

## DOCUMENT RESUME

ED 437 224

PS 028 232

AUTHOR Brown, Brett V.; Kinkukawa, Akemi; Michelsen, Erik; Moore, Amber; Moore, Kristin Anderson; Sugland, Barbara W.

TITLE A Century of Children's Health and Well-Being. Child Trends Research Brief.

INSTITUTION Child Trends, Inc., Washington, DC.

SPONS AGENCY Annie E. Casey Foundation, Baltimore, MD.

PUB DATE 1999-00-00

NOTE 9p.

PUB TYPE Information Analyses (070)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS \*Adolescents; \*Child Health; \*Children; Chronic Illness; Contraception; Drinking; Drug Use; Educational Attainment; Family Income; Family Size; Health Needs; Infant Mortality; Mortality Rate; Nuclear Family; Obesity; Physical Health; Poverty; \*Racial Differences; Research Needs; Sexuality; \*Trend Analysis; Unemployment; Venereal Diseases

## ABSTRACT

Although the last 100 years have seen dramatic improvements in the health of U.S. children, there remain racial and ethnic disparities. This research brief presents data illustrating improvements in children's health and the need for further progress. The brief also examines new morbidities among American youth, such as obesity, early sexual activity, and alcohol and drug use. Trends are described and presented graphically for the following, showing racial/ethnic differences: (1) life expectancy at birth; (2) infant mortality; (3) child death rates; (4) youth death rates; (5) deaths from pneumonia and influenza; (6) children's health status; (7) chronic health conditions; (8) child vaccinations; (9) median educational attainment; (10) child poverty; (11) median net worth of household; (12) children living in two-parent households; (13) families with three or more children; (14) unemployment among 20- to 24- year-old men; (15) substance use; (16) overweight adolescents; (17) sexual activity; (18) contraception use at first intercourse; and (19) gonorrhea. The report concludes by noting that remarkable success has been achieved in reducing infant and child mortality, and in eradicating or controlling major diseases and health conditions that could lead to death or disability. However, trends in risk-taking behaviors suggest that new approaches will be needed to reduce risk-taking and address racial and ethnic disparities. (KB)

# Child TRENDS RESEARCH BRIEF

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

C.A. Emig

4301 Connecticut Avenue, NW, Suite 100, Washington, DC 20008  
Phone 202-362-5580 Fax 202-362-5533 www.childtrends.org

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

## A Century of Children's Health and Well-Being

ED 437 224

There have been dramatic, even breathtaking, improvements in children's health in the United States in the last one hundred years. The childhood death rate has plummeted and immunizations have eradicated diseases like polio that once killed or disabled children, while new medications have held other childhood illnesses in check. On average, children born today, as we enter a new century, can expect to live almost twice as long as children born at the turn of the last century. But the fact remains that many of the racial/ethnic disparities present in earlier decades still remain at the close of the century. This research brief illustrates how far we have come in improving children's health and how much progress still needs to be made.

Racial/ethnic disparities in socioeconomic trends are also examined to provide a context for why some improvements in children's health have been made and why other disparities remain. The brief then looks at some of the "new morbidities" among American youth, such as obesity, early sexual activity, and alcohol/drug use. It is important to note that while non-white youth have high rates for some of the new morbidities, white youth have the highest rates for some negative behaviors. Trends in risk-taking behaviors suggest new approaches will be needed in order to reduce risk-taking and address racial/ethnic disparities as we work to improve the lives of young people in the next century. More detailed data for Hispanic sub-groups, Asians, and Native Americans are also needed.

### Mortality and Health

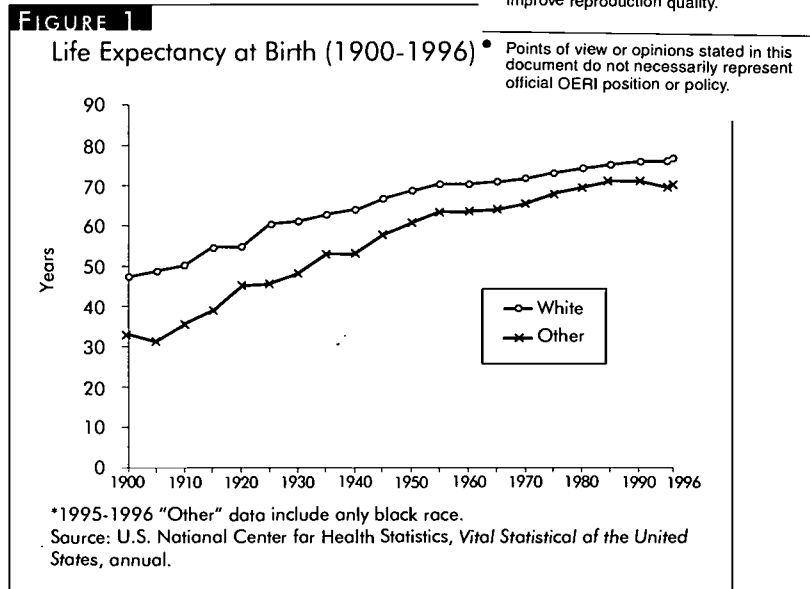
Numerous measures provide evidence of improvements in children's life span and health, but at the same time document ongoing disparities by race and ethnicity.

