

DOCUMENT RESUME

ED 299 344

UD 026 393

AUTHOR Ducey, Sara Bachman; And Others  
 TITLE Poor Infants, Poor Chances: A Longitudinal Study of Progress toward Reducing Low Birth Weight and Infant Mortality in the United States and Its Largest Cities, 1979-1984.  
 INSTITUTION Food Research and Action Center, Washington, D.C.  
 SPONS AGENCY Ford Foundation, New York, N.Y.  
 PUB DATE Sep 87  
 NOTE 325p.  
 AVAILABLE FROM Food Research and Action Center, 1319 F St., N.W., Suite 500, Washington, DC 20004 (\$10.00).  
 PUB TYPE Reports - Research/Technical (143) -- Statistical Data (110)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.  
 DESCRIPTORS \*Birth Weight; Blacks; Demography; Ethnic Groups; Geographic Distribution; High Risk Persons; Incidence; \*Infant Mortality; Influences; Longitudinal Studies; \*Minority Groups; Neonates; \*Poverty; Probability; Racial Distribution; Social Distribution; \*Socioeconomic Influences; State Surveys; \*Urban Areas; Urban Problems; Whites  
 IDENTIFIERS \*United States

ABSTRACT

This study examined low birth weight and infant mortality in the 50 states and the 54 largest American cities between 1979 and 1984. Its findings confirm that progress in reducing low birth weight and infant mortality has slowed, and in some cases the progress has actually reversed. Some states and many cities had higher rates of low birth weight and infant mortality in 1984 than in 1979. The disparity in low birth weight and infant mortality rates between nonwhites and whites is great, and from 1979 to 1984 this gap increased in most of the largest cities and in many of the states. While race can be used as an indicator of low birth weight and infant mortality, the causes are more likely the result of socioeconomic factors. Although many factors contribute to problems of low birth weight and infant death, poverty is the common element in all cases. The lack of money to purchase food, to receive proper medical care, to stay in school, and to afford adequate housing can act alone or together to harm the growth of the fetus in the womb and the growth and development of the infant during its first year. Further progress toward solving the problems of low birth weight and infant mortality must come from efforts to alleviate poverty and its harmful influence on infant health. Statistical data in tables and graphs are presented for each city and each state studied. Comparative analyses and trend analyses are presented in 43 tables and 4 maps. The appendices include a directory of sources for state vital statistics, and a list of 25 references. (FMW)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

## About FRAC

Since 1970, the Food Research and Action Center has served as a nonpartisan center seeking lasting solutions to hunger, malnutrition and poverty in America. As a national organization, FRAC works with individuals, elected officials, religious groups, civic leaders and the business community to solve one of America's most serious domestic problems.

By seeking improved federal food programs, greater economic opportunity for low-income people, and better protection of the rights of the impoverished, FRAC works to alleviate the hardships of hunger and poverty. FRAC's multi-dimensional approach of legal representation, policy analysis, research, grass-roots activities and public information results in a coordinated and balanced effort to address the complex problems of hunger and poverty in America.

FRAC is a nonprofit 501(c)(3) organization which relies primarily on the support of foundations, religious groups, corporations, individuals and others to continue its work on behalf of the disadvantaged. Contributions to FRAC are tax-deductible to the extent permitted by law.

# **Poor Infants**

---

# **Poor Chances**

**A Longitudinal Study of  
Progress Toward Reducing  
Low Birth Weight and Infant Mortality  
in the United States and its  
Largest Cities, 1979-1984**

**BEST COPY AVAILABLE**

Food Research and Action Center  
Copyright © 1987

00 4

## Acknowledgments

The Food Research and Action Center would like to express its sincere gratitude to the Ford Foundation for its generous and continuing support of our maternal and child health program, nutrition research and other activities.

The members of the *Poor Infants, Poor Chances* advisory committee provided invaluable counsel and support: Amy Fine, Jonathan Kotch, Brenda Lucas, Nancy Rudner, Linda Smith and Jeffrey Taylor.

In addition to the staff, many FRAC interns contributed much to this report, especially: Jennifer Heitman, Helen Ho, Cindy Hunter, Monica Kerrigan, Julie Kintner, Anoush Koroghlian, and Amy Subar.

Thanks to Scott Herman, our editor and special thanks to our word processing secretary, Iwon Gardner; this report could never have been completed without her.

