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ABSTRACT

The report summarizes the health status and service needs of children in the United States. The first of the report's three sections describes the general population to provide a context for health measures. In the second section selected health status measures are presented graphically with accompanying text organized according to three age groups--infants, children, and adolescents. In the third section, measures of health services utilization are presented. Topics addressed include: poverty; family structure; child care; school dropouts; infant mortality; neonatal and post-neonatal mortality; low birth weight; infant feeding; congenital anomalies; child mortality; child hospitalization; limitation of activity due to chronic diseases; oral health; injuries; child abuse and neglect; childhood obesity; causes of death among 10-19 year olds; teenage sexuality; child, adolescent, and young adult AIDS (Acquired Immune Deficiency Syndrome); substance abuse; childhood immunization; prenatal care; physician visits; physician/hospital utilization by income status; health care financing; Medicaid coverage; use of physician services by perceived health status; and physician/hospital utilization in children with chronic conditions. (DB)

CHILD HEALTH USA '90

HEALTH RESOURCES AND SERVICES ADMINISTRATION

"HRSA—Helping Build A Healthier Nation"

The Health Resources and Services Administration has leadership responsibility in the U S Public Health Service for health service and resource issues HRSA pursues its objectives by:

- Supporting states and communities in delivering health care to underserved residents, mothers and children and other groups;
- Participating in the campaign against AIDS
- Serving as a focal point for federal organ transplant activities;
- Providing leadership in improving health professions training;
- Tracking the supply of health professionals and monitoring their competence through operation of a nationwide data bank on malpractice claims and sanctions, and
- Monitoring developments affecting health facilities, especially those in rural areas.

ERRATA NOTICE

Child Health USA '90

Error in text on page 16, first paragraph, second sentence should read:

The infant mortality rate was 10.0 deaths per 1,000 live births.

Error on chart, page 26, "Limitation of Activities due to Chronic Conditions by Age and Sex", male and female labels reversed. Lighter shading should be male.

CHILD HEALTH USA '90

U.S. DEPARTMENT OF
HEALTH & HUMAN SERVICES
Public Health Service
Health Resources and Services Administration
Office of Maternal and Child Health
HRS-M-CH 90-1 October 1990

CONTENTS

PREFACE

Child Health USA 1990 is a report of the health status and service needs of America's children. It presents a summary of sentinel health measures reflecting both what we have accomplished for our children and what challenges yet remain.

This report was compiled as a result of a collaborative effort between the National Center for Health Statistics and the Office of Maternal and Child Health pursuant to the implementation of Section 509. (42 U.S.C. 701) Part (a) (5) of Title V of the Social Security Act as amended. It was designed to highlight information related to child health by appropriate growth and developmental groupings in a single publication displayed in a readily accessible and readable manner. Over time it is expected that this report may change and expand not only in content but in format as well, reflecting the dynamic needs of children and a better understanding of effective means to communicate the nature of those needs. In part, it fulfills the responsibility to disseminate information to the maternal and child health community, constituents, policy makers, and child related public and private organizations.

Child Health USA 1990 is comprised of three sections. The first section describes the general population to provide a context for health measures. The second, selected health status measures are presented graphically with accompanying text organized according to three age groups—infants, children and adolescents. In the third section, measures of health services utilization are presented. The availability of comparable national data was the major criterion used to select the indicators presented in this report.

Publication of this report would not have been possible without the contributions of numerous staff members throughout the Maternal and Child Health Bureau, the National Center for Health Statistics, and several other agencies. These people gave generously of their time and knowledge, providing data from their surveys and programs. A special thanks goes to a group of national experts who provided guidance and direction to this effort; their cooperation and assistance are gratefully acknowledged.

While we have tried to provide a comprehensive, accurate and current summary of key indicators of child health, the information in this report may become outdated quickly and almost certainly have significant gaps and other built-in limitations. Consequently, interpretation of the information in this monograph should be viewed as a point of departure for subsequent efforts to obtain information that facilitates the promotion of health and the prevention of disease among our children.

Explanatory Notes:

- Age breaks may vary among health indicators, depending on the source of the data. Where possible, the following age categories were used: <1, 1-4, 5-9, 10-14, 15-19, 20-21 years.
- Primary comments on each health indicator relate to the visual display, with other related information given at the end.
- Hispanic persons may be of any race; thus, the reader may need to refer to the specific source of data for further clarification.

INTRODUCTION

"Children are the hope of the future!"

That is stated so regularly, that we may overlook its obvious implications. If the future of a society is to be shaped by those who are today's children, there should be a national imperative to develop their bodies, and minds, and spirits to be strong, and sensible and sensitive.

The health of children—their bodies, minds, and spirits—and of the families in which they live is more than just an investment for the future, however. It is a benchmark of the health of the society. In this report, which is issued annually by the Maternal and Child Health Bureau, you have a series of measures of the health of our Nation's children at moments in time and through them a portrait of the health of our Nation. Looked at optimistically, we can say with pride that the vast majority of our children are healthy. Looked at pessimistically, we can note with alarm that a score of industrialized nations are doing better than the United States in important measures, such as infant mortality. But the practical value of the information in this book is to identify problem areas, trends and opportunities and use that information to focus public and private resources more effectively to improve the health of children.

The Federal Government has been deeply involved in promoting child health throughout most of this century. In 1912, when the Children's Bureau was established, it was instructed to "investigate and report . . . upon all matters pertaining to the welfare of children and child life among all classes of our people." Its earliest investigation focused on infant mortality and the strides made in reducing infant mortality since that first report in 1913 have been remarkable. Yet, despite significant reductions in the infant mortality rate, the issue must continue to challenge us. Improvements in infant mortality and low birth weight rates have slowed recently. Moreover, it is clear that all groups have not benefited equally. There is a long-standing disparity between blacks and whites, as well as significant differences among States. The causes of these variations are complex, and often unknown. However, demonstration projects over the years have shown techniques, such as early entry into prenatal care, which can improve pregnancy outcomes and reduce infant mortality. Therefore, national resources are now being focused on improving access to prenatal care. And studies to identify and eliminate barriers to obtaining prenatal care continue.

Statistics have revealed that, after the first year of life, injuries account for more child deaths than any other cause. The child health community has mobilized in the past decade to address those unintentional injuries which most affect children through different periods of their development. Parent education and community prevention campaigns around such issues as car safety seats and seatbelts, bicycle safety, and designated drivers are developing throughout the country. The effect of prevention efforts such as these won't be seen immediately, but persistent attention to this issue should reverse the trend of injury-related deaths as we head into the 21st century.

In future years, the Maternal and Child Health Bureau will be gathering data on the health status of our Nation's children from the state agencies which administer the Maternal and Child Health Services Block Grant, as well as the usual national sources. By compiling and sharing this

information, we will be, in part, measuring our progress toward achievement of national objectives for the health of mothers and children in the year 2000. While we can take pride in our achievements, there will continue to be and unfinished agenda. It is our collective responsibility to take up the challenge for all the children's sake, and direct our energies to assure healthy pregnancies, healthy births, and good health for our children through all stages of childhood.

We hope that the information provided in this booklet will point useful directions for our efforts and lead to the enhanced health of mothers and children throughout our Nation.

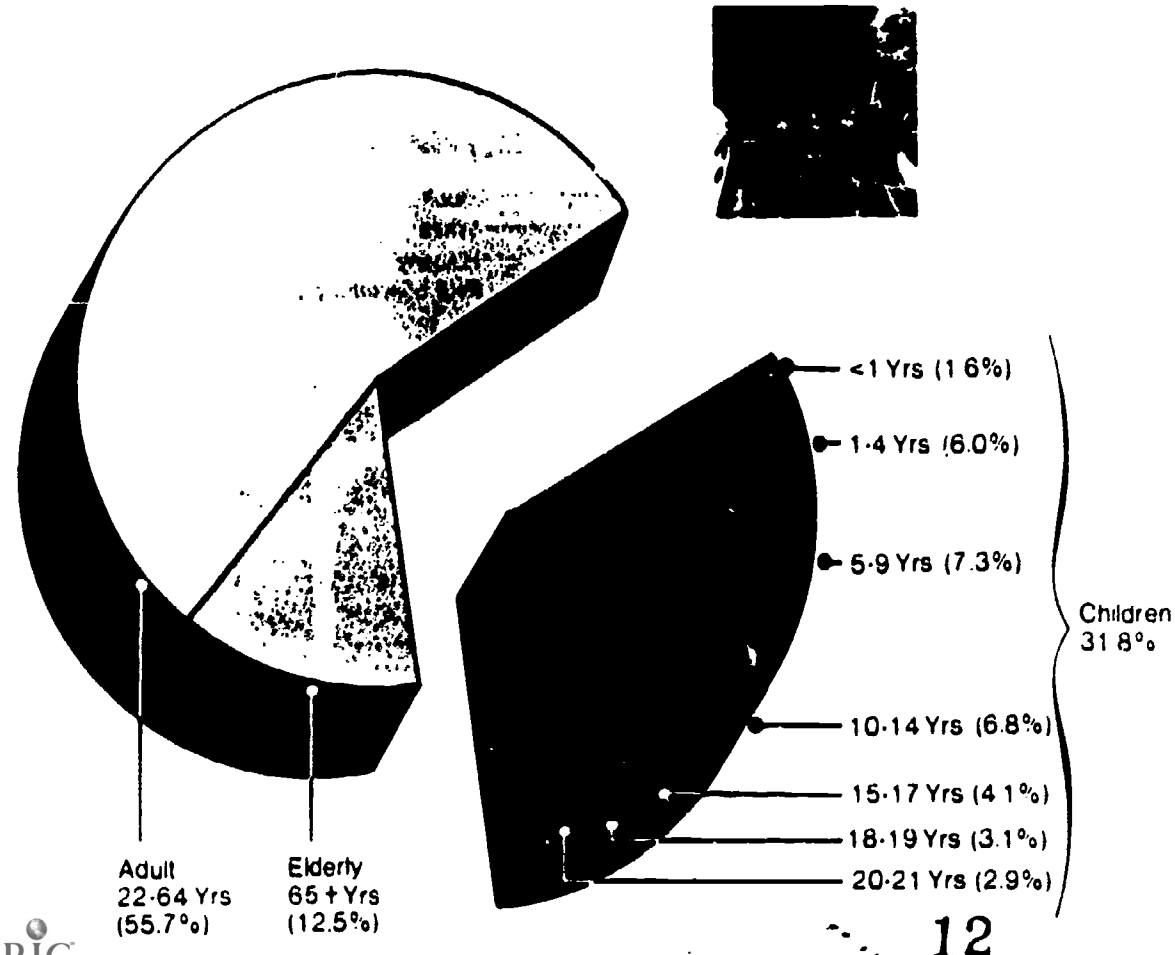
Maternal and Child Health Bureau
Child Health Day
October 1, 1990

POPULATION CHARACTERISTICS

There are many socio-demographic characteristics that are used to describe the maternal and child population (i.e. race, age, poverty status). Policy makers, whether at the national, state or local level, use this information to systematically address the health problems of the mothers and children they serve and to develop programs and allocate resources that best meet their needs.

We have chosen the following population descriptors because of their importance to program development in maternal and child health: population by age, poverty, living arrangements, child care and school dropout.

U.S. Population
by Age Group: 1989
Source: U.S. Bureau of the Census



POPULATION OF CHILDREN

In 1989, there were 79 million children through the age of 21 in the United States, representing 31.8% of the total population.

Although there were 23 million more children under 22 years of age in 1988 than in 1950, this age group is declining proportionally relative to other age groups in the population.

There was a 13.9% increase in the number of children under 5 years of age between 1980 and 1989.

In 1989, persons aged 65 and over represented 12.5% of the total population. By the year 2000, their numbers are expected to increase by 12.6%, whereas the child population (aged 0 through 21) is expected to increase by only 2.1% over the 1989 figures.

POVERTY

In 1988 there were 12.6 million children under 18 years of age living in poverty. This number represents nearly 40% of all the Nation's poor.

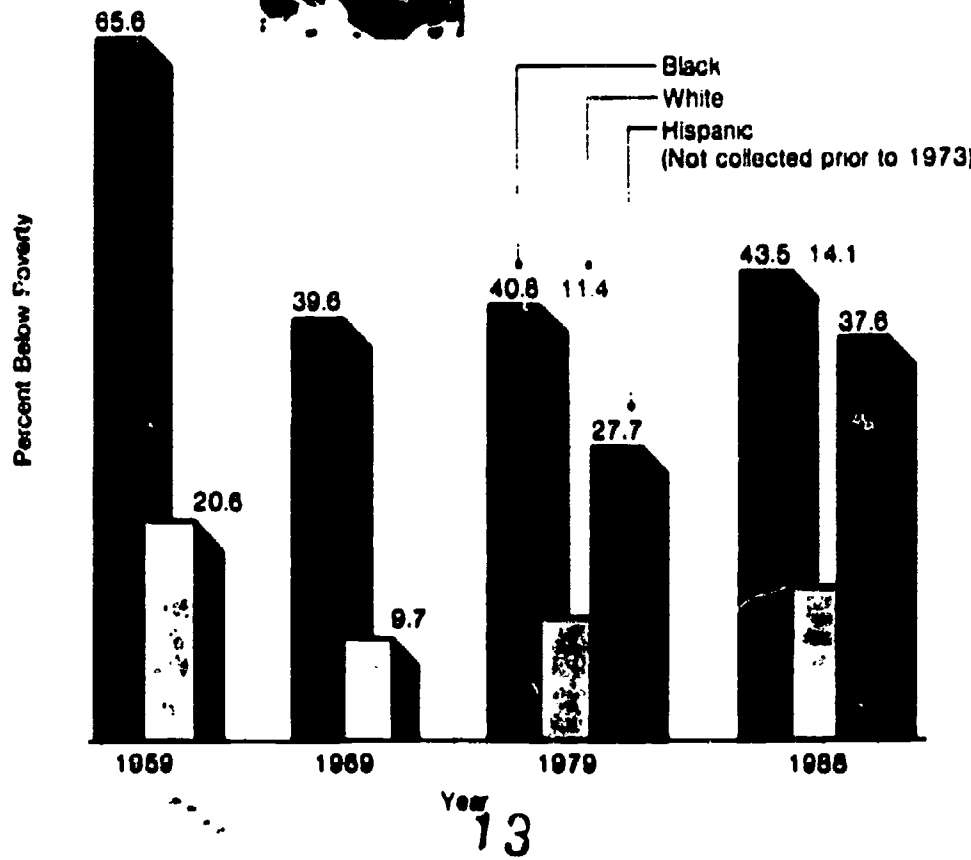
Between 1980 and 1988, the number of children living in poverty increased by 1 million; in contrast, the number of persons 65 years and over living in poverty declined by 3.9 million.

Black or Hispanic children are 3 times more likely to live in poverty than are white children.

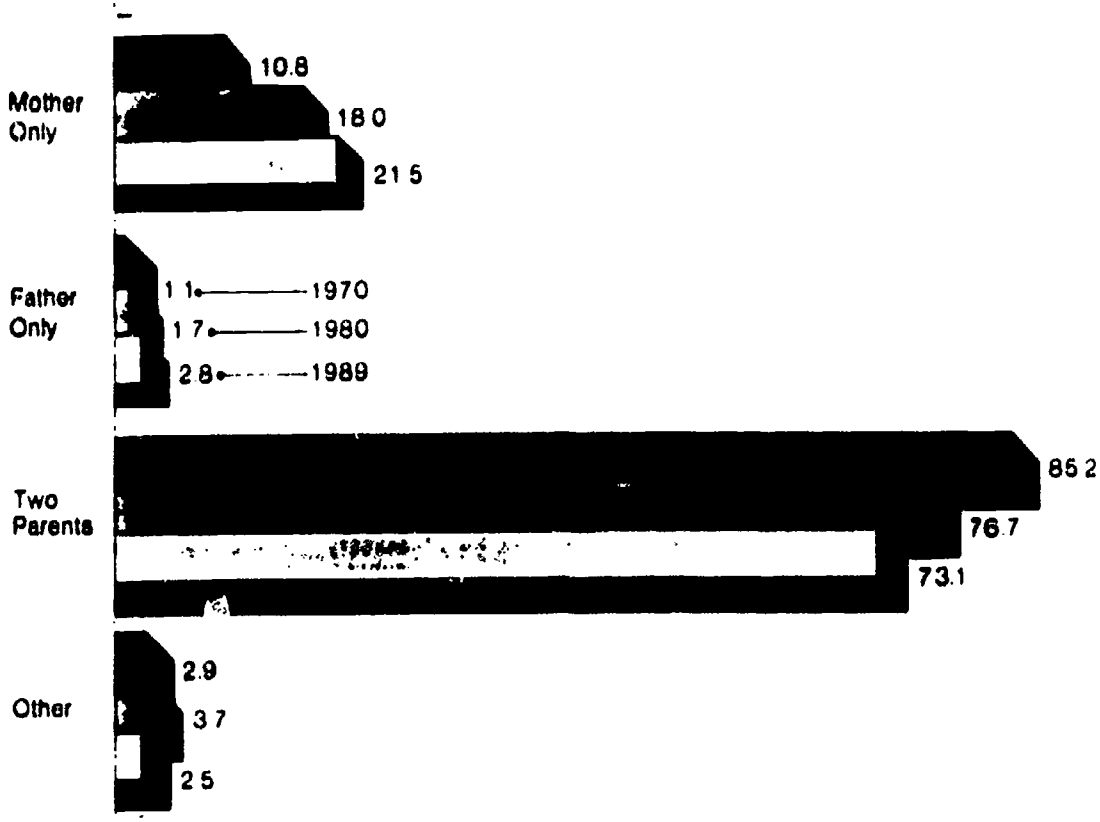
In 1988, a family of four was considered to be living in poverty if its annual income was below $12,091

Childre... Poverty Under ... Years of Age: 1988

Source: U.S. Bureau of the Census



Living Arrangements
Children Under 18 Years of Age: 1970-1989
Source: U S Bureau of the Census



FAMILY STRUCTURE

In 1989, 15.5 million children—24.3% of all children under 18 years of age—lived with one parent only, an increase of 12.4% since 1970.