#### 2 Life Expectancy at Birth

Life expectancy for both whites and non-whites\* has increased over the last century. A white child born in 1900 could expect to live to be about 48 years old; while children of other races could only expect to live 33 years. By 1996, the average life span was almost 77 years for whites and close to 70 years for non-whites. The gap between whites and non-whites still remains, but has been getting smaller. In 1900, whites could expect to live almost 45 percent longer than non-whites; the difference in 1996 was 9 percent.

\* Most of the figures and discussion refer to white/non-white and white/black racial groups only, because data for groups other than white and black children were not collected until the later decades of this century.

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)  
X This document has been reproduced as received from the person or organization originating it.  
□ Minor changes have been made to improve reproduction quality.



## Infant Death Rates

There has been a dramatic drop in the number of children dying within the first year of life over the past century. The rate of infant death among non-whites, however, is still twice that of whites.

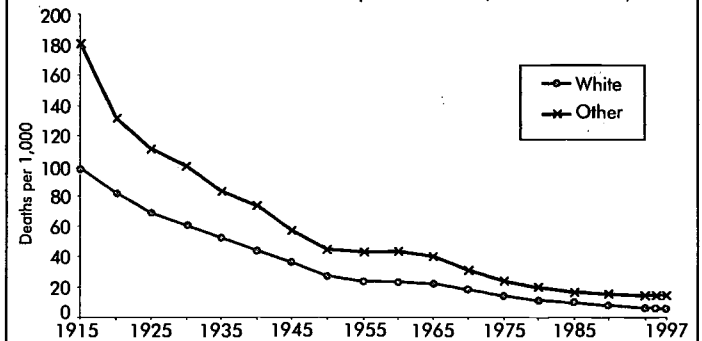
## Child Death Rates (ages 5 to 14)

The data for child death rates show a similar dramatic trend. The causes of death among children ages 5 to 14 over the past one hundred years have also changed. In 1925, the top three causes of death among children were recorded as accidents; influenza and pneumonia; and heart disease. In 1994, accidents were still the leading cause of child deaths, but the next two most common causes of death were cancer and congenital anomalies.<sup>1</sup>

## Death Rates Among Youth (ages 15 to 24)

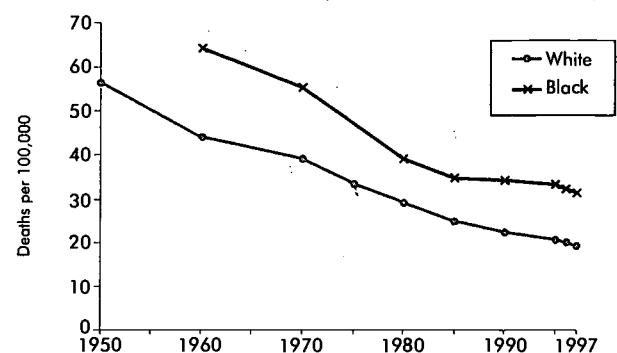
The death rate among youth (ages 15 to 24) has not declined as dramatically as the infant and child death rates. The death rate among white youth has been consistently lower than that of black youth since the 1960s and has dropped during the 1980s

**FIGURE 2**  
Infant Death Rates: deaths per 1,000 (1915-1997)



\*1995-1997 "Other" includes only black race.  
Source: U.S. National Center for Health Statistics, *Vital Statistical of the United States*, annual.

**FIGURE 3**  
Child Death Rates: deaths per 100,000 (ages 5-14)



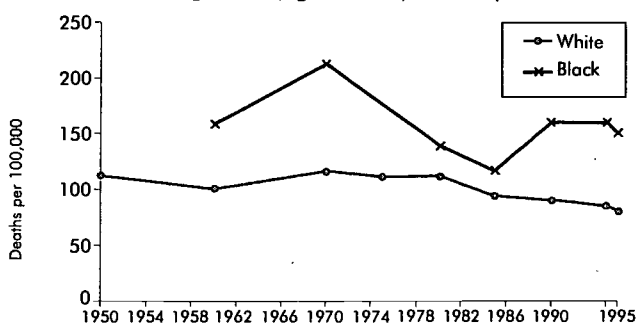
\*1960 "Black" data include all non-whites.  
Source: U.S. National Center for Health Statistics, *Vital Statistical of the United States*, annual.