Sara Bachman Ducey  
Principal Author

# TABLE OF CONTENTS

## Part One: The Study

### Chapter 1: EXECUTIVE SUMMARY

1.1	Introduction	1
1.2	Scope of the Study	1
1.3	Results of the Study	3
1.4	Conclusion and Recommendations	7

### Chapter 2: INFANT HEALTH IN THE UNITED STATES

2.1	Progress Toward Reducing Low Birth Weight and Infant Mortality Rates	9
2.2	U.S. vs. Other Nations' Infant Mortality Rates	10
2.3	The Influence of Poverty on Low Birth Weight and Infant Mortality	11
2.4	Low Birth Weight Causes Most Infant Deaths	11
2.5	Reducing Low Birth Weight Is the Key to Reducing Infant Mortality in the United States	12

### Chapter 3: METHODOLOGY

3.1	Selection of Cities	15
3.2	Data Collection	15
3.3	Methods of Analysis	19

### Chapter 4: STUDY FINDINGS FOR THE LARGEST U.S. CITIES, 1979-1984

4.1	Low Birth Weight Rates for All Races in America's Largest Cities	23
4.2	Low Birth Weight Rates Among Whites in America's Largest Cities	27
4.3	Low Birth Weight Rates Among Nonwhites in America's Largest Cities	31
4.4	White vs. Nonwhite Progress Toward Reducing Low Birth Weight Rates, 1979-1984	35
4.5	Infant Mortality Rates For All Races in America's Largest Cities	35
4.6	Infant Mortality Rates Among Whites in America's Largest Cities	40
4.7	Infant Mortality Rates Among Nonwhites in America's Largest Cities	44
4.8	White vs. Nonwhite Progress Toward Reducing Infant Mortality Rates, 1979-1984	47
4.9	The Gap Between the Races, 1984 vs. 1979	48
4.10	Poverty Rates and Poor Low Birth Weight and Infant Mortality Rates in the Cities	50

### Chapter 5: STUDY FINDINGS FOR THE STATES, 1979-1984

5.1	Low Birth Weight Rates for All Races in the States	57
5.2	Low Birth Weight Rates Among Whites in the States	63
5.3	Low Birth Weight Rates Among Nonwhites in the States	66
5.4	White vs. Nonwhite Progress Toward Reducing Low Birth Weight Rates, 1979-1984	70
5.5	Infant Mortality Rates for All Races in the States	70
5.6	Infant Mortality Rates Among Whites in the States	75
5.7	Infant Mortality Rates Among Nonwhites in the States	78

5.8	White vs. Nonwhite Progress Toward Reducing Infant Mortality Rates, 1979-1984	82
5.9	The Gap Between the Races, 1984 vs. 1979	82
5.10	Poverty Rates and Poor Low Birth Weight and Infant Mortality Rates in the States	86

## Part Two: The Profiles

### The Cities

Birmingham (Jefferson County), Alabama	96
Phoenix (Maricopa County), Arizona	98
Tucson (Pima County), Arizona	100
Los Angeles and Long Beach (Los Angeles County), California	102
Oakland (Alameda County), California	104
Sacramento (Sacramento County), California	106
San Diego (San Diego County), California	108
San Francisco (co-equal with San Francisco County), California	110
San Jose (Santa Clara County), California	112
Denver (co-equal with Denver County), Colorado	114
The District of Columbia	116
Jacksonville (Duvall County), Florida	118
Miami (Dade County), Florida	120
Atlanta, Georgia	122
Honolulu, Hawaii	124
Chicago, Illinois	126
Indianapolis, Indiana	128
Wichita (Sedgewick County), Kansas	130
Louisville, Kentucky	132
Baton Rouge, Louisiana	134
New Orleans, Louisiana	136
Baltimore, Maryland	138
Boston, Massachusetts	140
Detroit, Michigan	142
Minneapolis, Minnesota	144
Kansas City, Missouri	146
St. Louis, Missouri	148
Omaha (Douglas County), Nebraska	150
Newark, New Jersey	152
Albuquerque, New Mexico	154
Buffalo, New York	156
New York City, New York	158
Charlotte, North Carolina	160
Cincinnati, Ohio	162
Cleveland, Ohio	164
Columbus, Ohio	166
Toledo, Ohio	168

