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ABSTRACT

Third in a series of hearings on the status of Federal health and safety standards and the social and economic implications of lowering or relaxing them, this hearing investigated issues of child health. The hearings were prompted by concern that existing health and safety standards were being undermined by irresponsible budget cuts, in some cases sweeping arbitrary deregulation, and the complex interplay between the two. Testimony includes the personal views of Dr. Albert B. Sabin about child health issues, the Children's Defense Fund's positions regarding child health programs and standards, concerns of pediatricians about immunizations and nutrition, national and Maryland perspectives on health and other indicators of risk and the Federal food program, remarks on major areas of morbidity and mortality during adolescence which require significant resources and further understanding, academic researchers' attitudes concerning Federal funding of research, long-term consequences of reduced Federal commitment to child health programs, and an advocate pediatrician's views on child health and safety and the effects of cutbacks in research funding. In addition to prepared statements, submissions for the record include an article on preventive health care for children by Senator Dale Bumpers and a report of the Ad Hoc Group for Medical Research Funding. Tables and figures are included. (RH)

S. HRG. 99-1086

DECLINING FEDERAL HEALTH AND SAFETY STANDARDS: CHILD HEALTH

HEARING

BEFORE THE

SUBCOMMITTEE ON INVESTMENT, JOBS, AND PRICES

OF THE

JOINT ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES

NINETY-NINTH CONGRESS

SECOND SESSION

AUGUST 4, 1986

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SUBMISSIONS FOR THE RECORD

MONDAY, AUGUST 4, 1986

DECLINING FEDERAL HEALTH AND SAFETY STANDARDS: CHILD HEALTH

MONDAY, AUGUST 4, 1986

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON INVESTMENT, JOBS, AND PRICES
OF THE JOINT ECONOMIC COMMITTEE,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:45 a.m., in the 21st Floor Constellation Room, World Trade Center, Pratt Street, Baltimore, MD, Hon. Paul S. Sarbanes (member of the subcommittee) presiding.

Present: Senator Sarbanes.

Also present: William Buechner, professional staff member.

OPENING STATEMENT OF SENATOR SARBANES, PRESIDING

Senator SARBANES. If we could come to order.

Today, the Subcommittee on Investment, Jobs, and Prices of the Joint Economic Committee holds the third in a series of hearings on the status of Federal health and safety standards and the social and economic implications of lowering or relaxing them.

Today's hearing will be devoted to the subject of child health.

In its first hearing, the subcommittee focused on air transportation safety issues, and in the second, on fire prevention and control. The subject of the fourth hearing in the series, which will take place this Thursday in Washington, will be hospital disinfectants.

All four of these hearings are prompted by the rising concern in the Congress, the press, and the public at large that the Nation's existing health and safety standards are being undermined by irresponsible budget cuts, in some cases sweeping arbitrary deregulation, and the complex interplay between the two.

A 1984 study conducted by William Drayton, the former Deputy Administrator of the Environmental Protection Agency, concluded that the Federal Government is failing where health and safety protections are concerned and, further, that "budget cuts, which have been this administration's chief policy weapon toward this end, have fallen most unrelentingly on the relatively new and most vulnerable health and safety agencies." The result, he says, "is not the work of any one manager; it is a governmentwide pattern, with a resulting protection gap potentially enormous in scale."

Mr. Drayton's sober assessment is perhaps no more accurately applied than in the area of child health and safety standards. This is particularly troubling because of the central role our children play in our lives. They stand at the very heart of our families.

They represent the strength of our Nation. They are our hope for the future.

Let me mention just a few of the problems we face.

For nearly 20 years, the Nation's infant death rate dropped steadily and significantly. But in the last 3 years, the rate of decline has slowed dramatically. Whereas a quarter of a century ago, the United States placed 7th in the world in terms of infant mortality rate, today it is 17th.

Good prenatal care reduces not only infant mortality, but low birthweight as well. Last year, citing a study by the National Institute of Medicine entitled "Preventing Low Birthweight," the New Republic observed, "It costs far less to ensure that a baby is born healthy than to keep it alive just one day in intensive care," and pointed to the study's finding that every $1 spent on prenatal care translates into $3 saved in providing medical care.

Good health care for children minimizes long-term, indeed, lifetime, health problems. Lives are made fuller and richer, and the productive capacity of the Nation is increased when we identify and treat vision, hearing, and dental problems or neurologic or orthopedic problems early in life.

Yet there have been drastic cuts in funding and drastic restrictions on eligibility for the programs which, in many cases, mean the difference between treatment and nontreatment.

Routine immunization has virtually eliminated many of the childhood diseases—polio, diphtheria, whooping cough, measles, for example—that not many years ago raised the specter of life-long handicap or even death.

My distinguished colleague from Arkansas, Senator Bumpers, has noted that, since its launching on a national scale, the childhood immunization program "has had dramatic success in reducing the incidence of childhood diseases, and the combined Federal expenditure for the 8 years from 1973 through 1982 was only $205 million, or about the cost of one B–1 bomber."

Nonetheless, the President has declined to request the funds necessary to rebuild the national vaccine stockpile, which has fallen seriously below the 6-month supply recommended by the Centers for Disease Control.

Now Senator Bumpers has sent us a letter commending the committee for investigating the status of our children's health and seeking to determine the impact of funding decisions on research in the delivery of health care services to mothers and children. I'd like just to read excerpts from that letter. The entire letter, together with an article by Senator Bumpers, will be included in the record.

[The letter and article follow:]

United States Senate

COMMITTEE ON APPROPRIATIONS
WASHINGTON, DC 20510

August 4, 1986

The Honorable Paul S. Sarbanes
United States Senate
Washington, D.C. 20510

Dear Paul:

I want to commend you for calling a hearing of the Joint Economic Committee to investigate the status of our children's health and to determine the impact of funding decisions on research and the delivery of health-care services to mothers and children.

I believe that the availability of preventive health care for every child and expectant mother must be considered part of the basic foundation for the welfare and strength of this nation. Since 1970, I have been involved in debates on the proper role of the federal and state governments in financing public health programs for our citizens. Unfortunately, the decrease in the availability of public health and nutrition services since 1981 has slowed or reversed the progress we have made in improving many key public health indicators and called into question our ability to reach the Surgeon General's 1990 goals for lowering the rates of infant mortality, post-neonatal mortality, and low birthweights.

We shouldn't compromise our goals for 1990, but we must take action in order to meet these objectives. Last week, the Department of Health and Human Services announced the latest figures on health-care expenditures for 1985. The nation spent $425 billion on health care in 1985, an amount equal to 10.7 percent of the GNP. Two figures in the report especially disturb me: (1) the total government expenditures for public health activities, $11.9 billion, or 2.8% of total health-care expenditures; and (2) $7.4 billion for noncommercial research, or 1.7% of total health-care expenditures. Our investment in public health and research is woefully inadequate.

The human benefits of public health programs and research are reason enough to increase our investment, but the economic benefits are an added incentive. It is senseless to shortchange public health programs that have cost-benefit ratios ranging from 1:3 to 1:10. The United States has been a world leader in

developing the most sophisticated technology to save desperately ill newborns, yet we are also a leader in the industrialized world in the percentage of low birthweight babies who need these sophisticated services. We should be proud of our biomedical leadership, but we should also be very concerned about the delivery of preventive care. We need to improve our investment in preventive health programs because the long-term savings from this investment will help us to ensure our leadership in medicine and improve the public health.

I know the witnesses at the hearing today will provide great insight into the challenges facing health-care providers, researchers, and policymakers. I commend you for holding this hearing, and I look forward to reading the testimony of all the witnesses.

Sincerely,

Dale Bumpers

Dale Bumpers

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Securing the Blessings of Liberty for Posterity

Preventive Health Care for Children

Dale Bumpers *U.S. Senate*

Almost every day something happens that causes me to reflect again on the brilliance of the "Founding Fathers" of our great nation. As a senator, I am constantly reevaluating the appropriate role of government, and I continue to find guidance in the simple, eloquent words our founders used in the Preamble to the U.S. Constitution. Those words are worth repeating here:

> We the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

The future of every nation belongs to its children, and everyone, regardless of political persuasion, would agree that one of the essential ways to secure the blessings of liberty for them, our posterity, is to help them become and remain healthy. Although children's access to a public education has been considered a right, no such right exists for children's access to adequate health care. And yet a child who is not healthy cannot take full advantage of a public education, cannot seize the future and the full blessings of liberty America has to offer. I believe that the availability of preventive health care for every expectant mother and child must be considered part of the basic foundation for the welfare and strength of the nation.

One in every five children, or 13.6 million, live in poverty, and one third of these have no identifiable source of health care. Seven other countries have lower infant mortality rates than the United States. The United States has the second highest percentage among nine other industrialized nations in infants that have low birth weight. (Two thirds of all infant deaths occur among low-birth-weight babies.) One in every 20 women in the U.S. receives no prenatal care until the last trimester, and one in 76 receives none at all. One out of every 11 pregnant black women receives no prenatal care until the last trimester, and one in 37 receives none at all. These statistics illustrate how much can be done to improve the health care given to infants and children.

History of Federal Involvement

Before 1912, there was little federal involvement in children's health. The first White House Conference on Children was convened in 1909 by President Theodore Roosevelt, and at its recommendation the Children's Bureau was created in 1912. Julia Lathrop, the first woman to head a federal agency, was granted $25,640 to investigate seven issues: infant mortality, birth registration, orphanages, child labor, desertion, illegitimacy, and degeneracy. The bureau focused its first investigation on the causes of infant mortality and provided the first governmental data linking infant mortality to conditions such as family income, housing, employment status of the mother, and early health care for mothers and infants.

The Children's Bureau was granted limited authority by Congress and could only use its findings for public education and to encourage the enactment of state laws. In 1914, it distributed the now famous publication *Infant Care*. The public response to the findings of the Children's Bureau and its educational programs reinforced the efforts of those who were urging targeted federal action on behalf of mothers and children. The bureau's studies also stated the case for child labor laws, a school lunch program, a uniform birth registration program, and other significant initiatives.

The federal government became more directly involved in children's health care with the Sheppard-Towner Act, also known as the Maternity and Infant Care Act of 1921. Its passage was surrounded with controversy over the government's alleged interference in family affairs. Opponents argued that "official meddling cannot take the place of mother love" and called the act "radical, socialistic, and bolshevistic." This legislation was one of the first federal grants-in-aid programs for health care and was administered through the Children's Bureau. The program required states that accepted money to match federal funds and to designate an administrative agency with responsibility for maternal and child health activities.

By 1927, 45 states participated in the program and funds were used primarily for preventive child health programs. Although this act was extended for 2 more years, opposition from the Catholic church and the American Medical Association (AMA), which called the programs, "paternalistic, socialistic, and meddlesome," led to their termination in 1929. The controversy which surrounded this Act led a group of pediatricians to split away from the AMA to form the American Academy of Pediatrics (AAP).

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During the years of the Sheppard-Towner Act, the Children's Bureau produced several notable achievements. By 1929 all states required birth registration, and 1,594 new child health centers were established throughout the country between 1924 and 1929.

As the nation faced the Great Depression of the 1930s, 19 states continued their maternal and child health programs. Most of the states, however, found it difficult to maintain these programs as federal support diminished. During the early 1930s the Children's Bureau reported that the health and welfare of children were worsening and recommended a broader federal/state program. Katherine Lenroot, director of the Children's Bureau during these years, said, "We cannot too strongly recommend that the Federal Government again recognize its obligation to participate in the nationwide program saving the children from the forces of attrition and decay which the depression turned upon them above all others" (U.S. Department of Health, Education, and Welfare, 1976). Such a plea sounds similar to those made by many of us in Congress during recent funding fights on preventive health programs for children.

In 1935, the Social Security Act was passed and Title V of the Act designated the Children's Bureau to administer three programs: Maternal and Child Health (MCH) services, services for crippled children, and child welfare services. The goal of Title V programs was to expand health services for poor mothers and children.

During the 1960s, amendments to Title V expanded services and the access to care. The 1963 amendments required that each state's Title V program include maternal and infant (M & I) and children and youth (C & Y) projects, family planning, intensive infant care, and dental services. Because Congress believed that states were not meeting the needs of communities, the amendments allowed federal health agencies to circumvent state government and negotiate directly with community health units.

Dale Bumpers

During this time, the National Institute for Child Health and Human Development (NICHD) was created as part of the National Institutes of Health to provide a center for research on child health, growth, and development. Title XIX of the Social Security Act was passed in 1965, creating the Medicaid program for poor and disabled children and adults. In 1972 the Women, Infant and Children Supplemental Feeding Program (WIC) began to provide nutritional supplements to young children and mothers. A number of the original functions of the Children's Bureau were transferred to other agencies. Its health care functions are now carried out by the Public Health Service. Currently, the Bureau's responsibilities include child welfare activities as part of the Office of Human Development, Department of Health and Human Services.

In 1977, the Childhood Immunization Initiative was launched to immunize children against preventable childhood diseases. At the time, 40% of children (20 million) under age 15 were unprotected against one or more childhood diseases for which safe and effective vaccines were available. This initiative was modeled after the Arkansas program developed by my wife Betty when I was governor. It included

Editor's note. Senator Dale Bumpers is presently serving in his 10th year in the U.S. Senate, after serving two terms as governor of Arkansas. He has served with distinction on the Senate Energy Committee, the Senate Appropriations Committee, and formerly, the Armed Services Committee. He has used his position on the Appropriations Committee to ensure continued funding of health and education programs threatened by recent budget cuts. He was especially effective in preserving the childhood immunization and Maternal and Child Health Care programs. For his leadership in this area the American Academy of Pediatrics gave its 1983 Excellency in Public Service Award to Senator Bumpers and to his wife Betty, who helped develop a nationwide childhood immunization plan.

This article is part of our special invited series by public officials designed to inform psychologists about policy issues of concern to psychology and the public at large. The views expressed are those of the author and do not necessarily reflect the views of the American Psychological Association or its officers.

Requests for reprints should be sent to Senator Dale Bumpers, 229 Dirksen Senate Office Building, Washington, D.C. 20910.

extensive involvement by volunteers and voluntary organizations and a major public information and education campaign. By 1980, immunization levels of children entering school were between 92% and 96%, and the incidence of diseases was steadily dropping.

The 95th Congress passed legislation that created a Select Panel for the Promotion of Child Health. This panel reviewed all literature related to child health, set specific health status goals for children and expectant mothers, and developed a comprehensive national plan for achieving these goals. In 1981 the report of the Select Panel was released, and it pointed to the overriding absence of a cohesive federal policy for children's health services. It also described inadequate program information, insufficient resources, and poor coordination between services. The panel recommended a greater clarification of governmental responsibilities, better oversight, and more equitable allocation of resources.

By the time of the panel's report, sweeping changes in the administration and funding of federal programs for children had already begun under the Reagan administration. Many of these changes contradicted recommendations made by the Select Panel. With the passage of the Omnibus Reconciliation Act of 1981, Title V was combined with six other separate programs (genetic diseases, adolescent pregnancy, Sudden Infant Death, hemophilia, and Supplemental Security Income) to create the Maternal and Child Health Care Block Grant Act. Though initially the Administration proposed a much broader block grant of adult and child services, child health advocates were able to convince Congress to limit the block to child-oriented services. The Administration proposed this system of funding and administering programs, it said, to eliminate duplication of administrative effort and to increase local control of the programs.

Many of us in Congress were not fully persuaded that the block grant was a better approach, but my personal acquaintance with several state officials whom I knew to be deeply committed to high-quality services convinced me to vote in favor of giving the states more discretion in administering these maternal and child health programs. The problem, however, was funding. In fiscal year 1981, before the Maternal and Child Health (MCH) block grant was created, the total authorization for the seven categorical programs was $558 million, and the appropriation for that year was $456 million. When the MCH block grant was created, however, the authorization ceiling was set at $373 million, a reduction of over 33%. Moreover, the Administration only requested $289 million in funding for fiscal year 1982, and it was only with the help of a vigorous lobbying effort by MCH advocates that I was able to get the appropriation increased to $346 million for that year, still $27 million below the authorized ceiling. The fiscal year 1983 appropriation was the full $373 million, but this was still a full 33% below the 1981 funding level without taking into account inflation in health care costs, which was in annual double digit figures.

This reduced funding, combined with similar 1981 funding cuts in Medicaid, staggering unemployment, and skyrocketing health care costs, had a devastating effect on maternal and child health care services across the country. By the end of calendar year 1982, 31 states had reduced or eliminated Medicaid services important for mothers and children, including the imposition of new limitations on hospital, physician, clinic, and prescribed drug services for pregnant women, and had cut primary and preventive services for infants and children. Some states had eliminated their Aid to Families with Dependent Children (AFDC) programs for two-parent unemployed families, which also had the effect of eliminating these families from the Medicaid program. In all, about 700,000 children lost Medicaid coverage because of the AFDC cuts made in 1981 by Congress at the Administration's request. Scores of MCH-funded clinics closed or substantially limited services. In some parts of Detroit, the infant death rate hit 33 per 1,000 live births, the same death rate as in Honduras, the poorest country in Central America.

In Iowa, the number of mobile field clinics was cut, forcing a reduction in the number of children served by about 30%. Many other examples could be given from such states as Alabama, Idaho, Illinois, South Carolina, Ohio, and New York. In my home state of Arkansas, the largest maternity clinic in Little Rock is still so overburdened that it refers away about half of the women who seek help. It will not see any women for the first time who are over 28 weeks pregnant, and the waiting time for those who do get to see a doctor is about 5 weeks. Eight Arkansas counties have no child health clinics at all, leaving about 45,000 children without services. One out of four Arkansas children lives in poverty, and 60% of these children are ineligible for Medicaid ("Impact of Federal Spending Cuts," 1983).

In response to these and other horror stories, as part of the so-called jobs bill enacted early in 1983 as Public Law 98-8, Congress made a one-time additional appropriation of $105 million for the MCH block grant for fiscal year 1983. These additional funds were sorely needed and welcomed by the states, but they probably will make no more than a dent in the overall problem. So far, there has been little interest in Congress in restoring the Medicaid cuts made in 1981, although there is room in the 1984 budget for a special $200 million program to provide Medicaid coverage to poor pregnant women who fail to qualify for AFDC. I am not optimistic, however, that this program will be enacted into law.

Cost Effectiveness

The current state of affairs in the area of preventive health care for children makes absolutely no sense from a public policy perspective. Completely aside from the profound moral implications raised by failing to guarantee adequate funding for the health of our nation's children while at the same time funding hundreds of less important ventures, preventive health services for children and pregnant women should be emphasized by federal policy because they are absolutely cost effective. For example, a study by the Center for Disease Control showed that $180 million spent on measles vaccination programs between 1966 and 1974 saved $1.3 billion in medical care and long-term care by reducing deafness, retardation, and other problems. Similarly, a 1977 General Accounting Office report found that the costs of screening at birth and treatment of seven common disorders was less than one eighth the projected costs of caring for an impaired child over a lifetime. In Mississippi it costs $1,100 to provide complete prenatal care to a pregnant woman in comparison to the $22,000 cost of providing institutional services to a child born with handicapping conditions as a result of the mother's lack of health care. And this list could be extended.

It is, therefore, clear that federal dollars spent on preventive health care for children and pregnant women are a wise investment in our nation's future, and we have learned from history that when the federal government has chosen to become involved in child health issues it has made a real difference. As Table 1 shows, since the Childhood Immunization Initiative was launched on a national scale, it has had dramatic success in reducing the incidence of childhood diseases, and the combined federal expenditure for the eight years from 1975 through 1982 was only $205.4 million, or about the cost of one B-1 bomber.

Future Federal Involvement

What, then, should be the policy at the federal level on preventive health care for children? First of all, we should maintain our commitment to the childhood immunization program. We can carry it out effectively for about $42 million a year and save incalculable dollars in the long run. Second, we should ensure adequate funding for the Maternal and Child Health Block Grant. I have introduced a bill, S. 2013, that would increase the authorized funding ceiling from $373 million to $499.5 million. It is important to keep in mind that even this level of funding would be well below the 1981 appropriation for these programs, adjusted for inflation. I am encouraged by the interest in this measure and by the fact that the House of Representatives last summer passed a bill that would increase the authorization to $483 million. Third, we should take a hard look at the Medicaid program. It could be amended to ensure preventive health care for pregnant women who are in poverty but who are not currently covered by Medicaid because they do not qualify for Aid to Families with Dependent Children. Finally, we need a more comprehensive and more thoughtful federal policy in the area of preventive health care for children. In cooperation with the states, we need to set child health goals for the year 2000, and then put in place the programs necessary to meet those goals.