In 1989, the vast majority of single parent families consisted of children living with their mothers.

Black children are nearly 3 times as likely as white children to live with a single parent.

In 1989, almost half (44.7%) of the children living only with their mothers were poor.

CHILD CARE

Working Mothers

In 1988, over half of the mothers of preschool children (under 6 years of age) were in the labor force, an increase of 95% since 1970.

Although mothers of older children are more likely to be in the work force, between 1970 and 1988 the fastest increase in work force participation has been by mothers of children under 6 years of age.

* *Percent of mothers with children in this age group who are in the work force.*

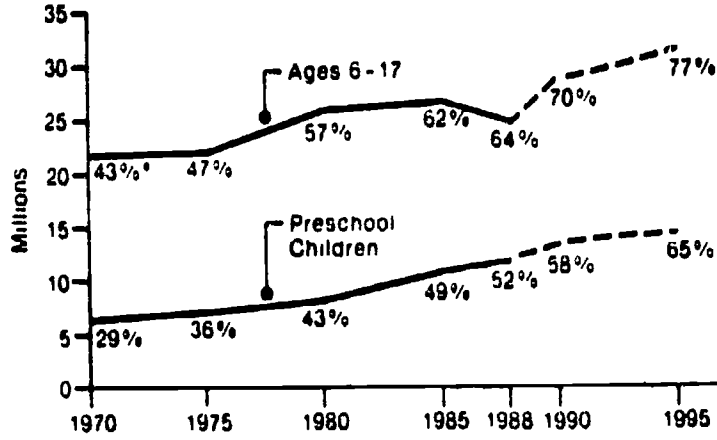
Selected Preschool Care

In 1987 almost one fourth of children under five years of age (2.2 million) whose mothers worked outside of the home were in non residential day care centers.

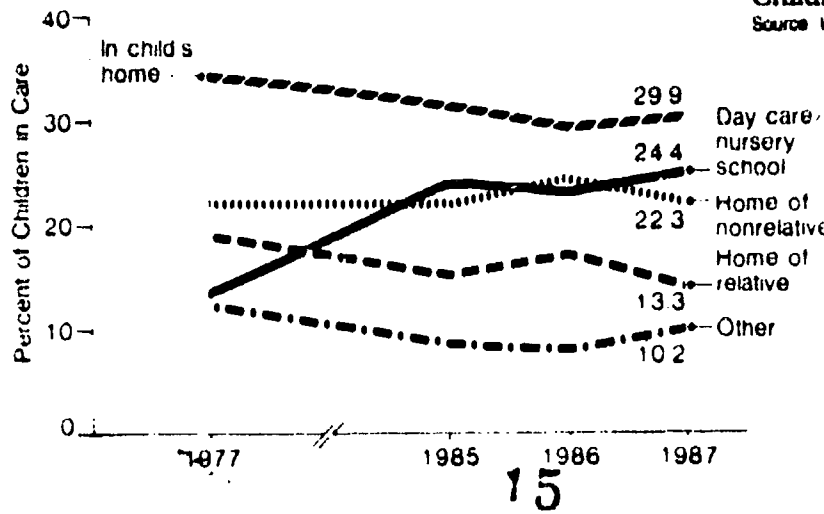
The largest shift in child care arrangements in the last 10 years has been away from in-home care toward day care center or nursery school settings.

Women who work full time tend to use day care centers while women who work part [illegible] are more likely to use in-home care.

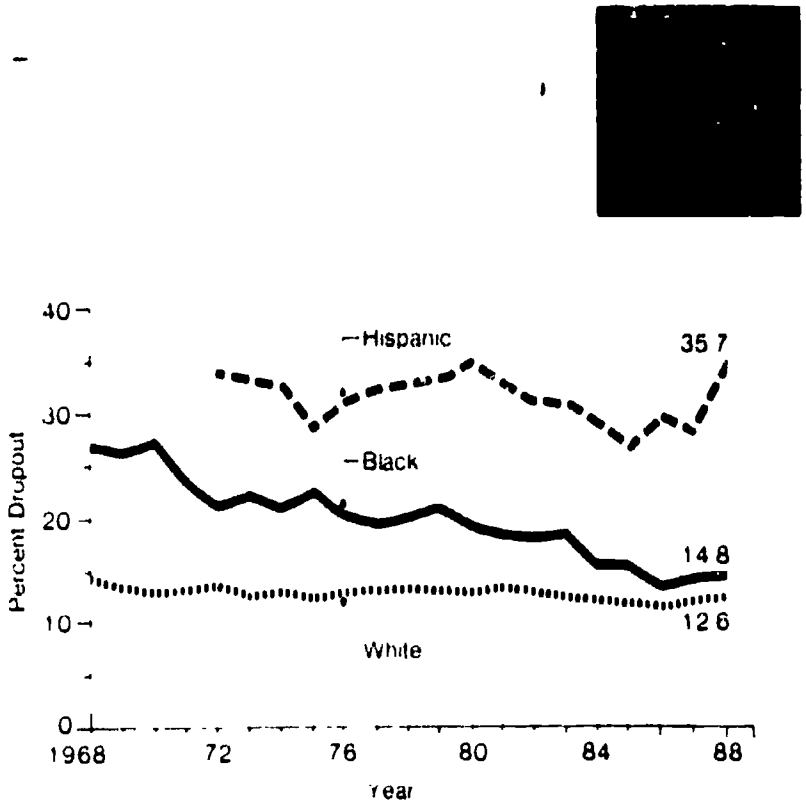
Children with Mothers in the Work Force: 1970-1995
Source: U S Bureau of Labor Statistics



Place of Care of Preschool Children: 1977-1987
Source U S Bureau of the Census



School Dropout Status, Ages 16-24 by Race/Ethnicity: 1968-1988
Source U S Department of Education



SCHOOL DROPOUT

In 1988, 4.2 million 16-to 24-year olds were out of school and had not completed high school. This represents nearly 13% of such young adults.

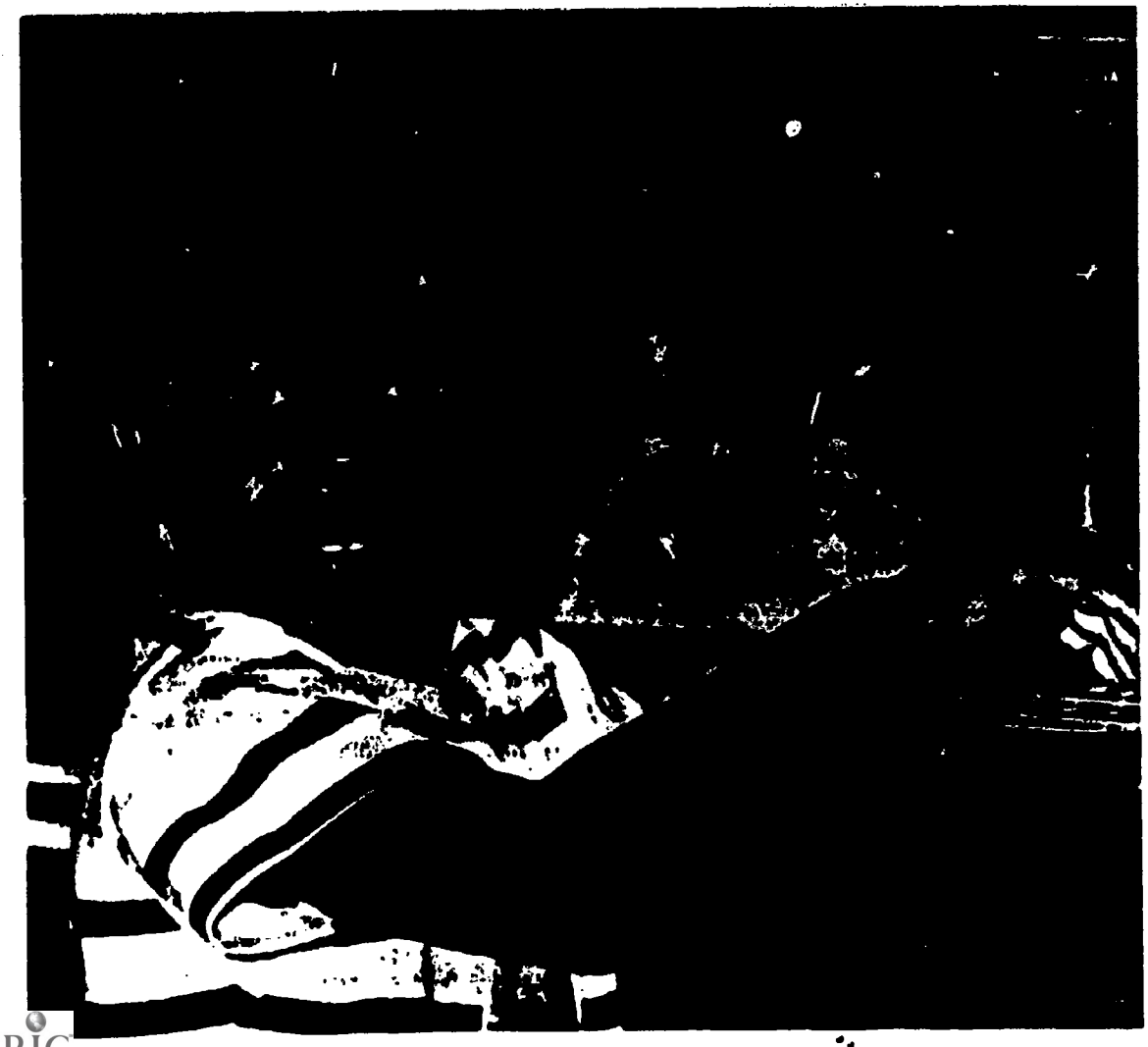
In 1988, nearly 36% of young Hispanics were dropouts. This high percentage may be influenced by the high immigration rates of Hispanics in recent years.

The differences between the dropout rates of black and white young adults have narrowed considerably in the last twenty years.

Between 1968 and 1988, the dropout decreased faster for black than for white young adults.

In a 1980-1982 cohort survey, American Indians had the highest dropout rate (35.5%) of any group, almost two and one half times as high as that of whites (14.8%). Asians had the lowest dropout rate (8.2%).

HEALTH STATUS

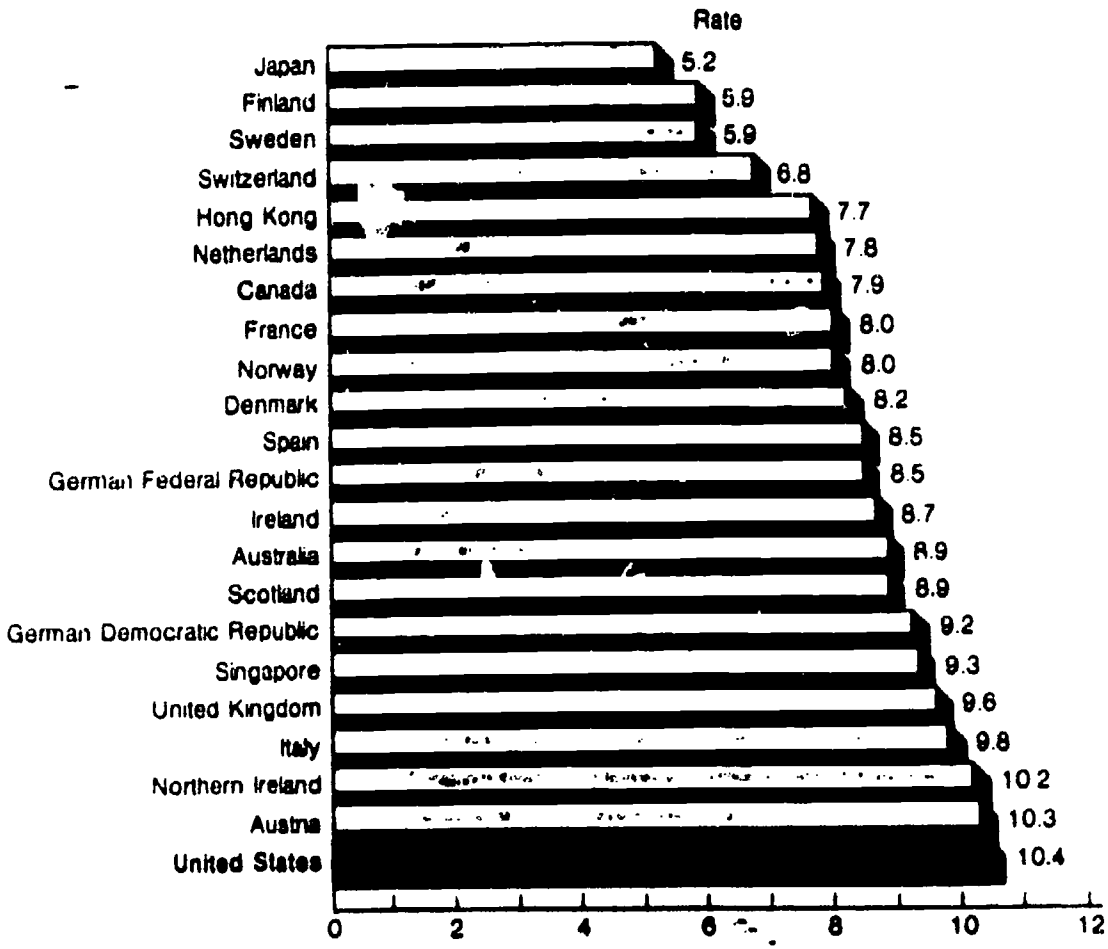


The measurement of the health status of our children is important because it enables us to assess the impact of our past and current programs and to plan for the future. The data in this section were primarily obtained through analysis of national surveys which, though limited in sample size, are representative of the populations we serve.

The health status indicators are presented by age group: infant, child, and adolescent. Although there is some overlap, the data are displayed by the age-specific importance of their contribution.

HEALTH STATUS—Infant

Cross-National Infant Mortality Ratings: 1986
Source: Health United States 1989



CROSS-NATIONAL INFANT MORTALITY

Although the United States has greatly reduced its infant mortality rate since 1965, it still ranks behind 21 other industrialized countries.

In 1950, Japan ranked 17th: worst among developed countries in infant mortality, with a rate of 60.1, whereas the United States ranked 6th, with a rate 29.2. In 1986, the rate of infant mortality in Japan (5.2) was the lowest in the world.