Oklahoma City (Oklahoma County), Oklahoma	170
Tulsa (Tulsa County), Oklahoma	172
Portland (Multnomah County), Oregon	174
Philadelphia (co-equal with Philadelphia County), Pennsylvania	176
Pittsburgh, Pennsylvania	178
Memphis, Tennessee	180
Nashville (Davidson County), Tennessee	182
Austin (Travis County), Texas	184
Dallas (Dallas County), Texas	186
El Paso (El Paso County), Texas	188
Fort Worth (Tarrant County), Texas	190
Houston (Harris County), Texas	192
San Antonio (Bexar County), Texas	194
Norfolk, Virginia	196
Virginia Beach, Virginia	198
Seattle, Washington	200
Milwaukee, Wisconsin	202

### The States

Alabama	204
Alaska	206
Arizona	208
Arkansas	210
California	212
Colorado	214
Connecticut	216
Delaware	218
Florida	220
Georgia	222
Hawaii	224
Idaho	226
Illinois	228
Indiana	230
Iowa	232
Kansas	234
Kentucky	236
Louisiana	238
Maine	240
Maryland	242
Massachusetts	244
Michigan	246
Minnesota	248
Mississippi	250
Missouri	252

Montana	254
Nebraska	256
Nevada	258
New Hampshire	260
New Jersey	262
New Mexico	264
New York	266
North Carolina	268
North Dakota	270
Ohio	272
Oklahoma	274
Oregon	276
Pennsylvania	278
Rhode Island	280
South Carolina	282
South Dakota	284
Tennessee	286
Texas	288
Utah	290
Vermont	292
Virginia	294
Washington	296
West Virginia	298
Wisconsin	300
Wyoming	302

## APPENDICES

Appendix A	Advisory Committee on "Poor Infants, Poor Chances"	305
Appendix B	State Directory for Vital Statistics Data	306
Appendix C	USDA Method for Determining Number of Income Eligibles	314
Appendix D	References	315

## List of Tables

2.5	Maternal Risk Factors Associated with Low Birth Weight	13
3.1A	Rank of 55 Largest U.S. Cities by July 1, 1984 Population Estimates	16
3.1B	Listing of Cities that are Represented by County Data in this Study	17
4.1A	Ranking of Cities by 1984 Low Birth Weight Percentage for All Races	24
4.1B	Ranking of Cities by Average Low Birth Weight Percentage, 1979-1984	25



4.1C	Three Measures of Change in the Low Birth Weight Percentages for All Races in the Cities, 1979-1984	26
4.2A	Ranking of Cities by 1984 Low Birth Weight Percentage for Whites	28
4.2B	Three Measures of Change in the Low Birth Weight Percentage for Whites in the Cities, 1979-1984	30
4.3A	Ranking of Cities by 1984 Low Birth Weight Percentage for Nonwhites	32
4.3B	Three Measures of Change in the Low Birth Weight Percentage for Nonwhites in the Cities, 1979-1984	33
4.5A	Ranking of Cities by 1984 Infant Mortality Rates for All Races	36
4.5B	Ranking of Cities by Average Infant Mortality Rates, 1979-1984	37
4.5C	Three Measures of Change in Infant Mortality Rates for All Races in the Cities, 1979-1984	39
4.6A	Ranking of Cities by 1984 Infant Mortality Rates for Whites	41
4.6B	Three Measures of Change in Infant Mortality Rates for Whites in the Cities, 1979-1984	42
4.7A	Ranking of Cities by 1984 Infant Mortality Rates for Nonwhites	45
4.7B	Three Measures of Change in Infant Mortality Rates for Nonwhites in the Cities, 1979-1984	46
4.9A	Racial Differences in Low Birth Weight in the Cities: A Comparison of the Nonwhite:White Ratios for 1979 and 1984	49
4.9B	Racial Differences in Infant Mortality in the Cities: A Comparison of the Nonwhite:White Ratios for 1979 and 1984	51
4.9C	Ranking of Cities by 1984 Nonwhite:White Ratios for Infant Mortality	52
4.10A	Ranking of Cities by Poverty Rate (1980 Census)	54
4.10B	Ranking of Cities by Percent Black Population (1980 Census)	55
4.10C	Cities Ranked by Average Infant Mortality Rates with Low Birth Weight and Poverty Rates and Percent Black Population	56
5.1A	Ranking of States by 1984 Low Birth Weight Percentage for All Races	58
5.1B	Ranking of States by Average Low Birth Weight Percentage, 1979-1984	59
5.1C	States Ranked by Average Infant Mortality Rates with Low Birth Weight and Poverty Rates and Percent Black Population	60
5.1D	Three Measures of Change in the Low Birth Weight Percentages for All Races in the States, 1979-1984	61
5.2A	Ranking of States by 1984 Low Birth Weight Rates for Whites	64
5.2B	Three Measures of Changes in the Low Birth Weight Percentage for Whites in the States, 1979-1984	65
5.3A	Ranking of States by 1984 Low Birth Weight Rates for Nonwhites	67
5.3B	Three Measures of Change in the Low Birth Weight Percentage for Nonwhites in the States, 1979-1984	69