There would be nothing experimental about providing sound preventive health care. It would be relatively inexpensive. It would require no new technology, nor would it involve any particular risk, for

Table 1
Reported Cases of Childhood Diseases From 1975 to 1982 (With Annual Appropriations)

Disease	1975	1976	1977	1978	1979	1980	1981	1982	1975–1982 (% change)
Rubella	16,652	12,491	20,395	18,269	11,795	3,904	2,077	2,325	−86
Measles	24,374	41,126	57,345	26,871	13,597	13,506	3,124	1,714	−93
Tetanus	102	75	87	86	81	95	72	88	−14
Mumps	59,647	38,492	21,436	16,817	14,225	8,578	4,941	5,270	−91
Pertussis	1,736	1,010	2,177	2,063	1,623	1,730	1,248	1,895	+9
Diphtheria	307	128	84	76	59	3	5	2	−99
Polio	8	14	18	15	34	9	6	8	0
Appropriation for fiscal year (in millions)	$7.5	$8.2	$14.5	$33	$46.9	$30.3	$30.4	$34.6	

Note. Source: Center for Disease Control.

we know that providing adequate perinatal care leads to healthier babies and that childhood immunization dramatically reduces the incidence of preventable childhood disease. We also know that these programs are highly cost effective, and this is important when huge budget deficits require an even closer scrutiny of federal spending programs.

In my judgment, our children deserve no less than our best efforts in providing preventive health care. We as a nation have a moral obligation to ensure to the maximum extent possible that each child gets a healthy start in life. And if we are willing to make this a national commitment, I think it would make the Founding Fathers and Mothers smile.

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Senator SARBANES. This is a subject in which Senator Bumpers has had a very keen interest ever since his days as Governor of Arkansas, when he instituted a comprehensive immunization program at the State level. I will read several paragraphs from his letter:

I believe that the availability of preventive health care for every child and expectant mother must be considered part of the basic foundation for the welfare and strength of this Nation. Since 1970, I have been involved in debates on the proper role of the Federal and State governments in financing public health programs for our citizens. Unfortunately, the decrease in the availability of public health and nutrition services since 1981 has slowed or reversed the progress we have made in improving many key public health indicators and called into question our ability to reach the Surgeon General's 1990 goals for lowering the rates of infant mortality, post-neonatal mortality, and low birthweights.

We shouldn't compromise our goals for 1990, but we must take action in order to meet these objectives. Last week, the Department of Health and Human Services announced the latest figures on health-care expenditures for 1985. The Nation spent $425 billion on health care in 1985, an amount equal to 10.7 percent of the GNP. Two figures in the report especially disturb me: the total government expenditures for public health activities, $11.9 billion, or 2.8 percent of total health-care expenditures, and $7.4 billion for noncommercial research, or 1.7 percent of total health-care expenditures. Our investment in public health and research is woefully inadequate.

The United States has been a world leader in developing the most sophisticated technology to save desperately ill newborns. Yet, we are also a leader in the industrialized world in the percentage of low birthweight babies who need these sophisticated services. We should be proud of our biomedical leadership, but we should also be very concerned about the delivery of preventive care. We need to improve our investment in preventive health programs because the long-term savings from this investment will help us to ensure our leadership in medicine and improve the public health.

We're fortunate this morning to have an unusually distinguished group of witnesses, and of course I'm particularly pleased and proud that a number of our outstanding medical institutions in Baltimore are well represented.

We will have two panels subsequently, but first we will hear from Dr. Albert Sabin, who will be our leadoff witness.

Dr. Sabin really needs no introduction. Through his work, he has given us the means, if we will only use them, virtually to eliminate polio, measles, and other communicable diseases as serious threats to our children's health. The magnitude of his contribution is not limited to one nation or, indeed, one generation. His contributions are worldwide and are enduring.

Dr. Sabin, it's a great privilege to welcome you.

STATEMENT OF ALBERT B. SABIN, M.D., SENIOR MEDICAL SCIENCE ADVISER, FOGARTY INTERNATIONAL CENTER FOR ADVANCED STUDIES IN THE HEALTH SCIENCES, THE NATIONAL INSTITUTES OF HEALTH

Dr. SABIN. Mr. Chairman, until I heard you just now, I didn't have any idea of what kind of information or judgment you may have wanted from me when you invited me to appear before you. I thought I would soon find out, and I've already found out something.

I've been asked to make some introductory remarks. And now I think, having heard you, that my introductory remarks will have some bearing on the problems you mentioned.

In 3 weeks, I shall be 80 years old. I became involved in research on various infectious diseases while I was still a student, about 60 years ago. The unfinished business with which I'm still concerned

now is the use of a special strategy for the rapid elimination and continuing control of polio, measles, and other vaccine-preventable diseases of children in the economically undeveloped countries where they continue to be a very important public health problem.

But today's hearing, I understand, is concerned with child health in the United States, so I will not say anything about the economically undeveloped countries. My personal information on this subject is largely indirect. Permit me, therefore, to give you my views on some of the leading problems in child health in the United States and on some possible approaches for dealing with them.

What I am about to say represents my own views and not that of the organization with which I'm affiliated.

First, a generalization that the major health problems of a population, or any subunit of it, depend on the level of economic development. The challenge, as I see it, is not to wait until economic development brings about the necessary changes for all sections of the population, but to develop programs that may be effective before economic development can step in.

At the beginning of this century, conditions were so bad in the United States—I mean economic conditions—that about 175 out of every 1,000 live-born children died before they were 1 year old. And it was worse for black children—about 330 of every 1,000 live-born children failed to survive their first birthday. The leading causes of death and misery were bacterial infections, undernutrition, and malnutrition. Currently, the overall infant mortality in the United States is only 10 to 11 per 1,000 live-born children overall, and still twice as high for black children—I would venture to say not because they are black, but because more of them are born in very poor families.

I mention this, digressing here, because I think it is important to pinpoint the actions, and the actions are mostly needed where poverty is worse.

The marked decline in overall mortality from bacterial diseases occurred in association with the gradual improvement in the standard of living with more food and clean water, more and better housing, sanitation, hygiene, and education—and all this happened before progress in medical science provided its share for combating pneumonia, tuberculosis, typhoid, dysentery, et cetera.

Now, what is the magnitude of some of the child health problems in the United States today?

You have already referred to infant mortality. Specifically, there are still about 40,000 live-born babies—that's more than a percentage thing to bring it to our mind—who die each year before their first birthday, a number that is much larger than the total of all age groups who die each year of AIDS. And yet, the public attention is concentrated on AIDS and is not concentrated on the 40,000 babies a year who don't even get to have a chance at life.

It is also estimated that about 200,000 children are born each year with or develop later mental or physical defects and that, as a result, there are approximately 7 million retarded persons distributed among 20 to 25 million families in the United States.

Learning disabilities affect an estimated 15 percent of the U.S. school-age population, which translates to 150,000 per million school-age children. Percentages don't somehow leave an impres-

sion on the mind—15 percent. But it's 150,000 out of every 1 million school-age children in the United States have learning disabilities.

Each year, more than 3 million pregnancies are unintended, a tragedy, including nearly 1 million among teenagers, a very serious problem of children having children. Births to teenage mothers are twice as high, 18 to 25 percent, among black, American Indian, Mexican, and Puerto Rican mothers than among white and Cuban, 9 to 12 percent, compared with only 1 percent among Chinese in the United States, and 3 percent among Japanese, indicating that certain things could be done. Things the Chinese can do are not impossible for other members of the population. The issue is how.

Low birthweight babies that you mentioned are more than twice as common among black mothers, 12.8 percent, than among white mothers, 5.7 percent. The issue in the United States about low birthweight is not the whole population of the United States, but specifically, those who are poor. Again, the blacks are that way, not because of their color, but because they are poor.

My point in all of these statistics is that poverty continues to be a most important factor in child health problems in the United States. And the issue is what to do about it.

Now let me turn to another field.

Although polio caused by polio viruses, and there is some polio that is caused by other viruses, has been completely, or almost completely, eliminated from the United States, not from the world, but from the United States, and measles has been reduced to small numbers by vaccination, not eliminated, I regard chickenpox, varicella, rather than whooping cough, as the major challenge in the United States. About 1,000 cases of chickenpox per million total population were reported in 1983, which calculates to about 240,000 reported cases a year now, and the number of reported cases may be only 10 percent, one-tenth, of the total, as was the case with measles, when only 10 percent was being reported before the vaccine era.

More important, however, is that the chickenpox virus, after producing the lesions on the skin, remains dormant in the spinal area, and later in life causes a severe disease, herpes zoster—shingles—a debilitating disease that affects an estimated 8 percent of all human beings. What does 8 percent mean? It translates to 80,000 per million population wherever people are in the world.

Now there's good reason to believe that prevention of chickenpox by vaccination would also prevent the often agonizing herpes zoster. A live virus vaccine reported by Japanese scientists in 1974, although found to be effective in tests also in this country, is still not available for general use.

In my judgment, the judgment of an impatient old man, the effort has been too small, too slow, and too unjustifiably cautious.

I'm thinking of my own colleagues now—too unjustifiably cautious—when one considers how much misery could ultimately be prevented by proper mass use of this vaccine.

One other note about vaccines that must continue to be used against polio, measles, whooping cough, and so forth, because we cannot stop. It's not like smallpox. Their use is being greatly im-

peded, the use of these vaccines, greatly impeded by the epidemic of litigation against the vaccine producers in the United States.

Let me illustrate what this really means. As a result of this litigation, a dose of oral polio vaccine, which costs less than 2 cents when sold in developing countries, not by subsidies but at a profit, now costs a pediatrician in the United States $8—less than 2 cents elsewhere, $8 here. A dose of measles vaccine that sells elsewhere for less than 10 cents—10 cents—costs $10 here now for a pediatrician.

Wait a minute. I've got it wrong. It costs $15.

And a dose of diphtheria pertussis and tetanus, DPT, that also sells for less than 10 cents, recently jumped to $15 a dose to the pediatrician.

As I see it, this has gone too far. And there's no use asking the Government of the United States to subsidize this kind of scandalous business without doing something about it. I believe that it is time for Congress to pass a proper law, and I can explain what I believe a proper law is later, that will put an end to such litigation and provide another mechanism for handling possible complications and make sure that the money that is provided can be used for other things than supporting members of your profession, Mr. Chairman. We're not all the same.

Finally, I want to conclude, there are, of course, many other important child health problems that I have not mentioned. To deal with some of those problems, new knowledge is needed, new knowledge. And the Government responsibility for that is in the National Institute for Child Health and Human Development, which has existed now for more than 20 years.

However, I believe that new social approaches, particularly those involving compassionate community participation, also might have an important role.

I hope I've not taken too long, Mr. Chairman.

Senator SARBANES. No, it's been very helpful. We appreciate it very much, Dr. Sabin.

Let me ask just a few questions. First of all, could you comment a bit on the tradeoff, as you see it, between spending money for preventive purposes, either for vaccines or the women and children's feeding programs, and so forth, and money that has to be spent if such preventive programs are not put in place and then we later have to engage in a number of treatment programs?

Dr. SABIN. As I see it, this is an issue about which there can be no argument. The argument is about how best to do it. The argument is how to utilize available knowledge and procedures to bring to bear on prevention with the knowledge that we have currently available, and to really determine what knowledge is not available and to make sure that we get it.

I think, and nobody will argue about the basic issue, that it costs more to treat the consequences than to prevent. But how to prevent, that is the issue, Mr. Chairman.

Senator SARBANES. Well, if you were the dispenser of funds and were given a significant amount of money to use for the purpose of improving child health care, what would be the three or four or five programs that would be at the top of your list, either existing

programs to be supplemented and strengthened, or new programs to be instituted?

Dr. SABIN. I would eliminate myself from such a decision because I think this requires a knowledge of what is going on, what is being done, that I do not have.

But I did mention several things that are certainly not the most important, that the Government should do.

The Government must put an end to litigation by lawyers of issues that are not for juries to decide. And I know there is some legislation that's been going around the Halls of Congress, but I'm not at all sure that they get to the heart of the problem.

The heart of the problem is to end it all, in my judgment, and to establish some mechanism comparable to workmen's compensation, in which there are special commissions competent to judge that will judge the issues involved in any individual case, and then when indicated, or even when in doubt, provide compensation for a person, a child or adult, that is considered appropriate and not that is based on an appeal, an emotional, illogical appeal to a jury.

That's not the most important problem. If I may be allowed another generalization on this question you asked me, I would in general not try to cover the waterfront. Poverty—where poverty is, you can do the most in child health. And therefore, I would want to have the information on what is being done now and what could be done.

I'm not against charity, supporting those that have nothing, that go hungry, or mothers that don't have enough to eat and therefore give birth to children who are born with low birthweight and cannot survive very long.

But instead of concentrating across the board, search out the areas of poverty.

Now, I cut out articles sometimes. This is one that the Catholic bishops, 2 months ago, made a statement. And they said that "Today, children are the largest single group among the poor which seriously threatens the Nation's future."

Now, Senator Moynihan and I had given some lectures at Harvard in which he stressed the same issue. That so many people are poor, the bishops continued, in a nation as rich as ours is a social and moral scandal we cannot ignore.

And in my judgment, I think we also cannot wait until trickle down gets to them or rely entirely on immediate help. But there must be an approach in which special programs involved in getting at those people, at those mothers, at those infants which do not depend only on temporary support, but provide some sort of mechanism in which they can become a more dignified group of society.

Senator SARBANES. In the last few years—and I particularly mention this question because of Senator Bumpers' letter to this subcommittee, which I read earlier and included in the record—we in the Congress have faced the issue of trying to restore money in the budget for immunizations because the budget, as submitted to us by the administration, has sought to cut sharply or eliminate those funds.

I guess the question is, first of all, if that were to happen, what impact do you think it would have, both in the short run and the long run? And second, assuming, as I assume is the case, that dis-

ease will rise over time, could we try to reverse such a trend simply by going back to the old level of immunization or would we have to launch a crash program in order to deal with the problem?

Dr. SABIN. Again, somehow on top of my head is the issue that the cost of immunization in this country can be cut tremendously. There's a tremendous overpayment for vaccines.

And the second part is that immunization in this country, as evident by statistics that have been published in Health USA, 1985, shows that already, immunization among children 1 to 4 years of age, 1 to 4 years of age, as determined by a house-to-house survey by the National Center for Health Statistics, in 1984, was only 40 percent among nonwhite children, only 40 percent, and 58 percent among white.

Now it was higher than that in 1970. Fortunately, the oral vaccine has the property of immunizing children and persons who do not receive the vaccine and it has cut the chain of transmission, the virus, the virulent virus, to such an extent that even with such a low rate, this country has eliminated polio.

On the other hand, with measles, it has not changed. It is wrong to say that it has changed. For example, among black and other nonwhites, from 1970 to 1984, the immunization rate against measles of 1- to 4-year-old children has gone up from 42 to 52 percent.

It's not enough. We will sooner or later get another outbreak of measles, not involving only high school students and college students and certain isolated groups, but more. Measles is not like polio vaccine.

And when the cost of a dose of measles vaccine is so high, so unnecessarily high, that is not correct. And furthermore, I think there should also be more pinpointing of groups who need it and programs that should involve immunization without going to a doctor's office.

And the Government doesn't pay these high prices when the Centers for Disease Control buys vaccine for clinics, but still high.

I think we could face a return to a higher incidence of measles than we have now. But that is still not the most important problem as far as child health is concerned. I think there are many other problems which go hand in hand with the poor sections of the American population that need to be attacked. By attacked, I mean examine what's being done now and find new ways.

I think just putting in more money will not do it. I'm sorry. I think more than that is required. More money alone will not be the answer.

Senator SARBANES. Do you know those rates of immunization compared with those in other advanced industrialized countries?

Dr. SABIN. They're very low because there are no litigation problems in other industrialized countries in Europe. In Europe, many countries already have commissions to deal with occasional complications or belief that something is wrong. With a child who's been vaccinated, very often mere association is involved. Not cause and effect.

I think it's in the United States that this thing is so absolutely incredible and way, way out of line. Scandalous is the word that has been applied to it.

Senator SARBANES. Would the rates in the other countries be roughly in the 80 or 90 percent range of immunization?

Dr. SABIN. Well, I haven't had time to find out what it is now. I did call up the other day, on Friday, to find out what an American pediatrician pays. But I didn't have time to find out what it is in the other European countries because the European countries have vaccine production centers.

It is not the fault of the vaccine producers. The vaccine producers are being very carefully controlled and regulated by the Public Health Service here, as well as in other countries. They're just taking advantage of juries that say, well, here's a poor child that's been injured and here's the rich corporation. And most of the awards are not warranted.

Senator SARBANES. The final question I want to ask is on the funding of research with respect to child-health problems.

First of all, how important was Federal funding for your own efforts and how important do you see the Federal Government as being in the research role with respect to child health?

Dr. SABIN. When I was doing my work, Federal funding did not exist. I got my funds for research from the National Foundation for Infantile Paralysis. It was only after World War II that Federal funding came into its very important role.

At the present time, as I said in my introductory remarks, the Institute for Child Health and Development, not only through its internal programs within the Institute, but through the grants and contracts that it gives to institutions of higher learning all over the United States, I think that is a center where a very comprehensive search for new knowledge goes on.

I am told, from what I've seen, that their present budget that has been proposed is $68 million too low.

I'm not going to make a judgment whether it is too low or not, but the people who know, who deal with the problem, say that it's $68 million too low. And it's probably too low. But that is where the search for new knowledge is involved.

But to deal with the problems of the poor, I think it is much less a problem of new knowledge than it is a problem of using what we know properly, and in a different way.

Senator SARBANES. And it's your view that with properly targeted programs, we can deal, at least to some extent, with the health programs of the poor ahead of dealing with the entire range of poverty problems which the poor face?

Dr. SABIN. I made a study of this in China, the People's Republic of China in 1980. It is a country that is economically very undeveloped. But the advances in public health have been so high. And I wrote a summary after making a study there at the end of 1980, of the advances in public health before economic development.

And what are these main advances and what are the mechanisms? The advances have been in maternal and child health, chiefly, and in the control and elimination of tuberculosis and other diseases.

But from the point of view of maternal and child health, what was outstanding in my mind was that no mother was hungry. They were well fed, so that they rarely gave birth to children of low weight (prematurely. That's been tremendously cut down. But

they had enough milk in their breasts to feed their babies, practically all of them, for 6 months, and that cut out a tremendous loss from intestinal infections early in life, with almost 70 percent breastfeeding in the first 6 months.

Now it's all right to encourage breastfeeding. Breastfeeding is important. But that's not enough. Not enough.

What the Chinese have done is to make it possible for mothers to breastfeed. So that in the agricultural communities, there are places where they leave their children after they go to work and they get time off every 3 or 4 hours to come—they're close enough, these children's centers—to come and feed their babies. And in factories and industrial centers, the same way.

The women work and they work very hard. But they have opportunities for breastfeeding their children.

These things are very important, to take care of that part of the American population that is underfed, malnourished—I'm thinking first of all of the mothers. I think it's important to concentrate on where it is and see what more can be done than giving them a ticket to go and get some more food.

I don't know what I would do. As I said before, I don't want to make any recommendations without knowing what the state of the art is now, what's being done. But I have a feeling that more can be done.

And I also have an experience of community organization. It's not enough to say get the community involved. It has to be good organization.

It was 23 years ago, 24 years ago now, that in Phoenix, AZ, the method for getting community involvement for the mass immunization for polio was developed by a pediatrician. I didn't do it.

The involvement of the community was so well organized, it became contagious. They did it without any money, except small voluntary contributions. I've always regretted the fact that this great achievement in which about 100 million Americans received vaccine in a short period of time in this country has not been extended to other activities in the community.

People want to do something, but they need organization. And to have organization, you need a plan.

These are generalizations that may not be very immediately helpful, but I think they're guidelines for action.

Senator SARBANES. I think they are, too. You've been very helpful and we appreciate your testimony this morning very much.

Thank you very much.

Dr. SABIN. Thank you very much.

Senator SARBANES. I think now we'll go to our first panel. I'd like to ask Sara Rosenbaum to join the first medical panel. Sara Rosenbaum is the director of the health division of the Children's Defense Fund, which has done some extraordinary work in this field.

In our first panel, we'll have Dr. Frank Oski, the chairman of the Department of Pediatrics at the Johns Hopkins School of Medicine; Dr. David Paige, professor of maternal and child health at the Johns Hopkins School of Public Health; and Dr. Felix Heald, professor of pediatrics and director of the division of adolescent medicine at the University of Maryland School of Medicine.

And then we'll follow that with the second panel of Dr. Tildon, Dr. Davis, and Dr. Kolb.

Ms. Rosenbaum, why don't you lead off?