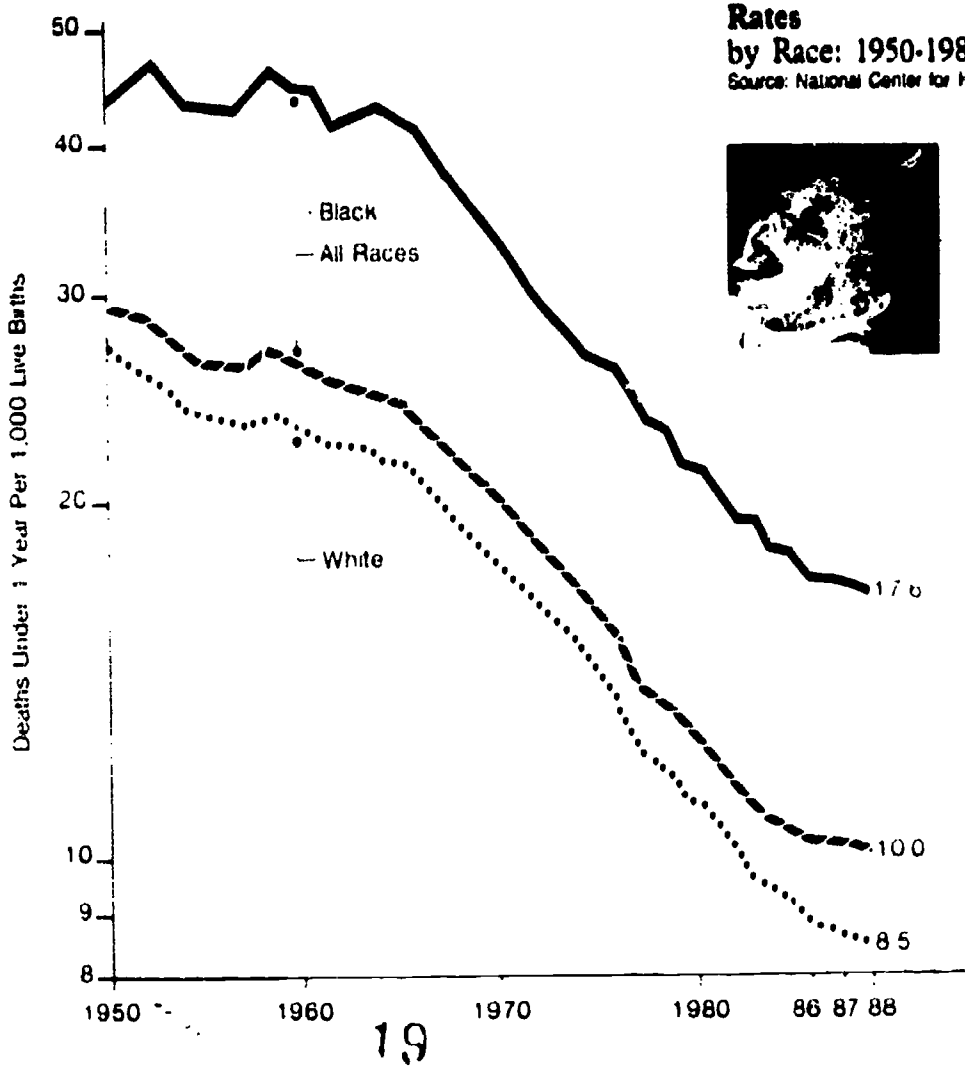
INFANT MORTALITY

In 1988, 3,909,510 babies were born in the United States, with 38,910 of them dying before their first birthday. The infant mortality rate was 10.1 deaths per 1,000 live births.

The rapid decline in the infant mortality rate during the 1960's and 1970's has slowed for both blacks and whites in the 1980's.

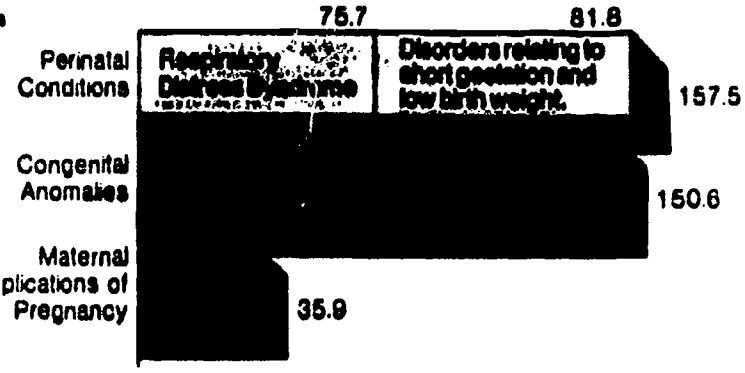
The infant mortality rate for black infants remains about twice as high as that for white infants.

U.S. Infant Mortality Rates
by Race: 1950-1988
Source: National Center for Health Statistics



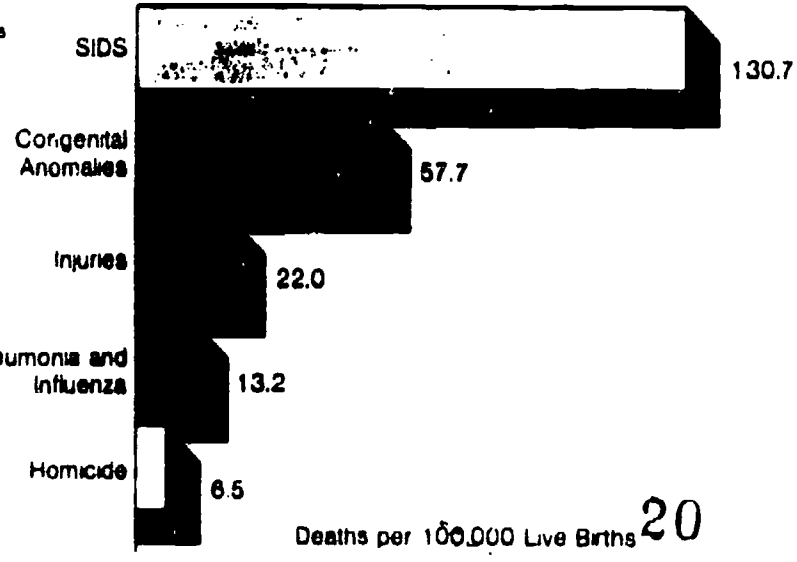
Leading Causes of Neonatal Mortality: 1988

Source: National Center for Health Statistics



Leading Causes of Postneonatal Mortality: 1988

Source: National Center for Health Statistics



NEONATAL AND POSTNEONATAL MORTALITY

Neonatal

In 1988, 24,690 infants under the age of 28 days died; the neonatal mortality rate was 632 deaths per 100,000 live births.

Postneonatal

In 1988, 14,220 infants ages 28 days up to one year died; the postneonatal mortality rate was 364 per 100,000 live births.

Of the five leading causes of postneonatal death, injuries and homicides may be prevented with appropriate intervention.

Between 1960 and 1988, the postneonatal mortality rate decreased faster for black infants than for white infants.

LOW BIRTH WEIGHT

In 1988, 6.9% of all live births (270,681 babies) were low birth weight, that is, they weighed less than 2,500 grams or 5½ pounds at birth.

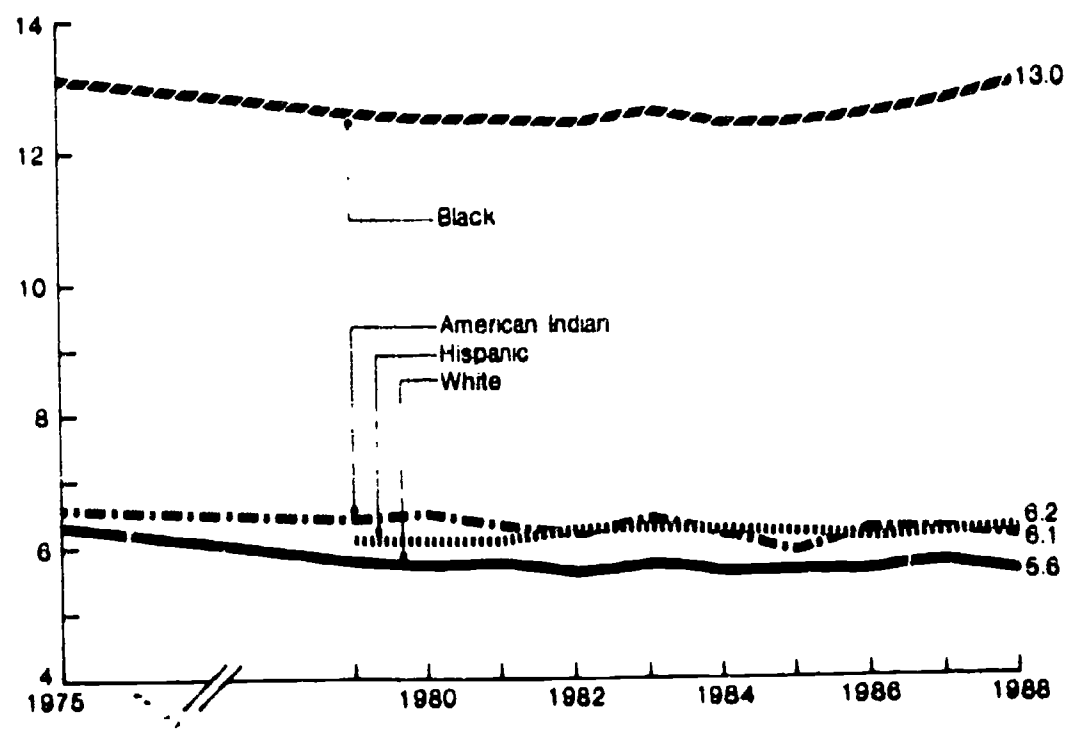
The percent of low birth weight births has not decreased since 1980.

Low birth weight is the factor most closely associated with neonatal mortality. Low birth weight infants are more likely to experience long term disabilities or to die during the first year of life.

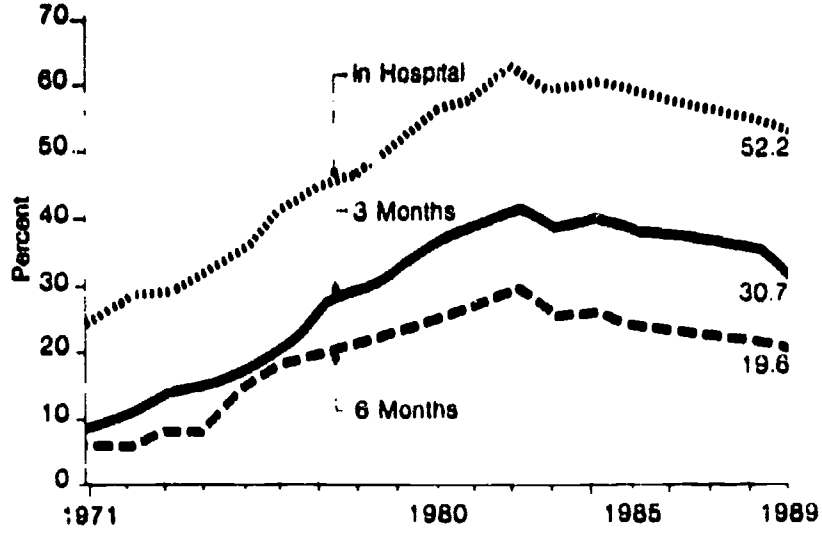
Social factors associated with increased risk of low birth weight include: poverty, low level of educational attainment, unmarried status and minority status.

Percent of Low Birth Weight Infants by Race: 1975-1988

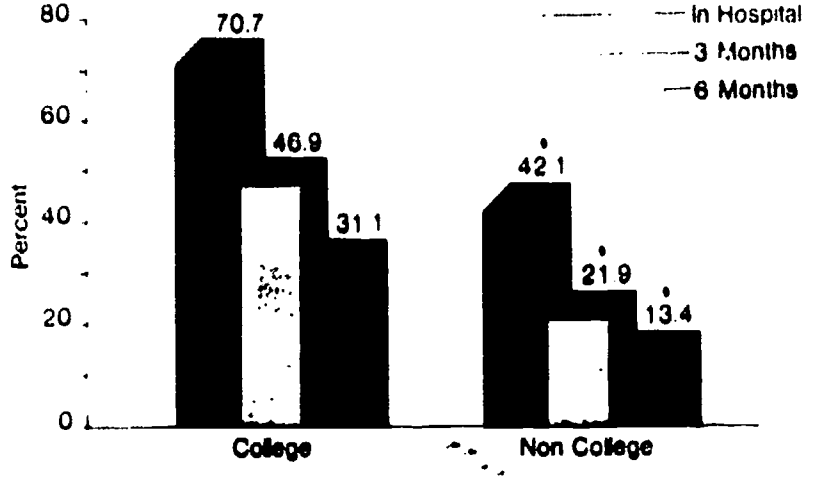
Source: National Center for Health Statistics



Percent Breastfeeding:
1971-1989 All Races
Source: Ross Laboratories



Percent Breastfeeding
by Education: 1989
Source: Ross Laboratories



INFANT FEEDING

Trend From 1971 to 1982, the percent of mothers who initially breastfed increased steadily to a high of 62% Since then there has been a slight but continuous decline to 52% in 1989.

Although proportionally fewer women are breastfeeding at 3 and 6 months, the overall trend parallels that of women breastfeeding in hospital.

Education

Higher educated women are more likely to breastfeed. Breastfeeding both in-hospital and after 6 months is considerably higher for women who have attended college.

Breastfeeding rates continue to be highest among women who are older, better-educated, relatively affluent, and/or who live in the western United States. Conversely, women least likely to breastfeed are those who are low-income, black, under 20 years of age, and/or who live in the southeastern United States.

Note: Data obtained through questionnaire mailed to mothers six months after delivery, concerning their infant feeding practices. In 1989, the sample was drawn from a list which represented 82% of all new mothers in the United States.

PEDIATRIC AIDS

As of April 1990, 2,192 cases of AIDS in children younger than 13 years of age had been reported in the U.S. These children represent approximately 1.7% of all reported AIDS cases.

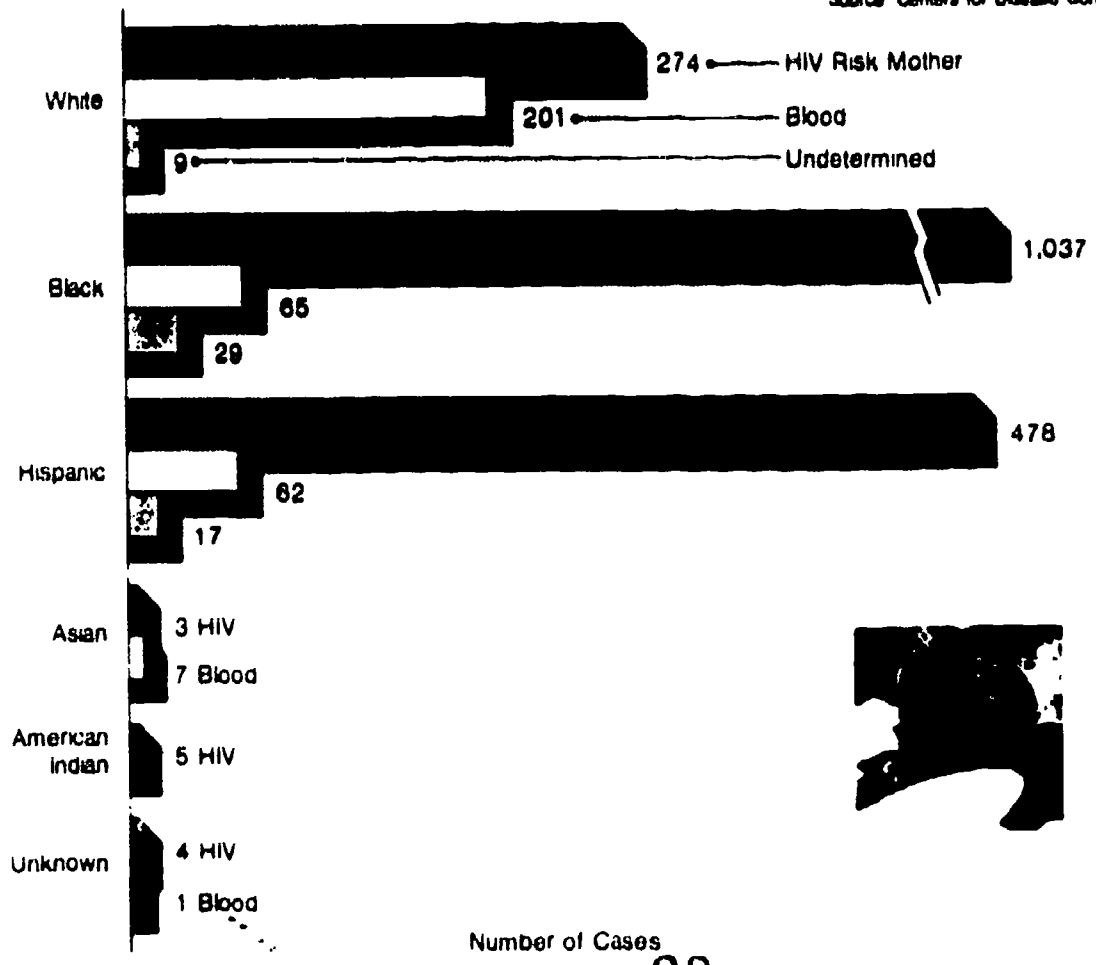
The majority of pediatric AIDS cases result from transmission by HIV risk mothers, with a disproportionate number of cases occurring in black and Hispanic children.

The number of cases of AIDS, as reported by the Centers for Disease Control (CDC), does not include children who are infected with HIV who are either asymptomatic or in the early stage of disease.