and 1990s. The death rate among black youth, however, rose during the late 1980s and early 1990s. This correlates with the rise in homicides and death from legal interventions among black youth during the same time period. In 1980, the death rate from those causes was 51 per 100,000 among black youth. By 1990, it had risen to 78 per 100,000. Among white youth, the rate was close to 10 per 100,000 in both of those years.<sup>2</sup> Conversely, the suicide rate for white youth has nearly tripled, from about 5 per 100,000 in 1950 to 13 per 100,000 in 1996. The suicide rate among blacks has been consistently lower than that of whites, but has increased steadily from 3 per 100,000 in 1950 to almost 10 per 100,000 in 1996.<sup>3</sup>

## Deaths from Pneumonia and Influenza

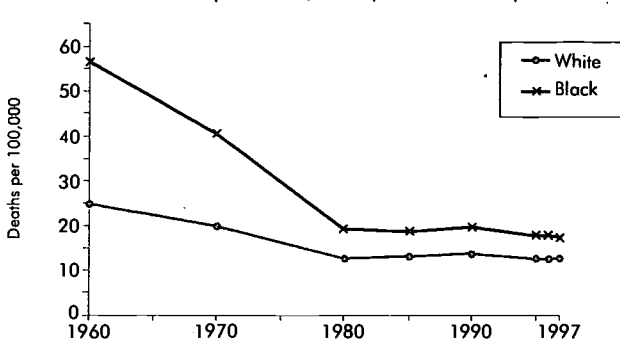
While influenza and pneumonia were leading causes of death for children at the beginning of the century, the rate for both white and black children has dropped substantially. Since 1960, the death rate from those causes has been cut in half for whites and cut by over two-thirds for blacks. Nevertheless, the death rate among black children is still much higher than among white children.

**FIGURE 4**  
Death Rate Among Youth (ages 15-24): deaths per 100,000



\* 1960 "Black" data include all non-whites.  
Source: U.S. National Center for Health Statistics, *Vital Statistics of the United States*, annual.

**FIGURE 5**  
Age-adjusted Death Rates for Pneumonia and Influenza: deaths per 100,000 (1960-1997)



Source: U.S. Department of Health and Human Services, *Health United States*, 1998.

## Health Status for Children

Having a poor health status can affect many aspects of a child's life, for example, school attendance and performance, social development, and the ability to participate in physical activities, such as sports. The percentage of children under 15 years of age who are reported to be in fair/poor health is fairly low (2 percent for white children and 4 percent for black children). However, the percent of black children in poor health is twice that of white children.

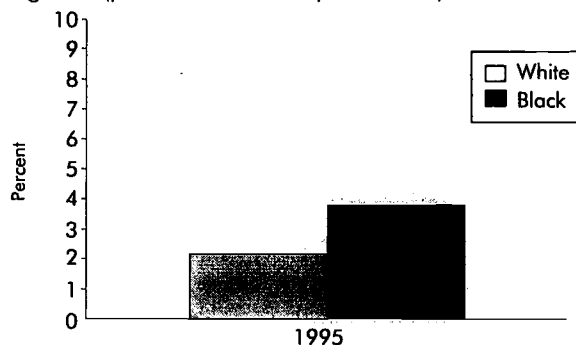
## Chronic Health Conditions

Racial differences are also reflected in the percent of children with limited activities due to chronic health conditions. Chronic conditions can include asthma, diabetes, congenital diseases or another health condition that has lasted for more than 3 months. In 1990 (see figure 7), roughly 5 percent of white and black children had limited activities due to health problems. By 1996, the percentage in both groups increased, but the percentage of black children with limited activities due to chronic health problems nearly doubled to roughly 9 percent compared with a much smaller increase for whites.

Some chronic conditions among children, such as asthma, are growing and attracting more attention. Almost 5 million children in America now have asthma.<sup>4</sup> Among 5 to 14 year olds, there was a 74 percent increase in the prevalence of asthma between 1980 and 1994. The prevalence among children up to 4 years old was even more dramatic, increasing 160 percent in the same time period.<sup>5</sup> The cause of asthma is still debated, but attacks can be triggered by such things as pollution and stress.<sup>6</sup> Treatment is most successful for children who have regular health care and can afford treatment. This again points to a health disparity among groups of children. In 1995, blacks (of all ages) were nearly 3 times as likely to die of asthma as whites. Blacks also visited emergency rooms 3.5 times more often than whites in the same year for asthma related conditions.<sup>7</sup>

FIGURE 6

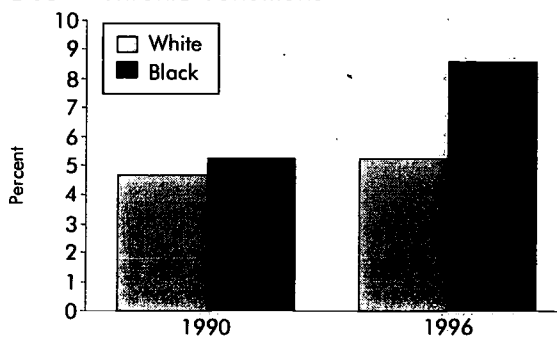
Respondent-Assessed Health Status for Children Under Age 15 (percent with fair or poor health)



Source: U.S. Department of Health and Human Services, *Health, United States, 1998*.