STATEMENT OF SARA ROSENBAUM, DIRECTOR, HEALTH DIVISION, CHILDREN'S DEFENSE FUND

Ms. ROSENBAUM. Thank you, Senator. We're delighted to have the opportunity to testify before you today. And I feel very fortunate to have followed Dr. Sabin because, of course, at the Children's Defense Fund, our primary reason for existence is to represent the needs of low-income children. And so it certainly, to put it mildly, rang true that it is poverty which most likely underlies very serious health problems that face many of our children.

I'd like to cover in my brief oral statement two or three central points.

One of those is the long-term nature of poverty and uninsuredness in America. I think that one of the aspects of childhood poverty that needs to be understood at this point in the United States is that there are a number of factors feeding into childhood poverty which means that not only do we have a widespread problem, but it's a very deep, intractable problem. And it goes hand in hand with the problem of uninsuredness. And that problem, of course, means that there are many low-income children who simply do not have the family resources, either personal or third-party coverage, to purchase the kinds of health care that Dr. Sabin enumerated.

By 1984, about one in five American children and one out of every two black children and about two out of every five Hispanic children lived in poverty. Poverty most seriously affected children who were youngest; that is to say, among children under the age of 6, about one in four lived in poverty.

Underlying these poverty trends are a number of factors, one of which is unemployment, which now in recent years has attained higher and higher norms. Another was the recession of the early 1980's, which, in fact, lifted out of poverty only about 200,000 of the 3 million children who had fallen into poverty.

Most serious, though, and most long term are the changing job market, which has resulted in many, many more families working at jobs that are lower paying jobs, and the failure of the minimum wage to keep pace with inflation. We've had the minimum wage at the same level for about 6 years at this point, so that families are living at extraordinarily low hourly rates. And, additionally, there has been the problem of taxation of families into poverty, families with family incomes at or near the poverty level who, because of our tax structure, have nonetheless paid sizable portions of their income in taxes.

It's this combination of changing employment structure, the lack of the minimum wage to keep pace with inflation, and tax policies that I think are threatening to hold millions of families in poverty over a long period of time.

Because we provide health insurance through employers in the United States, the same patterns that have produced the poverty have produced a severe uninsuredness problem.

We are familiar with the uninsuredness problems of the unemployed. But what I think is less well understood is that the vast majority of uninsured Americans are in fact workers or their dependents. They're people who work at lower paid jobs, whose employers do not perceive a need to offer fringe benefits as a lure to employment. They can hire from a minimum wage job market without fringe benefits.

A family coverage policy purchased on the open market can run anywhere from $2,800 to $4,000 a year. A person making the minimum wage is grossing, a woman with two children making the minimum wage is grossing a family income of about two-thirds of the Federal poverty level a year at this point.

It's completely unthinkable that she would be able to go out and buy a health insurance policy for herself or her children, or even pay a portion of the premiums. More employers are requiring their employees to pay a portion of their own or their family's insurance premiums. And at that kind of income level, she simply can't.

So what we see today is that about three-quarters of the uninsured are workers or their dependents, with children suffering enormously because very often dependent coverage is not offered or simply unaffordable.

The link between uninsuredness and access to health care is an obvious one. Health care is very expensive. You heard Dr. Sabin testify about the cost of even a series of immunizations at this point. It is nothing if you're a two-child family to have two children with very routine medical and dental problems costing about $1,000 over a year if you add up well-child visits, sick-child visits, dental care, eyeglasses, other services.

It's simply out of the reach of anybody who does not either have significant family resources or a very good insurance plan.

As a result, when we look at the health access of poor and uninsured children, we find that they are roughly half as likely to get medical care and significantly more likely to go for a full year, even among young children, without ever seeing a doctor once, without ever even making an emergency room visit, simply because they do not have the resources to pay and because health care, even in public facilities at this point, is very often not provided free of charge. There is a charge for services.

The second point I'd like to make is that, in the face of these statistics, these are not new statistics—they've been going on now for a number of years. We've been aware of them, tracking them. The administration has been tracking them. We have seen enormous cuts in Federal health programs. And by health programs, I include not only medical care programs, but programs, as Dr. Sabin indicated, that really go to the quality of life that a child needs.

These cuts, moreover, came on top of gross stagnation in these public health programs. Throughout the 1970's, because of very high medical care inflation, many States purposely withheld increases in their AFDC and Medicaid benefit levels because they couldn't afford the cost of medical care for all the people who would be brought into the program.

To give you an example, from Maryland, Maryland's AFDC payments today, if we look at those payments in real dollar terms com-

pared to what they were back in 1970, have suffered a 28-percent decline over the 15 years, between 1970 and 1985.

Now because Medicaid, which is our big public insurance program for poor children, is tied to AFDC, that means that Medicaid eligibility has similarly suffered a decline at the very time that uninsuredness has been increasing and poverty has been increasing.

On top of the stagnation, in 1981, and again in subsequent years, we had many—the Reagan administration proposed, and Congress enacted, a series of reforms that were aimed——

Senator SARBANES. I just would like to say that we've made Dr. Sabin an honorary member of the subcommittee. I figure that that will intimidate the witnesses, if nothing else will. [Laughter.]

Please continue. Your entire statement and those very helpful tables and charts will of course be included in the record.

Ms. ROSENBAUM. In 1981, Congress enacted a series of changes in our public health programs that were specifically designed to remove working poor families from those programs.

So that at the very time that we stopped increasing the minimum wage and employers began to cut back in the amount of health insurance that they would offer, and at the very time that taxation was continuing to take a bigger bite out of poor people's paychecks, contrary to popular belief, in fact, not everybody got a benefit out of the 1981 tax cuts—the poor ended up paying more taxes—we also pulled out the rug on Medicaid. We virtually removed from the program families who worked.

So that now States report that less than half of the 1981 caseload that had earned income at that point has earned income today.

In other words, maybe at best we saw 12 percent of the AFDC caseload having earned income. Today, nationally, the figure may be down to about 6 percent.

You simply cannot work and get either Aid to Families With Dependent Children or Medicaid, no matter how poor you are, because you're penalized for the work.

We have also made other terrible cuts and we have failed to feed the programs that would encourage good health. We have cut the Maternal and Child Health Program by about 25 percent after inflation has been taken into account and we today are funding that program at lower real levels than we funded it in 1980, despite the growth in poverty and uninsuredness.

These are all residual programs that might provide some public health services to the millions of uninsured women and children.

WIC is today the one program we have for, as Dr. Sabin indicated, feeding pregnant women and infants and children. WIC is serving less than half of all the people in the country who are eligible for its benefits. In Maryland, Maryland is feeding well less than half of WIC eligibles.

Programs such as community and migrant health centers do a remarkable job of serving underserved areas, but there are only enough centers to serve about 5 million Americans. We have 20 million more living in underserved areas.

There is, as Dr. Sabin said, no real mystery to what needs to be done. There are very, very specific things that could and should be done immediately and in advance of general overall economic development for poor families.

There is no excuse for Medicaid serving less than half of all poor children. We could expand that program tomorrow to cover all poor children and to make it possible for near-poor families to buy pediatric health coverage on a subsidized basis

We should expand WIC tomorrow to close the gap between the need and the number of women and children served.

As was mentioned, there is simply no excuse for not funding immunizations, again, recognizing that something needs to be done about the spiraling cost of immunizations. Since, obviously, the remedies are controversial, we cannot simply sit back and let the stockpile dwindle to nothing and let children go unimmunized because there isn't enough money to buy vaccines.

We are well on the way, we think to very important tax reforms that would provide substantial relief to working poor families. We also urge a revision in the minimum wage and in direct expenditure programs for families that simply do not have earned income.

Thank you.

[The prepared statement of Ms. Rosenbaum follows:]

PREPARED STATEMENT OF SARA ROSENBAUM

Mr. Chairman and Members of the Subcommittee:

Good morning. The Children's Defense Fund is pleased to have this opportunity to testify today regarding child health programs and standards.

Perhaps the most appropriate way to begin is to tell you about two children. Shawn is a young boy who lives in Missouri. This is Shawn's story as he told it before a committee of the United States House of Representatives last year.

> I was asked to tell you what it's like to live in a single-parent home with no money.
>
> Sometimes it's sad because I feel different from other kids. For instance, when other kids get to go to fun places and I can't because I don't have enough money and they do.
>
> Most of my friends get an allowance but I don't because my mom doesn't have enough money to pay me. They get to get the things that they want and need and I don't.
>
> The other day in school we had this balloon contest, and it only cost one dollar and out of three years I haven't been able to get one.
>
> Me and my brother are a little hard on shoes. This summer the only shoes we had were thongs and when church time came, the only shoes we had to wear were one pair of church shoes. The one that got them first got to wear them. The one that didn't had to wear a pair of my mom's tennis shoes or my sister's.
>
> I have a big brother. He is not my real brother. He is with the Big Sisters Association. Once I tried to tell my big brother about welfare. It was so embarrassing I was about to cry. I don't like Joe just because he takes me a fun place every week. I like Joe because he makes me feel special.
>
> Sometimes I pray that I won't be poor no more and sometimes I sit up at night and cry. But it didn't change anything. Crying just helps the hurt and the pain. It doesn't change anything.

> One day, I asked my mom why the kids always tease me and she said because they don't understand, but I do understand about being on welfare and being poor, and it can hurt.

The second child was named Shamal Jackson. Shamal would have been in the class of 2000, had he lived:

> Shamal Jackson was born in New York City on September 28, 1984, and died on May 20, 1985, according to a national newspaper report. During his short life he never slept in an apartment or house. His family was always homeless. He slept in shelters, welfare hotels, hospitals, the city welfare office, and riding the subways late at night. Shamal was a low birthweight, disabled baby, and he died of a virus complicated by an infection and his generally frail condition. Robert Hayes, of New York's Coalition for the Homeless, said, "Shamal died because he didn't have the strenght to resist the system's abuse."

In 1984, more than one-fifth of America's 62 million children under age 18 lived in poverty.[1] Nearly one out of every two black children, two out of every five hispanic children and one out of every six white children lived in poverty that year (Table I).

Although these statistics are sobering, their causes are not simple. Lying beneath them are disturbing currents that carry grave implications for both poor children and the nation's future.

Widening and Deepening Childhood Poverty

A more detailed examination of childhood poverty statistics indicates that the nation has been experiencing not merely a growth in, but also a widening and deepening of, childhood poverty. Between 1959 and 1979, childhood poverty rates fell 40.5% overall, 44.7% for white children and 37.7% for black children. Between 1979 and 1984, however, childhood poverty increased by 31.3% overall, 41.2% for white children, 13.2% for black children,

and 39.7% for hispanic children. (Table I) The greatest poverty increases occurred in families other than female-headed families, although female-headed families were more likely to be poor.

We can see that this widening, deepening childhood poverty was no mere flash in the pan. While the number of white children living in poverty declined slightly between 1983 and 1984 (Table I), nonetheless, 41.2% more lived in poverty that year than five years earlier. Between 1983 and 1984, the percentage of black children living in poverty remained the same, while the percentage of hispanic children in poverty actually increased. (Table I)

One indication of how deeply ingrained in American society childhood poverty is becoming is that of the more than 3 million children who fell into poverty between 1979 and 1982, the recovery which began in 1983 had, by 1984, lifted only 210,000 children out of poverty.[2] The 1984 childhood poverty rate was still greater than at any time during the 1960s. At the rate of improvement that took place between 1983 and 1984, it will take an additional 30 years for the nation to simply return to the childhood poverty rates it experienced in 1979,[3] when nearly one out of every nine children, over two out of every five black children, and more than one out of every four hispanic children was poor. (Table I)

Another indication of the growing seriousness of childhood poverty is that it is the youngest children -- those who have the most to gain from a good start in life -- who are the poorest.

Poverty most widely affects the nation's youngest, most vulnerable children. By 1984, while one out of five children was poor, nearly one out of every four children under age six was poor (Table II). Our youngest children were more likely to be poor than any other group of children. Indeed they were more likely to be poor than any other age group of Americans.

The Causes of Child Poverty

It is evident that childhood poverty in America is not some passing phenomenon. Instead, we are witnessing a series of major changes in both the formation and maintenance of families in the United States -- changes which translate into profound disadvantage among children. As was so compellingly identified by Senator Daniel Patrick Moynihan in his 1985 Harvard Godkin lectures, poverty among American children today is the result of a failure of a series of American policies toward families.

The major changes affecting American families can be roughly grouped into two types. First, over the past two decades the nation has experienced a significant movement away from formation of two-parent families. Between 1970 and 1983, although the birthrate among young women dropped significantly (Table III), the percentage of out-of-wedlock births to young mothers, especially young white mothers, increased significantly (Table I), as did the divorce rate.[4] Children living in female-headed families in 1984 were over four times more likely to be poor than those living in other families (Table I).

Out-of-wedlock birth patterns have numerous causes, including the increasing social acceptance of single parenthood. But clearly, a major factor in the growth of out-of-wedlock families is rampant unemployment among young poor men, especially young, poor, minority men, that make them unsatisfactory marriage partners. By 1983, one out of every 2 black children born in America was born out-of-wedlock.[5] In December, 1985, when national unemployment rates stood at around 7%, over 40% of young black men ages 16 to 19 were unemployed -- an unemployment rate about 6 times the national average (Table III-A). Entry-level manufacturing and industrial jobs are fast disappearing in America, as the most recent unemployment statistics for states such as Texas and Illinois indicate. Furthermore, unlike prior generations of ghetto-dwellers, minority families have remained trapped in inner cities with poor job opportunities and even poorer school systems.

The longterm erosion of supports and opportunities is not merely precluding or subverting the formation of two-parent families, however. It is also creating deep impoverishment among those families (whether headed by one or two-parents) in which the family head is in the workforce.

The withdrawal of government support for lower-income working families has taken several forms. First, families earning the minimum wage or close to it are far more likely to be poor today than a decade ago. In the past, the minimum wage often has been increased to keep pace with inflation. But for the past five years it has been held at the same level. As a result, in real dollars

(adjusted for inflation) a minimum wage worker in 1986 is taking home less than four-fifths of what he or she earned in 1980. (Table III)

A comparison of the declining value of the minimum wage to the inflation-tied rise in poverty levels shows that this drop in earnings value pushed many American families into poverty. Today, the more than 4 million American hourly workers who earn the minimum wage, and the nearly 2 million with hourly earnings below the minimum wage, are not making nearly enough money to provide a family with the basic necessities of life. (Table IV) Indeed, in 1984 more than 11.4 million Americans with hourly wages were paid at such low rates (Less than $4 an hour) that income from a full-time job would be insufficient to bring a family of three out of poverty. In 1979 the total with such inadequate wages was 2.8 million.[6]

Second, given the context of three years of economic recovery, unemployment is nonetheless at historically high levels. In December 1985, thirty-seven months after the end of the 1981-1982 recession, the official unemployment rate still stood at 6.9 percent. After the same amount of time had elapsed following the last major recession (1973-1975), the official unemployment rate was 6.1 percent. Of the 11.5 million workers who lost jobs because of plant closures or relocations from 1979 to 1984, only 60 percent obtained new employment during that period.[7]

We are now seeing progressively higher unemployment rates become the norm. During each recession, unemployment climbs higher than during earlier recessions. During each period of recovery unemployment drops, but not as far as it did during

earlier recoveries. Unemployment now has topped 6.5 percent for sixty-nine consecutive months, a phenomenon we have not seen since the Great Depression.[8]

Third, U. S. tax policies have continued to place increasing burdens on poor families, even as affluent families have enjoyed considerable tax relief. In 1979, a family of four with earnings at the poverty-line paid less than 2 percent of its income in federal Social Security and income taxes. In 1986 that same family, if still earning (inflation-adjusted) poverty-line wages, will have nearly 11 percent of its income taken by the federal government. Tax rates for single-parent families are even higher.[9]

Despite the huge tax cut passed in 1981, a family of four or more making poverty-line wages has been subjected to tax increases -- not just in dollar amounts but in the portion of its earnings that the government takes -- every year since 1971.[10] Between 1980 and 1982 alone, the total federal tax drain on America's poor families grew by 58 percent.[11]

As a result, more and more families see their impoverishment exacerbated rather than relieved by the federal government. And this tax policy has pushed hundreds of thousands of other families with very low incomes into poverty. Poverty rates, which are calculated on the basis of family income before taxes, leave out the millions of Americans -- 2.1 million members of families with children in 1984 -- who in reality are poor because, after taxes, their spendable incomes fall below the poverty level.[12]

Finally, of course, the deep cuts in direct public assistance programs that have occurred since 1980 have landed with particular force on the working poor. The cutbacks made by the federal government in 1981 reduced spending authority for public assistance programs for poor children, including Medicaid, AFDC, the Title V Maternal and Child Health Block Grant and Community and Migrant Health Centers by about 7.5 billion over 3 years.[13] This amount comprised less than 1% of the debt the nation has accumulated since President Reagan assumed office. But the reductions have had a profound impact on children.

The effect of the 1981 reductions, according to a major study of these reductions conducted by the General Accounting Office, was to reduce the average monthly AFDC caseload by 442,000 and to reduce already de minimus AFDC payments by $100 million per month.[14] The chief targets of the reductions were single-parent-headed AFDC recipient who worked. The 1981 budget reductions removed public assistance supports completely for between 38% and 60% of those AFDC recipients who worked, depending on the area in which they lived, and reduced benefits for 8% to 48% of the working poor.[15]

By 1983 the average monthly AFDC payment per family was $312.88, 65 percent of the level fifteen years earlier after adjusting for inflation.[16] And because of the combination of more restrictive program rules and an increase in the number of poor children, participation rates plummetted. In 1978, seventy-six children were on AFDC for every 100 poor children in the

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country. In 1984, that ratio had dropped to fifty-five per 100 (Tables V and VI).[17]

Other developments suggest reduced access to health care among poor children in recent years. By 1984 there were 35 million uninsured Americans -- a 22% increase since 1979.[18] Although children under age 18 comprise only about 25% of the U.S. population, they constituted nearly 40% of the uninsured that year.[19]

Families requiring Medicaid to meet rising health care costs face increasingly serious barriers. As services were reduced and access to care constricted, the expenditures on behalf of each recipient child dropped sharply, from $470.91 in FY 1979 to $406.08 in FY 1983 in constant (1983) dollars.[20] In Medicaid as in AFDC, many fewer children are now eligible when contrasted to the growing population of poor children. (Tables VII and VIII)

Thus, a wide range of American social policies, including education and employment programs, tax policies, fiscal and monetary policies and policies underlying our direct public support programs, have combined to push millions of families and their children into poverty. Moreover, the depth of that poverty is severe. In 1983, 43.7% of poor families with children under age six actually had family income below 50% of the federal poverty line, compared to 38.4% in 1979. (Table IX) Between 1970 and 1985, the real value of AFDC support plummetted in every state but 3. (Table X) And by 1985, no state provided AFDC and food stamp benefits levels that when combined, lifted recipient families out of poverty. (Table XI)

The Consequences of Childhood Poverty

Childhood poverty as broad and deep as that found in America today comes with it a constellation of health risks. Among those risks are living conditions, including inadequate food, poor housing and sanitation, and general family stress and hardship that threaten children's well-being. Poverty and the social isolation, stress, and environmental hazards that accompany it, is associated with health problems in children.[21]

These environmental and social health risks are further complicated by the fact that poor children are over three times more likely than non-poor children to be completely uninsured 22 and are obviously without the out-of-pocket resources necessary to secure access to basic health care. Uninsuredness in the United States has grown dramatically in recent years, as more workers have increasingly gained employment in minimum wage jobs that include few or no fringe benefits, as employers who do offer insurance have reduced their contributions to workers' premium costs, as unemployment has grown, and as Medicaid coverage has declined in relation to the poverty rate.

Even routine health care for a baby can cost $500 over the course of a year. This amount equals almost 5% of a poor family's annual gross pay -- a percentage of income considered catastrophic under federal tax law. In short, not only are low income children more likely to be in need of medical care, but they are also in less of a position to obtain it.

Health Risks Confronting Poor Children

Studies that have sought to measure the health status of low-income children indicate that, by any number of key measurements, poor children face greater health risks. Many of the health problems affecting poor children will leave a longterm impact on their ability to learn and work and to generally grow into productive adults.

Poor children are at increased risk of both neonatal and postneonatal mortality and of being born prematurely (which is closely associated with low birthweight, and therefore, with neonatal and postneonatal mortality).[23] Moreover, throughout childhood poor children face a higher risk of death from all major causes of death, including neoplasms, respiratory problems, congenital anomalies.[24] The disparity in death rates among low-income children is also marked when deaths resulting from accidents, poisonings and violence are considered.[25] Statistics indicate that at every age, poor children face a higher risk of death, and the disparity between poor and non-poor children is greater for older children than for younger ones.