Notes
HIV Risk Mother: Mother with/at risk for AIDS HIV infection—
- IV drug use
- Sex with IV drug user
- Sex with bisexual male
- Sex with person with hemophilia Born in Pattern-II country
- Sex with person from Pattern-II country
- Sex with transfusion recipient with HIV infection
- Sex with person with HIV infection, risk not specified
- Receipt of transfusion of blood, blood components, or tissue
- Has HIV infection, risk not specified

Blood
- Hemophilia/coagulation disorder
- Receipts of blood transfusions, blood components, or tissue

Pediatric AIDS by Race and Exposure Category: 1990
Source: Centers for Disease Control



CONGENITAL ANOMALIES

Down Syndrome

Down syndrome is one of the leading causes of mental retardation. Recent increases in its incidence may be due to an increasing proportion of births to older women who are at higher risk of giving birth to an infant with Down syndrome.

Spina Bifida

Based upon rates from the Birth Defects Monitoring Program at the Centers for Disease Control (CDC), from 1980 through 1988, an estimated 15,000 infants born in the U.S. had spina bifida without anencephaly. Approximately 4,200 have died as a result of their defects.

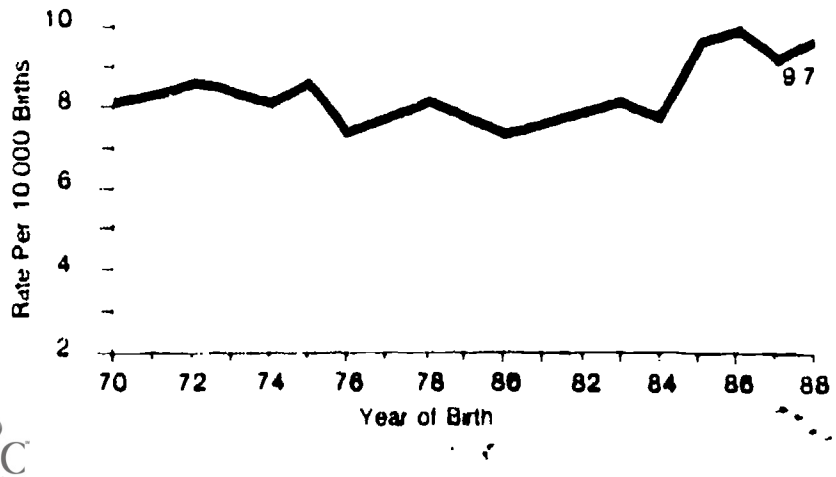
The estimated rate of infants born with spina bifida has decreased from 1980 (5.2 per 10,000 live births) through 1988 (3.5 per 10,000 live births). However, an increasing proportion of these infants survive into childhood each year.

Approximately 100,000 infants are born each year in the United States with serious congenital anomalies.

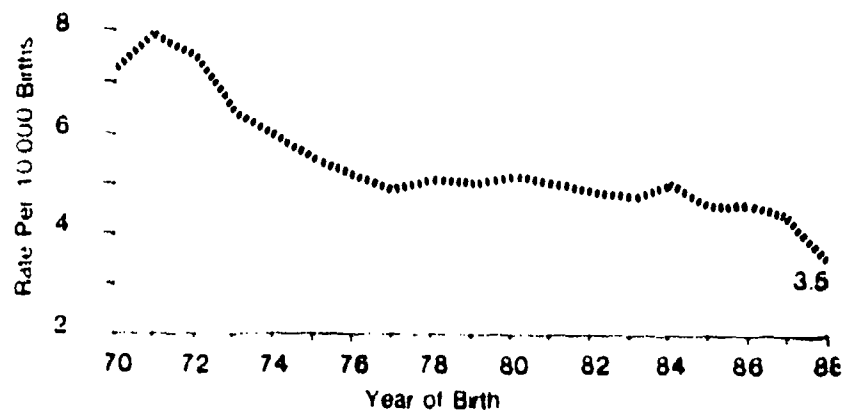
In 1987 there were 7,844 infant deaths related to congenital anomalies, accounting for 20.5% of all infant deaths.

1.2 million infants, children, and adults are hospitalized each year for treatment of congenital anomalies.

Down Syndrome:
1970-1988
Source: Centers for Disease Control



Spina Bifida
without Anencephalus:
1970-1988
Source: Centers for Disease Control



State Specific Information
Infant Mortality, Low Birth weight, and Early Prenatal Care by Race: 1988

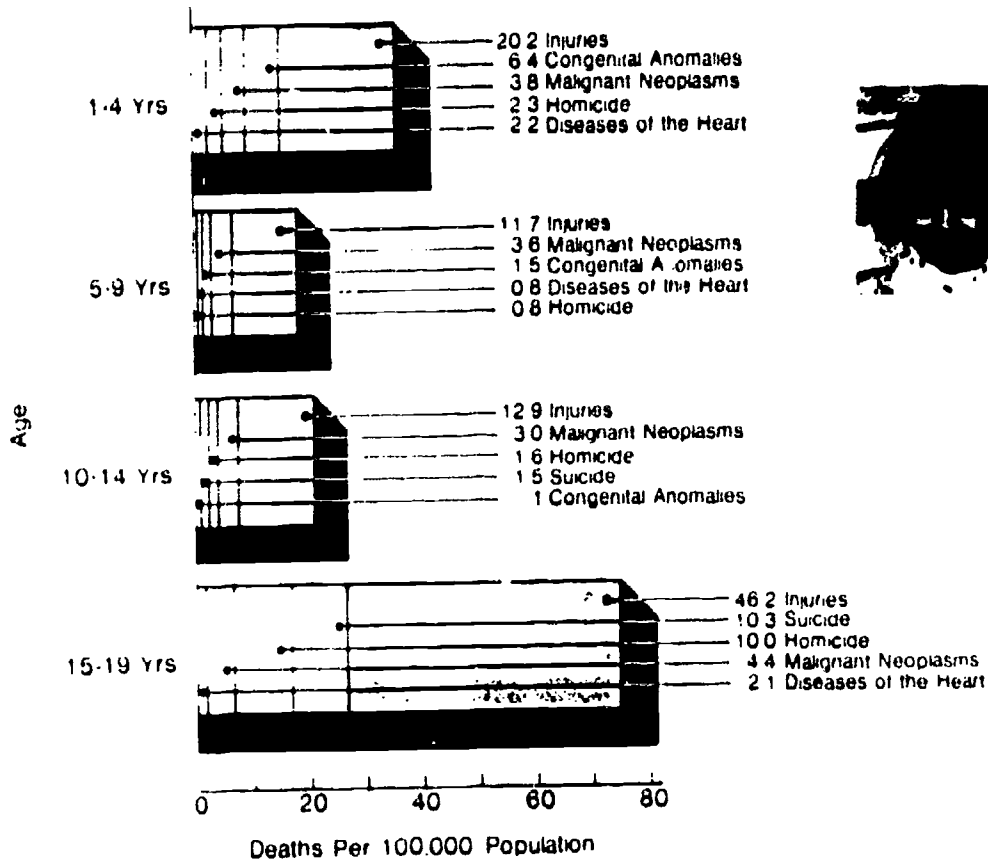
Source: National Center for Health Statistics

State	Infant Mortality†			Low Birthweight			Early Prenatal Care		
	All	White	Black	All	White	Black	All	White	Black
Alabama	12.1	9.3	17.2	8.0	6.0	11.9	73.1	80.6	58.9
Alaska	11.6	9.8	*	5.0	4.6	9.2	79.3	82.8	80.4
Arizona	9.7	9.4	17.9	6.2	6.0	12.4	67.9	70.1	61.5
Arkansas	10.7	8.7	17.4	8.2	6.7	13.0	68.3	74.0	50.0
California	8.6	8.2	15.9	6.0	5.1	12.7	75.3	75.5	69.0
Colorado	9.6	9.6	12.0	7.8	7.5	12.9	77.4	78.4	66.3
Connecticut	8.9	8.0	15.5	6.7	5.7	13.2	83.1	86.3	62.2
Delaware	11.8	9.1	21.1	7.4	5.6	13.0	79.7	85.1	61.2
District of Columbia	23.2	19.9	26.0	14.3	5.3	16.9	61.2	86.9	56.8
Florida	10.6	8.5	17.4	7.7	6.0	12.9	70.1	75.7	52.9
Georgia	12.6	9.2	18.9	8.4	6.1	12.5	73.3	80.1	61.3
Hawaii	7.2	7.2	*	6.9	5.8	8.8	76.6	83.7	82.8
Idaho	8.8	8.5	*	5.1	5.1	**	74.8	75.1	78.5
Illinois	11.3	8.7	20.7	7.5	5.5	14.1	78.1	82.8	62.7
Indiana	11.0	9.9	19.9	6.6	5.8	12.4	78.2	80.3	62.0
Iowa	8.7	8.3	19.9	5.4	5.2	11.7	85.4	85.9	72.3
Kansas	8.0	7.0	16.5	6.1	5.5	12.2	81.6	83.5	67.6
Kentucky	10.7	10.0	17.4	6.7	6.2	11.8	76.7	78.3	63.5
Louisiana	11.0	9.0	14.3	8.8	6.0	12.9	74.3	84.6	60.0
Maine	7.9	8.0	*	4.9	4.8	**	82.8	83.0	76.7
Maryland	11.3	8.5	17.8	8.1	5.8	12.9	81.2	87.4	68.2
Massachusetts	7.9	7.3	15.4	6.0	5.4	11.2	83.4	85.7	67.2
Michigan	11.1	8.6	21.9	7.3	5.7	14.2	79.9	82.9	67.8
Minnesota	7.8	7.2	19.5	5.0	4.6	11.7	79.8	82.2	55.6
Mississippi	12.3	8.7	16.1	8.7	6.0	11.8	75.9	85.6	65.4
Missouri	10.1	9.0	16.2	6.8	5.6	12.9	79.2	82.0	65.4
Montana	8.7	8.8	*	6.0	5.9	**	77.7	80.9	72.4
Nebraska	9.0	8.1	22.4	5.5	5.1	12.5	82.4	84.0	65.0
Nevada	8.4	7.5	18.7	7.5	6.7	14.5	72.0	74.7	52.2
New Hampshire	8.3	8.4	*	4.8	4.8	**	84.1	84.3	69.7
New Jersey	9.9	7.9	18.5	7.0	5.4	13.3	79.7	84.4	61.1
New Mexico	10.0	9.7	*	7.2	7.4	11.1	54.9	56.6	46.6
New York	10.8	8.9	18.1	7.8	5.9	14.0	74.8	80.4	56.9
North Carolina	12.5	9.6	19.5	8.0	6.1	12.4	75.7	82.6	60.4
North Dakota	10.5	10.0	*	4.8	4.6	**	81.9	84.1	80.1
Ohio	9.7	8.6	15.9	6.9	5.7	13.0	81.6	84.3	66.6
Oklahoma	9.0	9.3	12.6	6.5	6.0	11.8	73.6	77.7	58.2
Oregon	8.6	8.5	*	5.2	5.0	11.7	73.9	74.6	61.9
Pennsylvania	9.9	8.1	19.8	6.9	5.5	14.4	78.9	83.7	53.8
Rhode Island	8.2	7.5	*	6.0	5.6	9.3	84.0	86.2	69.2
South Carolina	12.3	9.6	16.6	9.0	6.3	13.1	64.7	75.1	48.5
South Dakota	10.1	9.7	*	4.7	4.6	**	76.6	80.7	69.6
Tennessee	10.8	8.2	18.6	7.9	6.3	12.7	75.5	79.2	64.3
Texas	9.0	8.3	14.2	6.8	5.9	12.2	66.9	68.5	56.8
Utah	8.0	7.9	*	5.7	5.6	11.8	82.6	83.6	66.2
Vermont	6.8	6.7	*	5.0	4.9	**	80.6	80.8	65.5
Virginia	10.4	8.1	17.9	7.0	5.4	11.9	80.7	85.1	67.7
Washington	9.0	8.7	16.1	5.3	4.8	10.8	77.1	78.6	63.4
West Virginia	9.0	8.5	21.6	6.4	6.2	10.9	71.2	72.0	54.0
Wisconsin	8.4	7.5	16.4	5.4	4.7	12.9	83.1	86.1	63.8
Wyoming	8.9	8.8	*	7.0	7.2	**	78.4	79.2	71.8
United States	**10.0**	**8.5**	**17.6**	**6.9**	**5.6**	**13.0**	**75.9**	**79.4**	**61.1**

*Fewer than 20 infant deaths, rates not shown
**Fewer than 20 births less than 2500 grams, rates not shown
†Death per 1,000 live births

Leading Causes of Death by Age: 1987

Source: National Center for Health Statistics



CHILD MORTALITY

Injuries are the leading cause of death among all children.

Homicide and suicide are major contributors to the causes of death in adolescents 15 through 19 years of age.

In 1987, 31,831 children of ages 1 through 19 died.

There has been a general decline in the overall death rates since 1950.

NOTE: The rates in this figure for injury, homicide, and suicide were determined by using the following ICD-9 E Codes:
- Injuries E800-E949
- Homicides E960-E978
- Suicides E950-E959

CHILD HOSPITALIZATION

Causes

In 1988, diseases of the respiratory system were the major cause for hospitalization of children 1 through 9 years of age, accounting for 34% of all discharges.

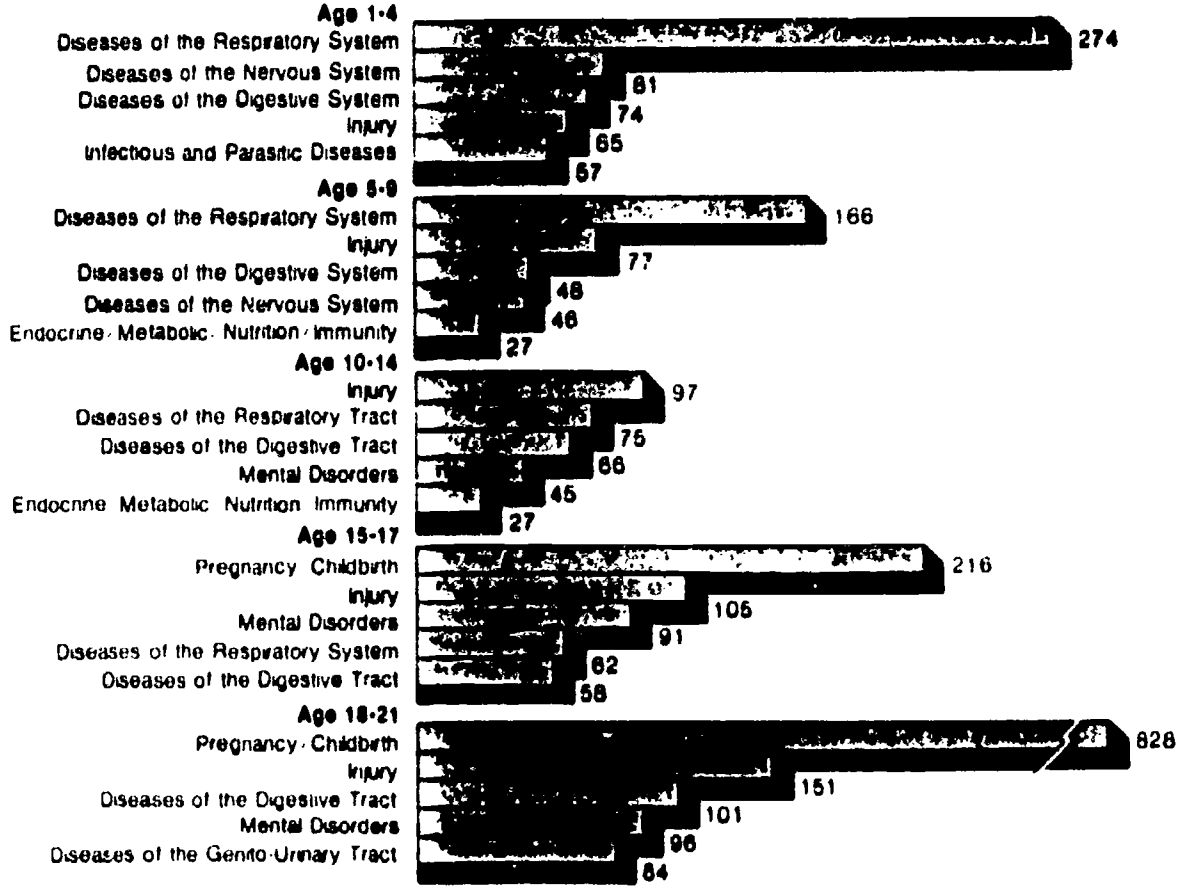
Hospital discharge rates decline with age until the age of 14, when they begin to increase.

While injuries are the leading cause of death for children greater than 1 year of age, this category accounted for only 12% of the hospital discharges in 1988.

Pregnancy and childbirth related hospitalizations accounted for 62% for young women aged 15-21.