FIGURE 7

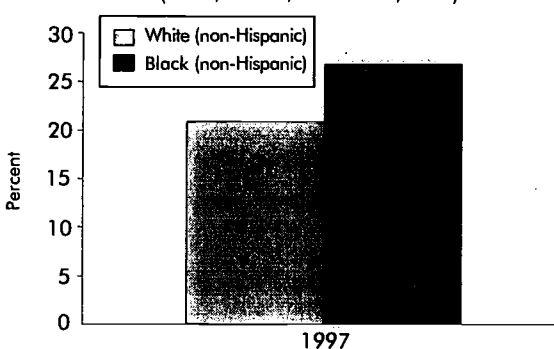
Percent of Children Under 15 with Limited Activities Due to Chronic Conditions



Source: U.S. Department of Health and Human Services, *Health, United States, 1999*.

FIGURE 8

Percent of Children 19 to 35 months NOT Vaccinated with 4:3:1:3 (DTP, Polio, Measles, Hib)



Source: U.S. Department of Health and Human Services, *Health, United States, 1999*.

## Child Vaccinations

To prevent children from acquiring certain diseases, vaccinations are administered within the first several years of life. Approximately one in five white children were not fully vaccinated in 1997, and a quarter of black children had not received the complete series of routine childhood vaccinations.

BEST COPY AVAILABLE

## Socioeconomic Well-Being

Health differences track with a number of socioeconomic trends, reflecting an ongoing association between social and economic status and health and access to health care.

### Median Education

Between 1940 and 1980, both non-whites and whites received increasingly more years of education. In 1980, non-whites received about 6.5 more median years of education than in 1940. Whites in 1980 received about 4 more median years of education than in 1940. Through the 1980s and early 1990s, disparities in median years of education have virtually disappeared, but other disparities in education remain. As of 1996, approximately 60 percent more white (16 percent) than black individuals (10 percent) over age 25 had completed their Bachelor's degree. Of those who had completed a Bachelor's degree, whites earned an average of \$37,711 per year in 1996, whereas blacks earned \$29,666 per year.

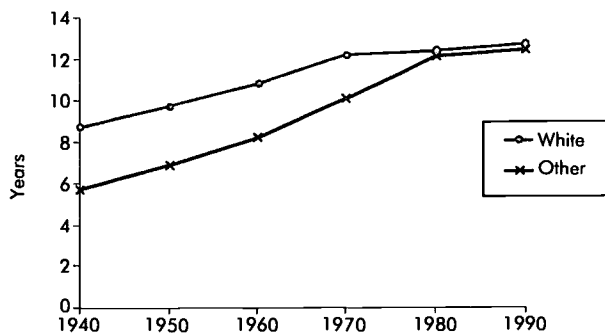
### Children in Poverty

In the period from 1939 to 1970, both blacks and whites saw considerable declines in the percent of children living in poverty. Despite these declines, in 1970 the percentage of black children living in poverty was still four times as high as the percentage of white children in poverty. In 1975, the percentage of Hispanic children in poverty was three times as high as whites. The percentages for all three groups increased through the 1990s, but began to drop in 1996. The percentage of black and Hispanic children in poverty in 1998 was about two and a half times higher than the percentage of white children in poverty. By 1998, 37 percent of black children, 34 percent of Hispanic children and 14 percent of white children lived in poverty.

### Median Net Worth of Household

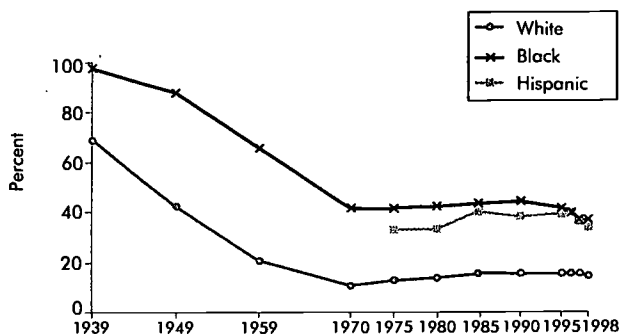
Though education and earnings gaps have closed somewhat over the past two decades, a large gap still remains between the median net worth of black and white households. In 1993, the median net worth of white households (\$45,740) was more than ten times higher than that of black households (\$4,418).

**FIGURE 9**  
Median Education in Years (individuals 25 and over)



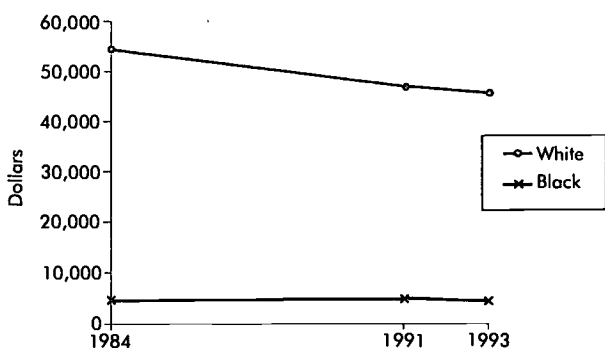
Source: Sources: U.S. Bureau of the Census, *Current Population Reports*.

