, St. Petersburg Times, Nov. 3, 1986, at 7B.

⁶⁹ No. 99851 (Mich. Ct. App. filed Apr. 9, 1987).

Laws that interfere with a fundamental privacy and liberty right, such as the right to procreate, must withstand searching judicial examination. The state must establish that the law is narrowly tailored to further a compelling state interest.⁷⁰

In most of these cases the state asserts an interest in the health of the fetus. However, the Supreme Court has held that at no stage of development is a fetus a "person" with rights separate from the woman.⁷¹ Fetuses are neither legally nor biologically independent parties with rights enforceable against the woman.⁷² As the Illinois Supreme Court observed:

It is, after all, the whole life of the pregnant woman which impacts on the development of the fetus. As opposed to the third-party defendant, it is the mother's every waking and sleeping moment which, for better or worse, shapes the prenatal environment which forms the world for the developing fetus. That this is so, is not a pregnant woman's fault: it is a fact of life.⁷³

These criminal and civil proceedings against women seek to create what the Illinois Supreme Court has called the "legal fiction" that the fetus "is a separate legal person with rights hostile . . . to the woman."⁷⁴

But whether the asserted state interest is in fetal rights or in the health and well-being of women and children, the state cannot prove that a statute criminalizing an addicted woman's pregnancy or subjecting her and her child to pointless separation would improve either maternal or fetal health through the least intrusive means. In fact, as discussed in Part I, criminal prosecutions of pregnant women will harm rather than help maternal and fetal health.

Prosecutions of pregnant women may also violate the fourteenth amendment's guarantee of equal protection. While the state can and should enforce against pregnant women criminal laws that apply to the general population, any governmental action that singles out women for special penalties solely because they become pregnant discriminates on the basis of gender.⁷⁵ These prosecutions may also raise race discrimination claims or, at the very least, issues of selective prosecution because such a disproportionate number of them are directed against poor women of color.⁷⁶

Finally, as the American Public Health Association has pointed out, these prosecutions violate the Eighth Amendment's prohibition against cruel and unusual punishment. These prosecutions punish women for their status as pregnant women who are addicted to drugs. In *Robinson v. California*, 370 U.S. 660 (1962), the Supreme Court reaffirmed a fact it had recognized thirty-seven years earlier and that is now widely accepted that addiction to drugs is a disease, and not a crime. *Id.* at 667 note 8; citing *Linder v. United States*, 268 U.S. 5, 18 (1925). In *Robinson*, the State sought to convict on a charge of drug addiction without evidence that Robinson had actually committed any proscribed act within the state of California. The Court struck down the criminal statute as violative of the Eighth Amendment prohibition of cruel and unusual punishment because Robinson was not convicted for what could properly be defined as a criminal act, but rather, for the condition of his addiction. The majority of pregnant women who ingest controlled substances are addicts before they become pregnant. Holding such addicts criminally liable for the happenstance of their having become pregnant, is to criminalize them for their continuing conditions of addiction and pregnancy, not for any discrete *actus reus* that can be perceived as voluntary.

CONCLUSION

IV. ALTERNATIVES TO PUNITIVE MEASURES

Addicts require habilitation, not punishment. As Herbert Kleber, M.D., who is deputy to William Bennett, Director of National Drug Control Policy, recognizes: "crack addiction can be treated," but the key is that the "addict must be given a

⁷⁰ See, e.g., *Akron v. Akron Center for Reproductive Health Serv.*, 462 U.S. 416, 427, 430-31 (1983).

⁷¹ *Roe v. Wade*, 410 U.S. 113, 162 (1973).

⁷² See *In re: A.C.*, No. 87-609 (D.C. Ct. App. April 26, 1990) slip op. at 1123.

⁷³ *Stallman v. Youngquist*, 531 N.E.2d 355, 360 (Ill. 1988).

⁷⁴ *Id.*

⁷⁵ Dawn Johnsen, *From Driving to Drugs: Governmental Regulation of Pregnant Women's Lives After Webster*, 138 U. Pa. L. Rev. 179, 203-204 (1989).

⁷⁶ See *Yick Wo v. Hopkins*, 118 U.S. 356 (1886).

place in family and social structures where they may never have been before," or "habilitation more than rehabilitation."⁷⁷

It is understandable that prosecutors and others are upset or angry that babies are being born with disabilities that in some cases could have been prevented. What is less understandable is why that anger is so easily and exclusively directed against the mothers. While no one views those who run drug abuse programs that turn away pregnant women or those who consistently underfund such programs as fetal abusers, many are willing to condemn explicitly pregnant women as selfish people intent on hurting their developing babies.

But pregnant women who are drinking excessively, abusing drugs, smoking, or eating inadequately are first and foremost hurting themselves. In our rush to blame women for their failure to take care of others we are missing the point that they have never been encouraged to "selfishly" care for themselves. One reason predominately male or coed drug treatment programs do not work for women may be that the women "assume caretaker or partner roles and neglect their own recovery."⁷⁸ For example, while a woman was at New Day, one of the country's only residential drug abuse programs run by and for women, the father of her child called to tell her that he had been arrested for possession of cocaine. She explained, "I'm the one who always bailed him out," but "[t]his time, she told him, she had to take care of herself."⁷⁹

Phyllis Savage, the Family Center Director at Odyssey House, the only drug treatment program in New York City where mothers and small children can live together, explained that the lives of the twenty-one women in the program "have never been anything but hellish." "[A]ll they know is rage and anger and abuse. This is the first place that many of our women have been where they can't get hit."⁸⁰ Research has shown that 80 to 90 percent of female drug addicts and alcoholics have been victims of rape or incest.⁸¹

If what we really want to do is help women and children, the last thing we should do is turn pregnant women and mothers into criminals. As Dr. Ira Chasnoff, an expert on perinatal addiction has stated: "[T]he public must be assured of *non-punitive*, comprehensive care which will meet the needs of the pregnant woman who is a substance abuser."⁸² Real solutions would include making available reproductive health services, including abortion, sex and parenting education, and prenatal and other health care.⁸³ More funds must be made available for drug treatment and education.

Non-discrimination policies must also be adopted and enforced in existing drug treatment programs. While many states already prohibit pregnancy discrimination through public accommodations/civil rights laws, not all states have such laws, nor do all civil rights laws cover sex and pregnancy discrimination. To address these inadequacies, the Federal government should take a leadership role by outlawing discrimination against pregnant women in both public and private alcohol and treatment programs. Finally, prosecutors and lawmakers must stop pretending that the criminal prosecution and the immediate removal of children from women who use drugs during their pregnancy is a quick fix for the problems of drug addiction. We have known for years that drug dependency, like most other causes of infant mortality and morbidity, requires long term solutions involving significant societal commitments to rehabilitation, treatment, and education.⁸⁴

⁷⁷ Experts Finding New Hole On Treating Crack Addicts, N.Y. Times, Aug. 24, 1989 at 1, col. 5.

⁷⁸ Ann Malaspina, *Clean Living*, *supra* note 9, at 20; Lisa Leff, *Treating Drug Addiction With the Woman in Mind*, Washington Post, Mar. 5, 1990, at E1.

⁷⁹ *Id.* (emphasis added).

⁸⁰ *Id.*

⁸¹ Lisa Leff, *Treating Drug Addiction With the Woman in Mind*, Washington Post, (March 5, 1990).

⁸² *Missing Links*, (Testimony of Ira Chasnoff at 7)

⁸³ "National estimates show that one out of every five women of childbearing age has no maternity care coverage, either through government programs or private health insurance." Lazarus, W., & West, K., *Back to Basics: Improving the Health of California's Next Generation 23-24* (Southern California Child Health Network, 1987).

⁸⁴ *Experts Find New Hope on Treating Crack Addicts*, New York Times, August 24, 1989 at 1. The infant mortality rate in the United States is the worst among the eighteen industrialized nations. The National Commission to Prevent Infant Mortality called for "universal access" to early maternity and pediatric care for all mothers and infants. *U.S. panel urges universal access to prenatal care*, Boston Globe, Aug. 16, 1989.

APPENDIX A—STATE BY STATE CASE SUMMARY OF CRIMINAL PROSECUTIONS AGAINST PREGNANT WOMEN

ALASKA

State of Alaska v. Grubbs, No. 4FA 589 415 Criminal (Sup. Ct. Aug. 25, 1989). In Fairbanks, Alaska, a woman who allegedly used cocaine during her pregnancy was sentenced in August, 1989, to six months in jail and five years probation for criminally negligent homicide in the death of her two week-old son. An autopsy performed on the baby found that the infant died from a heart attack caused by maternal cocaine use before his birth. GERALYNE GRUBBS, a 23 year-old white woman, was originally charged with manslaughter but pled no contest to the lesser charge. Grubbs' attorney described Grubbs herself as the victim, whose boyfriend beat her, forced her to work as an exotic dancer, and supplied her with drugs. See David Cannella, "Debate raised over 'prenatal police patrols,'" *The Arizona Republic*, Dec. 17, 1989 at C2.

CALIFORNIA

Reves v. Superior Court, 75 Cal.App.3d 214 (Ct. App. 1977). In San Bernardino, California, a Latina woman alleged to have used heroin gave birth to twin boys who were both allegedly addicted. She was subsequently prosecuted under the criminal child endangerment statute, which carries a maximum sentence of ten years in prison. The action was dismissed by the appeals court which held that the statute was not intended to apply to prenatal conduct.

State of California v. Stewart, No. M508197 (Municipal Court, County of San Diego, Feb. 26, 1987). In 1986, Pamela Rae Stewart was arrested under a criminal child support statute and charged with "failing to follow her doctor's advice to stay off her feet, to refrain from sexual intercourse, refrain from taking street drugs, and seek immediate medical attention, if she experienced difficulties with the pregnancy." Stewart is poor, white, and a victim of battering. Among the charges levelled against her, the only illegal act alleged was the use of "street drugs," based on findings of a substance in Stewart's blood that could have been caused by an over-the-counter antihistamine. The prosecutors later admitted that illegal drug use was not a significant issue in the case.

The San Diego Municipal Court dismissed the charges after defendant's counsel brought a demurrer and motion to dismiss. The court found that California's criminal child support statute was not intended to apply to the actions of a pregnant woman and does not create a legal duty of care owed by a pregnant woman to her fetus.