5.5A	Ranking of States by 1984 Infant Mortality Rates for All Races	71
5.5B	Ranking of States by Average Infant Mortality Rates for All Races, 1979-1984	72
5.5C	Three Measures of Change in Infant Mortality Rates for All Races in the States, 1979-1984	74
5.6A	Ranking of States by 1984 Infant Mortality Rates for Whites	76
5.6B	Three Measures of Change in Infant Mortality Rates for Whites in the States, 1979-1984	77
5.7A	Ranking of States by 1984 Infant Mortality Rates for Nonwhites	79
5.7B	Three Measures of Change in Infant Mortality Rates for Nonwhites in the States, 1979-1984	81
5.9A	Racial Differences in Low Birth Weight in the States: A Comparison of the Nonwhite:White Ratios for 1979-1984	84
5.9B	Ranking of States by 1984 Nonwhite:White Ratios for Infant Mortality	85
5.9C	Racial Differences in Infant Mortality in the States: A Comparison of the Nonwhite:White Ratios for 1979 and 1984	87
5.10A	Ranking of States by Poverty Rate (1980 Census)	88
5.10B	Ranking of States by Percent Black Population (1980 Census)	93

### List of Maps

Map 5.10A	States by Poverty Rates, 1980 Census	89
Map 5.10B	States by Percent Black Population, 1980 Census	90
Map 5.10C	States, Low Birth Weight, 1984	91
Map 5.10D	States, by Infant Mortality Rate, 1984	92

# Part I

---

## The Study

## CHAPTER ONE

### EXECUTIVE SUMMARY

#### 1.1 Introduction

Low birth weight and infant mortality represent two major infant health problems in the United States. A baby weighing less than 2500 grams (about 5 pounds, 8 ounces) at birth is considered to be low birth weight. Infant mortality is defined as the death of an infant (born live) before its first birthday. Low birth weight is a serious infant health problem because the weight of an infant at birth is the single most important determinant of its chances of survival and healthy growth and development.

In 1984, the infant mortality rate in the United States was lower than in previous years, yet the U.S. ranked 17th among industrialized nations. Furthermore, that rate, 10.8 infant deaths per 1,000 live births – masked the incidence of much higher infant mortality rates in most of the nation's largest cities, in many of the 50 states, and especially among nonwhite Americans.

Data from the National Center for Health Statistics show that progress in reducing infant mortality had slowed from a rate of 5 percent per year between 1978 and 1981 to 3 percent per year from 1981 to 1984. In late 1986, the Public Health Service of the U.S. Department of Health and Human Services acknowledged that many of the 1990 objectives for low birth weight and infant mortality, set in 1980, would not be met given the current slow rates of progress.

This study examined low birth weight and infant mortality in the 50 states and the 54 largest U.S. cities between 1979 and 1984. Its findings confirm the national data: progress in reducing low birth weight and infant mortality has slowed, and in some cases the progress has actually been reversed. Some states and many cities had higher rates of low birth weight and infant mortality in 1984 than in 1979.

The disparity in low birth weight and infant mortality rates between nonwhite and white Americans is great, and from 1979 to 1984 this gap increased in most of the largest U.S. cities and in many of the states. These marked differences in low birth weight and infant mortality are more likely the result of socioeconomic factors than race.