**FIGURE 10**  
Percent of Children Below Poverty Level



Sources: 1939-1949 estimates from *America's Children*, D. Hernandez (1993). U.S. Bureau of the Census, *Current Population Reports*, P60-194.

**FIGURE 11**  
Median Net Worth of Household in 1993 Dollars



Source: U.S. Bureau of the Census. *Asset Ownership of Households*, 1993.

### Children Living in Two-Parent Households

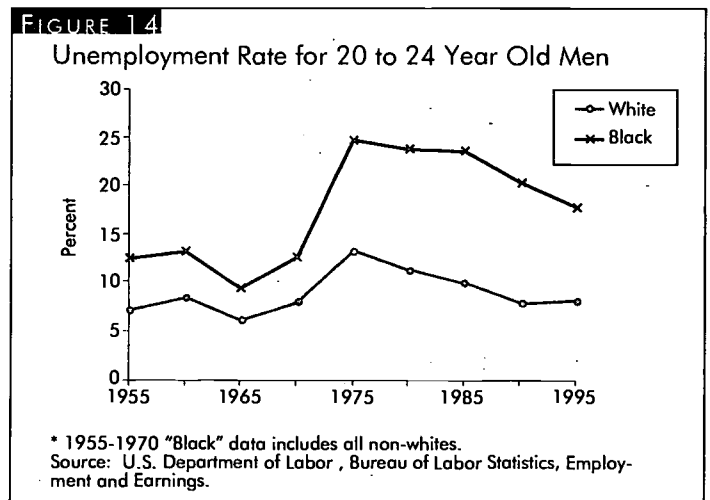
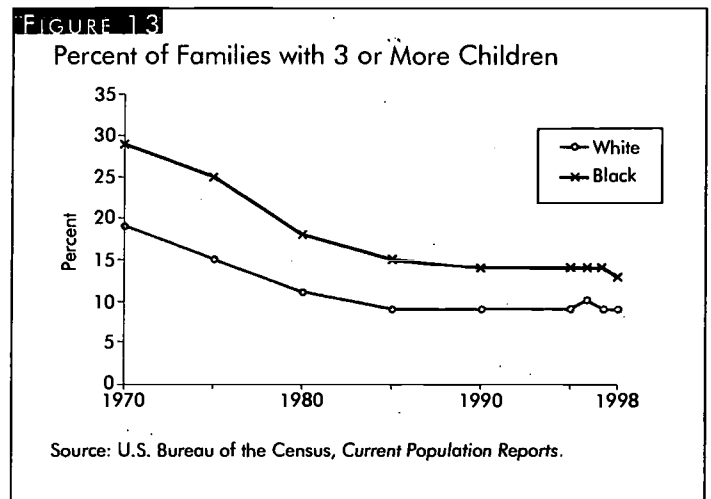
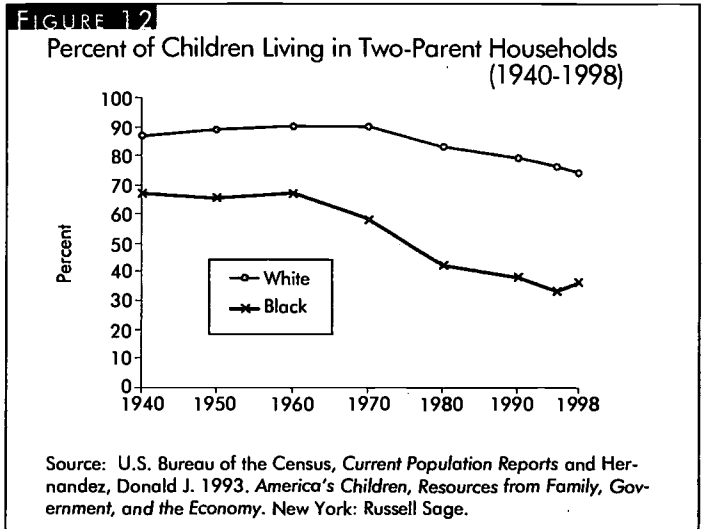
Since 1960, there has been a decline in the percentage of children living in two-parent households among both black and white families. However, the decline for children in black families (46 percent) has been significantly greater than the decline for whites (18 percent). This differential decline has exacerbated the racial gap in the percentage of children in families headed by married parents. Research has shown that children growing up in single parent households are not only at greater risk of poverty, but are more likely to have problems in school and to become teen or single parents themselves.<sup>8</sup>

### Families with Three or More Children

The percent of families with three or more children declined substantially between 1970 and 1985 for both blacks (48 percent) and whites (53 percent). Between 1985 and 1998, a disparity of approximately 4 percentage points remained between whites and blacks, with 14 percent of black families and 10 percent of white families having three or more children in 1998. Evidence suggests that smaller families may improve children's development by providing more resources, including parental time, for each child in the family.<sup>9</sup>

### Unemployment Among 20 to 24 Year Old Men

Steady employment provides not only income, but also job-related benefits such as health insurance. As seen in Figure 14, unemployment rates increased substantially during the 1970s, nearly doubling between 1970 and 1975 to 13 percent among white young men and 25 percent among black young men. Those rates have declined since that time to 8 percent for whites and 18 percent for blacks in 1995.