CONNECTICUT

State of Connecticut v. Baez, No. CR089-010-4414 (Sup. Ct. of Middletown filed July 31, 1989). Nellie Baez, a 20 year-old Latina woman, allegedly swallowed a quarter ounce of cocaine as police moved in to arrest her last July. Baez was subsequently charged with drug possession, tampering with evidence, and risk of injury to a child; police indicated that the charges would be elevated to manslaughter if the fetus died. The possession and child endangerment charges were later dropped and Baez was sentenced to one year in prison for tampering with evidence. See also Don Singleton, "Mom-to-be is held," *Daily News*, Aug. 11 1989 at 23; Suzanne Sataline, "State to drop drug count against pregnant woman," *Hartford Courant*, Aug. 29, 1989 at 1.

DISTRICT OF COLUMBIA

In *United States v. Vaughn*, No. F-2172-88B (Super. Ct. of D.C., August 23, 1988), an African-American woman who pled guilty to a charge of second degree theft was given a prison term, rather than the usual sentence of probation, when the judge learned she was seven months pregnant. Suspecting that Brenda Vaughn used cocaine, Judge Peter Wolf ordered a drug test in connection with the sentencing proceeding. The judge was "horrified" to learn that she tested positive for cocaine, and explicitly said that he was sentencing Vaughn to "a long enough term in jail to be sure she would not be released until her pregnancy was concluded." There was no trial or conviction on the allegations of illegal drug use.

In an opinion explaining his decision to impose a prison term, Judge Wolf commented that, after the sentence was initially handed down, "many of [his] colleagues reported having similarly sentenced or otherwise incarcerated pregnant drug abusers [W]hile Ms. Vaughn's case may be the first to have achieved publicity, she is not the first to have been given similar treatment." See Tamar Lewin, "Drug Abuse in

Pregnancy: A Conflict Over Rights," *The New York Times*, Jan. 9, 1989; Victoria Churchville, "D.C. Judge jails woman as protection for fetus," *Washington Post*, July 23, 1988 at A1.

FLORIDA

State of Florida v. Jerez, No. K89-16257 (Cir./County Ct. of Monroe County, Fla., warrant issued Jan. 11, 1990). Prosecutors in Monroe County have issued an arrest warrant for a 24 year-old African-American woman charged with child abuse for allegedly using cocaine during her pregnancy. The child abuse charge carries a maximum penalty of five years in prison. Similar charges brought elsewhere in the state have been dismissed because of the 1984 appeals court ruling that a fetus is not a person under Florida law. The prosecutor believes this case is distinguishable because the baby tested positive for cocaine. See Dan Keating, "Woman faces charges of abuse of unborn child," *The Miami Herald*, Jan. 13, 1990 at B1.

State of Florida v. Black, No. 89-5325 (Cir. Ct. for Escambia County Jan. 3, 1990). A Pensacola, Florida, woman has been sentenced to 18 months in prison and 3 years probation for allegedly passing cocaine to her baby through the umbilical cord. Police claim that Beverly Black, a 32 year-old African-American woman, admitted to having snorted cocaine twice during her pregnancy in efforts to induce labor. Black, who pled no contest, is the first woman to have been imprisoned in Florida under these charges.

Since Black's arrest five more women in Escambia County have been arrested on similar charges. All are African-American women with low incomes. Frances Arlene Nelson, 28, was initially charged when she gave birth to a cocaine-exposed baby in November, 1989. Charges against Nelson have since been dropped. The attorney for Ethel Carter, 29, has moved to dismiss the charges. *State of Florida v. Carter*, No. 89-6274-D (Cir. Ct. for Escambia County filed Nov. 20, 1989). Prosecutions are pending against Sheila Dawson, 25, and Rhonda Maxwell, 24. Denise Lee, 25, is currently in jail awaiting trial. See Michael Burke, "Cocaine moms are not coddled in Pensacola," *Pensacola News Journal*, March 4, 1990 at 1A; Burke, "Legal issues complicate crack moms' prosecution," *Pensacola News Journal*, March 4, 1990 at 12A.

State of Florida v. Gethers, No. 89-454 CF10A (Cir. Ct. for Broward County, Fla., Nov. 6, 1989). Judge Robert B. Carney dismissed criminal charges brought against a woman who allegedly used drugs during her pregnancy. Cassandra Gethers, a 23 year-old African-American woman, was arrested last February after she and her daughter tested positive for cocaine. In November, 1989, the court ruled that the fetus was not a legal person for purposes of the child abuse statute. See "Fetal abuse case thrown out in Fla.," *Boston Globe*, November 8, 1989.

In October, 1989, in New Port Richey, a Pasco County judge denied Pamela Forney's request for time to get an abortion before going to jail for a probation violation. Forney, who is single and has a part-time job, was entering her third month of pregnancy at the time of sentencing. Prosecutors and defense attorneys had agreed to a 10-day postponement of Forney's 60-day sentence to enable her to obtain an abortion. Judge Dan C. Rasmussen refused to allow the postponement, arguing that abortion is "murder" and that Forney "want[s] a continuance so [she] can murder [her] baby." Once in jail, Forney was able to arrange for an abortion. See "Pregnancy as Punishment," *The New York Times*, Nov. 1, 1989; David Sommer, "Groups criticize judge for stopping Pasco woman from getting abortion," *The Tampa Tribune*, Oct. 27, 1989 at B3.

State of Florida v. Hudson, No. K88-3435-CFA (Fla. Cir. Ct. July 26, 1989) Toni Hudson, a 30 year-old African-American woman, was charged with possession, distribution to a minor, and child endangerment when she gave birth to a baby with cocaine in its blood stream. Hudson pled guilty to the possession charge and the distribution and endangerment charges were dropped. She was sentenced to 150 days in jail, five years probation, and a \$225 fine.

State of Florida v. Johnson, No. E89-890-CFA (Fla. Cir. Ct. July 13, 1989), appeal docketed, No. 89-1765 (Fla. Dist. Ct. App. Aug. 31, 1989). In Florida, Jennifer Johnson, a 23 year-old African-American woman, was found guilty on two counts of delivery of a controlled substance to a minor and sentenced to 15 years probation. Johnson is the first woman to be convicted under a drug trafficking statute for delivering drugs to her infant through the umbilical cord. Both of the children, who tested positive for cocaine at birth, are healthy. Under the terms of her probation, Johnson is required to spend at least one year in a residential drug treatment program, during which time she is subject to random drug testing. She must perform 200 hours of community service, must enter an intense prenatal program if she becomes pregnant again, and is forbidden to use drugs or alcohol, go to bars, or associ-

ate with people who use drugs or alcohol—for 15 years. The court found Johnson not guilty of child abuse due to lack of evidence.

A 28 year-old white woman in New Port Richey, Florida, was charged with misdemeanor child abuse for her one-time cocaine use prior to delivery. The woman has entered a one year non-residential treatment program; the state has agreed to drop the charges if she successfully completes the program.

GEORGIA

State of Georgia v. Coney, No. 14/403-404 (Super. Ct. of Crisp County, filed Nov. 6, 1989) Doris Coney, a 21 year-old African-American woman in Cordile, Georgia, has been indicted for distribution of cocaine to her fetus because of her alleged drug use during pregnancy.

ILLINOIS

People of the State of Illinois v. Green, No. 88-CM-8256 (Cir. Ct. filed May 8, 1989). In Rockford, Illinois, the mother of a baby whose death was linked to her alleged cocaine use while pregnant was arrested on charges of involuntary manslaughter and delivery of a controlled substance to a minor. Melanie Green, a 24 year-old African-American woman, was the first woman in the country to be charged with manslaughter for the death of a child allegedly resulting from drug use during pregnancy. If convicted, Green could have faced a five year prison term for the manslaughter charge and 14 years for delivery. The charges were later dropped, however, after a grand jury refused to indict her. See Patrick Reardon, "Grand jury won't indict mother in baby's drug death," *The Chicago Tribune*, May 27, 1989.

INDIANA

State of Indiana v. Yurchak, No. 64DO1-8901-CF-181B (Porter County Super. Court filed Oct. 2, 1989). Brenda Yurchak, a 28 year-old Portage, Indiana woman, was charged with possession of cocaine based on findings that her baby was born addicted to cocaine. Yurchak was arrested and released on a \$2500 bond. Hospital officials said they followed procedures of the new state law that requires notification if a newborn shows drug or alcohol addiction. See "Woman charged after giving birth to addict," *The Indianapolis Star*, October 7, 1989.

MASSACHUSETTS

Commonwealth of Mass. v. Levey, No. 89-2725-2729 (Super. Ct. of Mass. Dec. 4, 1989). In Waltham, Massachusetts, a prosecutor charged Elizabeth Levey with motor vehicle homicide when she miscarried at eight months and two weeks of pregnancy as a result of her alleged drunk driving. Levey is poor, white, and 27 years old. She ultimately pled guilty to reduced charges of driving while intoxicated. The court ordered her to attend a 14 day treatment program and suspended her license for five years.

Commonwealth of Mass. v. Pellegrini, No. 87970 (Super. Ct. of Mass. filed Aug. 21, 1989). Josephine Pellegrini, a 23 year-old, poor, white woman from Brockton, is the first woman in Massachusetts to be charged under the state's drug trafficking statute for "distributing" cocaine to her fetus after her infant tested positive for cocaine. The charge carries a minimum three-year state prison sentence. Her family and friends describe Pellegrini as "a battered woman who was terrified of her live-in boyfriend, the father of her three children." The Massachusetts ACLU and the ACLU are filing an *amicus* brief in the case, which should go to trial in April. See John Kennedy, "Cloudy future after infant-cocaine case," *The Boston Globe*, Aug. 23, 1989 at 1.

MICHIGAN

People of the State of Michigan v. Hardy, No. 89-2931-FY (60th Dist. Ct. for Muskegon County filed Dec. 5, 1989). In Michigan, a 22 year-old African-American woman on welfare was charged with delivery of a controlled substance and child abuse after her newborn child tested positive for cocaine. The mother, Kimberly Hardy, is currently awaiting trial; since the arrest, all three of her children have been placed in foster care. The Michigan ACLU is representing Kimberly Hardy and has sought to have the charges dismissed. See Medendorp & Walsh, "Mother of 'crack baby' located, arrest is delayed," *The Muskegon Chronicle*, Oct. 21, 1989.