Although many factors contribute to problems of low birth weight and infant death, they are linked by a common element: poverty. The lack of money to purchase food, to receive proper medical care, to stay in school, and to afford adequate housing can act alone or together to harm the growth of the fetus in the womb and the growth and development of the infant during its first year. It is clear that further progress toward solving the problems of low birth weight and infant mortality in the United States must come from efforts to alleviate poverty and its harmful influence on infant health.

## 1.2 Scope of the Study

The Food Research and Action Center has long been concerned about the negative effects of poverty on the health of America's children. FRAC conducted this study as a follow-up to earlier work on infant health, "The Widening Gap: The Incidence and Distribution of Infant Mortality and Low Birth Weight in the United States, 1978-1982," published in 1984.

"Poor Infants, Poor Chances" provides an in-depth examination of low birth weight and infant mortality in the 50 states and in the 54 largest U.S. cities. By comparing rates of progress in reducing low birth weight and infant mortality in the 1982-1984 period to those in the 1979-1981 period, this report provides a unique evaluation of the changes in rates of progress. In addition, the report measures the "gap" between nonwhite and white infant health, explores how these gaps have changed from 1979 to 1984, and discusses why these gaps exist. Finally, this is the only current study that examines low birth weight and infant mortality in so many of the nation's largest cities.

This report is divided into two parts. Part One provides the findings and discussion of the study of low birth weight and infant mortality. Part Two contains profiles of the 50 states and 54 largest U.S. cities.

Part One presents the findings of a study of low birth weight and infant mortality in the 50 states and the 54 largest U.S. cities. The study assesses how 1984 low birth weight and infant mortality rates in the states and large cities compare with the national rates calculated by the National Center for Health Statistics. The study also analyzes changes in these health measures over the five-year span from 1979 to 1984.

Three measures of change were calculated for the low birth weight and infant mortality rates in the states and cities. The first, *percent change*, is a simple measure of how the 1984 rate compares with the 1979 rate. The second, *annual average percent change* for the five-year period 1979-1984, gives a single figure that is an average of the annual rates of change over the period studied. The third change analysis is referred to as the *trend analysis*. It compares the annual average percent change from the first half of the study, 1979-1981, to the annual average percent change for the second half of the study, 1982-1984. The trend analysis gives the reader the ability to see how progress in reducing low birth weight and infant mortality rates has slowed in recent years.

Part One provides a discussion of recent trends in infant health in the United States and looks at how the U.S. rates compare with those of other nations. It explains racial differences in low birth weight and infant mortality, cites low birth weight as the greatest cause of infant death in the United States, and concludes that reducing low birth weight is the key to reducing infant mortality rates in this country.

Detailed discussions of the findings for the cities and states are provided in Chapters Four and Five. Within each of these chapters are rankings of the cities or states by 1984 low birth weight and infant mortality rates for whites, nonwhites, and all races, as well as summary tables showing the results of the three change analyses conducted. Discussions of the wide gaps between the races and the relationships between race, poverty, and low birth weight and infant mortality are also included.

Part Two is a collection of profiles of the 54 cities and 50 states studied. The profiles provide demographic data such as population size, poverty rate, and racial composition; supplemental food program participation levels; and low birth weight and infant mortality rates for: 1) all races, 2) whites, and 3) nonwhites over the five-year study period. The low birth weight and infant mortality rates for whites and nonwhites over the five-year period are presented in graphic as well as tabular format.

## 1.3 Results of the Study

This study found that although national low birth weight and infant mortality rates have continued a general pattern of improvement through 1984, these rates obscured disturbingly high rates of low birth weight and infant mortality in many of the states and in most of the largest U.S. cities. Furthermore, the rates of progress in reducing low birth weight and infant mortality have slowed in 1982-1984 as compared with 1979-1981.

The gap between nonwhite and white low birth weight and infant mortality rates is great. The low birth weight gap is widening in most of the cities and states. In addition, the gap between the races increased for infant mortality in most of the cities and nearly half of the states. A summary of the study's major findings follows.

### **I. IN 1984, THE NATIONAL LOW BIRTH WEIGHT AND INFANT MORTALITY RATES, THOUGH LOWER THAN IN PREVIOUS YEARS, OBSCURED DISTURBINGLY HIGH RATES OF BOTH LOW BIRTH WEIGHT AND INFANT MORTALITY IN MANY STATES AND IN MOST OF THE NATION'S LARGEST CITIES.**

#### **Low Birth Weight**

In 1984, nearly three-quarters of the nation's 54 largest cities had low birth weight rates for all races in excess of the national rate of 6.7 percent.