## New Morbidities

With improvements in mortality and communicable diseases, new challenges have to be confronted. These "new morbidities" include risk taking behaviors such as substance abuse. Patterns by race/ethnicity are more mixed for these new morbidities.

## Substance Use

Over the last decade, white adolescents consistently had the highest rates of **cigarette smoking**, while black youth had the lowest. Racial/ethnic differences have lessened due to decreased rates of smoking among white and Hispanic adolescents and an increased rate among black adolescents. However, in 1997, whites remained approximately one and a half times as likely as blacks or Hispanics to smoke.

Rates of **alcohol** use among adolescents decreased during the late 1980s and early 1990s, then remained at about the same level for the last few years across all racial/ethnic groups. Alcohol use tended to be most prevalent among white adolescents and lowest among black adolescents over the last decade. White adolescents are still more likely to use alcohol compared to black and Hispanic adolescents. In 1997, 22 percent of white adolescents aged 12 to 17 reported using alcohol in the past month, compared to 16 percent of black adolescents and 19 percent of Hispanic adolescents.

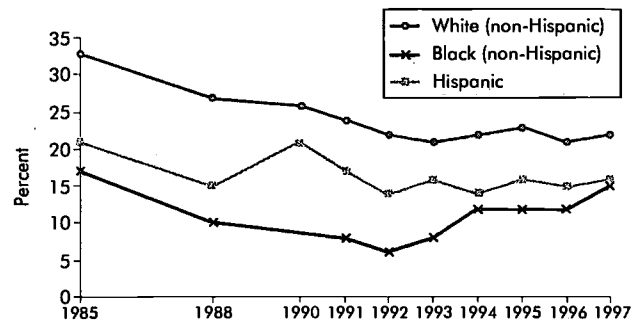
During the 1980s, white adolescents were approximately twice as likely to use **marijuana** as black and Hispanic adolescents. These racial/ethnic disparities decreased during the 1990s as the rate of marijuana use declined across all racial/ethnic groups. However, marijuana use among adolescents has risen in recent years, and white adolescents once again had the highest rate of use in 1997.

## Overweight Adolescents

The percentage of overweight adolescents increased across all racial/ethnic and gender groups over the last three decades. Racial differences in the percentage of overweight adolescents are particularly evident for young females, though they exist for young males as well. As Figure 18 indicates, the percentage of overweight black, female adolescents was consistently higher than that of their white peers during the last three decades. In the most recent period (1988-1994), 16 percent of black females aged 12 to 17 were overweight compared to 10 percent of white females in the same age group.

FIGURE 15

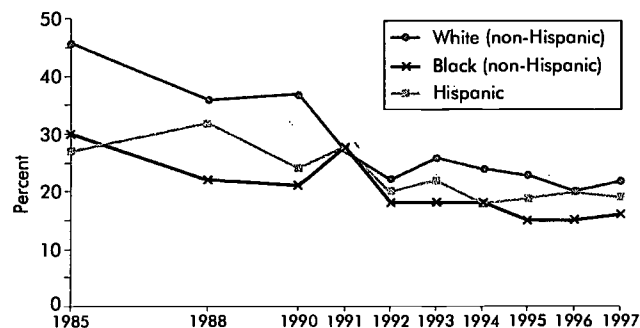
Percent of Adolescents Ages 12-17 Who Used Cigarettes in the Past Month



Source: U.S. Department of Health and Human Services, *Health, United States, 1999*. Results from National Household Survey on Drug Abuse Series H-6 and H-7.

FIGURE 16

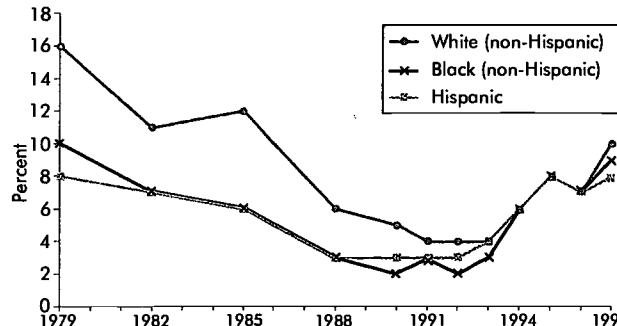
Percent of Adolescents Ages 12-17 Who Used Alcohol in the Past Month



Source: U.S. Department of Health and Human Services, *Health, United States, 1999*. Results from National Household Survey on Drug Abuse Series H-6 and H-7.