People of the State of Michigan v. Cox, No. 9053545FH (Cir. Ct. for Jackson County filed Jan. 30, 1990) In Michigan, Cheryl Cox is being prosecuted for delivery

of cocaine to her fetus. Cox is a 26 year-old African-American woman. The prosecutor is arguing that the fetus was a "person" under the statute and that the alleged delivery was ongoing. A preliminary examination was held in the district court on January 12, 1990. The charges of child abuse and delivery of drugs during pregnancy were dropped, but the prosecutor held over the charge that delivery occurred during the seconds after birth before the umbilical cord was severed. Pretrial in the circuit court is currently set for April 24, 1990.

NEVADA

State of Nevada v. Bloxham, No. RJC-36887 (Reno Justice Court filed Feb. 2, 1990); *State of Nevada v. Peters*, No. 90-241 (Sparks Justice Court filed Feb. 2, 1990). In Washoe County, three women have been charged with child abuse after giving birth to infants who tested positive for drugs. Arrest warrants have been issued for the first two women arrested, Regina Mae Bloxham, who is white, and Sharon L. Peters; Bloxham has agreed to cooperate with the police and plans to turn herself in, according to officials. The third woman was charged in February, 1990, with use of a controlled substance and child abuse. See Martha Miller, "3 Washoe cases now filed alleging substance abuse while pregnant," *Reno Gazette Journal*, Feb. 12, 1990 at 1A.

NORTH CAROLINA

State of North Carolina v. Inzar, No. 90 CRS 6960 6961 (Sup. Ct. of Robeson County, filed April 16, 1990). In Lumberton, a 24 year-old woman who allegedly smoked crack cocaine the day before she gave birth to a brain-damaged child was recently indicted on charges of assault with a deadly weapon and distributing cocaine to a minor.

OHIO

Cox v. Court of Common Pleas, No. 88AP 856 (Ct. App. for Franklin County Dec. 13, 1988). In Ohio, Franklin County prosecutors persuaded a juvenile court to issue an order placing Janet Cox, a white woman in her seventh month of pregnancy, in "a secure drug treatment facility" to protect the fetus from Cox's alleged drug use. The Court of Appeals overturned the order, holding that the trial court had no jurisdiction over an adult woman for the purpose of controlling her conduct during her pregnancy.

State of Ohio v. Andrews, No. JU 68459 (Ct. C.P. of Stark County, Ohio, June 19, 1989). Tina Andrews, an African-American woman from Stark County, Ohio, was charged with child endangerment for her alleged cocaine use during her pregnancy. The trial court held that Ohio's child endangerment statute applies only to children born at the time the endangering activity occurs and dismissed the charges.

State of Ohio v. Gray, No. CR88-7406 (Ct. C.P. of Lucas County, Ohio, July 13, 1989). In Ohio, Tammy Gray was charged with child endangerment for her alleged cocaine use during her pregnancy. Gray is a 27 year-old African-American woman. Relying on *Reyes*, the trial court refused to extend the Ohio child endangerment statute to include a fetus and dismissed the charges against Gray. The state is appealing the trial court decision.

SOUTH CAROLINA

Since August, 1989, eighteen women in South Carolina who allegedly took drugs during their pregnancy have been charged with either criminal neglect of a child or distribution of drugs to a minor. Seventeen of the eighteen women are African-American; one is white. Three other Charleston women, while not facing criminal charges, have had their children taken away from them through neglect proceedings in Family Court. Many of the infants did not test positive for drugs. Sources report that the hospital's new policy of reporting positive drug screens to the police has deterred some area women from seeking hospital care for their pregnancy.

In Charleston, ten women have been charged with criminal neglect or distribution. One Charleston case involves an 18 year-old African-American woman who was arrested in the seventh month of her pregnancy. On the basis of a positive drug test she was charged with possession and distribution and placed under house arrest for the duration of her pregnancy. The baby was born healthy and tested negative for cocaine. The magistrate who first heard the case dismissed the charges but the state has indicated that it will continue to seek an indictment.

In Greenville, eight women have been arrested and charged with criminal neglect of a child. Judge Hubert Long sentenced one 20 year-old woman to three-and-a-half years in prison, suspended to five years probation, on child neglect charges because

of her alleged cocaine use during pregnancy. In a similar case, a 15 year-old mother and her parents have all been charged with criminal neglect based on the positive drug test of the woman's five-day-old baby. The grandparents in that case are charged with failing to provide proper care for their daughter and the daughter's child.

South Carolina ACLU and the ACLU Reproductive Freedom Project are conducting an investigation. See Bob Piazza, "Addicted baby's mother charged," *Piedmont News*, Aug. 16, 1989; Jeff Zogg, "3 charged with neglect of drug-addicted infants," *Piedmont News*, Aug. 17, 1989.

SOUTH DAKOTA

State of South Dakota v. Christenson, No. CRI. 90-(S.D. Cir. Ct. Mar. 12, 1990). A Native American woman in South Dakota was recently sentenced to six months in jail for giving birth to a baby with cocaine in its bloodstream. Roberta Christensen, 28, gave birth prematurely last August after being severely beaten by her boyfriend and allegedly using cocaine. When hospital tests indicated that Christensen's infant had traces of cocaine in its system, the baby was taken from her and she voluntarily entered a treatment program. Christensen was extremely successful and had been drug and alcohol free for seven months when she was arrested in March, 1990, and charged with contributing to the dependency of a minor and ingestion of a toxic substance. On the advice of her attorney Christensen pled guilty to the ingestion charge.

Magistrate Judge Joseph Neiles, indicating that he wanted to "send a strong message" to other pregnant addicts, sentenced Christensen to the maximum possible sentence despite evidence of her rehabilitation. The judge emphasized that Christensen had made one unsuccessful attempt to complete a treatment program before satisfactorily completing a second program, and also noted that the defendant had "from time to time been uncooperative" with social service workers. Judge Neiles has also denied Christensen visitation with her children, saying that he didn't "really intend to get in the way of getting you back together with your child if that is appropriate; but . . . I am not convinced that that is appropriate." Christensen's child is still in foster care. Her attorneys plan to appeal the visitation ruling.

TEXAS

State of Texas v. Rodden, No. 0373625R (Dist. Ct. for Tarrant County filed June 1, 1989). Radeana Love Rodden, a 26 year-old white woman in Tarrant County, Texas, was indicted on a felony charge for injury to a child when her baby was born allegedly addicted to cocaine. The charges were dismissed when officials learned that, since Rodden was taking medically prescribed methadone, it was unclear whether the infant's withdrawal was caused by legal or illegal drugs. See Selwyn Crawford, "Legal system grapples with newborn addicts," *The Dallas Morning News*, July 19, 1989 at 1A.

WYOMING

State of Wyoming v. Pfannenstiel, No. 1-90-8CR (County Ct. of Laramie, WY, complaint filed Jan. 5, 1990). In Albany County, Wyoming, a pregnant woman who entered a hospital for treatment for injuries inflicted by her abusive husband was tested for alcohol, arrested, jailed, and charged with criminal child abuse for endangering her fetus. Dianne Pfannenstiel, 29 years old, white, and the mother of two children, had been married three years to a man who abused her before she finally walked out in January. When she left, Pfannenstiel had bruises on her neck, arms, and back from her husband's beatings and she was concerned that her fetus might have been injured. Pfannenstiel was arrested while she waited in the hospital emergency room. On February 1, 1990, the court found no probable cause to continue the case. See Charles Levendosky, "Turning women into 2-legged petri dishes," *Star-Tribune*, January 21, 1990 at A8.

State of Wyoming v. Osmus, 276 P.2d 469 (Wyo. 1954). Over 35 years ago, a Wyoming woman was charged with endangering the life of her fetus under the state child abuse statute. The Wyoming Supreme Court found that the statute was not intended to apply to an unborn child, and dismissed the charges.

NOTE: FORCED MEDICAL TREATMENT OF PREGNANT WOMEN CONTINUES

Shady Grove Adventist Hospital v. Walters, No. 52658 (Cir. Ct. for Montgomery County order granted Jan. 12, 1990). In Rockville, Maryland, a hospital sought a

court order allowing them to transfer a pregnant woman against her will. Twenty-seven year-old Tawanda Walters was in her seventh month of pregnancy when she entered Shady Grove Adventist in premature labor. Walters, a Gaithersburg resident, objected to the proposed transfer to Baltimore because she was concerned about child care arrangements for her 19 month-old son. Walters, who is African-American, owns no car, is unmarried, and has little money to spend on travel. Judge Messitte granted the order after hearing the hospital's oral petition; he did not consult with Walters or provide her with an attorney before ordering the transfer. While acknowledging that Walters was "an adult capable of decision-making," Messitte said that concern for the unborn fetus justified his decision. See Nurmi & Leclair, "Fetal rights spurs judge's decision," *Rockville-Gazette*, Feb. 7, 1990 at A1.

APPENDIX B.—RECENT STATE LEGISLATIVE DEVELOPMENTS

State and local governments are engaged in frenzy of activity around the issue of pregnant women's drug use, ranging from the increased allocation of resources to alcohol and drug treatment programs, to the enactment of state laws that would mandate sterilization of dependent pregnant women, to the modification of child neglect and abuse laws to include drug use during pregnancy. A short discussion of each of these trends follows:

INCREASED PROVISION OF DRUG TREATMENT PROGRAMS

Many states are responding with a concerted effort to address the problem as a health issue and accordingly are increasing funds for drug treatment programs and allocating resources to the development of special demonstration projects to treat the population of drug dependent pregnant women. For example:

- States have enacted laws which expands Medicaid coverage for pregnant women and infants to 133% of the Federal poverty level.⁸⁵
- Other states, including Arizona and New York, have proposed, or enacted, laws which would establish demonstration projects for eligible pregnant women. A bill pending in Connecticut would require the state alcohol and drug abuse commission to implement treatment programs for drug dependent women which would offer a comprehensive range of services.⁸⁶ Maine has appropriated \$175,000 for the first year of a three year pilot substance abuse halfway house for pregnant women and mothers with young children.⁸⁷
- The Washington Omnibus Drug Act (1989 Wash. Laws, Chp. 271) appropriated \$5 million for treatment and support services for low-income, pregnant and post partum women with alcohol and drug dependency problems and allocated \$1 million to the Division of Alcohol and Substance Abuse for child care.⁸⁸ The law also requires the Division of Alcohol and Substance Abuse, Division of Parent/Child Health, and Division of Medical Assistance to work together to ensure treatment intervention through the Chemically Dependent Pregnant Women Program. This case management program permits alcohol and drug dependent women to enter a continuum of treatment at any stage of their pregnancy and up to one year after delivery.
- In 1989 the Illinois General Assembly approved a \$44.3 million plan to combat widespread use of alcohol and drugs. \$1.9 million in state funds and \$2.5 million in Federal block grant funds is being allocated to expand services for pregnant women including social and medical detoxification, intensive patient outreach, the establishment of residential rehabilitation and extended care facilities to serve pregnant women with alcohol and drug dependency problems.
- In 1989 the Pennsylvania legislature appropriated \$90 million to fund a statewide substance abuse enforcement, prevention and treatment initiative.⁸⁹ In order to remedy past discrimination against women drug and alcohol treatment programs will receive an additional \$32.6 million to expand local programs to treat priority groups, including pregnant women and addicted newborns with alcohol and drug dependency problems.