Half of the states had low birth weight rates for all races in 1984 that were higher than the national rate.

#### **Infant Mortality**

In 1984, 63 percent of the cities had infant mortality rates for all races in excess of the national rate; nine cities had infant mortality rates that were more than one-and-a-half times the national rate; and two cities had infant mortality rates that were double the national rate.

Thirty-four percent of the states had infant mortality rates for all races in 1984 that were greater than the national rate.

## II. RATES OF IMPROVEMENT FOR LOW BIRTH WEIGHT AND INFANT MORTALITY SLOWED DURING THE 1982-1984 PERIOD AS COMPARED WITH THE 1979-1981 PERIOD.

### Low Birth Weight

Sixty-six percent of the cities were not making progress in decreasing their low birth weight rates for all races in 1982-1984 as compared with 1979-1981. Sixty-six percent of the cities were not making progress in decreasing their low birth weight rates among whites, and 74 percent of the cities were not making progress in decreasing their nonwhite low birth weight rates in 1982-1984 as compared with 1979-1981.

Seventy-four percent of the states were not making progress in decreasing low birth weight rates for all races in 1982-1984 as compared with 1979-1981. Sixty-eight percent of the states were not making progress in decreasing low birth weight rates for whites, and 62 percent of the states were not making progress in decreasing nonwhite low birth weight rates.

### Infant Mortality

The reduced rates of improvement were also apparent among infant mortality rates in the cities. Sixty-five percent of the cities were not making progress in reducing infant mortality rates for all races in 1982-1984 as compared with 1979-1981. Sixty-five percent of the cities were not making progress in reducing white infant mortality rates and 74 percent of the cities were not making progress in reducing nonwhite infant mortality rates in 1982-1984 as compared with 1979-1981.

Infant mortality rates in the states were lower than infant mortality rates in the cities. Yet only half of all states made the same or better rates of progress in 1982-1984 as compared with 1979-1981. Fifty-seven percent of the states were not making progress in reducing infant mortality rates for whites and 57 percent of the states were not making progress in reducing nonwhite infant mortality rates in 1982-1984 as compared with 1979-1981.

**Note:** This study judges a city or state to be making progress only if the infant mortality or low birth weight rate decreased at the same or better rate in the second two years, 1982-1984, than it did in the first two years, 1979-1981. See Chapter Three for details on the methods used in this study.

### III. MANY CITIES AND STATES HAD THE SAME OR WORSE INFANT HEALTH RATES IN 1984 AS THEY HAD FIVE YEARS PREVIOUSLY IN 1979.

#### Low Birth Weight

Thirty-two percent of the cities had the same or higher low birth weight rates for all races in 1984 as compared with 1979. Twenty-eight percent of the cities had higher white low birth weight rates in 1984 than in 1979. *Forty-nine percent of the cities had the same or higher low birth weight rates for nonwhites in 1984 than in 1979.*

Thirty-two percent of the states had the same or higher low birth weight rates for all races in 1984 as compared with 1979. Twenty-one percent of the states had higher white low birth weight rates in 1984 than in 1979, and one-third of the states had higher low birth weight rates for nonwhites in 1984 than five years before in 1979.

#### Infant Mortality

Fifteen percent of the cities had higher infant mortality rates for all races in 1984 as compared with 1979. Seventeen percent of the cities had higher white infant mortality rates in 1984 than in 1979. Thirty-five percent of the cities had higher nonwhite infant mortality rates in 1984 as compared with 1979.

Four percent of the states had higher infant mortality rates for all races in 1984 than in 1979. Two percent of the states had higher white infant mortality rates in 1984 than in 1979. Eleven percent of the states had higher infant mortality rates for nonwhites in 1984 than in 1979.

### IV. POVERTY APPEARS TO HAVE A STRONG NEGATIVE INFLUENCE ON LOW BIRTH WEIGHT AND INFANT MORTALITY.

#### Low Birth Weight

Nine of the 10 cities with the highest 1984 low birth weight rates for all races were among the 13 poorest cities, according to 1980 U.S. Census Bureau data.