Illness and Disability

Poor children are more likely to suffer from certain types of acute illnesses, such as rheumatic fever, haemophilus influenza meningitis, gastroenteritis and parasitic disease.[26] Furthermore, the prevalence of acute illness (or of certain types of acute illness) may be underreported among poor children because, given their reduced access to medical care, their illnesses may never be diagnosed.[27]

Poor children spend more days of restricted activity, lose more school days, and experience more days spent in bed as a result of illness.[28] Furthermore, illnesses in poor children appear to he more severe than in other children, as evidenced by their greater likelihood of activity limitations resulting from chronic illness and their greater rate of complications from illness such as bacterial meningitis, diabetes, and asthma.[29]

Specific Health Problems

Specific health problems are disproportionately prevalent among low-income children. Significantly greater proportions of poor children have elevated blood levels.[30] Poor children are also at higher risk of being left permanently psychologically and learning disabled as a result of lead poisoning.[30]

Poor children appear to suffer greater levels of vision problems that are not corrected.[32] Poor children experience greater amounts of otitis media and are more likely to be left with permanent hearing loss, auditory processing deficits, language delays and behavioral problems.[33]

Poor children are at increased risk of contracting cytomegalovirus inclusion disease, a particularly serious congenital problem that can result in significantly lowered IQ and school failure.[34] Moreover, poor children infected by this virus appear to suffer more severe sequelae than infected non-poor children.[35] Poor children are also much more likely to suffer from iron deficiency anemia, which is associated with poor

development in infancy, conduct and behavioral disorders in school-aged children and decreased attentiveness.[36] Poor children are also at higher risk of a range of psychosocial problems, particularly severe psychosocial problems.[37]

Recent Trends in Child Health

The marked increase in childhood poverty, with its attendant impact on poor children's living conditions, health insurance status, and access to health care, has occurred simultaneously with signals of an erosion in child health status. During the 1970s, as out-of-wedlock births to teens increased, there are indications that postneonatal mortality among babies born to teens increased.[38] Moreover, between 1982 and 1983, postneonatal mortality increased by 3% nationwide for all races and by 5% for black infants.[39] This rise in black postneonatal mortality was the first such national rise in 18 years (Table XII). By 1983, the disparity in mortality rates between black and white infants stood at it widest point in over forty years (Title XIII).

These postneonatal mortality trends are particularly serious in our opinion. Neonatal mortality is in many ways a reflection of the limits (either scientific or economic) of medical technology. But 80% of postneonatal mortality occurs among infants born at normal weight[40] and is a far greater reflection of the conditions under which poor children live and their access to adequate health services. America has traditionally had a relatively serious postneonatal mortality problem.[41]

The worsening of the postneonatal mortality problem portends worsening health factors for children of all ages, with the youngest children simply succumbing to abuses that older children are sturdy enough to survive. There is mounting evidence that children who are most in trouble physically, psychologically or socially early in life are at increased risk of having problems later on. Conversely, adolescents with problems are more likely to have been the ones who had problems in early life.[36a] It may be years before we know the price they have paid for their survival.

The Consequences of Childhood Poverty to the Nation

We invest in children for many reasons. We invest in them because it is the humane thing to do. We invest in children, because children are completely dependent upon adults to meet their most basic needs. They need adults to provide food, shelter and clothing. They need our help to prepare them for the world of work, to feel valued and valuable, and to feel that they have a fair chance of succeeding.

We also invest in children because many investments are both effective and cost-effective. Since the 1840s, the effects of social conditions on child health has been recognized,[42] and for 200 years America has made social investments in its children.[43] Immunizations, vision, dental and hearing care, and treatment of acute and chronic illnesses all can mean the difference between a healthy and productive young adult and one

disabled for life by preventable causes. Education, employment, and job opportunities all create strong families. Our national unemployment and fiscal policies are in reality our national family policy.

We invest in children because we need our children, and we need them to grow up healthy and resilient. In 19[illegible] there were 17 workers for each retiree. By 1992 there will be three. One of three will be a member of a minority group; one of four will have spent at least part of its childhood in poverty.[44]

We cannot afford not to invest in children. There are those who urge that social spending through programs such as Medicaid and AFDC only causes poverty. Yet this assertion is belied by the fact that throughout the 1970s and 1980s, as social spending fell in relation to both need and as a proportion of national outlays (Table XIV), childhood poverty grew to unprecedented levels. Indeed, our greatest gains in reducing childhood poverty and improving child health occurred simultaneously with the real growth in national childhood expenditures that occurred in the late 1960s and early 1970s.

Through negligence, carelessness, and even through deliberate punitiveness, we have pursued a series of national policies over the past decade that, if permitted to continue uninterrupted, threaten to permanently cripple a significant proportion of the next generation. Those who will work with teens 15 years from now will confront the enormous folly that will inevitably flow from years of childhood poverty, neglect and ill health.

We must ensure that all children have decent family income, health care, adequate food and housing and a good education. All public expenditure programs -- whether direct supports or tax expenditures -- must be designed to promote family cohesion, strength and self sufficiency. Furthermore, health professionals must grasp the breadth of the problem. Remedying the ill health of children in all its manifestations means a great deal more than advocating for more sophisticated medical care or attention to specific health problems. It entails advocating before recalcitrant members of Congress, governors, legislators and local governments for AFDC improvements, for education and job training, public housing, tax reform, and for other measures that fall outside the realm of medical care but well within the sphere of child health.

Thank you.

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2. Ibid.

3. Children's Defense Fund, A Children's Defense Budget (Washington, D.C., 1986).

4. Congressional Research Service, Children in Poverty (Washington, D.C., 1985).

5. National Center for Health Statistics, Advance Report of Final Natality Statistics, 1983.

6. A Children's Defense Budget, op. cit.

7. Ibid.

8. Ibid.

9. Ibid.

10. Ibid.

11. Ibid.

12. Ibid.

13. Rosenbaum, Sara, "Upon the False Altar of Economy" (Speech to the Northwest Pediatric Society, October, 1985).

14. General Accounting Office, Final Evaluation of the 1981 AFDC Changes (Washington, D.C., 1985).

15. Ibid.

16. A Children's Defense Budget, op. cit.

17. Between 1983 and 1984, the ratio of AFDC child recipients to children in poverty rose slightly. This is probably a result of 2 factors. First, between 1983 and 1984, the number of poor children dropped slightly, thereby reducing the denominator. Second, a number of states have slightly increased their AFDC payment levels in recent years, thereby increasing the program's penetration rate somewhat.

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29. Ibid.

30. Ibid.

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32. Ibid.

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37. Child Health and Social Status, op. cit.

38. Starfield, Barbara, "Postneonatal Mortality", 6 Annual Review of Public Health 21 (1985).

39. National Center for Health Statistics, Advance Report of Mortality Statistics, 1983.

40. "Postneonatal Mortality", op. cit.

41. Ibid.

42. "Social Factors", op. cit.

43. A Children's Defense Budget, op. cit.

44. Ibid.

Poverty

TABLE I

Percentage of Children in Poverty,
by Family Structure and Race,
1959-1984

Family Type	Hispanic	Black	White	Total
Female-headed Families				
1959	n/a	81.6	64.6	72.2
1969	n/a	68.2	45.2	54.4
1979	62.2	63.1	38.6	48.6
1980	65.0	64.8	41.6	50.8
1981	67.3	67.7	42.8	52.3
1982	71.8	70.7	46.5	56.0
1983	70.6	68.3	47.2	55.5
1984	71.0	66.2	45.9	54.0
% change 1959-1979	---	-22.7	-40.2	-32.7
% change 1979-1984	+14.1	+4.9	+18.9	+11.1
All Other Families				
1950	n/a	60.6	17.4	22.4
1969	n/a	25.0	6.7	8.6
1979	19.2	18.7	7.3	8.5
1980	22.9	20.3	9.0	10.4
1981	24.5	23.4	10.0	11.6
1982	27.8	24.1	11.6	13.0
1983	27.2	23.7	12.0	13.5
1984	27.5	24.3	11.0	12.5
% change 1959-1979	---	-69.1	-58.0	62.1
% change 1979-1984	+43.2	+29.9	+50.7	+47.1
All Families Combined -				
1959	n/a	65.5	20.6	26.9
1969	n/a	39.6	9.7	13.8
1979	27.7	40.8	11.4	16.0
1980	33.0	42.1	13.4	17.9
1981	35.4	44.9	14.7	19.5
1982	38.9	47.3	16.5	21.3
1983	37.7	46.2	17.0	21.8
1984	38.7	46.2	16.1	21.0
% change, 1959-1979	---	-37.7	-44.7	-40.5
% change, 1979-1984	+39.7	+13.2	+41.2	+31.3

Source: National Center for Health Statistics.

Data presented by CDF in A Children's Defense Budget (Washington, DC, 1986).

TABLE II

Poverty Rates by Age Group, 1969-1984

Year	All	18 and up	6-17	0-5	0-17
1969	12.2%	11.2%	13.5%	15.3%	14.1%
1970	12.6	11.3	14.3	16.6	15.0
1971	12.5	11.2	14.3	16.9	15.1
1972	11.9	10.4	14.4	16.1	14.9
1973	11.1	9.6	13.6	15.7	14.2
1974	11.6	9.8	14.9	16.9	15.5
1975	12.3	10.3	16.2	18.4	16.8
1976	11.8	10.0	15.1	17.7	15.8
1977	11.6	9.7	15.1	18.1	16.0
1978	11.4	9.6	15.0	17.2	15.7
1979	11.6	9.9	15.1	17.9	16.0
1980	13.0	11.1	16.8	20.3	17.9
1981	14.0	11.9	18.4	22.0	19.5
1982	15.0	12.7	20.3	23.3	21.3
1983	15.2	12.9	20.2	24.6	21.7
1984	14.4	12.1	19.7	23.4	21.0

Data presented by CDF in A Children's Defense Budget (Washington, DC, 1986).

TABLE III

Birth Rates by Age of Mother
and Race/Ethnicity of Child, 1970-1983

	Under 15	Total 15-19	15-17	18-19	20-24
ALL RACES					
1970	1.2	68.3	38.8	114.7	167.8
1980	1.1	53.0	32.5	82.1	115.1
1983	1.1	51.7	32.0	78.1	108.3
WHITE					
1970	.5	57.4	29.2	101.5	163.4
1980	.6	44.7	25.2	72.1	109.5
1983	.6	43.6	24.8	68.3	102.6
BLACK					
1970	5.2	147.7	101.4	204.9	202.7
1980	4.3	100.0	73.6	138.8	146.3
1983	4.1	95.5	70.1	130.4	137.7
HISPANIC 1980	1.7	82.2	52.2	126.9	156.4
Mexican	1.9	95.6	--	--	176.8
Puerto Rican	2.3	83.0	--	--	133.3
Cuban	.3	25.3	--	--	80.2
Other Hispanic*	.9	52.3	--	--	123.7

*Includes Central and South American, plus others.
Source: National Center for Health Statistics.

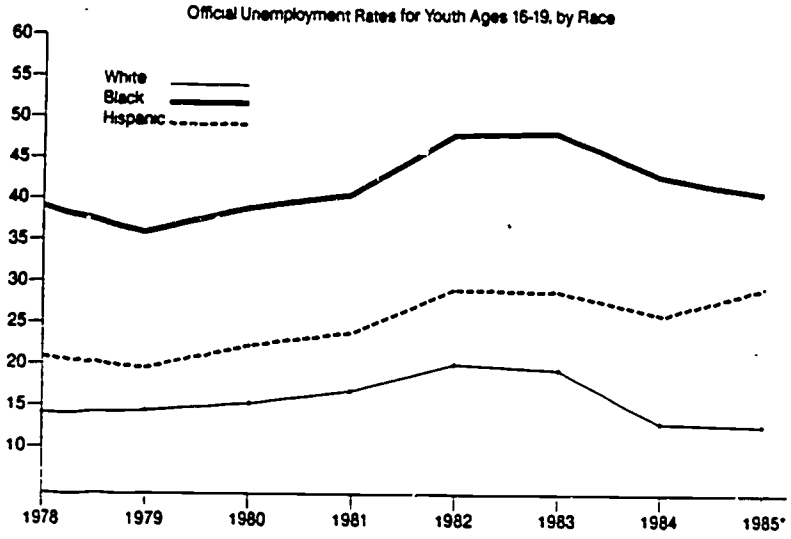
Birth Rates to Unmarried Women by Age of Mother
and Race/Ethnicity of Child, 1970-1983

	Total 15-19	15-17	18-19	20-24
ALL RACES				
1970	22.4	17.1	32.9	38.4
1980	27.6	20.6	39.0	40.9
1983	29.7	22.1	41.0	42.0
WHITE				
1970	10.9	7.5	17.6	22.5
1980	16.2	11.8	23.6	24.4
1983	18.5	13.5	26.1	26.4
BLACK				
1970	96.9	77.9	136.4	131.5
1980	89.2	69.6	120.2	115.1
1983	86.4	67.1	114.0	110.0
HISPANIC 1980	39.7	28.3	60.5	76.5
Mexican	41.8	29.9	63.9	79.5
Puerto Rican	62.4	43.9	9..8	114.1
Cuban	6.6	4.3	10.6	14.0
Other Hispanic	27.0	18.6	41.1	58.6

Source: National Center for Health Statistics.

Data presented by CDF in A Children's Defense Budget (Washington, DC, 1986).

TABLE III-A



*White and black rates based on monthly data for December 1985, seasonally adjusted. Hispanic rate is for November 1985, not seasonally adjusted.

Data presented by CDF in A Children's Defense Budget (Washington, DC, 1986).

TABLE IV

Full-Time Minimum Wage Workers' Earnings as a Percentage of the Federal Poverty Level (1964-1986)

Year	Hourly Minimum Wage	Annual Earnings For 2,000 Hours' Work (50 Weeks of 40 Hours)	Poverty Level (3 Persons)	Full-Time Minimum Wage Earnings As Percent of Poverty Level for 3
1964	$1.25	$2,500	$2,413	103.6%
1969	1.60	3,200	2,924	109.4
1974	2.00	4,000	3,936	101.6
1979	2.90	5,800	5,784	100.3
1980	3.10	6,200	6,565	94.4
1981	3.35	6,700	7,250	92.4
1982	3.35	6,700	7,693	87.1
1983	3.35	6,700	7,938	84.4
1984	3.35	6,700	8,277	80.9
1985	3.35	6,700	8,589 (est.)	78.0
1986	3.35	6,700	8,934 (est.)	75.0

Source: Bureau of Labor Statistics, United States Census Bureau (Computations by the Children's Defense Fund)

Data presented by CDF in A Children's Defense Budget (Washington, DC, 1986)

AFDC

TABLE V

AFDC RECIPIENT CHILDREN PER 100 CHILDREN IN POVERTY, 1972-1984

Year	Number of children on AFDC[a]	Number of children in poverty[b]	Rate per 100 poor children[c]
1972	7,905,000	10,082,000	78.4
1973	7,902,000	9,453,000	83.6
1974	7,822,000	9,967,000	78.5
1975	8,095,000	10,882,000	74.4
1976	8,001,000	10,081,000	79.4
1977	7,773,000	10,028,000	77.5
1978	7,402,000	9,722,000	76.1
1979	7,179,000	9,993,000	71.8
1980	7,419,000	11,114,000	66.8
1981	7,527,000	12,068,000	62.4
1982	6,903,000	13,139,000	52.5
1983	7,098,000	13,449,000	52.8
1984	7,144,000	12,929,000	55.3

[a]The number of dependent children in active payment status on AFDC averaged over the 12 months in the calendar year.

[b]The number of related dependant children living in families with incomes below the poverty level for the calendar year labeled.

[c]The first column divided by the second column multiplied by 100. It is not meant to imply that all or only children in poverty level families are eligible for AFDC benefits. Because the poverty level is based on the living arrangements of children in March of the year after the one for which family income is calculated, many children will appear above and below poverty, when that was not in fact true for the families with which the child lived in the previous calendar year. Many children living in families below poverty are not eligible for AFDC because of state limitations on earnings and assets.

Data presented by CDF in A Children's Defense Budget (Washington, DC, 1986).

TABLE VI

Number of Children Receiving AFDC, per 100 Children in Poverty, 1972-1984 (fiscal years)

Data presented by CDF in A Children's Defense Budget (Washington, DC, 1986).

Medicaid Recipients Under Age 21
per 100 Children in Poverty
1974-1984 (Fiscal Years)

Year	Number of Children on Medicaid[a]	Number of Children in Poverty[b]	Recipients per 100 Poor Children[c]
1974	9,478,000	9,967,000	95.1
1975	9,602,000	10,882,000	88.2
1976	9,939,000	10,081,000	98.6
1977	9,715,000	10,028,000	96.9
1978	9,500,000	9,722,000	97.7
1979	9,022,000	9,993,000	90.3
1980	9,285,000	11,114,000	83.5
1981	9,587,000	12,068,000	79.4
1982	9,656,000	13,139,000	73.5
1983	9,418,000	13,449,000	70.0
1984	9,680,696	12,929,000	74.9

[a]This represents the number of dependent children under age 21 for whom one or more Medicaid payments were made at some point during the fiscal year. From 1974 through 1976 the counts are for a fiscal year beginning in July and ending in the following June of the year labeled. From 1977 to the present, the year begins in October and ends in the following September of the year labeled.

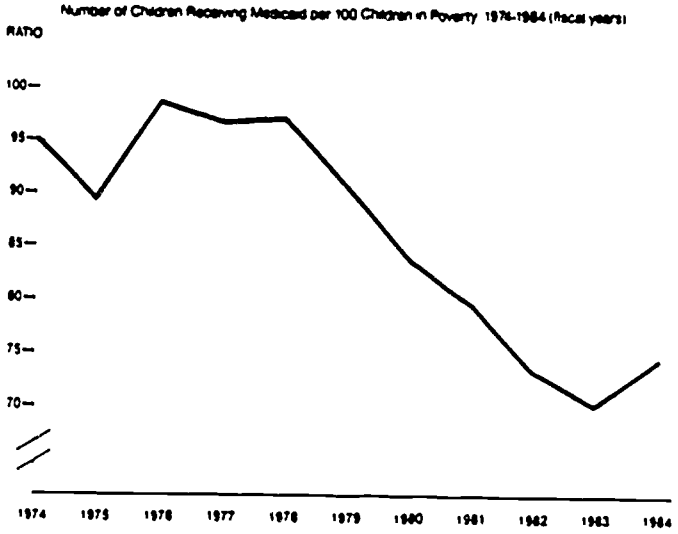
[b]This represents the number of dependent children under the age of 18 living in families with a calendar year income below the poverty level.

[c]This is the first column divided by the second column, times 100.

This chart does not depict the percent of poor children who receive Medicaid. Only about 50% of poor children are Medicaid recipients. Instead this chart indicates the eroding relationship between childhood poverty and Medicaid eligibility among children.

Data presented by CDF in A Children's Defense Budget (Washington, DC, 1986).

TABLE VIII



Data presented by CDF in A Children's Defense Budget (Washington, DC, 1986).

TABLE IX

Poverty

Number of Children Living Below Half of Poverty by Type of Family, and Age and Race of Child (income for calendar year 1983, counted March 1984)

Year, Family Type, and Age of Children	Black Children	Percent of Poor Black Children	White Children	Percent of Poor White Children	Total Children	Percent of All Poor Children
1983						
Female-headed Families						
Under 18	1,794,000	56.3	1,592,000	47.4	3,451,000	51..
Under 6	760,000	62.2	627,000	51.7	1,416,000	56.7
Other Families						
Under 18	362,000	33.7	1,665,000	32.6	2,176,000	32.7
Under 6	120,000	32.3	672,000	31.7	842,000	31.5
All Families						
Under 18	2,155,000	50.6	3,257,000	38.5	5,618,000	-2.2
Under 6	880,000	55.2	1,299,000	39.0	2,258,000	-3.-
1979						
Female-headed Families						
Under 18	1,173,000	41.1	898,000	35.1	2,111,000	38.3
Under 6	491,000	51.0	344,000	40.5	849,000	46.0
Other Families						
Under 18	248,000	29.4	954,000	29.8	1,287,000	30.5
Under 6	70,000	26.2	334,000	28.5	436,000	29.0
All Families						
Under 18	1,421,000	38.5	1,852,000	32.2	3,398,000	3-.9
Under 6	561,000	45.6	678,000	33.6	1,285,000	38.-

Data presented by CDF in A Children's Defense Budget (Washington, DC, 1986).