⁸⁵ HB 2249 (1990)

⁸⁶ SB 197.

⁸⁷ HB 1647.

⁸⁸ This example was compiled based on information obtained from the National Conference on State Legislatures.

⁸⁹ This information was obtained from the National Conference on State Legislatures.

PUNITIVE STATE ACTION

At the same time, many state governments are proposing bills which would drastically extend government control over pregnant women, including forced sterilization of women who are not able to overcome their dependency on drugs. These measures reflect a lack of understanding that drug and alcohol dependency is not a product of "willful" behavior but is rather an illness, which requires treatment, not punishment.

One bill in Georgia,⁹⁰ for example, which was recently defeated, provided that any person who uses a controlled substance or dangerous drug while pregnant, and who as a result gives birth to a child who "tests positive for addiction," is guilty of the criminal offense of distributing a controlled substance to an unborn child—a crime subject to imprisonment of not less than one nor more than ten years.

Another bill in Ohio, which is still pending, would require a woman who uses drugs while pregnant, causing the child to be drug addicted at birth, to be prosecuted as a felon. In addition to the prison terms ordinarily authorized as punishment for felony offenses, the legislation authorizes several alternative sentences. A court may sentence any woman pleading guilty or convicted of the offense to "elect" to "successfully complete a drug addiction program" to "undergo a tubal ligation" or to "participate in a five year program of monitored contraceptive use approved by the court . . . and during the five year period abstain from the addictive use of drugs of abuse." A repeat offender has only two "choices" under the proposed legislation: she may "undergo a tubal ligation" or participate in the monitored contraceptive program described above.⁹¹

CHILD ABUSE AND NEGLECT LAWS

On the civil side, states have begun to modify child abuse statutes to include prenatal conduct. For example, Illinois,⁹² example, Indiana,⁹³ Minnesota,⁹⁴ Nevada,⁹⁵ Florida,⁹⁶ and Oklahoma⁹⁷ have amended the Juvenile Court Act definition of neglected minor to include infants born with controlled substances their system. Similar bills are pending in Arizona,⁹⁸ Delaware,⁹⁹ and Missouri.¹⁰⁰

REPORTING

Other states are enacting laws which require health officials to report women who use drugs during pregnancy to child welfare authorities or state prosecutors. For example, Minnesota has amended its criminal code to mandate reporting of pregnant women who use drugs, the testing of some pregnant women for the presence of drugs, and the testing of newborns for drugs with results reported to Department of Health.¹⁰¹ Oklahoma also requires mandatory reporting to social services.¹⁰² If they find evidence of abuse, they are authorized to provide that informa-

⁹⁰ HB 1146.

⁹¹ SB 324, 118th General Assembly, Regular Session 1989-90 (Ohio) introduced by Senator Cooper Snyder.

⁹² HB 2262; 1989 Ill. Legis. Serv. P.A. 86-275 (West).

⁹³ Ind. Code. Ann. §31-6-4-3.1 (Burns 1987).

⁹⁴ 1989 Minn. Sess. Law Serv. Ch. 290, Art. 5 (West).

⁹⁵ Nev. Rev. Stat. Ann. §4320.330 (Mitchie 1989).

⁹⁶ Fla. Stat. Ann. §415.503(7). Chapter 415 of the Florida social welfare statute was amended in June, 1987 to expand the list of "harms" constituting "child abuse or neglect" to include the physical dependency of a newborn infant upon scheduled drugs. §415.503(8)(a)(2) Fla. Stat. (1987) As originally proposed, the amendment authorized criminal prosecution of a mother who gave birth to a drug dependent child. The legislature explicitly rejected this proposal and, to make clear its desire not to criminalize the birth of a drug-dependent newborn, the legislature added the provision that "no parent shall be subject to a criminal investigation solely on the basis of [an] infant's drug dependency." *Id.* The legislature's goal was to provide treatment and keep families intact. HRS Reg. No. 150-6 (Oct. 15, 1988) specifies that a positive drug screen is reasonable cause to suspect that a newborn is drug dependent but defines a drug dependent newborn as one "who exhibits abnormal growth or, abnormal neurological patterns or, abnormal behavioral patterns, and for whom there is documented evidence that the mother used Scheduled I or II drugs during her pregnancy." Thus, a positive toxicology alone without the other evidence does not constitute harm under the Florida statute.

⁹⁷ Okla. Stat. Ann. Tit.10, §1101 (West 1989).

⁹⁸ HB 2690.

⁹⁹ HB 416.

¹⁰⁰ SB 756.

¹⁰¹ 1989 Minn. Sess. Law Serv. Ch. 290, Art. 5 (West).

¹⁰² Okla. Stat. Ann. Tit. 21, §846 (West 1989).

tion to local district attorneys. Failure to report may be a misdemeanor. Utah now requires medical personnel to report women whenever they find a child born with fetal alcohol syndrome or drug dependency.¹⁰³

APPENDIX C—MEDICAL, PUBLIC HEALTH, AND PUBLIC INTEREST GROUPS THAT HAVE TAKEN PUBLIC POSITIONS AGAINST THE PROSECUTION OF PREGNANT WOMEN

The following organizations sought to file *amicus* briefs in *Johnson v. Florida*, based on their considered view that the prosecution of pregnant women is not only unconstitutional, but also detrimental to the health and well-being of women and their children:

THE AMERICAN PUBLIC HEALTH ASSOCIATION: A national organization with more than 50,000 members, including physicians, nurses, maternal and child health specialists, and bioethicists.

THE AMERICAN SOCIETY OF LAW & MEDICINE: An organization which seeks to ensure that health policy and law are founded upon a clear understanding of scientific and medical facts.

THE AMERICAN MEDICAL WOMEN'S ASSOCIATION, INC.: An organization of 12,000 women physicians and medical students.

THE AMERICAN SOCIETY OF ADDICTION MEDICINE: A nationwide organization of more than 3,600 of this country's foremost physicians who address addiction.

THE CENTER FOR LAW AND SOCIAL POLICY: A nonprofit public interest law firm that provides training and litigation assistance to attorneys whose clients are largely low-income women.

THE FLORIDA NURSING STUDENTS' ASSOCIATION: A constituent of the National Student Nurses' Association, the largest independent professional student health organization in the United States.

THE NATIONAL ASSOCIATION OF ALCOHOLISM AND DRUG ABUSE COUNSELORS: An organization representing more than 24,000 alcoholism and drug abuse counseling professionals nationwide.

THE NATIONAL BLACK WOMEN'S HEALTH PROJECT: A self-help and health advocacy organization that consists of a network of 88 chapters in 24 states, serving almost 2,000 members.

THE NATIONAL COUNCIL OF NEGRO WOMEN, INC.: An umbrella organization of national groups dedicated to the struggle for civil and human rights.

THE NATIONAL ABORTION RIGHTS ACTION LEAGUE: A national organization with over 350,000 members dedicated to keeping abortion safe, legal and accessible, and preserving women's fundamental reproductive rights.

THE NATIONAL WOMEN'S HEALTH NETWORK: An advocacy group representing approximately 500,000 women nationwide.

NOW LEGAL DEFENSE AND EDUCATION FUND: A nonprofit civil rights organization that performs a broad range of legal and educational services nationally in support of women's efforts to eliminate sex-based discrimination and to secure equal rights.

THE NATIONAL MEDICAL ASSOCIATION: An organization representing 16,000 Black physicians in the United States, including Puerto Rico and the Virgin Islands.

THE NATIONAL ASSOCIATION FOR PERINATAL ADDICTION RESEARCH AND EDUCATION: A national organization dedicated to providing a network for the exchange of information regarding the prevention of and intervention in perinatal addiction.

In 1986, the following organizations filed affidavits in *People of California v. Pamela Rae Stewart*, opposing the prosecution of pregnant women for alleged misconduct during their pregnancies:

THE CALIFORNIA MEDICAL ASSOCIATION (CMA): A non-profit, unincorporated professional association of approximately 30,000 physicians practicing in the State of California. The California Medical Association's membership includes most of the California physicians who are engaged in the private practice of medicine in all specialties. The Association's primary purposes are to promote the science and art of medicine, the protection of the public health and the betterment of the medical profession. The CMA's public position and policy on the propriety of using the criminal law to create and enforce a prenatal duty of care is as follows:

¹⁰³ Utah Code Ann. §62A-4-504 (1989).

A primary goal of CMA is to promote healthy mothers and healthy babies. While unhealthy behavior cannot be condoned, to bring criminal charges against a pregnant woman for activities which may be harmful to her fetus is inappropriate and discriminatory. Such prosecution is counterproductive to the public interest as it may discourage a woman from seeking prenatal care or dissuade her from providing accurate information to health care providers out of fear of self-incrimination. This failure to seek proper care or to withhold vital information concerning her health could increase the risks to herself and her baby.

DISTRICT IX OF THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS: District IX is a division of the American College of Obstetricians and Gynecologists (ACOG) representing the board-certified obstetricians and gynecologists practicing in California. District IX currently has approximately 3,000 members, the vast majority of obstetricians and gynecologists in the state. District IX's public position is as follows:

California ACOG strives to promote healthy mothers and healthy babies. It does not condone unhealthy behavior, but ACOG believes criminal charges for a mother's behavior during pregnancy which may be harmful to the fetus is inappropriate and counterproductive. Such prosecution is contrary to public interest as it will inhibit many women from seeking prenatal care at all or prompt others not to provide accurate information to medical personnel for fear of incriminating themselves.