The 10 states with the highest low birth weight rates for all races in 1984 were among the 13 states with the highest poverty rates.

#### Infant Mortality

Seven of the 10 cities with the highest infant mortality rates in 1984 were among the 10 poorest cities.



Seven of the 10 states with the highest infant mortality rates in 1984 were among the 13 poorest states.

**V. HIGH POVERTY RATES AMONG BLACKS AND OTHER NONWHITES APPEAR TO NEGATIVELY INFLUENCE THEIR LOW BIRTH WEIGHT AND INFANT MORTALITY RATES. FOR THIS REASON, RACE IS A STRONG PREDICTOR OF LOW BIRTH WEIGHT AND INFANT MORTALITY. IN THE 50 STATES AND IN THE 54 CITIES, NONWHITES GENERALLY HAVE HIGHER RATES OF LOW BIRTH WEIGHT AND INFANT MORTALITY THAN DO WHITES.**

#### **Low Birth Weight**

In 1984, nonwhite low birth weight rates were greater than white low birth weight rates in 97 percent of the cities.

In 1984, nonwhite low birth weight rates were greater than white low birth weight rates in 96 percent of the states.

#### **Infant Mortality**

In 1984, nonwhite infant mortality rates were greater than white infant mortality rates in 97 percent of the cities.

In 1984, nonwhite infant mortality rates were greater than white infant mortality rates in 87 percent of the states.

**VI. THE NONWHITE-WHITE GAP IN LOW BIRTH WEIGHT AND INFANT MORTALITY RATES WIDENED IN MOST OF THE CITIES AND MANY OF THE STATES FROM 1979 TO 1984.**

#### **Low Birth Weight**

The nonwhite-white gap in low birth weight widened in 60 percent (23 of 39) of the cities from 1979 to 1984.

The nonwhite-white gap in low birth weight widened in 63 percent (27 of 43) of the states from 1979 to 1984.

#### **Infant Mortality Rate**

The nonwhite-white gap in infant mortality widened in 62 percent (32 of 52) of the cities from 1979 to 1984.

The nonwhite-white gap in infant mortality widened in nearly half (21 of 45) of the states from 1979 to 1984.

## 1.4 Conclusion and Recommendations

Progress in reducing low birth weight among American infants has been slow despite the fact that two-thirds of all infant deaths are attributable to low birth weight. The 1984 low birth weight rate was only 10 percent lower than the rate a decade before.

Most of the advances toward reducing the United States' infant mortality rate during the last two decades have been made through improvements in medical technology that have increased the chances of survival for smaller and smaller babies. But these high-cost technological advances can only take the United States so far. Low birth weight – the greatest cause of infant mortality – must be prevented if we are to further reduce the nations' infant mortality rate.

Poverty appears to exert a powerful negative influence on low birth weight and infant mortality. This influence is equally devastating for both whites and nonwhites. Sustained high poverty rates have hampered our ability to prevent infant deaths, and it is clear that a reduced poverty rate can prevent low birth weight and infant mortality.

Sound and sensitive health, nutrition and income support programs can ameliorate the conditions imposed by poverty and provide some help in reducing infant deaths. The Special Supplemental Food Program for Women, Infants and Children is a prime example of an effective nutrition program. Numerous evaluations have shown that the WIC program can significantly reduce the incidence of low birth weight, prematurity, and infant mortality. This cost-effective, preventive health program currently serves fewer than half of those persons eligible for its benefits. The expansion of this successful program should be made a national priority.

While the WIC program should be expanded as part of efforts to improve the nation's infant mortality rate, it is important to recognize that by definition, WIC is a supplemental program. Unless programs like WIC are accompanied by a series of coordinated efforts to reduce the extent and degree of poverty, they cannot fully meet their potential to substantially reduce low birth weight and infant mortality rates in America.