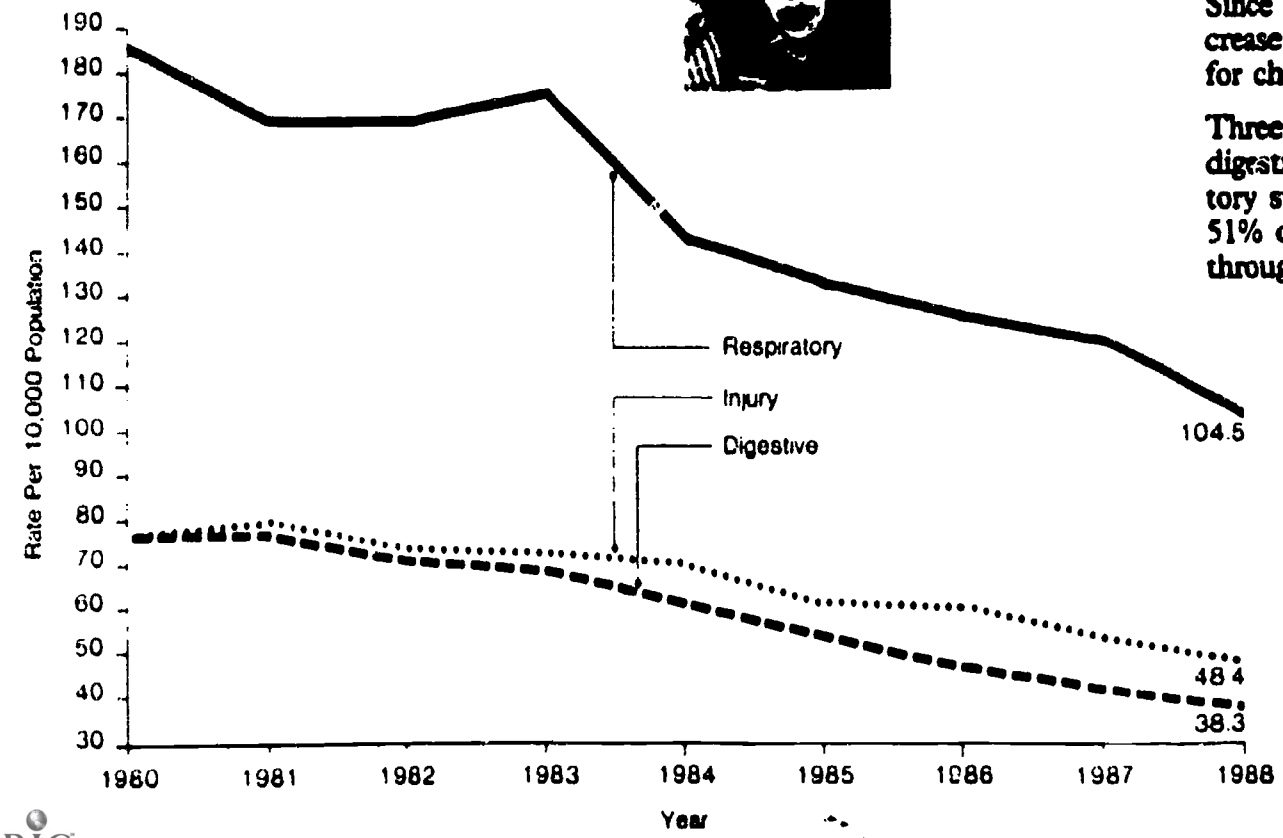
Major Causes of Hospitalization by Age: 1988

Source: National Center for Health Statistics



Discharge Rate for Selected Diagnoses, Patients Ages 1-14: 1988

Source: National Center for Health Statistics



Trend

Between 1980 and 1988, there was a 43% decline in the hospital discharge rate for diseases of the respiratory system for children aged 1 through 14 years.

Since 1980, there has been a 38% decrease in overall hospital discharge rates for children aged 1 through 14 years.

Three diagnostic categories diseases of the digestive system, diseases of the respiratory system, and injury accounted for 51% of the discharges of children aged 1 through 14 years in 1988.

LIMITATION OF ACTIVITY DUE TO CHRONIC DISEASES

Male/Female

In children from 0 through 19 years of age, the percentage of males with limitation of activity due to chronic illness is higher than females.

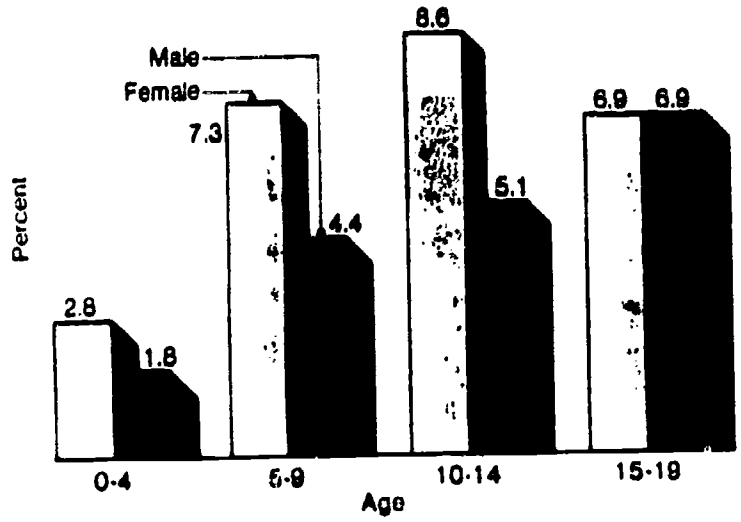
Income

Children from families where annual income falls below $20,000 were consistently more limited in activity due to chronic conditions.

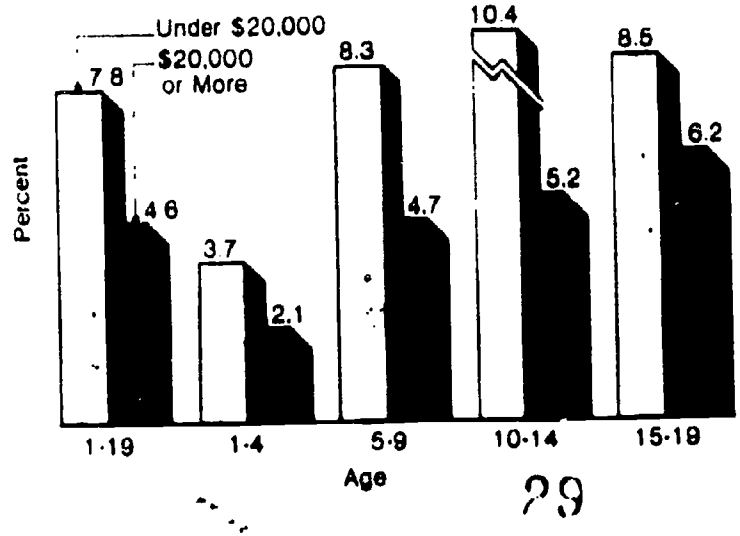
For children aged 5-9 years, those with family income below $20,000 were nearly twice as likely as those with a family income above $20,000 to have limitation of activity due to chronic conditions.

The proportion of children with limitation of activity has doubled since 1960. A number of factors may have contributed to this trend; these include improved data collection, greater awareness of chronic conditions, greater sensitivity to impairment, and improvements in lifesaving medical technology.

In 1989, more than 3 million (5.1%) of all children 1 through 19 years of age were limited in their usual activities because of chronic illnesses and impairments.

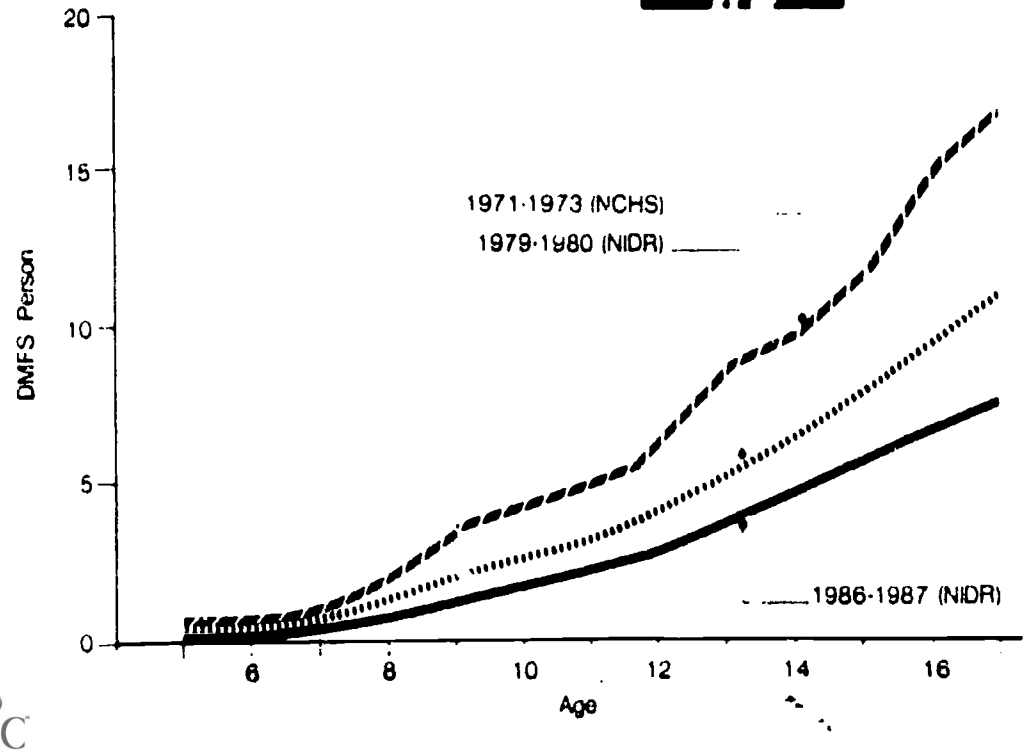


Limitation of Activities due to Chronic Conditions by Age and Sex: 1989
Source: National Center for Health Statistics



Limitation of Activities due to Chronic Conditions by Age and Income: 1989
Source: National Center for Health Statistics

Age-Specific Prevalence of Dental Caries (DMFS)
in 3 National Surveys
Source: National Institute of Dental Research



ORAL HEALTH

The prevalence of dental caries increases with age. From 1971 to 1987 there was a decline in the prevalence of dental caries for children aged 5 through 17 years of age.

Studies show that one half of the school children in the U.S. have no decay in their permanent teeth.

In 1987, children 5 through 9 years of age had an average of 4 baby tooth surfaces affected by decay.

The incidence of dental caries is closely associated with income and education. The average number of decayed teeth increases as household income and education decreases.

In a number of studies, the prevalence of Baby Bottle Tooth Decay (BBTD) has been reported to be 5% in children aged 2 through 4 years. However, over half (53%) of children from low income families and American Indian children have BBTD.

Decreases in the incidence of dental decay have been largely attributed to the presence of fluoride in community water supplies, toothpaste and other forms.

Note: DMFS-Decayed, Missing, Filled Surfaces

INJURIES

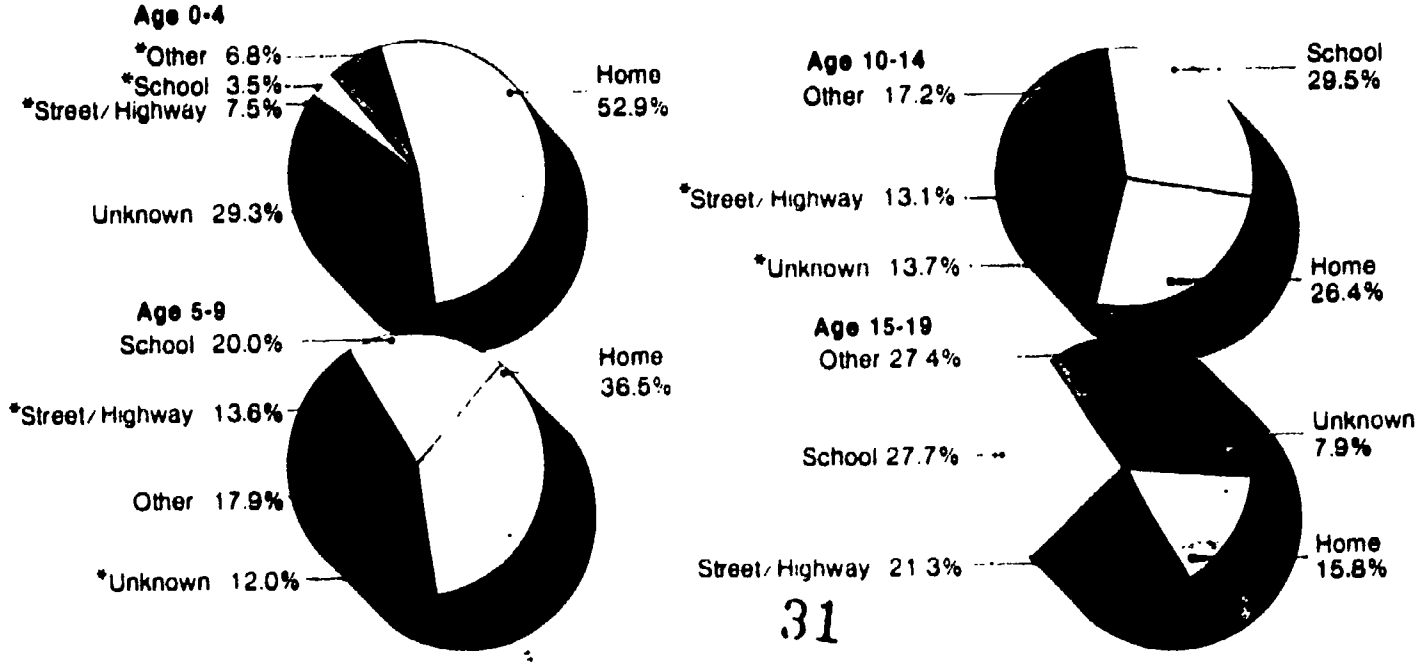
Injuries occurring at school account for 29.5% of all injuries among children aged 10 through 14 years.

The most common single site of injuries to children under age 15 is the home.

* Relative Standard Error (RSE) of numerator is more than 30%

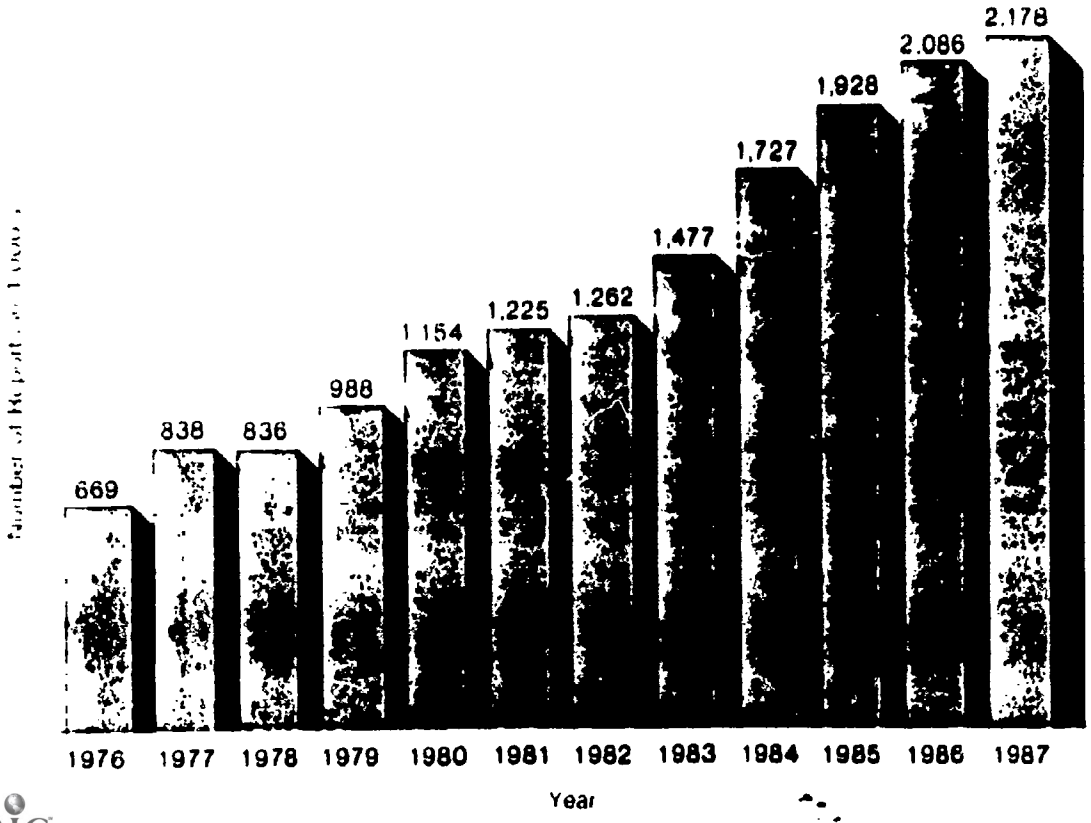
Child Injuries by Place of Occurence: 1989

Source: National Center for Health Statistics



National Estimates of Child Abuse and Neglect Reports: 1976-1987

Source: National Center on Child Abuse and Neglect



CHILD ABUSE AND NEGLET

There were almost 2.2 million reports of abused or neglected children nationwide in 1987. This represents an increase of 225% since 1976.