THE SOUTHERN CALIFORNIA PUBLIC HEALTH ASSOCIATION (S.C.P.H.A.): Was organized in 1925 to provide a forum for community health workers. S.C.P.H.A. is an affiliate of the American Public Health Association (A.P.H.A.). It is a dynamic, active, organization representing over 2,500 health professionals in Southern California. The organization provides leadership in public health and promotes high standards in the field of public health practice. It assures equal opportunity for and access to health services, health careers, and participation in the development of health policy.

The Governing Council of the Southern California Public Health Association promotes the well-being of mothers and babies. We believe that the prosecution of women for activities adverse to the fetus would be an additional obstacle for women seeking prenatal care. The fear of prosecution may cause women to be reluctant to seek prenatal care or to divulge potentially incriminating facts to their clinician, thus jeopardizing optimum fetal outcome.

The AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS: A non-profit incorporated professional association of board-certified obstetricians and gynecologists. A.C.O.G. represents 30,000 obstetricians and gynecologists throughout the United States. A.C.O.G.'s primary purposes are: to establish and maintain the highest possible standards for obstetric and gynecologic education in medical schools and hospitals, obstetric and gynecologic practice and research; to perpetuate the history and best traditions of obstetric and gynecologic practice and ethics; to maintain the dignity and efficiency of obstetric and gynecologic practice in its relationship to public welfare; to promote publications and encourage contributions to medical and scientific literature pertaining to obstetrics and gynecology; and to foster and stimulate improvements in all aspects of the health care of women which properly come within the scope of obstetrics and gynecology.

In 1987, ACOG published a committee opinion on Patient Choice: "Maternal-Fetal Conflict," Number 55—October 1987. ACOG has made clear that the statement in their opinion that "inappropriate reliance on judicial authority may lead to undesirable societal consequences, such as, the criminalization of noncompliance with medical recommendations" was intended to be used to oppose legal actions against women because they are pregnant and engage in behavior possibly detrimental to the fetus. Correspondence from Elaine Locke, Associate Director of Practice Administration of the ACOG to Kary Moss and Lynn Paltrow, December 4, 1989.

CALIFORNIA ADVOCATES FOR PREGNANT WOMEN: A Statewide coalition which advocates for the medical, social and recovery needs of pregnant women affected by the use of alcohol and other drugs. The organization develops and supports public policy, legislation, educational programs and community standards of practice to promote health mothers and healthy babies. Additional objectives of the group are: (1) to propose and develop legislation to advocate for the health needs of pregnant women; (2) to monitor proposed legislation in opposition to our above-stated objectives; (3) to develop a network for response to legislation; (4) to produce

and distribute a newsletter on issues related to the organization's purpose; and (5) to advocate for expanded treatment and recovery options. Members include medical professionals, child welfare and social services workers, alcohol and drug program staff, maternal-child health program staff, mental health workers, lawyers, policy makers, and others who are concerned about the health and welfare of the expectant woman and her family.

COALITION ON ALCOHOL AND DRUG DEPENDENT WOMEN AND THEIR CHILDREN: Organizational Members—January 23, 1990.

Alan Guttmacher Institute
 American Academy of Pediatrics
 American College of Nurse-Midwives
 American College of Obstetricians and Gynecologists
 American Civil Liberties Union
 American Prosecutors Research Institute
 American Psychological Association
 American Society on Addictive Medicine
 Association of Maternal and Child Health Programs
 Center for Child Protection and Family Support, Inc.
 Center for Clinical Protection and Family Support
 Center for Law and Social Policy
 Center for Science in the Public Interest
 Child Welfare League of America
 Children of Alcoholics Foundation
 Legal Action Center
 NAACOG: The Organization for Obstetric, Gynecologic and Neonatal Nurses
 National Abortion Rights Action League
 National Association of Alcohol and Drug Abuse Counselors
 National Association of State Alcohol and Drug Abuse Directors
 National Center for Prosecution of Child Abuse
 National Parent Teachers Association
 National Perinatal Association
 National Council on Alcoholism and Drug Dependence
 National Society of Genetic Counselors
 National Women's Law Center
 National Women's Health Network
 Therapeutic Communities of America

STATEMENT OF PURPOSE PASSED BY COALITION ON JANUARY 23, 1990

The Coalition on Alcohol and Drug Dependent Women and Their Children is a group of national organizations concerned about the health and welfare of alcohol and drug dependent women and their families. Coalition members include organizations concerned about women's health care; legal issues; civil rights; child welfare; alcohol and drug problems; and maternal and child health.

Because pregnant drug dependent women have so often faced discrimination, barriers and penalties, the Coalition is concerned about the provision of health and other appropriate services to them and protection of their rights. Therefore, the Coalition is organized to enhance access to preventive and educational services, health care, prenatal care, and alcoholism and drug addictions treatment for women, and to ensure the availability of health and social services for their children. The Coalition believes that the interests of women and their children are best served through the health care and social service systems. Women should not be singled out for punitive measures based solely on their use of alcohol and other drugs during pregnancy.

STATEMENT OF THE ASSOCIATION OF MATERNAL AND CHILD HEALTH PROGRAMS

The Association of Maternal and Child Health Programs (AMCHP) represents state programs funded by Title V of the Social Security Act, as most recently amended by the 1989 Omnibus Reconciliation Act (OBRA) State Title V programs are responsible for promoting the health of all mothers and children, consistent with national health objectives; and for planning, developing, coordinating, and supporting family-centered, coordinated systems of care offering preventive, primary, specialty and support services. Title V Amendments included in OBRA '89 strengthened requirements for state needs assessment and planning; for collecting and reporting data on MCH health status (including incidence of Fetal Alcohol Syndrome

and drug dependency among infants) and services; for developing systems of child health care; and for coordination with Medicaid to assure that financing translates into access to comprehensive, quality care. The purpose of this statement is to support an integrated systems approach to resolution of drug dependency in families and to outline the role of the Title V Maternal and Child Health Program in achieving that integration.

THE PROBLEM

The apparent epidemic of crack-cocaine usage by pregnant women and the birth of drug-exposed infants highlights the mounting drug crisis that threatens American families from all directions. Factors contributing to the drug epidemic and the devastated lives it engenders are not isolated from issues of poverty, prejudice, fragmented health care and inconsistent societal attitudes towards drugs and drug users. Reduction of drug dependency in families, in fact, can be viewed as another aspect of the struggle to assure healthy pregnancies and birth outcomes, and vigorous families.

In the past decade, increasing state and national attention has been focused on the reduction of infant mortality and promotion of child health through prevention and improved technology. Evidence of this can be seen in the Health Objectives for the Nation, in family centered legislation, and in the number of commissions established to examine various maternal and child health issues. It is now widely understood that lack of access to health care for women, children and families, as well as poverty and lack of educational attainment, are major barriers to achieving infant mortality reduction and improvement in children's health and development. The impact of substance abuse on women and children results in the birth of low birth weight babies, maternal death, congenital anomalies (birth defects) and a host of other outcomes all associated with infant mortality and morbidity. Drug dependency further compromises a woman's general health, as well as the outcome of future pregnancies. Infants born subsequent to maternal substance use during pregnancy are known to suffer a host of physical and developmental sequelae which may have lifelong deleterious impact on their potential for normal emotional attachments and academic achievement. Many if not most such children require special education, health and support services. The well-being of entire families, including siblings of drug affected newborns, is jeopardized by parental use of drugs, including alcohol.

PRINCIPLES TO GUIDE NATIONAL POLICY

Although crack-cocaine brings new hazards to the drug crisis, the issue of maternal addiction and its effects has been an ongoing concern to the maternal and child health community. Fetal Alcohol Syndrome, and the effects of heroin, methadone, valium, barbiturates and nicotine on the mother and the fetus will continue to wreak havoc with young lives. crack cocaine is only the newest addition to the list of drugs being abused. Needed are models of intervention that comprehensively address drug dependency as a chronic issue.

Advocacy for the family affected by drug and alcohol abuse demands assurance that each member be healthy. Women deserve appropriate treatment and rehabilitation regardless of pregnancy status. Children affected by drugs in utero or after birth must receive early intervention and primary and specialty health services according to their individual needs. The stability of the biological family must be enhanced; if it is not possible to keep the family intact, all family members should still receive care and the efforts of caregivers should be directed towards reunification.

The Association of Maternal and Child Health Programs (AMCHP) endorses the following principles in addressing drug dependency among women of childbearing age, pregnant women, children, and families.

- Policy (including legislation) and programs at all levels of government should be aimed at all substances of abuse, including alcohol.
- Prevention of substance use at primary, secondary and tertiary levels of intervention should be the cornerstone of all health, social and education programs serving women, children and families.
- Treatment and rehabilitation for alcoholism and/or drug dependence of affected women, children and families should take precedence over punishment.
- All public health primary care interventions, including family planning, perinatal health care and child health care should include assessment and follow-up for drug and alcohol involvement. Similarly, individuals receiving treatment and rehabilitation for drug related illnesses should receive comprehensive primary health care. Such comprehensive and coordinated primary health and substance abuse intervention services must also be provided for women who are incarcerated. Link-

ages between primary and specialty health and developmental services for children and support services for their families should also be established.

- Protocols for assessment, testing and referral to health, social and criminal justice systems should be established so as to avert prejudicial testing and reporting.
- Ethical, legal (including malpractice and confidentiality) medical and social issues require research and resolution.

THE ROLE OF TITLE V

State Title V programs have an important role to play in ensuring that maternal and child health service systems are reaching women, children and families affected by substance use and that these services are well coordinated with substance use prevention and intervention services, as well as education and social services. Further, the OBRA '89 amendments to Title V clearly demonstrate congressional intent that states assess needs and ensure that service systems meet the health and related service needs of chemically dependent women and their children.