FIGURE 17

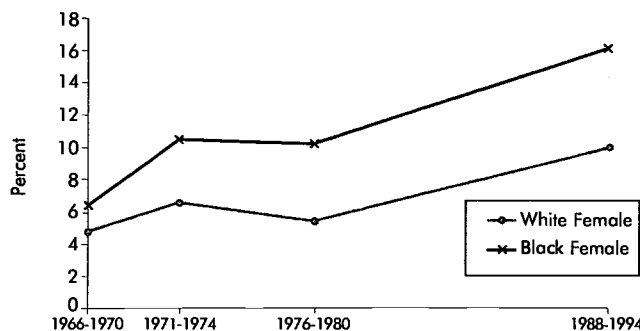
Percent of Adolescents Ages 12-17 Who Used Marijuana in the Past Month



Source: U.S. Department of Health and Human Services, *Health, United States, 1999*. Results from National Household Survey on Drug Abuse Series H-6 and H-7.

FIGURE 18

Percent of Overweight Female Adolescents Ages 12-17



Source: U.S. Department of Health and Human Services, *Health, United States, 1999*. Data from Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Health Examinations Statistics.

## Sexual Activity

Over the last decade, black females aged 15 to 19 were consistently more likely to have ever had sexual intercourse than their white or Hispanic peers, a pattern which also holds for males.<sup>10</sup> While the percentage of black females aged 15 to 19 who had ever had sexual intercourse remained around 60 percent over the last two decades, the percentage of white and Hispanic females fluctuated. For white females, sexual activity increased during the 1980s, and then decreased slightly to 51 percent in 1995. In contrast, the percentage of Hispanic females who had had sexual intercourse declined in 1988 and then increased about 20 percent reaching 56 percent in 1995.

## Contraceptive Use at First Intercourse

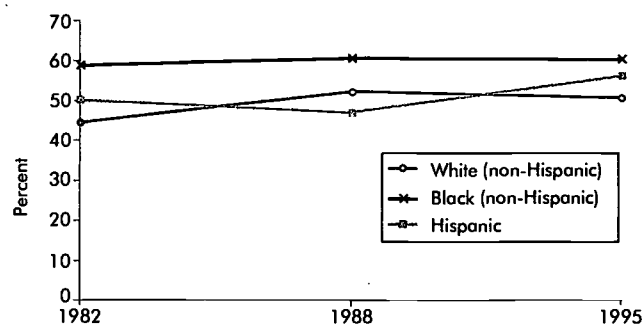
The reported rates of contraceptive use at *first* sexual intercourse among female teens increased for whites, blacks, and Hispanics over the last decade. However, white teens were consistently more likely to have used contraception at their first sexual intercourse than black or Hispanic teens. In 1995, about 82 percent of sexually experienced white females aged 15 to 19 reported having used contraception at first intercourse compared to 68 percent of black teens and 58 percent of Hispanic teens.

Contraceptive use at *last* sexual intercourse shows contrasting trends. Between 1988 and 1995, rates of contraceptive use at last sex decreased substantially among sexually active Hispanic females aged 15 to 19 from 69 percent to 53 percent. The rate also declined for white teens from 80 percent to 71 percent, while the rate remained at about 70 percent for black teens.

## Gonorrhea

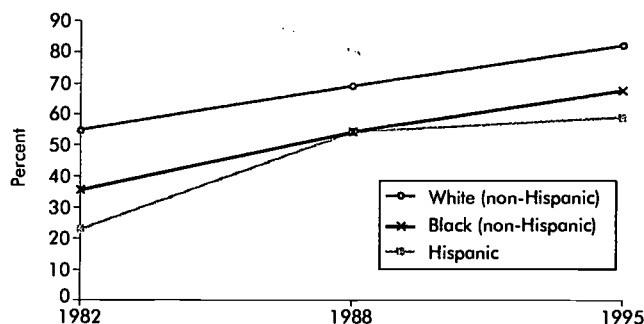
Early unprotected sex and having multiple sexual partners increases the risk of sexually transmitted diseases, such as gonorrhea and chlamydia. Black teens have consistently had the highest reported rates of gonorrhea over the last decade. Native American, Hispanic, white, and Asian teens have substantially lower rates. The rate of gonorrhea among black teens dropped by about half during the last decade, from 6316 per 100,000 in 1990 to 2951 in 1998. However, the rate for gonorrhea among black teens in 1998 is still more than 40