TABLE X

AFDC

AFDC MAXIMUM BENEFIT FOR A FOUR-PERSON FAMILY BY STATE
SELECTED YEARS (a)

State	Maximum benefit (b) July 1970	July 1980	January 1985	Percent Change 1970-85	Percent change 1970-85 in constant 1985 dollars (c)
ALABAMA	$ 81	$148	$147	81.5	-32.2
ALASKA	375	514	800	113.3	-20.4
ARIZONA	167	244	282	68.9	-37.0
ARKANSAS	100	188	191	91.0	-28.7
CALIFORNIA	221	563	660	198.6	+11.5
COLORADO	235	351	420	78.7	-33.3
CONNECTICUT	330	553	636	92.7	-28.1
DELAWARE	187	312	336	79.7	-32.9
DISTRICT OF COLUMBIA	238	349	399	67.6	-37.4
FLORIDA	134	230	284	111.9	-20.9
GEORGIA	133	193	245	84.2	-31.2
HAWAII	263	546	546	107.6	-22.5
IDAHO	242	367	344	42.1	-46.9
ILLINOIS	282	350	368	30.5	-51.3
INDIANA	150	315	316	110.7	-21.4
IOWA	243	419	419	72.4	-35.6
KANSAS	244	390	422	73.0	-35.4
KENTUCKY	107	235	246	31.6	-50.9
LOUISIANA	109	213	234	114.7	-19.9
MAINE	168	352	465	176.8	+ 3.3
MARYLAND	196	326	376	91.8	-28.4
MASSACHUSETTS	314	419	463	47.5	-45.0
MICHIGAN:					
Washtenaw County	531		542.....		
Wayne County	263	5010	512	94.7	-27.3
MINNESOTA	299	486	611	104.3	-23.7
MISSISSIPPI	70	120	120	71.4	-36.0
MISSOURI	130	290	308	136.9	-11.6
MONTANA	228	331	425	86.4	-30.4
NEBRASKA	200	370	420	110.0	-21.6
NEVADA	143	314	279	95.1	-27.2
NEW HAMPSHIRE	294	392	429	45.9	-45.5
NEW JERSEY	347	414	443	27.7	-52.3
NEW MEXICO	182	267	313	72.0	-35.8
NEW YORK:					
Suffolk County	563		676.....		
New York City	336	476	566	68.5	-37.1
NORTH CAROLINA	156	210	244	54.4	-42.3
NORTH DAKOTA	2o1	408	454	73.9	-35.1

Data presented by CDF in / Children's Defense Budget (Washington, DC, 1986).

AFDC

TABLE X (Cont'd.)

State	Maximum benefit (b) July 1970	July 1980	January 1985	Percent Change 1970-85	Percent Change 1970-85 in constant 1985 dollars (c
OHIO	$200	$327	$360	80.0	-32.8
OKLAHOMA	185	349	349	88.6	-29.6
OREGON	225	441	468	108.0	-22.3
PENNSYLVANIA	313	395	444	41.9	-47.0
RHODE ISLAND	263	389	547	108.0	-22.4
SOUTH CAROLINA	103	158	229	122.3	-17.0
SOUTH DAKOTA	300	361	371	23.7	-53.8
TENNESSEE	129	148	168	30.2	-51.4
TEXAS	179	140	201	12.3	-58.1
UTAH	212	429	425	100.5	-25.2
VERMONT	304	552	622	104.6	-23.6
VIRGINIA	261	305	379	45.2	-45.8
WASHINGTON	303	536	561	85.1	-30.9
WEST VIRGINIA	138	249	249	80.4	-32.6
WISCONSIN	217	529	636	193.1	+ 9.4
WYOMING	227	340	310	36.6	-49.0

(a) Source: Excerpted from Committee on Ways and Means, U.S. House of Representatives, Children in Poverty, May 22, 1985, Table 6-12, pp. 204-205.

(b) Maximum benefit is the amount paid for a family of a given size with zero countable income. Family members include one adult caretaker.

(c) The last column was computed using the CPI-U Consumer Price Index which was 316.1 for January 1985.

Data presented by CDF in A Children's Defense Budget (Washington, DC, 1986)

TABLE XI

STATES RANKED BY JANUARY 1985
MONTHLY AFDC AND FOOD STAMP BENEFITS
AS A PERCENTAGE OF THE
MONTHLY 1985 FEDERAL POVERTY LEVEL

Rank[a]	State	% of Monthly Poverty Level[b]	Monthly Combined AFDC and Food Stamp Benefits for a Three Person Family[c]	Maximum AFDC Benefit for a Three Person Family
1	Alaska	91.9	847	719
2	Vermont	85.0	627	558
3	California	84.7	625	555
4	Connecticut	83.8	618	546
5	Rhode Island	82.7	610	479
6	Wisconsin	82.6	609	533
7	Minnesota	81.8	603	524
8	Hawaii	80.9	686	468
9	Washington	78.5	579	476
10	New York	78.2	577	474
11	Michigan	74.6	550	417
12	Oregon	73.5	542	386
13	Massachusetts	69.6	513	396
14	New Jersey	68.6	506	385
15	New Hampshire	67.9	501	378
16	Kansas	67.4	497	373
17	North Dakota	67.3	496	371
18	Maine	67.1	495	370
19	Pennsylvania	66.6	491	364
20	Utah	66.4	490	363
21	Iowa	66.2	488	360
22	Nebraska	65.2	481	350
23	Colorado	64.8	478	346
24	Maryland	63.5	468	313
24	Montana	63.5	468	332
25	South Dakota	63.2	466	329
26	District of Columbia	63.1	465	327
26	Virginia	63.1	465	327
27	Idaho	60.9	449	304
28	Illinois	60.6	447	302
29	Ohio	59.5	439	290
30	Delaware	59.3	437	287
31	Oklahoma	58.7	433	282
32	Wyoming	57.2	422	265
33	Missouri	56.9	420	263
34	New Mexico	56.5	417	258
35	Indiana	56.3	415	256
36	Florida	54.8	404	240
37	Arizona	54.1	399	233
37	Nevada	54.1	399	233
38	North Carolina	53.2	392	223
39	Georgia	51.8	382	208
40	West Virginia	51.5	380	206
41	Kentucky	50.7	374	197
42	Louisiana	50.0	369	190
43	South Carolina	49.8	367	187

Data presented by CDF in A Children's Defense Budget (Wash., DC, 1986).

TABLE XI (cont'd.)

STATES RANKED BY JANUARY 1985
MONTHLY AFDC AND FOOD STAMP BENEFITS
AS A PERCENTAGE OF THE
MONTHLY 1985 FEDERAL POVERTY LEVEL

Rank[a]	State	% of Monthly Poverty Level[b]	Monthly Combined AFDC and Food Stamp Benefits for a Three Person Family[c]	Maximum AFDC Benefit for a Three Person Family
44	Texas	47.9	353	167
45	Arkansas	47.6	351	164
46	Tennessee	45.2	333	138
47	Alabama	43.3	319	118
48	Mississippi	41.1	303	96

[a]States with the same combined AFDC and Food Stamp benefit are given the same rank.

[b]The 1985 monthly federal poverty level for a family of three of $737.50 was used for all states and the District of Columbia (except Alaska and Hawaii). The 1985 monthly federal poverty level for a three person family in Alaska was $921.67 and in Hawaii $848.33.

[c]Food stamp calculations are based on maximum AFDC benefits for a three-person nonworking family as shown and assume the standard deduction of $95. The calculations take into account the fact that food stamps are reduced $.30 for every dollar of AFDC income, and that in the six states where part of the AFDC payment is designated as energy aid this amount is disregarded for food stamp purposes. The six states include Maryland, Michigan, New York, Oregon, Rhode Island, and Washington. Maximum monthly food stamp benefits for a family of three in January 1985 were $208 in all states and the District of Columbia, except Alaska and Hawaii where they were $290 and $319 respectively.

Data presented by CDF in A Children's Defense Budget (Wash., DC, 1986).

TABLE XII

Postneonatal Mortality Rates, by Race, U.S., Selected Years, 1950-1983

Year	All Races	White	Nonwhite		Black-White Ratio
			Total	Black	
1950	8.7	7.4	17.0	16.1	2.18
1955	7.3	5.9	15.6	15.3	2.59
1960	7.3	5.7	16.3	16.5	2.89
1961	6.9	5.5	14.5	14.7	2.67
1962	7.0	5.4	15.3	15.5	2.87
1963	7.0	5.5	15.4	15.8	2.87
1964	6.9	5.4	14.6	14.8	2.74
1965	7.0	5.4	14.9	15.2	2.81
1966	6.5	5.0	14.0	14.3	2.86
1967	5.9	4.7	12.1	12.5	2.66
1968	5.7	4.5	11.5	11.9	2.64
1969	5.3	4.2	10.4	10.8	2.57
1970	4.9	4.0	9.5	9.9	2.48
1971	4.9	4.1	8.9	9.3	2.27
1972	4.9	4.0	8.5	8.9	2.23
1973	4.7	4.0	8.3	8.8	2.20
1974	4.4	3.7	7.7	8.1	2.19
1975	4.5	3.8	7.4	7.9	2.08
1976	4.3	3.6	7.2	7.6	2.11
1977	4.2	3.6	7.0	7.6	2.11
1978	4.3	3.6	7.1	7.6	2.11
1979	4.2	3.5	6.9	7.5	2.14
1980	4.1	3.5	6.6	7.3	2.09
1981	3.9	3.4	6.0	6.6	1.94
1982	3.8	3.3	6.0	6.5	1.97
1983	3.9	3.3	6.0	6.8	2.06

Data presented by CDF in The Health of America's Children (Wash., DC, 1986).

TABLE XIII

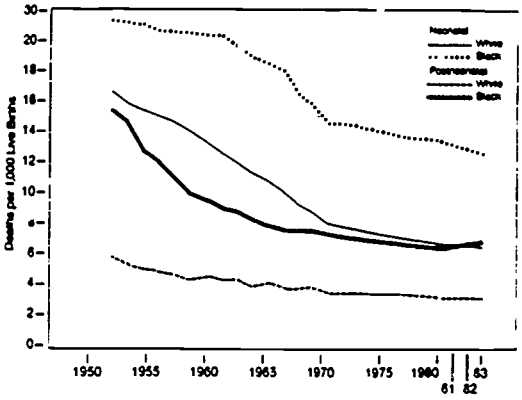
Infant Mortality Rates, by Race, U.S., 1940-1983

Year	All Races	White	Nonwhite Total	Nonwhite Black	Ratio of Black to White
1940	47.0	43.2	73.8	72.9	1.69
1941	45.3	41.2	74.8	74.1	1.80
1942	40.4	37.3	64.6	64.2	1.72
1943	40.4	37.5	62.5	61.5	1.64
1944	39.8	36.9	60.3	59.3	1.61
1945	38.3	35.6	57.0	56.2	1.58
1946	33.8	31.8	49.5	48.8	1.53
1947	32.2	30.1	48.5	47.7	1.58
1948	32.0	29.9	46.5	45.7	1.53
1949	31.3	28.9	47.3	46.8	1.62
1950	29.2	26.8	44.5	43.9	1.64
1951	28.4	25.8	44.8	44.3	1.72
1952	28.4	25.5	47.0	46.9	1.84
1953	27.8	25.0	44.7	44.5	1.78
1954	26.6	23.9	42.9	42.9	1.79
1955	26.4	23.6	42.8	43.1	1.83
1956	26.0	23.2	42.1	42.4	1.83
1957	26.3	23.3	43.7	44.2	1.90
1958	27.1	23.8	45.7	46.3	1.95
1959	26.4	23.2	44.0	44.8	1.93
1960	26.0	22.9	43.2	44.3	1.93
1961	25.3	22.4	40.7	41.8	1.87
1962	25.3	22.3	41.4	42.6	1.91
1963	25.2	22.2	41.5	42.8	1.93
1964	24.8	21.6	41.1	42.3	1.96
1965	24.7	21.5	40.3	41.7	1.94
1966	23.7	20.6	38.8	40.2	1.95
1967	22.4	19.7	35.9	37.5	1.90
1968	21.8	19.2	34.5	36.2	1.89
1969	20.9	18.4	32.9	34.8	1.89
1970	20.0	17.8	30.9	32.6	1.83
1971	19.1	17.1	28.5	30.3	1.77
1972	18.5	16.4	27.7	29.6	1.80
1973	17.7	15.8	26.2	28.1	1.78
1974	16.7	14.8	24.9	26.8	1.81
1975	16.1	14.2	24.2	26.2	1.85
1976	15.2	13.3	23.5	25.5	1.92
1977	14.1	12.3	21.7	23.6	1.92
1978	13.8	12.0	21.1	23.1	1.93
1979	13.1	11.4	19.8	21.8	1.91
1980	12.6	11.0	19.1	21.4	1.95
1981	11.9	10.5	17.8	20.0	1.90
1982	11.5	10.1	17.3	19.6	1.94
1983	11.2	9.7	16.8	19.2	1.98

Source: National Center for Health Statistics.
Data presented by CDF in The Health of America's Children (Wash., DC, 1986).

TABLE XIV

Neonatal and Postneonatal
Mortality, U.S. 1965-1983



Source: National Center for Health Statistics.

Data presented by CDF in The Health of America's Children (Wash., DC, 1986

TABLE XV

REAL OUTLAYS PER CAPITA (1986 DOLLARS) FOR NATIONAL DEFENSE AND FOR PROGRAMS FOR LOW-INCOME FAMILIES AND CHILDREN

Fiscal Year	National Defense	Low-Income Programs
1980	$ 785.03	$507.85
1981	828.70	516.99
1982	910.77	456.63
1983	991.72	466.14
1984	1,029.60	465.66
1985	1,092.68	470.12
1986	1,100.50	464.87
1987	1,112.07	431.07
1988	1,125.67	421.96
1989	1,163.81	411.15
1990	1,200.85	401.10
1991	1,238.69	400.15
Change FY 1980-FY 1991	+$ 453.66 + 57.8%	-$107.70 - 21.2%

Figures in 1986 dollars.

National Defense outlays are totals for function 050. Programs for low-income families and children include all outlays for: education, training, and social service (function 500); health care services (subfunction 551) less Medicare; housing assistance (subfunction 609); food and nutrition assistance (subfunction 605); and other income security (subfunction 609). This grouping includes all programs discussed in this book, plus many small categorical programs (e.g., library grants) and a few larger adult employment programs (e.g., employment services) not covered. The annual average level of the Consumer Price Index (CPI-W) for 1984 through 1991 is as shown in the FY 1987 Budget. U.S. total population estimates are from the U.S. Bureau of the Census.

$14.1 billion in FY 1985 and $1.8 billion in FY 1986 of low income housing loans are removed from function 604. These loans are treated as direct outlays in the FY 1986 budget documents for technical reasons related to the tax changes passed the preceding year. They do not include any new funds for housing nor any new guaranteed loans, and so have been removed from the table above.

Data presented by CDF in A Children's Defense Budget (Wash., DC, 1986)

Senator SARBANES. Thank you very much. Dr. Oski, please proceed. We'll include your prepared statement in the record, if you want to summarize it.

STATEMENT OF FRANK A. OSKI, M.D., CHAIRMAN, DEPARTMENT OF PEDIATRICS, THE JOHNS HOPKINS SCHOOL OF MEDICINE

Dr. OSKI. Thank you for providing me with the opportunity to share with you my concerns, the concerns of pediatricians in general, on the impact of Federal budget cuts during the past 5 years on the health of the Nation's children.

Dr. Sabin has admirably summarized the status of child health in the United States and I will confine my remarks primarily to the area of immunizations and nutrition.

Immunization status is a measurable indicator of nonsusceptibility to specific infectious diseases. The immunization status of a population is a reflection of a community's commitment to preventive public health efforts. A fall in immunization rates may reflect a change in policy or program priorities, or it may indicate a decreased capability of public health agencies to meet their objectives.

Schedules have been developed by the Committee on Infectious Disease of the American Academy of Pediatrics which serve to define optimum immunization status for children against the now preventable infectious diseases—diphtheria, tetanus, pertussis (whooping cough), measles, mumps, rubella (German measles), and polio.

As you mentioned before, between 1977 and 1979, the Federal Government initiated and the States and local governments participated in childhood immunization programs aimed at achieving a 90 percent immunization rate for our nation's children. By the fall of 1979, this goal was achieved for all school-aged children. The highest rates were observed among the 5- to 6-year-old population and the lowest immunization rates were seen among the children 1 to 4 years of age.

Even at the time of our greatest success, the proportion of preschool children who were adequately immunized against childhood disease varied considerably as a function of race and income. The percentage of white preschoolers immunized was 10 to 21 percent higher than for nonwhites.

The immunization status of our children has deteriorated since that time, the high mark years of 1978 and 1979. Data adapted from the Centers for Disease Control demonstrate that 15,635,000 doses of diphtheria-pertussis-tetanus vaccine were distributed in 1984 as contrasted with well over 21 million in 1980. That's a decline of 28 percent. For oral polio vaccine, the number of administered doses has declined by approximately 13 percent, while measles vaccine has declined by about 28 percent over time.

Just as a rising tide does not lift all boats equally, the same can be said for the falling tide, with more of the poor and the black failing to achieve optimum immunization status.

Of children living in inner cities, at least 45 percent are not fully immunized against measles, 37 percent are not fully immunized

against mumps, 45 percent not fully immunized against polio, and 40 percent not fully immunized against diphtheria.

In the State of Maryland, this is an example of what has happened. In the State of Maryland, in 1978, 82 percent of children at 2 years of age were appropriately immunized, while in 1984, the figure has fallen to 68.5 percent, a drop of over 20 percent in that space of time.

We are as a country on the verge of potential epidemics, epidemics of diseases that we have the means to prevent, diseases we once had prevented. An epidemic of pertussis did, in fact, occur in Oklahoma in 1983 and represented the largest number of reported cases in that State since 1956.

More and more instances of pertussis and whooping cough are being observed across the country. Even more will be observed as the cost of the DPT vaccine rises and becomes less accessible to our Nation's poor.

Provisional data for 1984 indicate an increase of 69 percent over 1983 in reported cases of measles, for example.

This is occurring despite the evidence which clearly demonstrated that for every dollar spent on the Childhood Immunization Program, the Government saved $10 in medical costs. In 1983, for the combined measles-mumps-rubella vaccination program alone, $14.4 were saved for every dollar spent on immunization. An estimate of the average lifetime cost of each case of congenital rubella—that's German measles—is $200,000. For 1 million 2-years-olds, rubella vaccination would save $9.8 million in net medical costs and an additional $7.4 million in productivity.

According to a study by the Centers for Disease Control, $180 million spent over several years on a measles vaccination program has saved $1.3 billion in medical and long-term care by reducing hearing impairment, retardation, and other health-related problems, an amazing, amazing investment.

Is there any better way to spend the Nation's income? Is there any better investment in the Nation's future?

I am personally unaware of the extent of the reduction in Federal spending on nutrition programs, but there is evidence that demonstrates that Federal programs such as the special Supplemental Food Program for Women, Infants, and Children, known as WIC, have proven to be effective.

For example, a study for Missouri revealed that WIC participation by pregnant women was found to be associated with the reduction of Medicaid, newborn costs of about $100 per participant. For every $1 spent on WIC, about 83 cents in Medicaid costs within 30 days of birth were apparently saved, according to the results of that study.

Reductions in the incidence of low-birthweight infants and neonatal intensive care unit admission rates among the WIC infants were two possible reasons for the savings observed.

In a similar study, from Massachusetts, it was found that for every $1 spent on WIC prenatal costs, more than $3 was saved in medical costs after birth.

The WIC Program has also been demonstrated to be effective in virtually eliminating iron-deficiency anemia among infants and children. Iron deficiency is the most common single nutrient defi-

ciency in the world. Studies in the United States have shown that the prevalence of overt iron deficiency anemia is 5 to 15 percent in American infants and children between 9 and 36 months of age. Iron deficiency without anemia affects at least an additional 5 to 15 percent.

So perhaps as many as one-third of our Nation's poor are iron deficient.

Iron deficiency has found to result in alterations in infant behavior, as manifested by unhappiness and decreased attention span. Iron deficiency in the older child and adolescent has been associated with poor school performance and impaired learning.

The WIC Program provided iron-fortified milk formulas and cereals during the first year of life. The use of such diets is known to reduce the incidence of iron deficiency anemia.

For example, a study for New Haven, CT, has clearly demonstrated the impact of the WIC Program on iron deficiency. In 1971, before implementation of the WIC Program in New Haven, the prevalence of moderate or severe iron deficiency anemia among infants 9 to 36 months of age was 23 percent. In 1984, the degree of anemia present was down to only 1 percent.

This study demonstrates near disappearance of nutritional anemia in an inner-city population of poor infants and children in the span of 13 years. This cannot be explained by an improvement in the economic status of the community. In fact, according to U.S. census figures, between 1970 and 1980, the proportion of residents of the Hill area of New Haven, the site of this survey, whose annual income was less than the federally established poverty level increased from 24.5 to 33.7 percent. The authors of the study conclude with the following:

> In an era of increasing curtailment of social programs for the poor and skepticism about their effectiveness, efforts should be made to ensure the continuation of nutrition programs, such as the WIC program, for eligible American infants The provision of iron-fortified foods to high-risk infant populations for at least 12 months should be given a high national priority.