State Title V service programs are targeted to low-income, at-risk, and special needs populations, wherein significant proportions of women and children affected by substance abuse are presenting for services. Title V programs are struggling to serve increasing numbers of pregnant substance using women and their children in the face of level Federal funding that has been eroded by inflation, and constrained state budgets in most states. A weakened basic service infrastructure cannot support the targeted outreach and enhanced maternal and child health service system required to provide for the special needs of families affected by substance use. National policy must support the strengthening of state and local preventive, primary and specialized health services as a prerequisite to adequately meeting the needs of special populations, such as those affected by substance use.

National policy should also be directed at promoting coordination and integration of health, substance use, education and social service systems at national, state and local levels. State Title V programs bring health professional and MCH program expertise to interagency collaboration efforts. Title V collaboration with Medicaid has been instrumental in effectively implementing the series of Medicaid reforms for women and children enacted in the past decade. OBRA '89 amendments further strengthened Federal mandates for this Title V/Title XIX partnership. The Title V Statute also requires, and state programs are actively involved with, a range of other health, education, and social services programs. P.L. 99-457, which establishes the basis for state early intervention service systems, is only the most recent example of a related Federal program where Title V expertise and existing services are a critical ingredient. These service systems will unquestionably be serving many young children affected by substance use. National policy must not only continue to support and encourage these existing interagency links, but must also expand them to ensure that substance use prevention and intervention joins the partnerships. Given its long history of assuring a broad range of services to maternal and child health populations, Title V is in a unique position to provide needed expertise to the treatment community (which has historically focused on men) regarding the special health care service delivery needs of women and children.

AMCHP acknowledges and supports the important roles of many other programs and organizations serving families affected by drugs. Some of those with which Title V seeks to work most closely in addressing substance abuse include: (1) the Women's Set Aside Programs of the Alcohol, Drug Addiction, and Mental Health Services Block Grant, (2) the Office of Substance Abuse Prevention Demonstration Grants for Pregnant and Postpartum Women and Their Infants, (3) Medicaid, (4) the Department of Education through Early Intervention and Drug Free Schools Programs, (5) child protective and foster care services, (6) the criminal justice system, (7) community, Rural and Migrant Health Services and (8) the Indian Health Service.

RECOMMENDATIONS TO SUPPORT TITLE V'S ROLE IN ADDRESSING THE PROBLEM

The Association enlists the committee's support for the following actions to assure necessary funding and sufficient authority to carry out the Title V mission in regard to families affected by drug and alcohol dependence.

- Full funding of the Maternal and child Health Services Block Grant to strengthen the basic services infrastructure and support development of data collection systems to assess needs and evaluate programs (including programs designed to reduce perinatal drug addiction and its impact) as intended by the OBRA '89 amendments.

- Development of mandates to include Title V participation at the Federal, state and local levels in planning programs or entitlements for drug dependent or drug

affected maternal and child health populations. Requirements or strong incentives for interagency agreements similar to those established among Title V, Title XIX, WIC and other Federal assistance programs would be helpful.

- Improved utilization of Medicaid to finance critically needed alcohol and drug treatment services, including residential programs, that offer services designed to meet the needs of pregnant and post partum women and their children. Standards for these programs should include coordination with other programs (including Title V) to assure access to: primary and specialty health care for women and their children; developmental intervention and education services for children; parenting education and vocational skills building for women; as well as access to a full spectrum of social support and assistance services necessary to assure successful re-entry into the community.

- Provision of resources, including training, technical assistance and funding for state and local agencies to develop protocols for substance use assessment and reliable methods of testing.

In conclusion, Title V programs are well positioned to coordinate activities among multiple agencies in providing comprehensive health care services to families involved with drug and alcohol abuse. Full funding of the MCHS Block Grant, improved Medicaid financing, legislative mandates or incentives for collaboration among key Federal, state and local programs, and additional financial support for selected activities such as data collection will most effectively build on existing systems.

DANBURY REGIONAL COMMISSION ON CHILD CARE, RIGHTS, AND ABUSE, INC.,
Danbury, CT, July 16, 1990.

Ms. LAURA WILCOX,
Hearing Administrator of Senate Finance Committee,
Dirkson Senate Office Building,
Washington, DC.

Dear Senate Finance Committee: The Danbury Regional Commission on Child Care, Rights, and Abuse is now entering its fifteenth year of operation. Never in the Commission's history has the problems of child abuse and/or neglect been more pronounced, more visible, or more evident to us than it is today in 1990. Our focus is one primarily centering around issues of prevention. We work with families in which children have been identified as living "at risk" of abuse or neglect. We do this in many ways: through the use of "Parent Aides" placed within the home to provide supportive training, guidance, and role-modeling to overwhelmed and troubled parents and specifically children; through "Child protection Teams" who bring together various agencies to provide uniform, interactive, collaborative, inter-agency treatment plans to children who are living at risk of abuse or neglect; through "At Risk Mother and Children Groups, using group work techniques and the group, as a forum, to further reach parents, children, and significant other primary caregivers.

We also have a policy of outreach collaboration, in which we try to work with groups and/or individuals who are facing issues of concern that would directly effect the health and welfare of children and of the families in which they reside. It is in this regard, working with groups around relevant issues of concern, that we discovered this insidious problem of drug affected babies. Through our educational outreach program, we were drawn into an interaction and were directed to a group of foster/adoptive parents: mothers with children of their own; families who take foster children into their homes; mothers and families who, in most cases, end up as prospective adoptive parents. (Indeed, the foster/adoptive mothers we are presently working with have adopted three children and are looking to adopt two more.) These mothers are desperately struggling with the problem of taking in (and being given) drug affected children.

What is the problem of drug affected children? Who are these children? Why are they so special? Why are these foster/adoptive mothers so concerned? Aren't responsible agencies already dealing with this problem? Aren't these just cocaine addicted babies going through withdrawal and haven't we really covered this issue already?

The answer to the last question posed is no, these are not "crack addicted babies" we are talking about; no, these kids show no signs of drug addiction at birth or at any time until they reach the toddler stage; and no, no one agency or governmental entity has really clearly understood the true dynamics, nor parameters, of the problem we as a nation now face, and will face in the future with these drug affected children.

First of all, drug affected children are not predominantly children of crack users. However, they are children of cocaine users, recreational cocaine users. (In actuality, the area we service as a commission really encompasses the western part of Connecticut, comprised of small towns and a few middle sized cities, that represents the traditional middle class strata for most of Connecticut.) These drug affected children are as much children of the upper and middle class as they are children of lower socio-economic classes. I think we see a great misrepresentation when the media projects the drug problem as a minority issue. To us, out here on the front lines, the drug problem is just as important a middle class/middle American issue as it is an urban inner city minority one! Drug affected children are the true by-product of the fashionable middle class drug of choice: cocaine.

If a woman takes cocaine just once during her pregnancy, that baby will be born drug affected. In fact, we are compiling data from all quarters. Some of that data indicates and some researchers believe that if a woman takes cocaine before she has sex, then conceives, that child will be born drug affected. Some other researchers also believe that there could be a male transmittal factor as well. This means that even if a pregnant woman takes excellent care of herself, it might not matter, if her husband or significant other is using cocaine. If they continue to have sex, the baby may be born drug affected. The baby is born drug affected because cocaine remains "in utero" (within the mother's amniotic fluid) which the fetus constantly ingests and breathes throughout the pregnancy. The high the mother experienced via her cocaine hit is duplicated within the fetus—only the fetus does not experience the supposed euphoria. It does, however, experience an impediment to development. The same brain cells that are destroyed within the "catalyst" (the mother's brain) are also subject to destruction within the fetus' developing brain. The result is a loss of brain cells at a critical juncture in the brain's development! This is very important and will have a tremendous impact later on in the child's overall development, especially as the child develops into the toddler stage.

If the child is born drug affected, can we provide help for them at this point? Unfortunately, children born drug affected usually are born with no inherent signs of their drug affected condition. Only the "lucky" ones (the crack addicted children of an actively using addicted mother) show signs at birth of crack addiction. But remember that these babies are different than drug affected babies. These are beautiful-looking children at birth. Also, hospitals do not test all children for drug affected status or addiction. Only the babies showing active withdrawal symptoms are spotted at birth. The hospital can further work with these children.

The drug affected child (9 out of 10 times) returns home to the mother after birth. Remember that experience in which the child's brain development was interrupted and the resulting loss of brain cells? Symptoms of drug affectation do not start to occur fully until the child has reached the 12-18 month (toddler) level of development. That is when the problem becomes visible.

What problems? For starters, there is the child's inability to bond correctly (or at all) with the mother. The bonding process requires two participants, the mother and the child. Remember, the child is impaired in utero. The mother is not aware of this. She doesn't usually have knowledge of the effect of that cocaine experience and if it is true (and we are not sure) that if she uses cocaine before she had sex, it still doesn't matter. The baby will be born drug affected. She has no reason to connect any problems she sees to a prior drug involvement. The child is impaired already and incapable of interacting with the mother to the fullest degree possible (with eye-to-eye contact, true reciprocal, tactile stimulation responses, etc.) which would lead to a full psychological bonding to occur! The child can't bond, won't bond, is inhibited from bonding. If a child cannot bond psychologically, it cannot proceed to develop through the subsequent psycho-social levels of normal growth and development. The child is incomplete and develops incompletely. This results in another problem, the lack of total self esteem. The child cannot experience any sense of self esteem and can never, never derive this through any psychological modality (or therapy) because the brain does not have the developmental structure to partake in the process of therapy!

These children are permanently impaired forever. Some children show no consequence to their actions, as well. Some scream constantly, never letting up. Some have the need to be fed and filled up, literally, yet they may have been fed a full meal less than a minute ago! This presents a myriad of problems for the natural birth mother, the primary caregiver, and certainly the prospective foster or adoptive mother.

Indeed, the foster care system has shown itself replete with instances in which children are placed into foster/adoptive homes with very little background or history available on a child. The problem of drug affected babies only serves to weaken

this system further. Beautiful, wonderful children at birth (the usual "adoptable" child) can, in the end, turn out to be a time bomb waiting to explode. The warehousing of these children' has' begun already.

SOLUTIONS

Foremost, please reconvene Federal hearings on this issue (not on drug affected infants, but on drug affected children/toddlers). This information on these children and this problem must be made known and discussed. The Senate Finance Committee and the Committee on Children and Families must reconvene hearings to address this issue. The subject has not even come close to being discussed in its proper context or within its structural framework. That, ladies and gentlemen, is the middle class American framework of recreational cocaine use.