An estimated 30% of individuals who were physically or sexually abused or extremely neglected as children become abusive parents themselves.

The increasing number of reports of child abuse or neglect between 1976 and 1987 may reflect improved recognition of the problem, improved statewide reporting systems, and/or a larger number of affected children.

Note: A precise definition for child abuse cannot be made because the definition and policy varies from state to state.

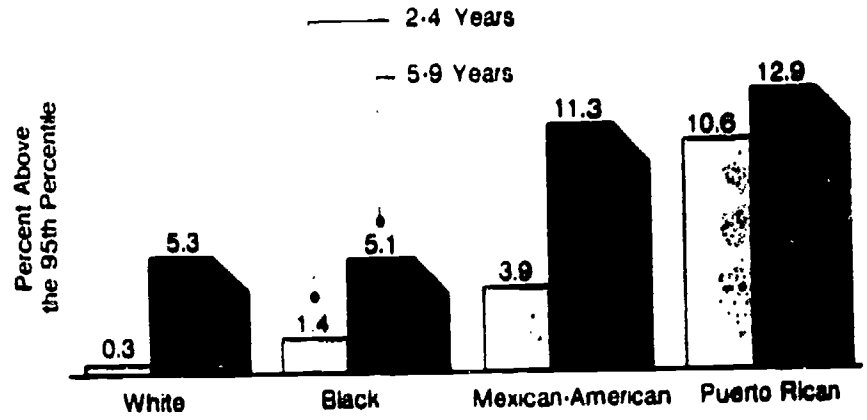
CHILDHOOD OBESITY

Although the prevalence of obesity in white and black children is about 5%, the prevalence in most Hispanic subgroups is over twice this.

There are more obese females than obese males for these age and racial/ethnic groups.

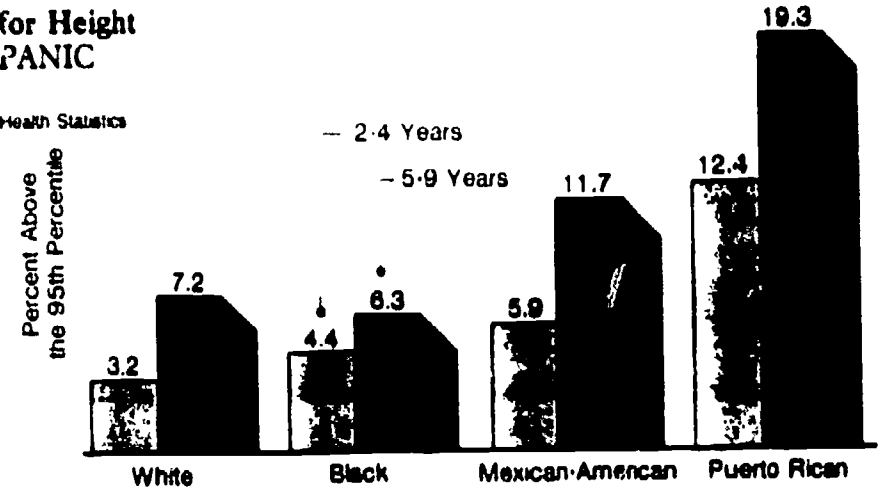
Males Weight for Height (HANES II, HISPANIC HANES)

Source National Center for Health Statistics

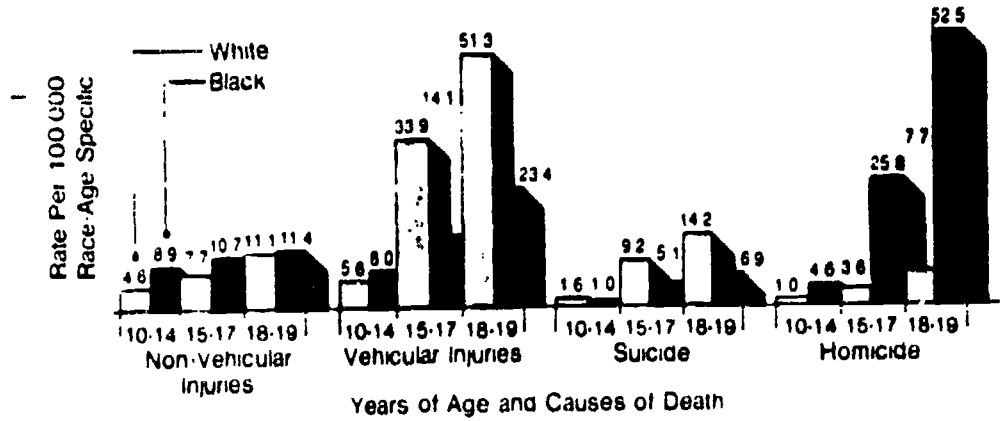


Females Weight for Height (HANES II, HISPANIC HANES)

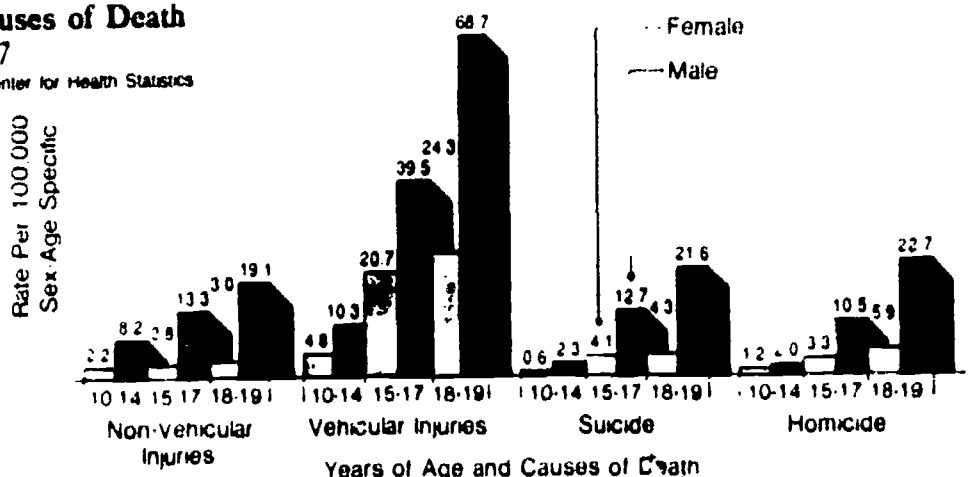
Source National Center for Health Statistics



Selected Causes of Death
By Race: 1987
Source: National Center for Health Statistics



Selected Causes of Death
By Sex: 1987
Source: National Center for Health Statistics



SELECTED CAUSES OF DEATH AMONG 10-19 YEAR OLDS

By Race

The homicide rate for blacks aged 10 through 19 years is significantly greater than for whites.

By Sex

Many more males than females die from homicide, suicide, motor vehicle related injuries and other traumatic injuries.

In 1987 there were 20,057 deaths of adolescents aged 10 through 19 years.

Fires and drowning are the two leading causes of non-motor vehicle injury deaths in these age groups.

TEENAGE SEXUALITY

Sexual Activity

In 1988, 27% of 15 year-old females had intercourse, increasing steadily each year to a total of 78% of all 19 year olds.

Teen Pregnancy

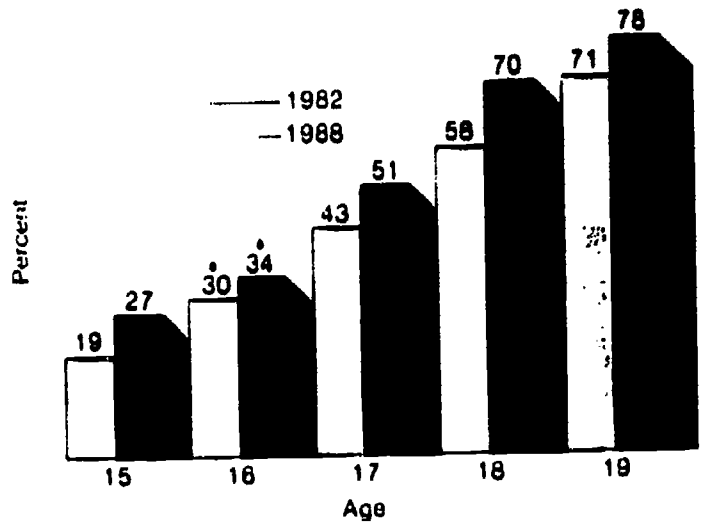
In 1985, more than half of all pregnancies to teenagers under 15 year were reported to end in abortion. The percent of pregnancies ending in abortion decreased with age to 38% in those women 18-19 years.

In 1985, 1,031,040 teenagers became pregnant; of these, 31,000 were younger than 15. The outcomes included 477,710 live births, 416,170 induced abortions, and 137,120 miscarriages and stillbirths.

Women younger than 20 accounted for 26% of all abortions and 13% of all births.

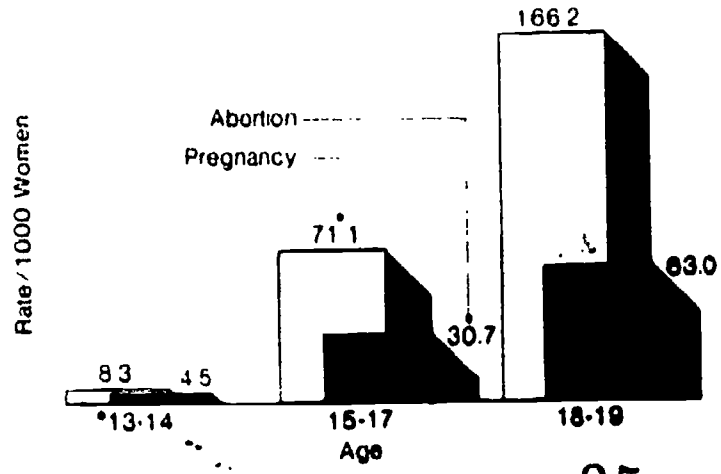
Each year, of female teenagers aged 15 through 19, one American in 10 becomes pregnant, as compared with fewer than one teen in 20 in Canada, England or France.

The abortion and pregnancy rates in the United States are the highest of any country that publishes accurate abortion statistics, although it is possible that certain Eastern European countries for which data are unavailable have equally high teenage pregnancy rates.



Percent of Women who ever had Intercourse, Ages 15-19: 1982-1988

Source: National Center for Health Statistics

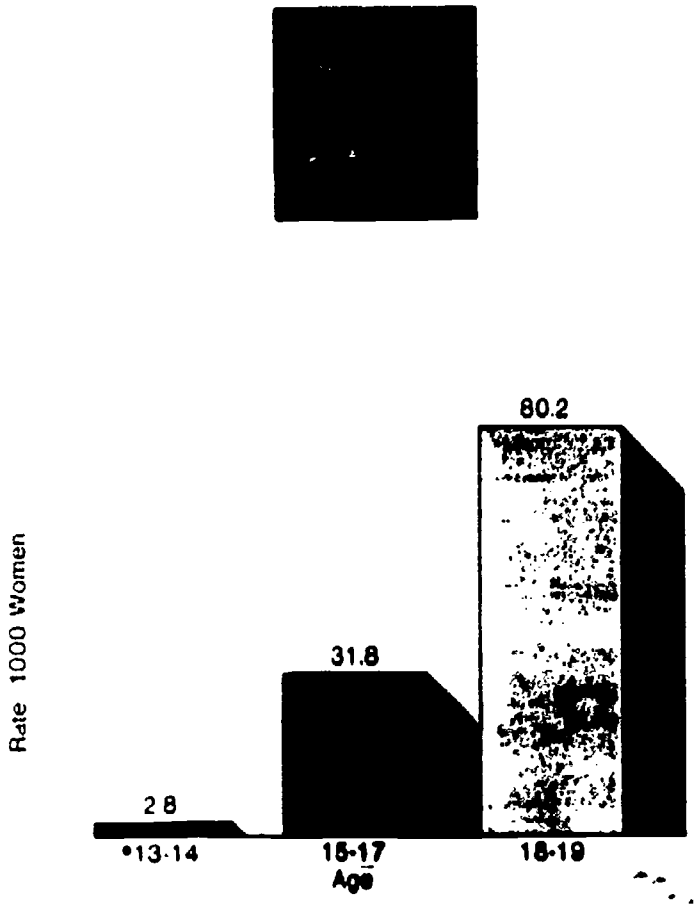


Rate of Pregnancy and Abortion by Age: 1985

Source: Alan Guttmacher Institute

* Population base is women age 13-14

Live Births by Age of Mother: 1985
Source: National Center for Health Statistics



Childbearing

In 1985, the live birth rate/1000 was 2.8 for teenagers aged 13 through 14, 31.8 for those 15 through 17; 80.2 for those 18 through 19 years.

In 1985, there were 67,074 live births among black females under 18 years of age which represented 10.5% of all births to black women. There were 110,004 births to white females under 18 years of age which represented 3.7% of all births to white women.

In the United States, approximately 55 million women are of childbearing age (15-44 years of age).

* Population base is women age 13-14

ADOLESCENT AND YOUNG ADULTS/AIDS

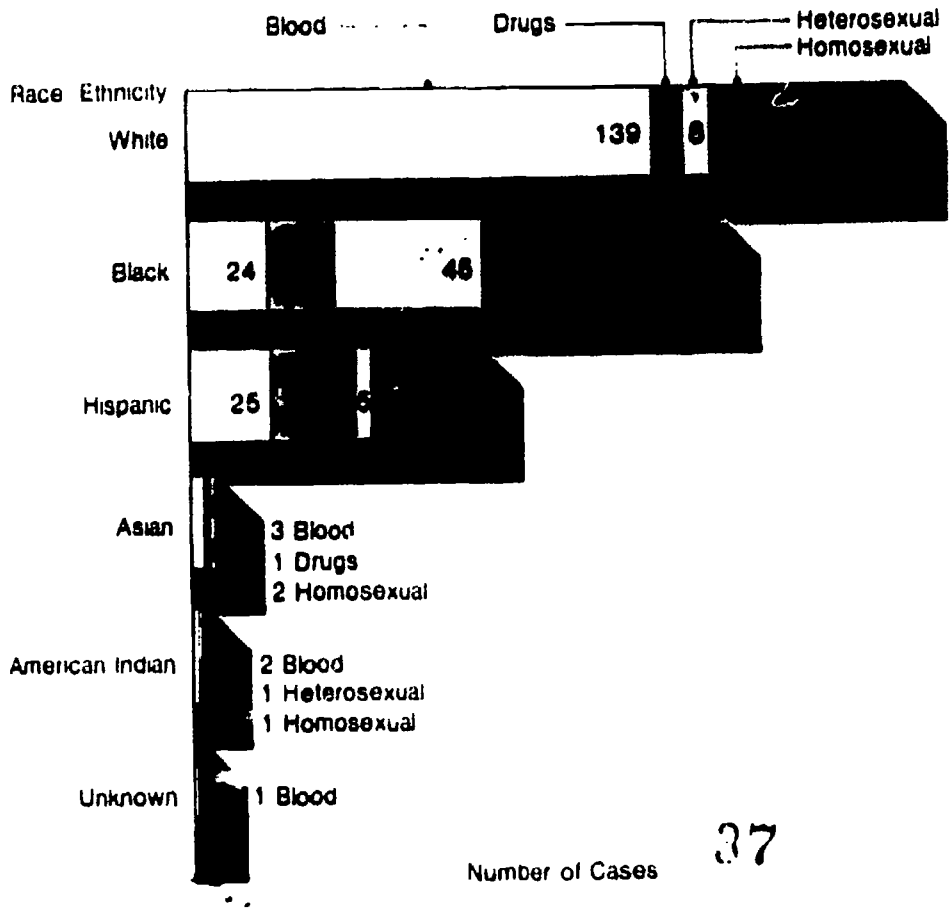
Adolescent

As of April 1990, 500 cases of AIDS were reported in adolescents aged 13 through 19 years.