To put this problem of WIC in a local perspective, as of May 1986, there were 49,897 infants and children in the city of Baltimore that were eligible for WIC. Of this number, only 13,000, or 26 percent, were enrolled. This poor enrollment was a consequence of the construction, by the Federal Government, of bureaucratic barriers that discourage participation.

Now that one in every four of our Nation's children lives below the poverty level, we must redouble our efforts to protect and preserve their health. Immunization programs and nutrition programs, programs with proven effectiveness, programs with a sound investment in our tax dollar, must not be curtailed. Children, as a result of cutbacks in Federal programs, have already become our country's first victims of the nuclear war.

Thank you.

Senator SARBANES. Thank you very much, Dr. Oski. Dr. Paige, please proceed.

We'll take all the statements and then we'll have questions for the panel as a group.

STATEMENT OF DAVID M. PAIGE, M.D., PROFESSOR OF MATERNAL AND CHILD HEALTH, THE JOHNS HOPKINS SCHOOL OF HYGIENE AND PUBLIC HEALTH

Dr. PAIGE. Thank you very much, Senator Sarbanes, for the opportunity of addressing you this morning. I will try to summarize the various sections in the interest of time. I will address myself to a select number of maternal and child health issues.

As chairman of the Governor's Task Force on Food and Nutrition in Maryland, from 1983 through its conclusion in December 1985, I will also try to bring a State, as well as a National, focus to my testimony.

As we've heard indicated, one out of every five children in the United States now lives in a poverty-stricken family and for black children, the figure is one out of two. The study conducted by the House Select Committee on Children, Youth, and Families further revealed that the number of poor children increased by 2 million between 1980 through 1982, and corroborating studies by the Congressional Budget Office, as well as the U.S. Conference of Mayors, indicate that the picture is indeed bleak for the 50 percent of black children and 20 percent of all children in the United States who are currently living in poverty.

We already know that cuts in the AFDC Program since 1981 have resulted in a half million people, most of them living in single-parent families, being dropped from the rolls. Studies conducted in a sample of five cities show that one-half of the families cut from the AFDC rolls since 1981 have run out of food after losing their benefits.

Next, I will address the Maryland patterns with respect to these issues.

According to the 1980 census information, persons living below poverty in July 1980 numbered over 404,000, or approximately 10 percent of the Maryland population. The poverty rate tends to run highest, as you undoubtedly know, in Baltimore City, 23 percent. But also, the western counties, Garrett County, as well as the Eastern Shore, Somerset, at levels of 16 and 17 percent.

Based on the Census Bureau reports of August 1983, the number of Americans living in poverty has increased by 5.1 million since 1980, and the Maryland State Planning Department estimates that there are 65,000 to 75,000 new poor right here in Maryland, an increase of approximately 17 percent over the 3 years.

In Maryland, approximately 1 in 10 children have been receiving AFDC since 1985 and presently, 70 percent of all AFDC recipients are children living in poverty.

The Federal programs which have attempted to address this have not been successful, according to the September 1983 Census Bureau report of households below the poverty line; 50.3 received no Federal assistance at all, 50.3 percent; 28 percent received no food stamps; 46 percent received neither free nor reduced price lunches; 48 percent lived in private, unsubsidized housing. And further, a 1983 study released by the Congressional Budget Office showed the following effects of the spending cuts which were realized. Low-income households have lost from 3 to 6 times more in benefits than other households. While human resources spending

in 1985 will account for 46.3 percent of Federal expenditures, only 10 percent of those total Federal expenditures will go to low-income programs; 10 percent of Federal spending to benefit the poor will absorb 36 percent of total Federal aid cuts.

I'd like to turn my attention to the health indicators of risk and to more precisely identify specific health problems among the poor. A series of indicators may be employed to define the problem.

As is heartening to indicate, both you, Senator, as well as Dr. Sabin, Dr. Oski, and Ms. Rosenbaum, have all indicated the same phenomenon, even though each of us sitting in our own offices have developed the testimony independently, we come back to the same set of circumstances and problems which exist in our country and in our State.

Low birthweight, as an exemple, may be considered a useful indicator of the health of the population and by extension, a limited index to the nutritional status of a population. A proportion of low birthweight deliveries may result from conditions associated with poverty, poor weight gain on the part of the mother, inadequate food intake, absent prenatal care operating independently or synergistically to result in a low birthweight infant.

It's important, parenthetically, to remind ourselves that there are other causes of low birthweight infants, but very important causes are the ones that we're addressing this morning.

While the percentage of low birthweight infants born to white women in the United States is 6 percent and mirrored by percentages in 1982, as well as 1983, of 6 percent in Baltimore County and 5.5 percent in Montgomery County, our richer counties in the State, sharp differences exist in other parts of the State.

Baltimore City, with 29 percent of the population below 125 percent of poverty level, demonstrates low birthweight rates almost twice as high—11 percent in 1982 and 1983. Similar disparities are noted over the past number of years in Baltimore City. This is not a 1-year fluctuation.

A high percentage of low birthweights are also reported in Dorchester, Somerset, and Wicomico Counties, counties with 20.9, 23.9, and 17.7 percent of the population, respectively below 125 percent of poverty level. Further, blacks have the highest rates of low birthweight infants. In 1983, nationally, 1 in 8 black infants were born at low birthweights compared to 1 in 17 white infants, a very striking difference.

Low birthweight babies are 20 times more likely to die in the first year of life than those of normal birthweight. The percentage of babies who are born at low birthweight are increasing, albeit, slightly, they're increasing, and at the current rate of progress, the Children's Defense Fund estimates only nine States will meet the Surgeon General's 1990 objective for reducing the incidence of low birthweight in this country.

I'd like to address infant mortality.

This index is often employed as an indicator of health status of communities. In 1983, the gap between white and black infant rates was the greatest since 1940 in the United States. Black infants were almost twice as likely as white infants to die in the first year of life.

The Maryland Department of Health and Mental Hygiene reported in 1985, clearly a neutral body, that although both whites and nonwhites have shown steady improvement over time in infant mortality, since 1981, rates among nonwhites have not shown the downward trend seen among white infants. They further note that while nonwhite neonatal mortality rates have declined slightly since 1981, post-neonatal rates rose during that period, a further indicator of the social and environmental risks which exist beyond the neonatal period.

The ratio of nonwhite to white deaths for Maryland in 1984 indicates the infant mortality ratio, nonwhite to white, black to white, basically, was 1.94, neonatal mortality 2.0, twice as many, and post-neonatal mortality 1.82, compared to the 1980 ratios of 1.73, 1.76, and 1.66.

We have an increasing problem over the past several years.

Five-year averages indicate a more than two-fold difference in the reported mortality rate between the lowest and highest counties in the State, which, as noted above, frequently parallels the level of poverty within the county.

I will skip over perinatal morality and I'll just briefly indicate that with respect to adolescent pregnancy, which my good colleague from the Univer ity of Maryland, Dr. Heald, I'm sure will speak to at considerable length, indicates that in 1983 only 57 percent of white and 47 percent of nonwhite teen mothers received early prenatal care. Babies born to teen and unmarried mothers are at the greatest risk of poverty, late or no prenatal care, low birthweight, and infant death and poor health outcomes than those born to married and adult women. Yet, MCH block grants and family planning services are all being cut.

I'd like to just briefly mention some other indicators, Senator, with respect to some of the nutrition utilization patterns that exist here in the State of Maryland.

Emergency food services, as an example, are a measure of need, and this has been proliferating over the past several years. We've taken testimony throughout this State and have heard from all of the citizens, black and white, urban and rural, long-term poor and short-term poor, dispossessed workers, people who have lost their jobs because of technological transition, as well as the more common stereotypical individuals within the poverty situation.

Information provided by the Department of Social Services here in Baltimore City indicates that the emergency service unit reported in fiscal year 1984, 26,760 households in the city were being provided with emergency food services, and the number has grown dramatically over this decade of the 1980's.

The report notes that this increase has been largely due to the tightening of Federal food stamp regulations, high unemployment, particularly among the young, single adults, and the inadequate public assistance grant to meet additional monthly food needs, thus causing food stamps to become a supplemental food source.

Other indicators within the city—Catholic Charities' Our Daily Bread reports serving over 450 lunches daily. Paul's Place, a small church-sponsored group, 35 to 40 people per day in 1982.

In addition, an extensive food bank program is operating in Baltimore and throughout Maryland. Over 450,000 pounds of food per

month is distributed through a network of food pantries, soup kitchens, halfway houses, and other nonprofit organizations which distribute food to the needy within our State alone. And this is a national network which is supported by Second Harvest throughout the country.

As indicated, the number of soup kitchens has proliferated over the past years. And I won't go into the specifics, but indicate that a University of Maryland study in 1983 debunked the issue as to who these people were. While 88 percent were unemployed at the time of interview, 80 percent were receiving income from government programs, which include general public assistance grants, SSI, and food stamps. And 74 percent had a regular address, 26 percent lived alone.

I'd also like to mention some issues with respect to some of the deficiencies in the current Federal food program.

Tightened eligibility standards since 1981 have resulted in a decline in participation in food stamp utilization. In Maryland, following the 1981 Omnibus Budget Reconciliation Act, the participation rate has dropped from 146,000 households and 351,000 individuals to 113,000 households and 280,000 individuals.

We estimate that only 62 percent of the eligible population is being served here in the State and this is reflected throughout the country.

More than 200,000 eligible Marylanders are not participating currently in this program, which is a loss in human terms as well as a loss to the State of $40 million in terms of entitlement funds, and the multiplier effect that that would have.

It's also noted, Senator, that the food stamp benefits are tied to the USDA Thrifty Food Plan, which is a bit of sleight of hand. Recent consumption patterns show that the food stamp households spend about 24 percent more on food than the TFP suggests. And this is not because of any lack of good shopping, but because of the fact that it's impossible to purchase on the basis of Thrifty Food Plan the proper diet.

USDA's April 1984 figures demonstrate that food costs under the Low Cost Food Plan of the USDA more accurately reflects the family's needs, and that the TFP, the Thrifty Food Plan, is inappropriate.

Further, the program's complexity is designed to reduce error. It has become draconian in its requirements with respect to what's necessary to eliminate the error rate, which is a way, I believe, to further reduce the level of participation.

Stricter penalties are being applied to the States. This has put a chilling effect on the outreach activities that are occurring here in Maryland and throughout the country.

Other important initiatives would be necessary to assist in increasing participation, and just summarizing that last chapter of my prepared statement: Simplification of program regulations, increasing the asset limits from $1,500 to $2,350 for most households, returning the household definition to the 1979 definition and status, increasing the earned income credit, restoring Federal funding for food stamp outreach, which is critical.

These are all pre-1981 factors which existed in the food stamp legislation which have been slowly removed.

I'd like to touch briefly on the USDA supplemental feeding program, the WIC program, which Dr. Oski has already addressed, but perhaps indicate the following.

In Maryland, as was indicated, there is a cap on this program currently and it is a program that works. Throughout the country, we have approximately one-third of the eligibles that are participating. The underparticipation results from this continued attempt to cap the program. This occurs despite the fact that the Institute of Medicine 1984 report, which you had referenced in your opening comments, Senator, urges that the nutrition supplementation programs, such as WIC, be a part of the comprehensive strategies to reduce the incidence of low birthweight among high-risk women.

I won't recite all of the research noted in my prepared statement, but to reiterate the fact that the GAO report, which was commissioned by Senator Helms in an attempt to effectively discredit the impact of the WIC Program, indicated quite clearly that it had a very positive effect in summarizing the national research on the improvement of the birthweight and therefore, the reduction of the low birthweight population.

It notes that there is a large and significant reduction in preterm, less than 37 weeks, deliveries to high-risk white and black women with less than 12 years of education. The higher the risk the greater the poverty, the less the education. These are the disadvantaged among us who are the victims of these cuts and the outcome of their pregnancies will be improved by nutrition intervention.

The estimated reduction is 23 percent, 8 per 1,000 deliveries among white women and 15 percent, 20 per 1,000 deliveries among black women.

The other reports continue to reinforce that.

If we apply, Senator, the 20 percent reduction to the low birthweight rate of 115 per 1,000—I'll try to stay out of the numbers—we would drop from 115 to 92 low birthweight infants per 1,000 live births. This will be a reduction of 23 low birthweights per every 1,000 live births, an estimated decrease of 10 percent in infant mortality. This translates into a decline in infant deaths on this one population alone of 254 infant deaths in this high-risk group of women.

As noted earlier, the savings—if one doesn't want to focus on the human savings that have been achieved as a result of such an intervention, the Institute of Medicine report indicates that intensive care hospital costs, conservatively, and I'm using the most conservative estimate, $13,000 per low birthweight infant. Preventing 2,544 low birthweights in this one segment of the population alone would result in a savings of more than $34 million.

In addition, there will be a savings in terms of the rehospitalization reported by the Institute of Medicine, resulting in almost $3 million and in the long-term followup care, in multiple millions of dollars.

I would like to finally address the reduced price school meal program.

There is a need to increase, very much so, the participation in the free and reduced price school meal programs on the national level. It's an opportunity to simultaneously impact the nutritional

and educational well-being of the disadvantaged children on an ongoing basis.

In Maryland, when the charges for reduced price meals increased from 10 to 30 cents after 1981, the participation rate, the numbers of meals served, dropped 75 percent for breakfast and 41.6 percent for lunch, respectively. The Maryland experience mirrors the national patterns which have existed.

Through State initiatives, in our State, in fiscal year 1987, Maryland, as a result of the legislative initiatives, to compensate for the federally mandated increase in reduced price meals, will make up this difference. And we feel that we will return to the pre-1981 levels here in Maryland. But, unfortunately, our forward-looking action in this State is not the case on a national level, and this situation has to be reversed.

I'd like to finally indicate that while it's possible to dispute the impact of Federal cutbacks, it's apparent that many key indicators of maternal and child health have been plateauing or deteriorating over the past several years. The number of teenage pregnancies is high and the level of prenatal health care is low. Low birthweight continues to push our infant mortality rates to a very high level when compared to other industrialized nations.

Coupled with this lack of forward progress is a real reduction in the number of low-income individuals participating in the Food Stamp Program, the USDA Supplemental Feeding Program, the national free and reduced price school feeding programs, while there is a concomitant rise in the utilization rates of local food pantries, food banks, soup kitchens, and private sector aid.

It would appear that there's a pattern which indicates increased risk as a result of decreased availability of critical Federal support services which are not being adequately made up for by local and private resources.

A decrease in Federal support for maternal and child health programs and the shifts in organizing and paying for health care services may lead to an even greater deterioration of the health of our most vulnerable segments within the population.

Public policy and the health of mothers and children have been inexorably linked throughout this century. There is clear evidence that Federal programs which facilitated access to health care and an improvement in the nutritional status of high-risk groups has resulted in a decrease in low birthweight infants, a decrease in infant mortality which includes neonatal and post-neonatal mortality, births to teenagers, improved growth and development, and reduced morbidity.

Reductions in children's programs as reflected by cuts in the maternal and child health block grant, family planning services, child welfare and child care services, and employment training opportunities, will result in an increase in health, nutritional, and social problems of the poor and their children.

I leave my recommendations in my prepared statement for you to review at another point in time.

I thank you very much for the opportunity to present this to you, Senator.

[The prepared statement of Dr. Paige follows:]

PREPARED STATEMENT OF DAVID M. PAIGE, M.D.

Mr. Chairman, member of the Committee, I am Dr. David M. Paige, Professor of Maternal and Child Health at the Johns Hopkins University School of Hygiene and Public Health with a Joint Appointment in Pediatrics at the Johns Hopkins School of Medicine, and attending Pediatrician at the Johns Hopkins Hosptial. I appreciate the opportunity of appearing before the Committee this morning.

I will address myself to a select number of maternal and child health issues. As Chairman of the Governor's Task Force on Food & Nutrition from 1983 through the conclusion of its work in December 1985, I will attempt to bring a State as well as a National perspective to my testimony.

Economic Perspective

National Patterns

The fact as reported last year in the American Journal of Public Health is that one out of every five children in the United States now lives in a poverty-stricken family. For black children, the figure is one out of two, or 50 per cent. The study, conducted by the House Select Committee on Children, Youth and Families, further revealed that the number of poor children increased by 2 million between 1980 and 1982. Corroborating studies by the Congressional Budget Office, the U.S. Conference of Mayors, and others combine to paint a bleak picture for the 50 per cent of black children and 20 per cent of all children now living in poverty. Over the last five years, the disposable income of the poorest one-fifth of American families has dropped more than 9 per cent. Families headed by non-elderly black women suffered the largest decline - 10 per cent.

We already know that the cuts in Aid to Families with Dependent Children (AFDC) embodied in the Omnibus Budget Reconciliation Act of 1981 resulted in half a million people, most of them living in single parent families, being dropped from the rolls. A General Accounting Office study conducted in a sample of five cities, showed that one half of the families cut from the AFDC rolls since 1981 ran out of food after losing their benefits. Between 11 and 28 per cent of the families with working members who lost their benefits also lost access to medical and dental care either because of the expense or because they no longer had any health insurance.

Maryland Patterns

According to 1980 Census Information, persons living below poverty level in July 1980, numbered 404,532, 9.8% of the population. The poverty rate tends to run highest in Baltimore City - 22.9%, followed by Garrett County, 15.8%, (associated with a high rate of plant closings and job loss), and Somerset, 15.7% (one of the ten poorest counties in the nation, termed a "Starvation County" by USDA; its winter unemployment rate exceeds the average unemployment rate nationally during the Depression. Based on the Census Bureau's report of August, 1983, the number of Americans living in poverty has increased by 5.1 million since 1980. The Maryland State Planning Department estimates that 65,000 -75,000 "new poor" have fallen into poverty, an increase of 16.1% - 18.5% in three years. In Maryland approximately 1 in 10 children received AFDC during 1982. Presently, of the 196,000 people who receive assistance, 70% are children, and the average family consists of a mother and two children. The average length of time on AFDC, according to a recent study, is just over 2 years, with the vast majority of families receiving assistance for the first time. For most of these families, AFDC is the only means of support.

Federal Programs and the Poor

According to the September 1983 Census Bureau report of households below the poverty line in 1982, 50.3% received no Federal assistance, 27.7% received no food stamps, 46.4% received neither free nor reduced-price lunches, 47.9% lived in private, unsubsidized housing. Further, a 1983 study released by the Congressional Budget Office showed the following effects of spending cut: 1) The low-income households have lost from three to six times more in benefits than other households, 2) while human resources spending in 1985 will account for 46.3% of Federal expenditures, only 10% of those total Federal expenditures will go to low-income programs. 3) the 10% of Federal spending to benefit the poor will absorb 36% of total Federal aid cuts, 4) in 1983, households with incomes under $10,000 lost average benefits of $74 households with incomes over 40,000 lost average benefits only one-sixth as large - $40, and) by 1985, households with incomes under $10,000 will lose more than twice as much on the average than households with greater incomes.

Health Indicators of Risk

To more precisely identify specific health problems among the poor, a series of indicators may be employed to define the problem.

Low Birth Weight

As an example, low birth weight may be considered a useful indicator of health and by extension a limited index to the

nutritional status of a population. A proportion of low birth weight deliveries may result from conditions associated with poverty, poor weight gain on the part of the mother, inadequate food intake, absent prenatal care operating independently or synergistically to result in a low birth weight infant. Yet it must also be realized that it may occur for a variety of reasons and may be frequently associated with medical conditions which bear no relationship to a harsh social environment.

While the percentage of low birth weight infants born to white women in the U.S. is 6% and mirrored by percentages in 1982 of 6.1% in Baltimore County and 5.5% in Montgomery County, sharp differences exist in other parts of the state. Baltimore City with 28.9% of the population below 125% of poverty level, demonstrated low birth weight rates almost twice as high, of 11.0% in 1982. Similar disparities are noted over the past five years. A high percentage of low birth weights are also reported in Dorchester, Somerset, and Wicomico Counties. Counties with 20.9, 23.9, and 17.7% of the population respectively below 125% of the poverty levels. Further, blacks have the highest rate of low birth weight infants. In 1983, nationally one in eight black infants was born at low birth weight compared to one in seventeen white infants.

Low birth weight babies are twenty times more likely to die in the first year of life than those of normal birth weight. Nationally between 1982 and 1983, the percentage of babies born at low birth weight increased sightly. At the current rates of progress, The Children's Defense Fund estimates, only nine states will meet the Surgeon General's 1990 objective for reducing the incidence of low birth weight births.