Second, only through the Federal government's recognition of this very special and specific problem' can the states begin to take a lead and a direction to refocus approaches more along the lines of state inter-departmental agency strategy issues, whereby all state departments involved with entitlements (such as the Department of Health and Human Services, the Department of Mental Health, Mental Retardation, Income Maintenance (Welfare) and Department of Substance Abuse) can together mount an attack that's united and directed at this problem! Right now this is not happening at the Federal level nor the state level. A scattergun approach has begun and is growing. Only a unilateral, all comprehensive approach should be sent from the Federal level. This does not involve money. The state of Connecticut can be encouraged to network and comprehensively direct an across-the-board, inter-departmental human services approach. The state Education Department should be working directly with the state Department of Human and Social Services and that example should emanate directly from Washington. Although this does not involve money, it does involve using existing resources wisely.

Finally, we here at the Commission have begun already. Children can't wait for politics, so we have begun a *Foundation for Children Born Drug Affected*.

This foundation, under the Commission's auspices, will serve to collect all pertinent data, information, and up-to-the-minute research on drug affected toddlers (and children of all ages). It will not only serve as a clearing house for research information, but it will provide direct access structures to help for those in need, those foster/adoptive or primary caregivers with the questions and problems they are experiencing. (We will provide an 800 Watts line.) We will work with support groups and doctors throughout the state and nation. Doctors, therapists, researchers will be able to call up and access the latest information available.

But first, you and the Federal Government must come to grips with the full dynamics of the problem with which you are faced. Solutions will not revolve around money, per se. They will revolve around understanding and a central direction toward using existing Federal and state human and social service entities in a way they have never been used before: through a truly collaborative, networking, comprehensive framework scaled directly to pick up the pieces at the entry points all along the continuum of service. Anything less than this total scale focus will fail, and I dare say that this problem has the true potential to surpass AIDS as the number one risk hazard to the people of the United States. We have already lost one (and possibly a second) generation to drugs. This time, however, the total impact will be felt across the board from the quaint historic towns and greens of New England and the middle class conclaves of Scarsdale and Forest Hills to Chapel Hill; Shaker Heights; Carmel, California; the South Bronx; Watts; and Washington, D.C. itself. Just read your local Washington newspaper.

I await your rescheduling of this topic for a separate hearing and hope to be of service to you in any way.

Sincerely,

JOSEPH D'AMBROSIO, *Executive Director.*

STATEMENT OF THE NATIONAL ASSOCIATION OF CHILDREN'S HOSPITALS AND RELATED INSTITUTIONS (NACHRI)

The National Association of Children's Hospitals and Related Institutions (NACHRI) appreciates the opportunity to submit a statement for the record of the Senate Finance Committee's June 28 hearing on "Infant Victims of Substance Abuse."

NACHRI is the only national, voluntary association of children's hospitals in the United States; it represents more than 100 institutions in the United States and Canada. Children's hospitals have missions of serving very sick children, children

with specialized health care needs, and children whose families have very low incomes. Virtually all of NACHRI's members are teaching hospitals and most are regional medical centers receiving referrals from larger geographic regions.

NACHRI recognizes that the unique mission of children's hospitals is likely to place them on the front lines of care for infants with more acute care needs resulting from maternal substance abuse. Through its Council on Child Health, the association is beginning to identify the scope of the problem as experienced by its members and to advocate for increased availability of comprehensive health and social services for families impacted by substance abuse. We are pleased to have this opportunity to share our members' experiences with you.

During the spring of 1990, the association undertook an informal survey of seventeen member institutions to determine whether children's hospitals are, in fact, providing care for an increasing number of drug-exposed infants. Hospitals were selected based upon their location in a known area of high-drug use and/or their known high incidence of pediatric HIV infection, because of its apparent correlation with maternal substance abuse. Selected hospitals represent a range of geographic locations, serve both urban and larger metropolitan areas, and are either freestanding children's hospitals or part of a larger medical center. Five of the hospitals either have a maternity unit on-site or are joined with a maternity unit.

The results of the survey will be reviewed and revised by a committee of the Council in August. The preliminary findings include the following:

- While most of the children's hospitals did not yet have the needed data collection mechanisms in place to quantify precisely the size of their caseloads, they were able to provide anecdotal information. The hospitals reported that in general they are providing care to drug-exposed infants shortly after birth. Many are seeing a growing number of cases, the majority of whom have been exposed to cocaine, crack, and/or alcohol.
- Most of the hospitals do not yet have an established protocol or policy for the identification of drug-exposed infants and children. These children's hospitals do not routinely screen infants and children for exposure to substance abuse. They do, however, test if there is a high level of suspicion based upon clinical presentation or family history.
- Drug-exposed infants and children seen by these hospitals have multiple, very complex medical and social problems which require multidisciplinary, resource-intensive care, often involving neonatal intensive care units (NICUs). A wide range of services are provided, including necessary inpatient medical care, outpatient follow-up, rehabilitative and developmental services and intensive social work interventions.
- Drug-exposed infants cared for in the NICU often are extremely premature and have very low birth weights. The hospitals are aware that use of certain illicit substances may precipitate premature birth with its consequent low birthweight and have difficulty relating specific clinical problems and the costs of care to the drug-exposure versus the low birth weight and prematurity. They acknowledge that the combination of drug-related birth defects, low birth weight and prematurity results in even more complex medical problems, more intensive clinical needs, and higher costs of providing care.
- The family needs of the drug-exposed infants are very complex and require intensive interventions by social work staff. Due to the service needs of these infants and children, departments of social work are heavily involved in working with appropriate community agencies to provide follow-up services and to identify cases where there is a potential for abuse or neglect. One hospital responded that four times the average hours are needed for social work interventions with families impacted by substance abuse.
- While most hospitals noted that eventually all drug-exposed babies are discharged, almost all stay beyond their medically ready discharge dates. Unnecessary stays may range in length from one day to several months. Several hospitals noted that the reason for the unnecessary stays is the lack of qualified foster care parents in the community.
- The care for most of the cases either is covered by a combination of Medicaid and state special health care funds or is uncompensated. In comparison, according to NACHRI data, 56.7% of non-drug-exposed patients receiving care in freestanding acute care children's hospitals are covered by private insurance, 30.6% by Medicaid, 5.5% by other public sources, and 7.3% were uncompensated.
- Hospital staff are now beginning to learn how to identify babies who have been exposed to maternal substance abuse, how to develop multidisciplinary approaches to their care, and how to coordinate the community-based care for these children and their mothers after they leave the hospital. While most of these hospitals are

not yet caring for a large number of drug-exposed infants and children, they are concerned about the future impact that projected increases in cases will have on their administrative and clinical organizations.

This informal survey provides us with some important preliminary information about the experience of selected children's hospitals in caring for infants and children who have been exposed to maternal drug use. Children's hospitals around the country are beginning to plan to meet the challenge of the increasing number of newborns and infants who have been exposed to cocaine, crack, alcohol and other drugs. However, they are finding their work hampered by the lack of drug treatment programs which will treat women, particularly women with young children; by the lack of available family support services in the community; and by an extremely overburdened child welfare system.

During the Committee's June 28 hearing, Senator Christopher Dodd (D-CT) described his new bill, S. 2820, the "Children of Substance Abusers Act of 1990." This legislation would provide, for the first time, grants for a coordinated and comprehensive approach to the multidisciplinary health needs of children of substance abusers and their families. It recognizes the social supports required to preserve the family unit and the dire need for this nation to come to grips with the crisis it faces in drug treatment programs.

We know that the growing, tragic problem of perinatal substance abuse does not begin or end when the baby is born. Senator Dodd's bill acknowledges this fact by increasing the funds available to provide drug treatment to all women, by creating a preventive home visitors program for identified high-risk pregnant women and their children, by providing a wide range of long-term coordinated services for those families impacted by perinatal substance abuse, and by creating training programs to equip health, education, justice, and social service professionals to provide the necessary services to these families. The findings from our informal survey demonstrate the immediate need for these services. NACHRI supports enactment of this legislation.

Senator Dodd's legislation is an important first step to improve services for children and families affected by maternal substance abuse. However, as the recently-released GAO report, "Drug-Exposed Infants: A Generation at Risk," indicates, there are many gaps in our national health policies and programs for this population. The NACHRI survey findings corroborated those gaps in two areas.

First, the GAO report found that hospitals are not adequately identifying drug use during pregnancy, resulting in a lack of reliable data on the number of drug-exposed infants born each year. Our informal survey found that most of the responding hospitals do not yet have protocols in place for identifying and tracking either the number of drug-exposed babies who receive care or their related resource needs. As a result, NACHRI is in the process of developing a uniform data collection mechanism to assist its members to document and track their caseloads.

Second, the GAO report documented the short- and long-term health, social, and cost implications of the growing number of drug-exposed infants. Our informal survey documented some of the identified short-term problems which these infants and their families have. It also showed us that children's hospitals around the country now are recognizing, and anticipating, the long-term implications. NACHRI, through its educational programs, will be providing its members with information and technical resources to build the service infrastructure and expertise necessary to provide quality health care to all children impacted by maternal substance abuse and their families.

The Senate Finance Committee will play an essential role in addressing the health and social service needs of children who suffer the effects of maternal substance abuse. With its responsibility for Medicaid, the MCH Block Grant, and welfare legislation, and with Senator Bentsen's chairmanship, the Committee has paved the way for improving access to health care for all children of low income families. We look forward to continuing to work with the Committee in advancing access to health care for all children as well as assisting the Committee as it develops legislative responses to the growing problem of children impacted by maternal substance abuse.

STATEMENT OF THE NATIONAL ASSOCIATION OF PUBLIC HOSPITALS

The National Association of Public Hospitals (NAPH) would like to take this opportunity to submit this statement to the Senate Committee on Finance in connection with the Committee's June 28th hearing on infants born to chemically-dependent women. NAPH consists of over 90 urban public and non-profit hospitals that

serve as major referral centers, teaching hospitals, and hospitals of last resort for the poor and medically underserved in most of our nation's largest metropolitan areas. Many of NAPH's hospitals treat a disproportionate share of addicted mothers and their children. As a result of this and other resource demands, many NAPH hospitals are on the edge of financial collapse and in desperate need of increased governmental support.