**FIGURE 19**  
Percent of Females Ages 15-19 Who Had Ever Had Sexual Intercourse



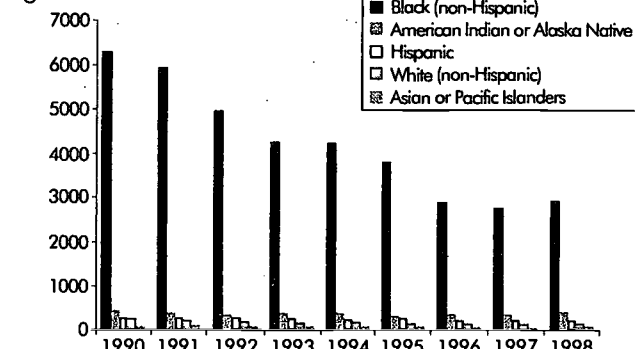
Source: Singh, S and Darroch J. E., "Trends in Sexual Activity Among Adolescent American Women: 1982-1995," *Family Planning Perspectives*, 31:212-219. Data from the National Survey of Family Growth 1982, 1988 and 1995.

**FIGURE 20**  
Percent Using Contraception at First Sexual Intercourse Among Sexually Experienced Female Ages 15-19



Source: Manlove J and Terry E. *Trends in Sexual Activity and Contraceptive Use Among Teens*. *Child Trends*, 1999. Data from the National Survey of Family Growth, 1982, 1988 and 1995.

**FIGURE 21**  
Reported Rates of Gonorrhea per 100,000 Youth Ages 15-19



Sources: Centers for Disease Control and Prevention, Division of STD Prevention. *Sexually Transmitted Disease Surveillance 1993, 1996, and 1998*.

times higher than the rate for Asian teens and over 20 times higher than the rate for white teens. The reported gonorrhea rates for Native American youth had once declined but have now returned to the 1990 level (404 per 100,000 in 1998).



## Conclusion

Today, the United States is a much different society for children than it was one hundred years ago. We have been remarkably successful at giving children a healthier start at life, demonstrated by dramatic declines in infant and child mortality. Many of the diseases and health conditions that would lead to death or disability, such as smallpox, polio, and diabetes, have been eradicated or largely controlled with advances in medicine and public health practices.

Despite these accomplishments, some children still have serious health conditions, and many of the racial/ethnic disparities in children's health and well-being that were very apparent earlier in this century continue to this day. Also, a number of the remaining disparities are not as easily amenable to medical or clinical intervention. To some extent, they reflect socioeconomic conditions such as equitable access to health care, the quality of housing, the strength and safety of communities, and opportunities for education. These are important factors in understanding the cultural context of health and health behavior.

Risk-taking behaviors among American adolescents also represent a new health challenge as we enter the next century. Patterns by race/ethnicity are more varied for these new morbidities. Clinical medicine cannot address many of the factors that undermine the life chances of young people who are risking their own health and safety. Instead, we need strategies that focus on the root causes of risk-taking, such as stress and inadequate economic opportunity. Such approaches appear necessary to influence people's behaviors and attitudes with respect to excessive risk-taking.

Note: As reflected in this research brief, quality data for tracking trends among racial/ethnic groups are needed. As recommended by the President's Initiative on Race, future data need to be recorded by five racial/ethnic breakdowns: White, African-American, Hispanic/Latino, American Indian/Native American and Asian American/Pacific Islanders. This will make tracking progress more reliable and make recommendations for policy and programs more appropriate.

## Endnotes

1. National Center for Health Statistics, Vital Statistics of the United States, Vol. II. Mortality, Selected Years.
2. National Center for Health Statistics, Vital Statistics of the United States, annual.
3. Ibid
4. *CDC's Asthma Prevention Program*, National Center for Environmental Health, Centers for Disease Control, 1998.
5. *Asthma Statistics Data Fact Sheet*, National Institutes of Health, National Heart, Lung, and Blood Institute, 1999.
6. *Facts About Asthma*, American Lung Association, 1998.
7. *Asthma Statistics Data Fact Sheet*, National Institutes of Health, National Heart, Lung, and Blood Institute, 1999.
8. *Children and Welfare Reform: A Guide to Evaluating the Effects of State Welfare Reform on Children*. Child Trends, 1999.
9. Ibid.
10. Data for males come from Sonenstein, F.L. et al. 1998. "Changes in Sexual Behavior and Condom Use Among Teenaged Males: 1988-1995." *American Journal of Public Health*, Vol. 88, No.6: 956-959.

This research brief was written by Brett V. Brown, Akemi Kinkukawa, Erik Michelsen, Amber Moore, Kristin Anderson Moore and Barbara W. Sugland in preparation for the National Child Health Leadership Conference sponsored by Birch and Davis Health Management Corporation, Inc.

Child Trends is a nonprofit, nonpartisan research center that studies children and families. For additional information on Child Trends, including a complete set of available research briefs, please visit our web site at [www.childtrends.org](http://www.childtrends.org).

Child Trends gratefully acknowledges the Annie E. Casey Foundation for support of this research brief.



**U.S. Department of Education**  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)



## **NOTICE**

### **REPRODUCTION BASIS**



This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (9/97)