Infant Mortality

This index is often employed as an indicator of the health status of communities. Nationally in 1983, the gap between white and black infant mortality rates was the greatest since 1940. Black infants were almost twice as likely as white infants to die in the first year of life. The Maryland Department of Health and Mental Hygiene reported in 1985 that although both whites and nonwhites have shown steady improvement over time in infant mortality, since 1981, rates among nonwhites have not shown the downward trend seen among white infants. They further noted that while nonwhite neonatal mortality rates have declined slightly since 1981, post-neonatal rates rose during that period. They cautioned, given the small number of years involved, it is not clear whether this represents a stable trend.

The ratio of non-white to white death rate for Maryland in 1984 indicates the infant mortality ratio was 1.94, neonatal mortality 2.0 and post-neonatal mortality 1.82, compared to the 1980 ratios of 1.73, 1.76, and 1.66 respectively. Further, the computation of five year average infant mortality rates between the subdivisions within the State demonstrate sharp differences as well. Five year averages

indicates a more than two-fold difference in the reported mortality between lowest and highest counties in the state, which as noted above frequently parallels the level of poverty within the county. Nationally if black and white infant mortality rates were equal, about 5,500 black babies would not have died in 1983.

Perinatal Mortality

Perinatal mortality is another indicator of health status which may be influenced by economics, health and nutritional status. Again higher levels are reported in Baltimore City compared to Montgomery and Baltimore County. The rates per 1000 live births and fetal death are 27.1 compared to 16.7 and 16.8 respectively.

Adolescent Pregnancy

Additional indicators of potential risk are the proportion of mothers less than 18 years of age. Teen mothers are at greater risk than adult women of receiving late or no prenatal care, and of having low birth weight babies who suffer higher mortality rates. In 1983, only 57 percent of white and 47 percent of nonwhite teen mothers received early prenatal care. Babies born to teen and unmarried mothers are at greater risk of poverty, late or no prenatal care, low birth weight, and infant death and poor health outcomes than those born to married and adult women. Yet, MCH Block grants and family planning services are being cut. Mothers less than 18 years of age, 11.5%, are found in Baltimore City compared to 2.1 and 2.6 in Montgomery and Baltimore Counties. Recent headlines highlight the fact that approximately 35% of both black and white out of wedlock babies were born to unwed mothers. The percentage of low birth weight infants born in Maryland in 1983 to nonwhite and white mother 15-19 years of age was 15.3% to 11.2 respectively. Not, only has this percentage increased over the past few years now approximating 1970 figures. The overall 1983 figure is almost one-third to 50% higher than that found in nonteenage mother.

Other Indicators

Other indices as to the level of need in a community can be utilized to augment the above information.

Emergency Food Services

A direct measure of need is the proliferation of emergency food centers responding to a reported increase in demand. Information provided by the Department of Social Services, Emergency Services Unit reports in FY 84, 26,760 households in the City were being provided with emergency food service. The number served has grown dramatically over the past decade.

The report notes that this increase has been largely due to the tightening of federal food stamp regulations, high unemployment particularly among young, single adults and the inadequate Public Assistance grant to meet additional monthly food needs thus causing food stamps to become a supplemental food source. Nearly half of the households served are single adults or childless couples. The monetary and foods resources provided to this group have been insufficient to meet their needs.

Complementing the work of the public agencies is the private sector. An example is the Franciscan Center, a private non-profit social services agency, located in mid-town Baltimore. Their mission is to meet the emergency needs of those people who have no other resource to which they can turn.. total clients served in their hot lunch program operating an average of 19 days per month is over 6,000.

The above example is replicated by a number of private programs throughout the city. As one example, the emerging food programs of Associated Catholic Charities' Our Daily Bread, reports serving over 450 lunches daily and is noted to be only one of the many programs serving capacity crowds. Paul's Place, a small church sponsored emergency lunch program, reports serving 250 hungry people per day. This is an increase from 35 to 40 people per day over 1982. Further, as noted for all centers, there has been an increase in the number of women, children and intact families which seek emergency food relief on a daily basis. The documented activities in the city are only a microcosm of what has been reported to the Governor's Task Force, as occurring throughout the state.

In addition, an extensive Food Bank program is operating in Baltimore and throughout Maryland. Over 450,00 pounds of food per month is distributed through a network of food pantries, soup kitchens, halfway houses, and other non-profit organizations which distribute food to the needy within the state. A steady supply of food is received from the parent organization, Second Harvest, and through donated surplus foods from large food outlets and a variety of other vendors. The number of people being served by the Food Bank has escalated over the past several years. An infrastructure of outlets throughout the state, a sophisticated transportation system and volunteers keep the program operating.

As indicated, the number of soup kitchens has proliferated over the past several years. A study conducted by the University of Maryland in May and June 1983 was undertaken to define those using Emergency Food Kitchens. The report indicates that the users were "rooted" in poverty . While 88% were unemployed at the time of the interview, 80% were receiving income from government programs which included G.P.A. (19%), SSI (17%) and food stamps (25%). Seventy-four percent had a regular address and 26% lived alone. Ten percent were on medication for emotional problems while 28% reported being on medication for physical illness.

Federal Food Program

Despite the increase in participation levels among the poor, there is an erosion of federal support service.

Food Stamp Program:

Tightened eligibility standards since 1981 has resulted in a decline in participation. In Maryland, following the Omnibus Budget Reconcilation Act of 1981, the participation rate dropped from 146,538 households and 351,220 individuals to 113,187 households and 280,608 individuals in mid 1985.

The Maryland program reaches only 62% of the eligible population. It is estimated that more than 200,000 eligible Marylanders are not participating, resulting in a loss of up to $40 million per year in Federal reimbursement to the State.

It also is important to note that food stamps benefits are tied to the USDA Thifty Food Plan (TFP). Recent consumption patterns show that food stamp households spend about 24% more on food than the TFP suggests is necessary. USDA's April 1984 figures also demonstrate that food costs under the Low Cost Food Plan more accurately reflect the family's needs. It is necessary to replace the TFP with the Low Cost Food Plan as the basis for determining benefit levels.

Further, much of the program's complexity is designed to reduce error. A growing source of attention over the last years and an increasing drain on limited resources. The Department of Human Resources success in lowering the food stamp error rate from 17% to 6.7% in recent years is commendable. Yet, Federal emphasis on the elimination of fraud and error and the threat of financial sanctions have led to an overly complex program and has increased the tension between worker and client. Stricter penalties will worsen these problems as the cost-benefit ratio of extreme error-reduction practices rises.

Other important initiative which would assist in increasing participation include: a) Simplification of program regulations, particularly by seeking a state option for monthly reporting/retrospective budgeting, which has proven to be costly and error-prone in states where it has been implemented. b) Increase the assets limit from $1,500 to $2,350 for most household (a help to the recently unemployed), and from $3,000 to $3,500 for households with at least one person over age sixty. c) Return the household definition to its 1979 status, to allow siblings, parents and children over 18 living with their parents to be considered separate food stamp households. Currently extended families sharing living quarters to save on shelter expenses are being penalized for their efforts. d) Increase the earned income deduction from 18% to 20% to help the working poor. e) restore Federal funding for Food Stamp Outreach

activities. ii) Achieve greater conformity in eligibility for low-income programs, such as Food Stamps, and Public Assistance, would permit State development of a unified application form and drastically reduce administrative costs.

The USDA Supplemental Feeding Program (WIC)

The WIC Program which provides nutritional supplements to pregnant and lactating women, infant and children to 5 years of age is serving approximately one third of the eligible population. In Maryland 45,000 out of an estimated 110,000 eligible individual receive benefits.

This underparticipation is a result of the federal cap on spending. This occurs despite the fact that the Institute of Medicine Report on Low Birth Weight urges that nutrition supplementation programs such as WIC be a part of comprehensive strategies to reduce the incidence of low birth weight among high-risk women.

Nutrition research supports the view that nutritional assessment and services should be major components of high-quality prenatal care. Evaluation studies show that prenatal participation in the WIC program is associated with improved pregnancy outcomes. Of particular relevance to this report is the decrease in the incidence of low birth weight associated with WIC participation. Recently the U.S. General Accounting Office (GAO) critically reviewed the published literature on the subject and noted that the evidence of program benefit is strongest for increases in mean birthweight and decreases in the percentage of low birthweight infants. Further, receiving WIC supplementation during the interpregnancy period can help to increase birthweight in subsequent pregnancies.

The National evaluation of the WIC Program released in January 1986 reinforces the above conclusion. The study indicates that the program is working well, reaching it's intended population of high risk women, infants, and children and is cost effective. It notes that there is a large and significant reduction in preterm (<37 weeks) deliveries to high risk white and black women with less than 12 years of education. The estimated reduction is 23% (8/1000 deliveries) among white women and 15% (20/1000 deliveries) among black women.

The Report to the U.S. Senate Committee on Agriculture, Nutrition, and Forestry by the U.S. General Accounting Office in January 1984 noted that the decrease in the proportion of low birth weight (LBW) infants born to women who participated in the WIC Program was most evident in high risk poorly educated women.

If we apply the 20% reduction to the LBW rate of 115/1000 live births born to the 110,601 women on public health assistance alone who completed less than 12 years of education, the WIC Program would have a major impact. A 20% reduction in this group results in a decrease from 115 to 92 low birth weight infants/1000 live births. This reduction of 23 low birth weight infants for every 1000 births will have the following results:

1) As estimated decrease of 10% in infant mortality. This translated into a decline in the infant death rate of 2.3 infants per/1000 live births. This will result in a decrease of 254 infants death in this high risk group of women alone. The assumption in this model is consistent with the observed decrease in neonatal mortality in the historical study of the National Evaluation and the low birth weight reduction in the GAO Report.

2) An estimated savings in intensive care hospital costs conservatively estimated to be $13,616 per low birth weight infant. By preventing 2544 low weight births and the associated cost of hospitalization of women there will be a savings of $34,639,104 in medical and hospital costs.

3) In additional there will be a savings of $5,580 per rehospitalized low birth weight infant. This rehospitalization is estimated to occur in 20% of all low birth weight infants in the first year of life. This will result in a savings of $4,580 x 509 infants or $2,840,220 in this cohort of high risk low income mothers and infants.

4) Further, a savings of $1,405 per year will be realized for the 18% of surviving low birth weight infants who require long term care. This is estimated to be a recurring annual cost of $1,405. Reduction in the number of low birth weight infants will result in a savings of $643,490 per year for the 458 infants in this cohort estimated to require this addi tional care.

Thus, for this one cohort of high risk infants born to poorly educated women a positive WIC Program effect results in a 20% reduction in low birth weight infants. This will result in a savings of $38,122,814 in direct medical costs. There is an urgent need therefore to assure that 100% of eligible high risk pregnant women participate in WIC as well as their infants and preschool children to retain their nutritional head start. We should not be content with only one-third of the eligibles participating in the program.

Reduced Priced School Meals

There is a need to increase the participation in the free and reduced price school meal programs on a National level. It is an opportuni to simultaneously impact the nutritional and educational well being of disadvantaged children on an ongoing basis. The provision of breakfast and lunch for 180 days a year to the neediest among us will have considerable national impact.

In Maryland when the charges for reduced price meals increased from ten to thirty cents for breakfast and twenty to forty cents for lunch in 1981, the number of meals served dropped 75.1% and 41.6% respectively. The Maryland experience mirrors the National patterns

and projections for FY 87 show participation figures remaining at these lower levels.

Through State initiative in FY 87, Maryland will subsidize the reduced price school meals for eligible children in an attempt to increase the participation levels. Despite the approach taken in this State, this should not be left to individual State initiative; rather the charges for reduced price meals should be rolled back to the pre 1981 levels and States encouraged to increase the level of participation. Low-income students, who may well be at other educational disadvantages, can ill afford to come into the classroom inadequately fed. The states can ill afford the estimated federal dollar loss resulting from low participation rates in the reduced-price programs.

New Intitiatives

While it is possible to dispute the impact of Federal cut backs, it is apparent that many key indicators of maternal and child health have been plateauing or deteriorating over the past several years. The number of teenage pregencies is high, and the level of prenatal health care is low. Low birth weight continue to push our infant mortality rates to a very high level when compared to other industrialized nations. Coupled with this lack of forward progress is a real reduction in the numbers of low income individuals participating in the food stamp program, the USDA supplemental feeding program, the National free and reduced price school feeding programs; with the concomitant rise in the utilization rates of local food pantries, food banks, soup kitchens, and private sector aid. It would appear that there is a pattern which indicates increased risk as a result of decreased availability of critical federal support services that cannot be adequately substituted for by local and private resource.

A decrease in Federal support for maternal and child health program and the shifts in organzing and paying for health care services may lead to an even greater deterioration of the health of the most vulnerable populations. Public policy and the health of mothers and children have been inexorably linked throughout this century. There is clear evidence that Federal programs which facilitated access to health care and an improvement in the Nutritional status of high risk groups has resulted in a decrease in low birth weight infants, a decrease in infant mortality which includes neonatal and post neonatal mortality, births to teenagers, improved growth and development, and reduced morbidity.

Reductions in children's program as reflected by cuts in the Maternal and Child Health Block Grant, Family Planning Services, Child Welfare and Child Care Services, and employment training opportunities, will result in an increase in the health, nutritional and social problems of the poor and their children.

To reverse this we need:

1. To decrease the proportion of low birth weight infants: we need to assure participation in the Food Stamp Program, the WIC Program, health care facilities providing prenatal services and increased participation in the medicaid program.

2. To decrease neonatal mortality: we need to reduce low birth weight as noted above, increase prenatal care, assure participation in the WIC and Food Stamp Program, improve access to health care, improve family planning services, have abortion services available, continue to improve neonatal intensive care services, increase Medicaid participation and increase research funds.

3. To decrease post-neonatal mortality: we need to maximize participation in Federal Assistance Programs, increase availability of Health Care Services, support for increased immunization, and increase Medicaid participation.

4. To decrease the number of teen births: we need increased family planning services, Jobs programs for youth, Family support services, school based clinics, pregnancy prevention programs, public education and abortion.

5. To improve the level of school performance: we need increased funding of the National School Lunch and Breakfast Programs, a rollback in the cost of reduced price meals, and a rededication to maximizing the number of participants in the free and reduced price School Breakfast Program.

6. To increase the participation in the Federal Supplemental Feeding Programs: we need improvement in the enrollment procedures for the Food Stamp Program, increase in benefits consistent with current food costs, and finding for outreach programs. WIC Program participation should be increased to reach a higher percentage of the eligible population and an immediate shift to universal participation of high risk pregnant women.

The decade of the 80's is an unsettled time for the disadvantaged. Poor families and their children have had to share an even greater burden than other segments of the community. The promise of past progress has not been fully achieved. We must regain the momentum being lost in our current Public Health Policy.

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Senator SARBANES. Thank you very much, Dr. Paige.

Dr. Heald, professor of pediatrics and director of the division of adolescent medicine at the University of Maryland School of Medicine.

STATEMENT OF FELIX P. HEALD, M.D., PROFESSOR OF PEDIATRICS AND DIRECTOR OF ADOLESCENT MEDICINE, THE UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE

Dr. HEALD. Thank you, Senator Sarbanes.

Since I was well aware that my other colleagues would discuss issues of children, I want to focus on three issues that are of some concern to me and some personal experience that we find in the adolescent.

Adolescents are ordinarily considered one of the healthiest periods of human existence. By and large this is true, but there are certain disorders which cause considerable physical, emotional, psychosocial, morbidity and mortality. I'd like to focus on three specific areas of morbidity and mortality which still require significant resources and further understanding to reduce their costs, both to the adolescent and to the Nation.

The first two problems I would like to bring to your attention are the results of a change in the sexual attitudes and behavior of our people, including our own teenage population.

Our society has become more sexually permissive, initially at an adult level, and then somewhat later, among our teenage youth. Sexual activity now occurs at an increasingly younger age and in the younger age group population, which is of some concern to us, even more frequently than in the past.

We should also remember in talking about sexual activity in teenagers, that there are a considerable number of our youth who are not sexually active.

Now, I would feel like the odd man out this morning if I didn't talk about the low birthweight infant. So although I did not include that in my original remarks, I do want to say a few words about it, Senator Sarbanes.

In 1980, along with our sister institution at Johns Hopkins, we initiated some special programs for prenatal care of pregnant teenagers. In our own institution, we confined the program because of cost constraints to those youngsters who are age 16 years and under. Our specific aim was to reduce the number of low birthweight infants, which at that time ran about a steady 20 percent of those youngsters who are 16 and under. And as a result of this program, it is now down to a steady rate of between 8 and 9 percent a year.

The only point I'm making is that the prevention of low birthweight babies to teenagers, young teenagers, basically an issue around premature birth, is a preventable problem. It just takes organization of current knowledge to implement appropriate programs by appropriately trained people. If you can do this with poor inner-city youngsters, you can do it with any other group of poor in our country.

So we need to find out where they are and to target them with appropriately trained people with appropriate programs which concentrate on this very young age group.

But those of us who work with this particular population of youngsters, instead of seeing anywhere from 175 to 200 a year in our prenatal clinic, I really wouldn't like to see any, because it's really not in the youngster's best interests or anyone's best interest for these very young teenagers to be having babies.

The issue is why is it such a problem in the United States? The United States has the highest rate of teenage pregnancy by far in the developed countries.

This past spring, really a landmark paper was published, a study was published by the Guttmacher Institute, authored by Jones et al., and shed considerable light on why we have such a high rate of teenage pregnancy.

They looked, really, at six countries—including Sweden, Great Britain, France, the United States, and the Netherlands. These countries all had a similar rate of teenagers who were sexually active; that is, the rate of sexual activity was similar, except for Sweden, which had a higher rate of sexual activity among their teenagers. But there was a sharp difference, particularly when compared to the United States and the other countries in terms of teenage pregnancy and abortion.

The Netherlands, by far, had the lowest rate of teenage pregnancies, despite the fact that the percentage of teenage girls in the United States and the Netherlands are almost identical. The United States has a far higher rate. The same for abortion.

Now what is the difference between the other countries and the United States?

Well, some of the differences they felt were important were, and the two major differences, is the public perception, the adult perception of the morality, if you will, of adolescent sexual activity, and based on that, the countries were able to make access to contraception and family planning clinics readily available, and, if you will, permissible; that is, the teenagers taking cues from the adult population, saying that it's OK to go and get family planning if you're sexually active, or it's responsible to.

Now, the problem in this country is our Government and its constituents are deeply divided and split over the issue of family planning, over the issue of abortion, over the issue of teenage pregnancy. Should family planning be widely and easily available to teenagers or should we be more restrictive?

You can find groups who will take either side of that.

Teenagers know this and, as a result, we are much more reluctant than teens in other countries studied to make use of available family planning resources. As a result, those sexually active teenagers do not have ready access to contraceptive services designed for their needs. Therefore, we should not be surprised by the high pregnancy and high abortion rates in the United States.

We know enough about the reproductive issues of teenagers to drastically reduce the rates of pregnancy and abortion. The only question that remains is the ability of the people and their government to arrive at a consensus and adopt a more appropriate course of action than the present divisive posture.

The second major problem resulting from the change in sexual attitude and behavior among our teenagers is the sharp increase in sexually transmitted diseases. Numerically, sexually transmitted disease is the most common infectious disease, with the exception of the common cold, during adolescence.

The rate of gonococcal infection is highest in young adults, 19 to 24, and next highest in the 15- to 19-year-old age group.

If one corrects and looks at the rates per sexually active population of teenagers, they have the highest attack rates of all ages for sexually transmitted disease and their complications.

There are a number of infectious agents that are of concern to us in addition to gonococcus—herpes simplex virus, chlamydia, the papilloma virus more recently, and they, too, have a similar distribution in our young people, being very common.

This is a major health problem, particularly for inner-city teenagers. As a result of these infections, complications such as infertility and ectopic pregnancy are found far too frequently and are very costly medically.

In addition, teenage girls may be developing the biological basis for later development of cancer of the cervix. I'm speaking specifically of the recent evidence linking the papilloma virus, which is becoming very common in our own adolescent clinic as a precursor for carcinoma of the cervix later on in life. Because of the psychological nature of the teenager, special measures in clinics somewhat different from those ordinarily used for adults need to be supported widely in trying to control these infections.

In addition, basic microbiological and clinical research, specifically through the Centers for Disease Control, need to be increased.

Now a third major problem that has been overlooked in the health care of the adolescents is the result of motor vehicle accidents. We have been aware for sometime that motor vehicle accidents have been the major cause of death among adolescents and young adults.

For example, in the year of 1975, there were about 15,000 deaths to this age group, of which 12,250 were to males and the remaining to females. And the cost here is in human lives and lost potential. The economic cost is virtually nil because little gets expended on them because they die so quickly.

What has been overlooked, during the same period of time, is that there were 1.6 million accidents in this age group, again, males mostly predominant. The thing that has changed during the past years, as a result of the specialized shock trauma emergency systems in this country, is that an increasing number of teenagers have survived these serious accidents.