The consequences of substance abuse among pregnant women are numerous. First, substance-abusing women often lack access to prenatal care or may not seek it. Second, babies exposed to substance abuse are more likely to be born prematurely and have low birth rate, increasing their risk of infant mortality and childhood disability, as well as their need for intensive and expensive hospital care. Third, a drug-exposed baby has a myriad of physical and emotional problems which are particularly stressful to an addicted parent. Each of these problems, directly or indirectly, increases the demand on the U.S. hospital system, especially public hospitals. Without additional government support, our hospitals will be unable to meet this demand.

Unfortunately, information is limited with respect to the magnitude of the substance abuse problem as it impacts hospitals across the country. NAPH, however, recently surveyed 26 member hospitals and identified 2,693 infants exposed to cocaine during 1988. This represents an average of 104 cases per institution. During the first half of 1989, the annualized average increased to 122 cases per institution. It should be noted that very few institutions have universal testing, so in most cases the infants identified are done so by self-reporting by the mother or by testing as a result of infant characteristics and suspected drug use. Nonetheless, the limited NAPH study reveals two disturbing trends. First, utilization of hospital services by drug-exposed infants (and by inference drug-addicted mothers) is increasing at a significant pace. Second, the problem of crack cocaine and other addictive drugs is impacting public hospitals all across the country, not just those in New York and Los Angeles.

To further illustrate these observations, a recent study at Truman Medical Center in Kansas City, Missouri produced startling results. It found that approximately 15% of babies born at Truman Medical Center tested positive for cocaine. For this test to indicate the presence of cocaine, the mother must have utilized "crack" cocaine within a 72-hour period prior to delivery. In the middle of the nation, almost one out of six babies born at the public hospital tested positive for cocaine! Moreover, 1990 birth projections of cocaine-affected infants at Truman already are significantly higher than 1988 statistics.

The plight of the public hospitals cannot be overstated. Trauma centers and emergency rooms are overcrowded to the breaking point. Occupancy rates continue to rise, topping 100 percent in some cities, and critically ill patients wait up to 36 hours for an inpatient bed. Gang violence, AIDS, refugees and other problems are growing at an alarming rate in some cities—greatly compromising their ability to serve less seriously ill indigent patients. Combined with these problems, the additional stress of treating a growing population of substance-abusing mothers and their children has pushed many public hospitals to the brink of financial ruin.

STATEMENT OF TERRIFIC, INC.'S GRANDMA'S HOUSE

Senator Bentsen and distinguished members of the Finance Committee, as Executive Director of Grandma's House, I am pleased to have the opportunity to provide testimony regarding crack/cocaine exposed babies. Grandma's House was founded in January '88 by its parent organization TERRIFIC, Inc. a private non profit community based organization which provides housing and complimentary support services to people in crises. TERRIFIC, Inc. was founded in 1975 by my sister, the Reverend Debbie Tate. Named after the family member who so often steps in to help in times of trouble, Grandma's House provides special homes in Metropolitan Washington D.C. for infants under five years old who are abandoned, abused, neglected and/or HIV infected. Through a multidisciplinary, therapeutic approach, children receive round-the-clock, comprehensive care in the kind of loving, stimulating home environment that a real grandmother would provide if she could. The serious crises of drug exposed and HIV infected children has come to the forefront as one of the most challenging crises to confront health, social and financial systems. Daily Grandma's House receives numerous calls from national and international sources in reference to Grandma's House role as prototype in responding to 20th centuries' children's crises—drugs, homelessness and AIDS.

Since January 1988 Grandma's House 1 provided a home for eleven babies within different time spans. Two of the children have died from AIDS. One child returned to her mother and siblings. Another is currently in foster care with a Grandma's House volunteer. Everyone of these children has been a prenatally drug exposed baby. As with most prenatally drug exposed infants, all of our children were prematurely born. Of course, cocaine/crack contribute to premature labor and early inducement.

The complex problems of parental drug use, poor prenatal care, poverty and physical/emotional abuse experienced by the mother as well as the child contributes tremendously to the child's poor health, social and emotional status. Every child who has been cared for in Grandma's House has been low birth weight, developmentally delayed and has displayed a variety of atypical infant development behaviors, e.g., tremors/rigidity, weak pull to sit development, poor feeding, sleeping and irritability difficulties.

Without a doubt, however, the most devastating problem that most of our children have possessed is HIV infection.

The magnitude of the cocaine/crack and sex linkage is commonly known. Indeed, a bartering system exist in many "crack houses" in which sex is traded for drugs. The majority of the women who use cocaine/crack are of child bearing age. Seventy-eight percent of women with AIDS are between the ages of 13 and 39. National statistics indicate that sixty eight percent of HIV exposed babies are born to IV drug and works using (drug paraphernalia) mothers and an additional twenty-three percent of these babies had mothers who have had sex with men who had shared drug works. This represents a startling total of ninety-one percent of HIV infected babies' statuses related to perinatal transmission related to drugs. One study indicated that twenty-five percent of mother's HIV infected statuses were established through the infected infant's diagnosis.

It is not uncommon for many women who have an infected child to give birth to additional infected children. The very nature of the drug contributes to a multiplicity of circumstances which contribute to repeated pregnancies. These include the previously mentioned sex in exchange for drugs, unprotected sex with infected partners, female powerlessness to control the sexual demands and expectations of male partners, prostitution as a means of financial support, poor judgment related to drug impairment, low self esteem which contributes to a fatalist approach to life and a host of other problems.

While the cocaine/crack prenatally exposed infant suffers from a myriad of physical/mental and social problems, the crack/cocaine exposed infant who is additionally HIV infected experiences same, increased and more intensified problems. These problems are enhanced because of society's fear, stigma and discrimination regarding AIDS and HIV transmission.

The anxiety and fear that is related to infant attachment, acute care, dying and death further exacerbates the problem.

The Grandma's House experience has consistently demonstrated the fact that care for the special crack/cocaine baby demands more intensified and carefully coordinated care. It is not unusual that one child is involved in more than seven systems of care. An example is a three year old child who was placed in Grandma's House at eleven months old. The child was removed from the mother's "crack house" because of severe neglect and abuse. Because of abuse, HIV infection and crack/cocaine exposure the child has suffered a multiplicity of physical and emotional problems. His current systems of care include, immunology (HIV related) clinic follow ups, allergy clinic, special diets developed by a Grandma's House nutritionist-consultant, speech therapy because of early childhood abuse and neurological problems possibly related to HIV infection and/or drug exposure, physical/occupational therapy because of gross and fine motor skills deficits, special child development school enrollment, legal system involvement related to his abandonment, and family counseling related to Grandma's House's desire to assist the social service system in its attempt to identify a family member(s) (other than the parents) or foster parent(s) who can provide a nuclear home placement for the child.

In the Washington Metropolitan area, and throughout the United States cocaine/cracked exposed infants and those who are additionally HIV infected, remain in hospitals and other institutional settings beyond the clinically indicated time. Other infants and children remain in detrimental home settings, vulnerable to damaging physical and emotional environments maintained by parents and/or guardians who cannot provide adequate child care and nurturing. Developmental delay, abnormal socialization processes, altered behavioral and intellectual development, etc, are just a few of the side-effects of prolonged institutionalized care and abusive home environments.

An appropriate response to this problem is further complicated by an inadequately prepared traditional foster care system which is adversely affected by three basic factors: (1) a changing society and labor force. The potential foster parent pool no longer seeks to fill the empty nest as means of obtaining a modest income, (2) an inability to effectively and efficiently care for the fragile child who requires a myriad of special service interventions and the complex case management required to ensure service continuity and consistency, and (3) the fear and discrimination related to HIV infection coupled with the general public's perception of HIV infection as an untimely death sentence.

In addition to the community's inability to meet the special needs of these children, the cost of health maintenance, social/legal interventions and boarding for these children significantly drains government and community resources. The American Academy of Pediatrics has stated that "Keeping children in hospitals beyond the medically indicated time is costly and cruel and may place these children at additional medical and developmental risk."

Per year, hospital/institutional cost is estimated between \$170,000 to \$237,000 per child. The price per parental abuse includes the high cost to legal, social, criminal justice and health care systems. A child's most critical period of early development is between the ages of infancy to three years of age. Prolonged hospitalization and/or an abusive/neglectful home environment tremendously retards a child's normal period of growth and development. The combined presence of HIV infection, infant drug exposure and poor prenatal care further impacts on the child's failing health status.

While the financial cost of cocaine/crack infant and drug exposed pediatric AIDS are costly, the personal cost to the children, their families, the community and particularly people of color is traumatic. The personal costs speak of poverty, family fragmentation, abandonment, inaccessibility to and ignorance of the availability of needed health and social service systems. As approximately 91 of all pediatric AIDS cases are due to perinatal (mother to child) transmission, the implication regarding the death of an entire family is eminent. Although the problem of identifying home care alternatives for the vulnerable child is nothing new, the advent of HIV infection and the epidemic proportions of drug abuse have intensified the need for innovative social health care responses to escalating 20th Century social/medical problems. By 1991 it is estimated that 1,000 HIV infected children will have been born (cumulative number) in the District of Columbia and nationally 10,000 to 20,000 infants.

To insure a holistic approach to the care of these special children, we believe that the following is critical:

- Elimination of delayed and inappropriate hospital and institutional placements of children who are difficult to place due to health problems, and physical disabilities caused by drug exposures and HIV infection.
- Elimination of child neglect and abuse of HIV infected and fragile children.
- Provision of a multidisciplinary, clinically focused, secure and supportive family living environments.
- Enhancement of the quality of life of children who have special health problems or physical disabilities related to crack/cocaine and HIV infection.
- Facilitation of children's placement in foster or adoptive parent's home when possible.
- Clinically therapeutic home based models, similar to the Grandm's House model, designed to ensure an intimate family environment, consistent family images, and surrogate parenting, comprehensive, 24-hour, intense, personal care, with a goal of strong nurturing relationships between child, childcare providers, parents, siblings
- Effective/efficient working relationships with public and private clinical and specialty care systems within the District in order to ensure service continuity, quality of care and clinical expediency in the delivery of care.
- Well-trained professionals and paraprofessionals who can effectively respond to the clinical/emotional needs of fragile children.
- Education, training for staff, mothers, fathers, and relatives. This training includes education and training related to AIDS but also to other issues that are related, such as death and dying, parent effectiveness.