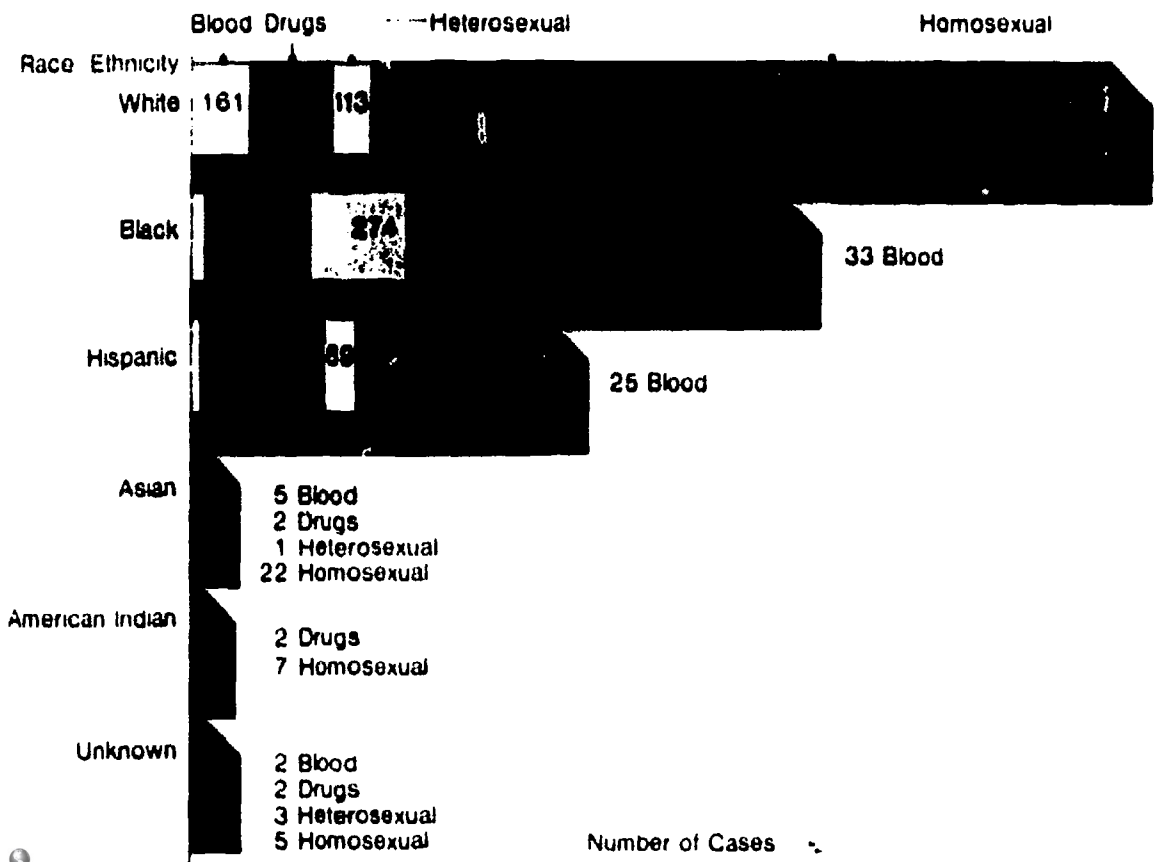
Nearly 40% of cases of AIDS in this age group are reported in adolescents with hemophilia or receipts of blood transfusions.

Adolescent AIDS by Race and Exposure Category Ages 13-19: 1990

Source: Centers for Disease Control



Young Adult AIDS
by Race and Exposure
Category Ages 20-24: 1990
Source: Centers for Disease Control



Young Adult

As of April 1990, 5,484 cases of AIDS were reported in young adults aged 20 through 24 years.

Across all racial/ethnic groups, sexual activity was the major exposure category although drug related exposure was a significant contributor to AIDS in the Hispanic population.

Due to the long latency period (up to 9 years) the majority of cases seen in this age group were the result of exposure occurring during adolescence.

Note

Blood

- *Hemophilia/coagulative disorders*
  Receipts of blood transfusions, blood components or tissue

SUBSTANCE ABUSE

Alcohol continues to be the most widely abused substance among youth aged 12-17 years.

Cigarette smoking has declined steadily over the past decade.

Although the use of marijuana peaked in the late 1970's with 17% then indicating use in the past month, there has been an apparent decline in the 1980's.

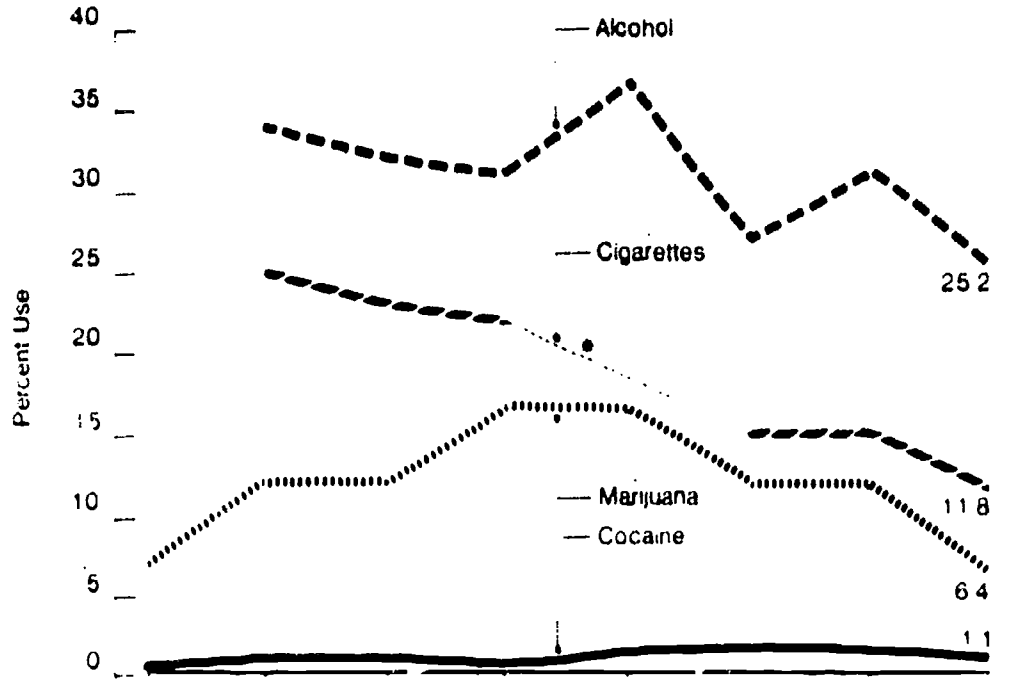
Among this age group, 17% used an illicit drug in the past year and 9% used an illicit drug at least once in the past month. Any illicit drugs include marijuana, nonmedical use of psychotherapeutics, inhalants, cocaine, hallucinogens, and heroin.

The oldest youth in the 12-17 year old age group were more likely to report illicit use of these substances in the past month, as evidenced in the following table:

	Percent Use in Past Month by Age		
	12-13	14-15	16-17
Alcohol	6 5	23 2	42 2
Cigarettes	3 3	10 5	19 9
Marijuana	1 5	4 9	11 8
Cocaine	—	1 4	1 6

Use of Selected Substances in the Past Month Ages 12-17: 1972-1988

Source: National Institute of Drug Abuse



* No data for 1979 available

HEALTH SERVICES

The availability of and access to quality health care are important factors which influence health outcome for mothers and children, especially for those at high risk. It is estimated that thirty-one million Americans do not have health care coverage. There is no universal coverage for women and children in the United States. Although some private physicians and hospitals provide "free" care, many Americans are still unable to receive needed preventive services. Many wait for life-threatening events to occur before they seek care. The finest and most effective intervention programs are of little value if they are not accessible.

The data presented in this section indicate the availability and utilization of health care by source, type and place of care.

IMMUNIZATION OF CHILDREN

In 1983, the U.S. reached its highest level of childhood immunizations against all five of the common preventable childhood diseases. However, more than one third of children aged 1-4 years were not appropriately immunized.

Although current National data is not available, some States having immunization assessments for preschool children estimate immunization levels to be 75% to 80%.

Anecdotal reports suggest that in urbanized low income areas the immunization levels in preschool children may be as low as 50%.

In 1989 90, provisional data indicate that at least 97% of children entering kindergarten/ 1st grade were immunized against all five of the comon preventable childhood diseases.

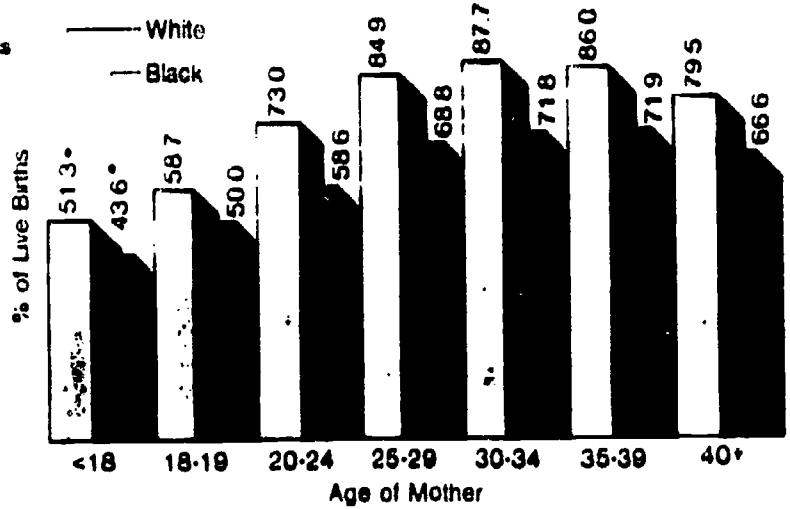
Reported increases in measles incidence continue in 1990, suggesting that there are some geographic areas where the population of children is less well immunized.

Immunization Levels *
1-4 years of age
Source Centers for Disease Control

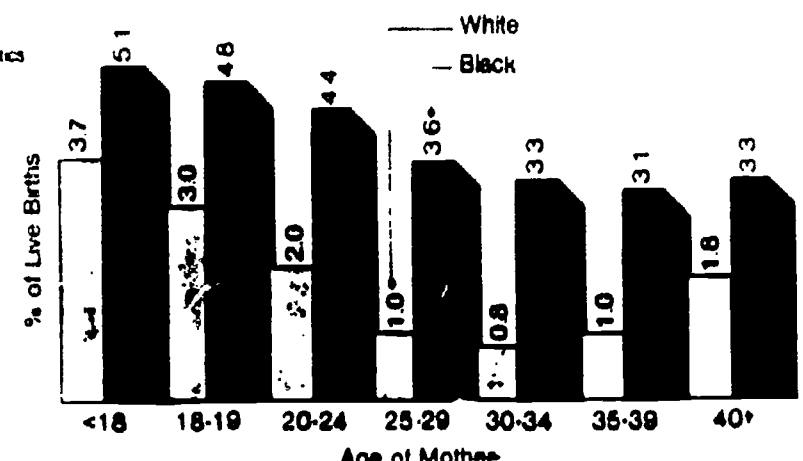
	1970	1976	1983	1984	1985
Rubella	37.2	61.7	64.0	60.9	58.9
Measles	57.2	65.9	64.9	62.8	60.8
Mumps	—	48.3	59.5	58.7	58.9
DPT 3 + doses	76.1	71.4	65.7	65.7	64.9
Polio (3 + doses)	65.9	61.6	57.0	54.8	55.3

* Based on information from the U.S. Immunization Survey; respondents answering questions after referring to an immunization record

Early Prenatal Care
by Age and Race: 1988
Source: National Center for Health Statistics



No Prenatal Care
by Age and Race: 1988
Source: National Center for Health Statistics



Early Prenatal Care

Overall, 76% of all mothers began early prenatal care in the first trimester of pregnancy, the same proportion that has been observed annually since 1979.

The racial disparity in the timely receipt of prenatal care continues to be substantial. In 1988, 79% of white mothers as compared to 61% of black mothers received early prenatal care.

Six percent of infants were born to mothers whose first visit for prenatal care was late or to those who had received no prenatal care.

Prenatal Care

Black women of all ages are more likely not to receive prenatal care than white women.

Women under 20 years of age are less likely than older women to receive early prenatal care.

Risk factors for not receiving prenatal care include: women who are under 18 years old, unmarried, have low educational attainment, and are of minority status.

PLACE OF PHYSICIAN CONTACT

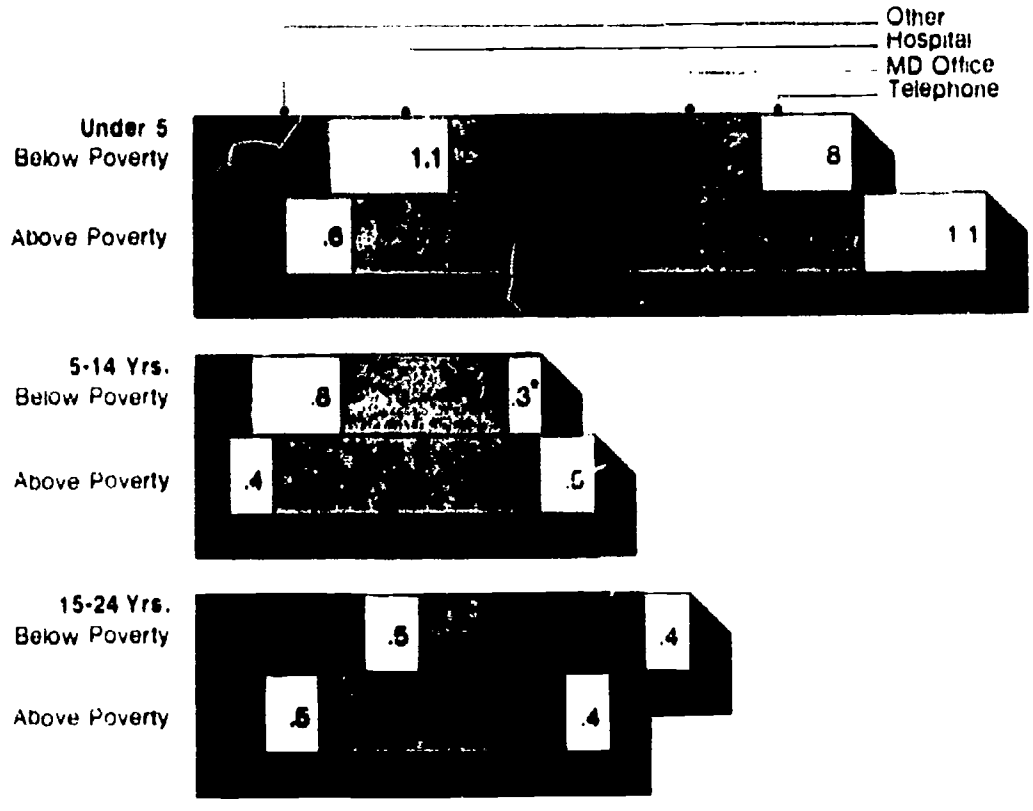
In 1989, children less than 15 years of age whose family income was above poverty used more services offered through physicians' offices whereas children from poor families were more likely to use physicians and other sources.

On the other hand, adolescents and young adults aged 15 through 24 years living below poverty had more physician and other contacts than those living above poverty.

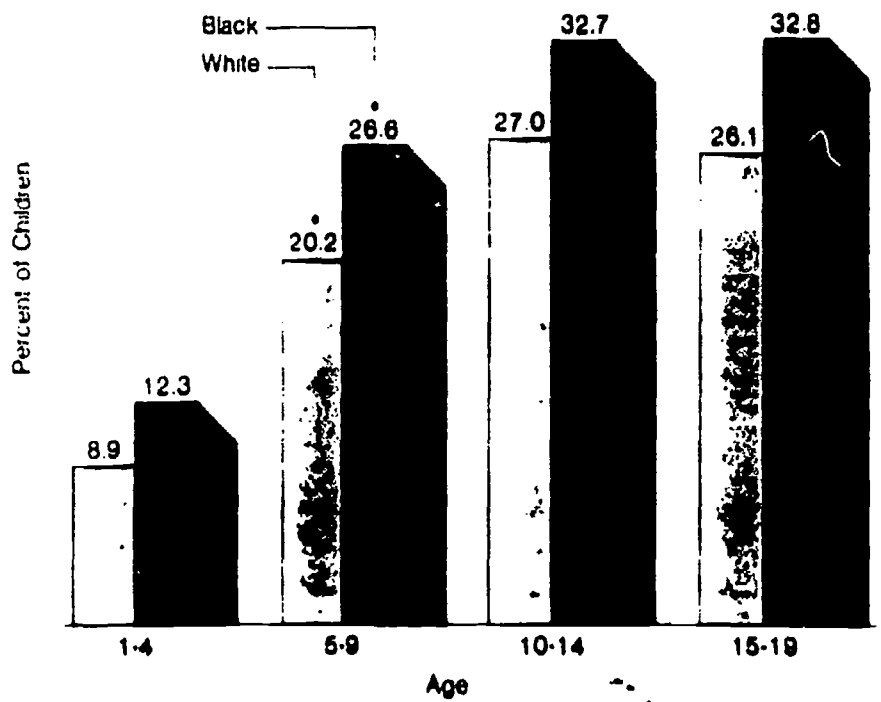
*Relative standard Error (RSE) of numerator is more than 30%

Place of Physician Contact by Age and Poverty Status: 1989

Source National Center for Health Statistics



No Physician Visits
in Past Twelve Months: 1989
Source: National Center for Health Statistics



PHYSICIAN VISITS

A lower percentage of black children of all ages were seen by physicians in the past year as compared to white children.