In the year 1975, there were 35,000 youngsters who were severely injured, though surviving the accidents. We have not really taken a close look at the morbidity as a result of these accidents.

Until recently, we have underestimated the inability of closed head injured teenagers, which is the major morbidity, to function in school for months or even years after the accident. Their parents are bewildered by their inappropriate behavior and their educators are angered by their inability to do their school work.

Even after mild injuries, deficits such as impaired judgment, reduced attention span, irritability, short-term memory loss, and other ongoing memory deficits are encountered by these teenagers.

The most difficult task for the professional is to separate the usual behavior resulting from head injury from normal adolescent behavior. Thus, we have identified this as a major cause of morbidity resulting from automobile accidents in our own program, and specifically closed head injuries, and are working out long-term rehabilitation studies to best know how to rehabilitate these teenagers.

We basically are not sure what the issues are in very specific terms. We need to know much more about the effect of brain injury on brain function following head injury and programs that investigate this particular issue will result in information upon which we can better prepare remedial programs.

Clearly, this area now is underfunded and needs greater support.

Finally, it is clear that teenagers for certain specialized disorders, such as some of them mentioned here, need the resources of people training in adolescent medicine. Such people are in short supply due to the shortage of funds and the number of adolescent health care training centers in this country.

Incidentally, Senator Sarbanes, I have a meeting at 12 today where we have to consider, have to adjust our teenage pregnancy program because of budget cuts, readjust our staff and reduce the staffing for the adolescent portion of this program, which has been so effective, incidentially, in cutting back on our low birthweight infants.

We're going to lose staff.

Thank you.

[The prepared statement of Dr. Heald follows:]

PREPARED STATEMENT OF FELIX P. HEALD, M.D

Adolescents are ordinarily considered one of the healthiest periods of human existence. By in large this is true, for this age group is free of many of the diseases which cause considerable morbidity and mortality in our adult population. Further they are less likely to have some of the earlier childhood diseases like genetic defects which are concentrated heavily in the newborn and childhood ages. Adolescence is a time of life when mortality rates are at their lowest ebb. Let us not be misled by the fact that adolescents generally are disease free. There still remain disorders of adolescence, which cause considerable physical, emotional, psychosocial, and economic morbidity and mortality.

The testimony today will focus on three major areas of morbidity and mortality during adolescence which still require significant resources and further understanding to reduce their current morbidity and mortality. The first two problems I would like to bring to your attention are the results of a change in the sexual attitudes and behavior of our people including our teenage population. Our society has become more sexually permissive, first at an adult level, and then somewhat later, among our young people. Therefore, sexual activity occurs at an increasingly younger age and more frequently even in the younger teens. It should also be remembered that during the teenage years a considerable number of teenagers are not sexually active.

In a recent study comparing the sexual activities of the

number of developed countries, Swedish teenagers initiated sexual activity at least a year earlier than other countries. Whereas Canadian teenagers initiated sexual activity a year later. The rest of the countries, Great Britain, France, United States, and the Netherlands had the same percentage of teenagers being sexually active from ages 15 - 19. However, if one looks at the pregnancy rates for the same countries, the United States by far leads the rest of the countries in this recent study from the Guttmacher Institute. The Netherlands, by far, had the lowest rate of teenage pregnancies, despite the fact that the percentage of teenage girls in both countries had about the same rate of sexual activity. Also quite striking are the abortion rates in the United States, by far higher than either France, Canada, Sweden, Great Britain or the Netherlands. If one looks at the contraception and the use of family planning in these countries, it is quite clear that American adolescents use contraception much less effectively in order to avoid adolescent pregnancy. When they do use contraception, they tend to use a much less effective method. This problem is a serious one because in all probability it results from a deep division in this country over the approach to teenage pregnancy. Our teenagers have the worse of all possibilities. Jones et al, from the Guttmacher Institute, says; "U.S. teenagers have inherited the worse of all possibilities, movies, music, radio and television tell them that sex is romantic, exciting and titillating yet at the same time young people get the message that good girls should say no". Further, our government and its constituents are deeply split over the issue of family planning. Should family planning be

widely and easily available to teenagers, or we should be more restrictive? Teenagers know this, and as a result are much more reluctant than teens in other countries studied to make use of available family planning. As a result those sexually active teenagers do not have ready access to contraceptive services designed for their needs. Therefore we should not be surprised by high pregnancy and abortion rates in the United States.

We know enough about the reproductive issues of teenagers to drastically reduce the rates of pregnancy and abortion. The only question remains is the ability of the people and their government to arrive at a concensus and adapt a more appropriate course of action than the present divisive posture.

The second major problem resulting from the change in sexual attitudes and behavior among our teenagers is the sharp increase in sexually transmitted diseases. Numerically, sexually transmitted diseases is the most common infectious disease with the exception of the common cold during adolescence. The rate of gonococcal infection is highest in the young adults, 19-24 years, and next highest in the 15-19 year olds. These two age groups account for seventy-five percent of all the cases of reported gonorrhea. Other sexually transmitted diseases, such as herpes simplex, chlamydia, and papilloma virus have a similar age distribution nationally. Chlamydia, particularly in adolescent females, is three-times more common than gonococcal infections. It is a major public health problem, particularly for inner-city teenagers. As a result of these infections, complications such as infertility and ectopic pregnancy are found far too

frequently. In addition, teenage girls may be developing the biological basis for later development of cancer of the cervix. Because of the psychological nature of the teenager, special measures and clinics somewhat different from those ordinarily used for adults, need to be supported widely in trying to control these infections. In addition, basic microbiological and clinical research, (through the Center for Disease Control) need to be increased.

The third major problem that has been overlooked in health care of adolescents is the result of motor vehicle accidents. We have been aware for some time that motor vehicle accidents have been a major cause of death for boys and girls between the ages of 15-24. For example, there were 12,250 deaths in the year of 1975 for males compared to 3,451 for females. In the same time period there were total of 1.6 million accidents in this age group of which 985,184 were males and 654,376 were females. During the past ten years, as a result of the specialized shock-trauma emergency systems in this country, an increasing number of teenagers have survived serious accidents. In the year of 1975 there were 35,000 youngsters who survived, yet were classified as having serious injuries. The morbidity that has escaped attention up until recently has been the damaging effect of closed head injury. Until recently we have under-estimated the inability of closed head injured teenagers to function in school for months after the accident. Their parents are bewildered by their inappropriate behavior and their educators are angered by their inability to do their school work. Even after mild injuries, deficits such as impaired judgment, reduced

attention span, irritability, short-term memory loss, and other on-going memory deficits are encountered by these teenagers. The most difficult task for the professional is to separate the unusual behavior resulting from head injury from normal adolescent behavior. Thus, we have identified this as a major cause of morbidity resulting from automobile accidents, specifically closed head injuries and are working out long-term rehabilitation studies to best know how to rehabilitate these teenagers. These programs need to be supported.

And finally it is clear that teenagers for certain specialized disorders, such as those mentioned here, need the resources of people trained in adolescent medicine. Such people are in short supply due to the shortage of funds and the number of adolescent Health Care training centers in this country.

Senator SARBANES. Thank you very much. I just want to ask a couple of questions, for the record, of the doctors.

First of all, would you define low birthweight as you've been using it in your testimony for the record?

Dr. OSKI. A low birthweight infant is normally defined as an infant weighing less then 2,500 grams. That's 5½ pounds. A very low birthweight infant is defined as an infant weighing less then 1,500 grams, or approximately 3 pounds.

Senator SARBANES. OK. Now, I want to put this question—I'll come to Ms. Rosenbaum in a minute—to the doctors.

As you look at the child's progression, beginning in the prebirth stages, can you determine the critical times for health, in terms of later consequences?

In other words, if you have a limited amount of money, or as you start putting money out, which are the most critical periods to address, conceding that in a sense they are all critical. I'm thinking in terms of fewer problems over time—in other words, how does the 9-month period of pregnancy compare with the 1 year after, or is that period all critical and then we see a change?

At what point does the neglect have fewer consequences than at some other point, if that is a sensible question?

Dr. PAIGE. It's sensible. It's difficult to partition with precision. But clearly, I would urge, I would recommend that we address the pregnancy, the period of embryonic development and fetal growth are critical, with respect to long-term consequences, and the period during the first 6 months to 1 year are particularly important as well.

During the period of rapid fetal development, inadequate maternal nutritional results in fat stored in that mother being drawn down, which will lead to a less than complete maximum optimal fetal growth and development.

That is one of the factors which contribute to low birthweight. And we know from studies abroad, in less developed countries, that where the nutritional health of the mother is poor, the nutritional well-being of the newborn will be compromised.

And really, as you put to Dr. Sabin earlier, what would you do with respect to reversing this trend? I don't see any reason why we would not have universal prenatal services available for all low-income women.

The WIC Program has been considered even by its sharpest critics a success. Nutritional intervention strategies which promote the prenatal nutrition of the mother and therefore, by extension, the fetus, is a very positive thing to do.

The absence of universal prenatal services, particularly for our most disadvantaged population, is something that is intellectually, emotionally, morally, and certainly economically, unsound.

So I don't understand the absence of it at this point in time. I further don't understand why there would not be universal entitlement to health services for particularly preschool children in our country.

I can go on, but I know that my colleagues may have some additional thoughts.

Senator SARBANES. Dr. Oski.

Dr. OSKI. I would certainly agree with the statement that Dr. Paige made about the most crucial time to invest your money if you have a limited amount of funds to invest.

I personally don't think we should have to face that choice, but I certainly think up to about 2 years of age, I would extend that time of critical development because by that time, about 80 percent of brain growth has occurred.

Senator SARBANES. By the age of 2?

Dr. OSKI. By about the age of 2. But that's not to minimize the importance of what happens after age 2 in terms of social development.

Senator SARBANES. Right.

Dr. PAIGE. The nutritional head start that can be realized by a mother who is well nourished and, by extension, the fetus and then the newborn, is rather dramatic.

Scientific evidence has indicated over the last 5 to 10 years that the maternal fat stores, her ability to lay down good energy reserve to maintain the latter part of this pregnancy, is not only good for the fetus, but it provides maximum stores for the newborn as well, to carry them forward, propel them forward through those early months in time.

It has a direct effect on the exponential growth of many of the organs which are growing in this latter part of the pregnancy.

And to face a third of the eligible population participating in the WIC Program doesn't make good sense on a national basis. It's a small cost. It's a very small cost. WIC at this time is about $1.2 billion. We could provide entitlement for all low-income women, beg the issue of its impact on the older preschool child, which I think, too, is important. I don't want to trivialize that.

But if there's a national consensus that's important with respect to this segment of the population, and I think even the sharpest critics on the Senate Agricultural Committee would agree, then why not provide for a universal provision of nutrition services and prenatal care?

We're woefully behind other industrialized nations in this particular regard.

Senator SARBANES. Dr. Heald.

Dr. HEALD. I would just point out one other thing that's really a problem, particularly for the pregnant teenager. That is, for the most part, they do not come in to see services until about the 24th week of pregnancy, on the average. So that almost two-thirds of the pregnancies go on before they even seek services.

The problem of why this occurs is multifaceted, partly related to, again, the attitudes of adult society and the controversy over teenage pregnancy and the sexual activities of teenagers, so that they tend not to seek care early.

You know, Senator Sarbanes, we have probably some of the most effective advertising corporations in the world in this country. And we could certainly change, with appropriate leadership from our public health community, the attitudes and behavior of our population toward pregnancy and access to services and encourage them to come for services instead of putting all of the blocks in that are presently both emotional and bureaucratic blocks that are put up that they have to overcome before they seek service.

Senator SARBANES. That comment leads into my next question, which I would ask of all of you. It is this: Suppose you were just to give money? Suppose you were to take persons in poverty and just give them income?

To what extent do you think that the health care problems we are addressing would be adequately dealt with? That is, if money is not provided through programs that ensure they actually do these things? And I guess I'm really asking a question, which is if you simply gave people money, would they then take care of themselves, or must it be done through a structured program that assures that it's going to be done?

How much of a problem is that?

Dr. OSKI. I personally don't think that giving the money, giving anyone money, initially, immediately would result in improved services, improved health care. I think that would not be the No. 1 priority on most people's list of things, particularly preventive services. It takes years to see the consequences of what you've accomplished.

I think that over the course of a decade or more, maybe you'd see health measures rise as a consequence of this stipend, but not overnight.

I would much prefer to provide the services and enlist the participation of every single person on a block-by-block basis, much like the experience in China that Dr. Sabin referred to, to have a cadre of barefoot doctors who go door to door and make certain every person has signed up for every entitlement program that is available, making certain that every child is immunized, making certain that every young girl is benefiting from prenatal services and appropriate nutrition.

I think that's the way to go.

Senator SARBANES. I guess another way to put the question is to focus on low-income persons, as obviously we should since they have the most pressing problem. But that doesn't mean as you're moving up the income scale and moving out of the lowest income group into the next category, that in that next category the health needs of children or of the pregnancies are being fully met.

You may still have a deficiency taking place. Would that not be the case? I mean, you could have it even at the highest of incomes, but there you'd assume some kind of gross irresponsibility, I guess.

Dr. PAIGE. Well, it's a multipronged issue and there's probably no facile solution.

But if it's possible, I would agree with the intent of both statements, Dr. Oski and yours as well, I think in the short term there is need for ongoing support services. As I've looked at this issue in Maryland, I've come to the conclusion that all of these programs represent a band-aid approach to the hemorrhage that exists among the poor, that the fundamental problem is poverty, at least as I see it, and that until we cure the economic deficits that exist, which are at the root of all of these issues and others, as we bring others to the table who have broader perspectives than the medical people, we'll hear of even other problems, I'm sure.

It's my judgment, after looking at these issues for a while, that they're issues rooted in poverty and until you get to the root cause

of the problem, we will not cure this problem in this country. We're talking about unemployment.

One of my doctoral students who came to provide some preliminary data to me derived from the Hopkins teenage pregnancy program here in east Baltimore, looking at logistic models and multiple regressions and all of the more sophisticated information, indicates that in a population of about 900 pregnant women, one of the most significant factors operating in short, interpregnancy intervals has to do with unemployment, that the lack of employment is the most significant factor associated with short interpregnancy interval.

Whether that will hold up on additional analysis, I don't know. But clearly, if by the question you suggest that these are all interrelated, I would agree and I don't think that single approaches are as effective as the gutting of poverty within this country.

Senator SARBANES. Well, perhaps. But, in a comprehensive sense, that's obviously true. How do you break the vicious circle and where can you be most effective for the best investment of money?

For instance, let me ask this question. If you lose a critical period of the first 2 years, what are the implications for the learning capacity of those youngsters and their school performance and, to carry forward, their job performance?

Is part of today's unemployment problem the neglect of young people some years ago who now have had their capacities impaired because of that?

Dr. OSKI. We'd like to be able to answer yes to that, but I don't think we can say with specificity. This is an area that does need further research, to see if that's true. Although there's a cumulative effect of poverty, there's the impact of lead poisoning on intellect. There's the impact of nutrition on subsequent intellect. There's the impact of birthweight on subsequent intellect. And all these things add up and they are functions of poverty and they do play a role in the early years of life.

How we can sort of dissect out each one of those——

Senator SARBANES. It's hard to do.

Dr. OSKI. It's hard to do.

Senator SARBANES. That's right.

Ms. Rosenbaum.

Ms. ROSENBAUM. I'd like to add a couple of thoughts to the issue of poverty. There's no question that poverty has many, many effects on people. It diminishes their ability to gain access to services. Because over a long period of time, long-term poverty can diminish a family's ability to even perceive that a service is needed because they've been excluded from the service for so long that they may have less of an appreciation than nonpoor families would about the need for the service.

But I think that it's crucial that we not overlook a point that's been reiterated by almost every witness. And that is that we have gross systemic problems in this country that have very little to do with individual poverty, per se, and more to do with how we've chosen to carry out the business of health care.

We don't have a health system in place that assures, simply as a matter of living in the United States, that certain services are available. If I lost my health insurance tomorrow, I very quickly

could find myself in as desperate a situation as a poor family. We have an incredibly inadequate public health system. I'm sure here in Baltimore we see the same phenomenon that we see in other parts of the country.

Right now, in Los Angeles, it takes about 2 months for a pregnant woman to get her initial prenatal visit at a public maternity clinic because those services are so underfunded that there simply is no capacity to serve her quickly.

Even if a pregnant teenager wanted to come in the door quickly, she couldn't in Los Angeles.

Senator SARBANES. What's the situation here? Do we know? In Baltimore.

Dr. HEALD. I can only speak for teenagers. They can be appointed within 2 weeks.

Senator SARBANES. Two weeks.

Dr. HEALD. If a pregnancy has been identified.

Senator SARBANES. What percent was it that did not get any care prior to 24 weeks that you said earlier?

Dr. HEALD. The average age for coming in to our clinic is 24 weeks.

Senator SARBANES. I see. So 24. But assuming they come in right in the beginning, they can get an appointment in 2 weeks.

Dr. HEALD. They can get an appointment in 2 weeks.

Senator SARBANES. Los Angeles, 2 months.

Ms. ROSENBAUM. Two months. In Washington, DC, Providence Hospital offers a subsidized maternity program. It has 300 slots a year. They have a 2,500-person waiting list for those 300 slots. They had no waiting list 4 or 5 years ago.

In rural Maryland—you know, we think, of course, that Maryland—I'm a Maryland resident, so I know that our biggest population concentration is in Baltimore. But I do a lot of work in the Eastern Shore counties. Those counties are in desperate straits in terms of having a range of medical care readily accessible to families who have marginal incomes.

There are certain kinds of services that probably shouldn't even be funded along an insurance model, which is what we use in this country for just about everything. We should simply have a maternity program, a pediatric program. Insurance is something you use when you want to protect yourself against high-medical risks. It's not a particularly economically efficient or administratively efficient way of trying to get very basic services out to the population.

Unfortunately, it is our predominant model and short of calling for a complete change in how we finance health care, at least in the short term, we could simply improve the system's responsiveness to families whose employers don't offer insurance. We could pump more money into programs that, unfortunately, the administration has chosen to shut down, programs like the National Health Service Corps, which provides scholarship moneys for students to go out into underserved areas.

Well, by 1991, we'll have two people placed under that program because we've ended that program. We may have a glut of physicians in Baltimore, but we don't have a glut of physicians in many other areas.

Senator SARBANES. And let me just amend that. Even if you have a glut of physicians in Baltimore, you'll have a glut of physicians in the Baltimore metropolitan area.

Ms. ROSENBAUM. Exactly.

Senator SARBANES. But you'll not necessarily have a glut of them in certain geographical sectors of the Baltimore metropolitan area.

Ms. ROSENBAUM. Exactly. And so that's not in any way to diminish the importance of making sure that people have enough money to achieve a decent standard of living. But, unfortunately, medical care is now so expensive, that simply giving money—and so complicated—that you can't just give money to solve the problem. You have to deal at some point with the systemic issues.

Senator SARBANES. Let me ask another question that feeds right into it.

It's all very frustrating, in this area in particular, I think, because the benefit to cost ratio on these things is just enormous. For the amount of money you put in, the benefits come back to you.

What programs would you fund? How would you spend it? And bearing in mind Dr. Sabin's admonition earlier, what changes would you make in the organization of the system, or the systemic change in terms of how it was spent?

Suppose someone said, look, you're right. You're talking about very serious problems. We're simply building tomorrow's problems. There's a chance, obviously, we know enough that we can do something about it. Now we're going to look at this thing and we're going to put some more money into it and we may make, along with that, if necessary, structural institutional changes.

What three or four things would each of you recommend? If I could just pose that question.

Dr. HEALD. The first thing, and the most important thing, is maternal and early child health care.

Second would be—I think we have all the information, much of the information—we never have all—we have much of the information that we know how to lower the morbidity of pregnancy. And what we really need to do is stop and rethink our health care organization for maternal and childhood care, and then supply the appropriate leadership and wherewithal to carry out a national plan.

Dr. PAIGE. I would certainly agree with maternal entitlement. I would, within the bounds of what is possible, have entitlement for WIC, so that every pregnant woman could participate in the WIC Program. I would extend my comments beyond the focus this morning and say, just moving chronologically, make sure that there was day care available.

I want to emphasize the point that Dr. Sabin made with respect to promotion of breastfeeding on a national basis. I don't think we've paid attention to that. National free and reduced price lunch programs should be transformed into an entitlement program within the schools for all of our needy children. Food stamps available to all of our population. And a better educational program within our schools to permit our young people to move forward and to find employment and to fulfill their American dre ...

Senator SARBANES. Dr. Oski.

Dr. OSKI. I would start out by offering and providing subsidized health insurance for every single person that needed it. And there