Of those children from 1 through 4 years of age, nearly 9% of white and 12% of black children had not been seen by a physician in the previous year.

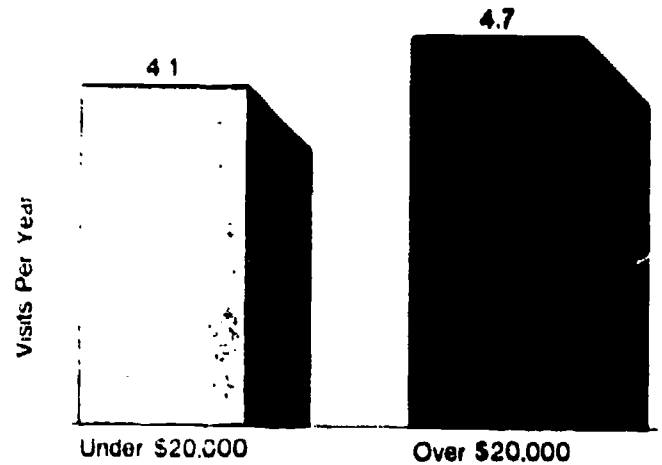
In 1989, 15 million children, about 22% of all under 20 years of age, had not been seen by a physician in the previous year.

PHYSICIAN/HOSPITAL UTILIZATION BY INCOME STATUS

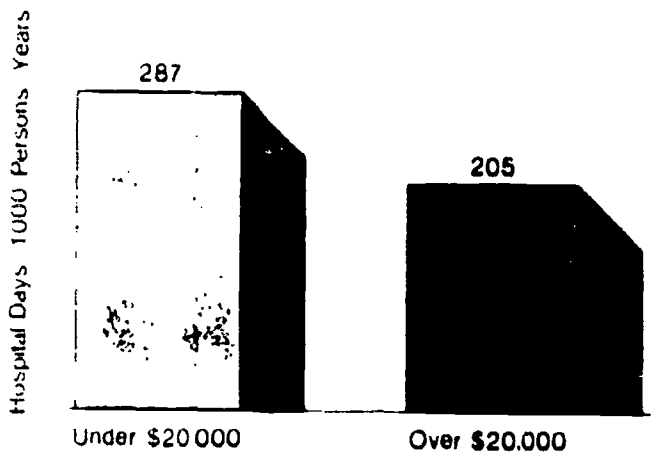
Children whose families earn less than $20,000 per year had fewer physician contacts than those who earn more.

Children from families earning less than $20,000 had 40% more hospital days.

These observations may suggest that children from poorer families do not receive health care until later in the course of their illness and, as a result, require more hospitalization.



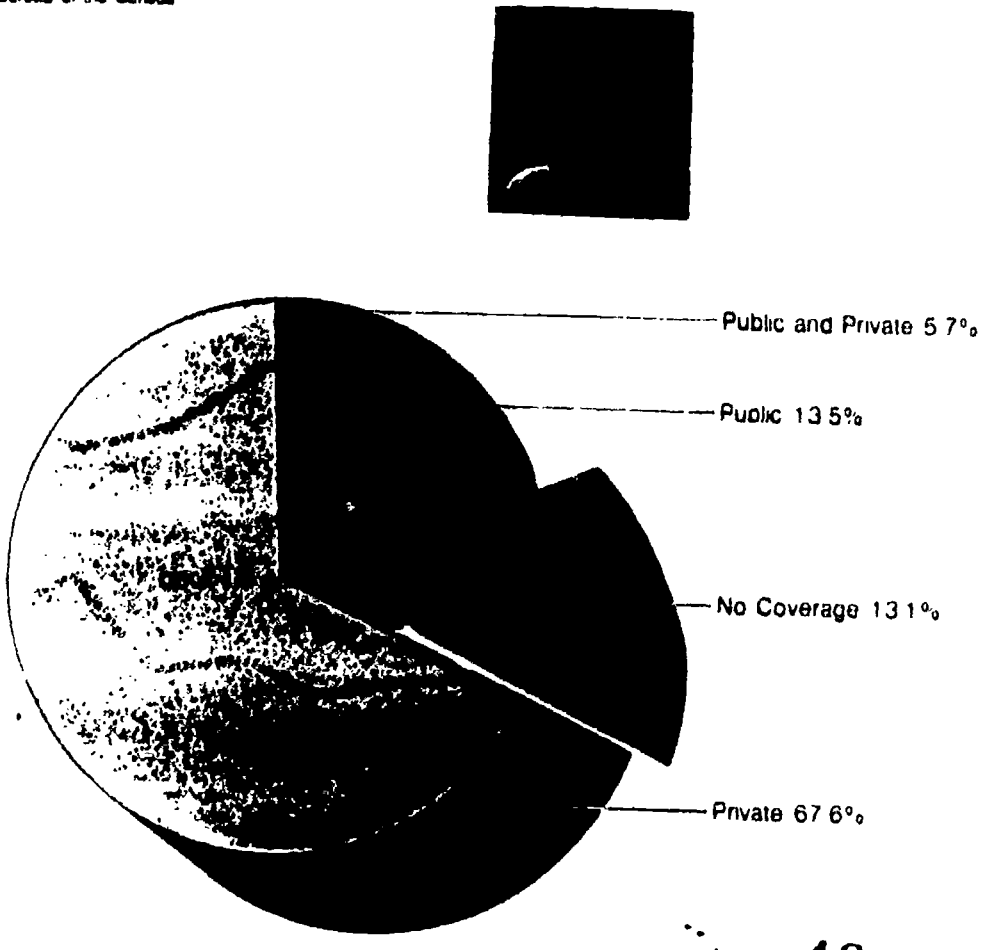
Physician Utilization
by Income Status,
Children under 18 years
of age 1989
Source: National Center for Health Statistics



Hospital Utilization
by Income Status,
Children under 18 years
of age 1989
Source National Center for Health Statistics

Health Insurance Coverage of Children Under 18 Years of Age: 1988

Source U S Bureau of the Census



HEALTH CARE FINANCING

Insurance Coverage

The Current Population Survey found that 13% or 8.3 million children under 18 had no insurance coverage in 1988. Over 19% of children were publicly insured primarily through Medicaid and 73% were privately insured primarily through employer sponsored coverage.

Over half of all uninsured children resided in families whose head was employed full-time and full-year. Another one third of children without insurance protection lived in families whose head was a part-time or part-year worker. Only 11% of all uninsured children were from families with unemployed parents.

Thirty-eight percent of all uninsured children had family incomes below poverty; 36% had incomes between 100-200% of poverty; and 26% had incomes above 200% of poverty.

Medicaid Coverage

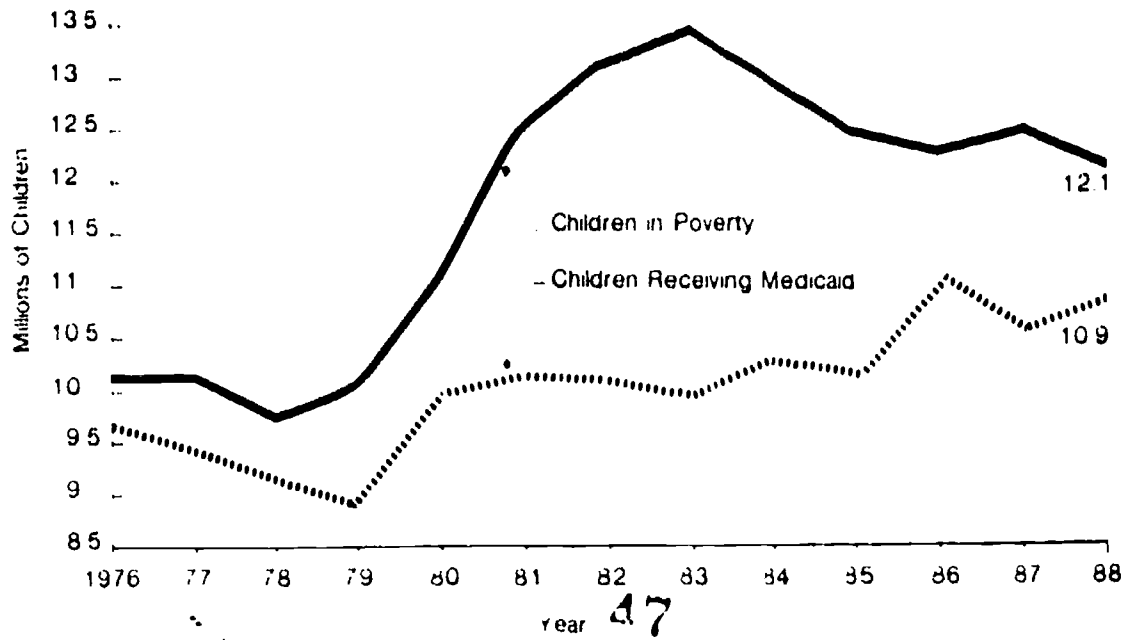
Medicaid covers only about half of all poor children. Since 1982, the percentage of poor children insured by Medicaid has steadily increased although the proportion is still much lower than it was in the 1970's.

To qualify for Medicaid under the Aid to Families with Dependent Children (AFDC) category, the average annual income threshold for a family of three in 1986 was $4,638 or 49% of the federal poverty level, according to HCFA's Office of the Actuary.

In 1987, children under 21 represented 52% of all Medicaid recipients and only 19% of expenditures. Adults represented 47% of all recipients and 81% of expenditures. The average payment per child recipient was $742 compared to $3,362 for adults.

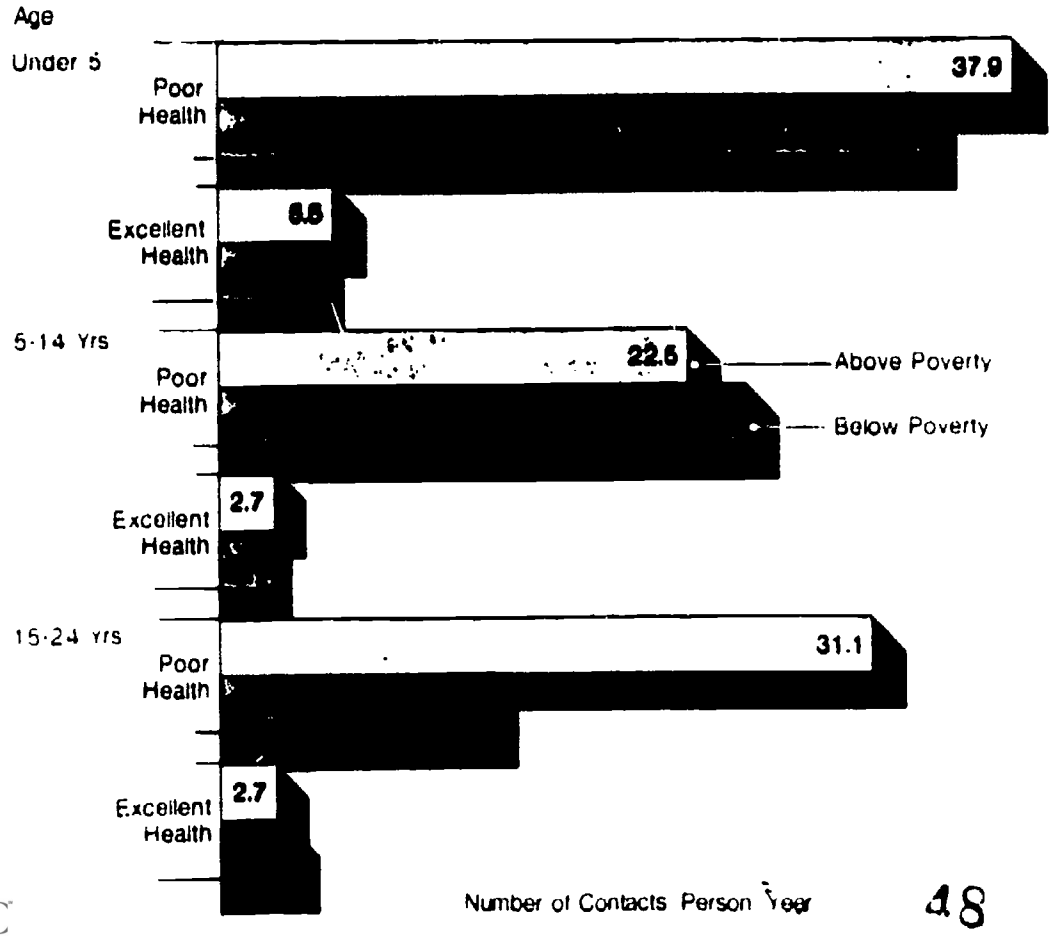
Children in Poverty and Children Receiving Medicaid: 1976-1988

Source: Health Care Financing Administration and U.S. Bureau of the Census



Use of Physician Services by Perceived Health Status, Age and Poverty Status: 1989

Source: National Center for Health Statistics



USE OF PHYSICIAN SERVICES BY PERCEIVED HEALTH STATUS

In almost all age and health categories, those children living below poverty were less likely to see a pnysician than those living above.

Regardless of poverty status, children in perceived poor/fair health use more physician services than those who are perceived to be in excellent or very good health state.

PHYSICIAN/HOSPITAL UTILIZATION IN CHILDREN WITH CHRONIC CONDITIONS

Physician Utilization

Five percent of all U.S. children are limited in their activities; however, they account for 11% of all physician contacts among children.

Children limited in their activities have 2½ times as many physician contacts as other children.

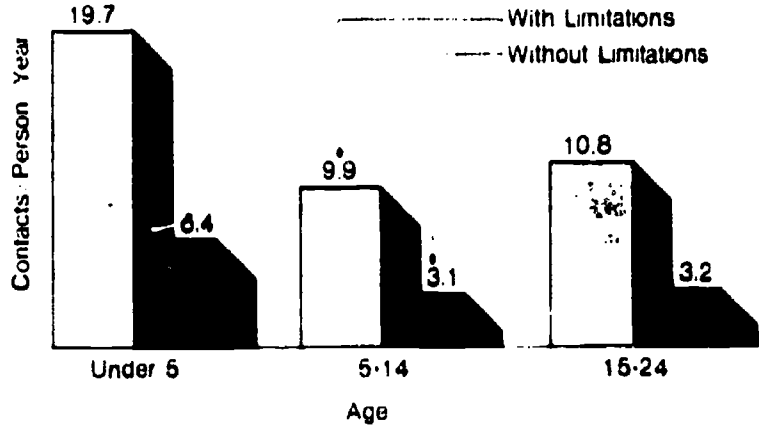
In 1989, children under 5 years of age with limited activities due to chronic diseases had greater than 3 times as many physician contacts as other children.

Hospital Utilization

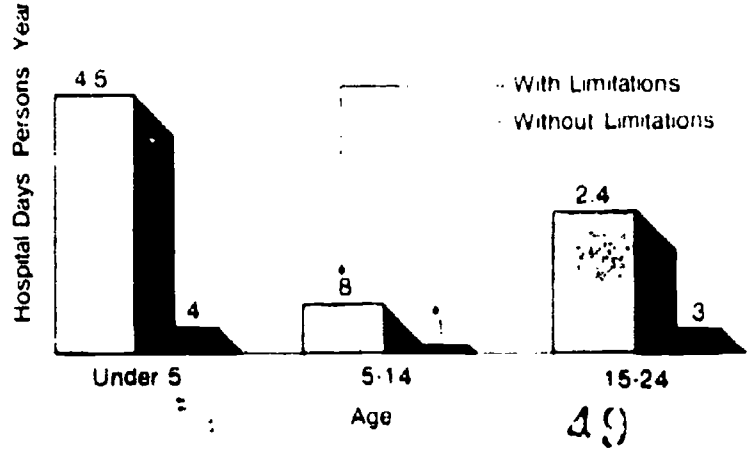
Children ages 1 through 19 limited in their activities spend over 11 times as many days in the hospital as other children.

Although accounting for only 5% of all U.S. children, these children account for 40% of all hospital days among children aged 1 through 19 years.

Physician Utilization: With and Without Limitation in Activities due to Chronic Conditions: 1989
Source: National Center for Health Statistics



Hospital Utilization With and Without Limitation in Activities due to Chronic Conditions: 1989
Source National Center for Health Statistics



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