## CHAPTER TWO

# INFANT HEALTH IN THE UNITED STATES

## 2.1 Progress Toward Reducing Low Birth Weight and Infant Mortality Rates

In November, 1986, the Public Health Service of the U.S. Department of Health and Human Services published, "The 1990 Health Objectives for the Nation: A Midcourse Review." That document evaluated the nation's success in meeting health goals set by the Surgeon General in 1980. It stated, "No indicators of public health offer greater priority than slowing declines in annual infant mortality and low birth weight rates and the discrepancies between these rates for black and white babies." It concluded that, "many of the objectives will not be achieved, given current rates of progress."<sup>1</sup>

In September 1986, the National Center for Health Statistics reported that 39,580 infants died before their first birthday in 1984; 10.8 babies died for every 1,000 live births.<sup>2</sup> Though a new low for the nation, this composite infant death rate obscured tremendous differences among America's racial and ethnic groups and in certain states and cities. Black infants died at a rate virtually twice that of white infants. The black:white infant mortality gap in 1984 was 1.96:1. This is just 1/100th of 1 percent lower than the 1983 gap of 1.97:1, which was the widest gap between the races in over 40 years.<sup>3</sup>

National research shows that there has been a slowing in the rate of decline in infant mortality rates. In the period between 1978 and 1981, the nation's infant mortality rate dropped by an average of 5 percent a year. Between 1981 and 1983 the rate of decline slowed to 4 percent per year.<sup>4</sup> This overall infant mortality rate is determined by combining the neonatal infant mortality rate with the postneonatal mortality rate.

The neonatal infant mortality rate - number of deaths per 1,000 live births in the first 27 days - dropped by 4 percent from 1983 to 1984. Black neonatal mortality decreased by 5 percent, and white neonatal mortality decreased by 3 percent. The physical condition of the mother, specifically her nutritional status, and the quality of the medical care she received before and during pregnancy, the quality of care and services during labor and delivery, and neonatal care are all powerful determinants of survival for the baby in the first month.

The postneonatal mortality rate for the nation - the number of deaths per 1,000 live births that occur between the 28th and the 364th days of life - was 3.8 in 1984, 3 percent lower than the year before. The postneonatal mortality rate had increased from 1982 to 1983, so the decrease between 1983 and 1984 simply brought it back to its 1982 level. The 1984 postneonatal mortality rate for blacks was 6.5, lower than both previous years: 6.6 in 1982 and 6.8 in 1983.

Postneonatal mortality is mostly a reflection of the infant's environment at home. Social and environmental influences such as the quality of housing, infant nutrition, sanitation, and other situational hazards such as communicable diseases, rats, and lead-containing paint as well as lack of supervision, may lead to infant death during this later period. Occasionally, postneonatal mortality may reflect the loss of a severely

compromised infant who survived the first month of life due to the highly technical capabilities of the neonatal intensive care unit, only to die early in the postneonatal period.

In recent years progress in reducing low birth weight in the United States has been at a virtual standstill. The 1984 low birth weight rate for all races was 6.7 percent. Although this was the lowest proportion recorded since 1950 when birth statistics first became available, it remained unchanged at 6.8 percent for each of the years 1979 through 1983. The 1984 low birth weight rate for blacks in 1984 (12.4 percent) was more than double that for whites (5.6 percent).<sup>5</sup>

The proportion of babies born at low birth weight for other nonwhite, nonblack groups ranged from 5.1 percent for Chinese to 7.7 percent for Filipinos. Native Americans (6.2 percent), Japanese (6.1 percent), and Hawaiians (7.6 percent) experienced low birth weight rates higher than whites but substantially lower than blacks. Statisticians believe that the low level of teenage childbearing among these groups is one important factor explaining the relatively low rates of low birth weight births among these groups.<sup>6</sup>

The factors contributing to infant mortality are complex. Poverty, unemployment, lack of health insurance, limited educational achievement, and housing are powerful determinants of mortality in that first, precarious year of life. *Low birth weight is the single greatest problem associated with infant mortality.* Two-thirds of all infant deaths occur among low birth weight infants.<sup>7</sup> Reducing the infant mortality rate in the United States will require that even more attention be focused on preventive programs designed to improve birthweights. Well-known pediatrician-epidemiologist Nigel Paneth made it clear - in an editorial in the *Journal of the American Medical Association* when he said, "America's number one pediatric public health problem, low birth weight, will not go the way of diphtheria and polio without a similar and well-funded effort."<sup>8</sup>

## 2.2 U.S. vs. Other Nations' Infant Mortality Rates

When the United States is compared with other developed countries, the average U.S. infant mortality rate for 1980-1985 (11 per 1,000) ranks seventeenth.<sup>9</sup> Finland, Iceland and Japan (6 per 1,000) and Sweden (7 per 1,000) have the lowest infant mortality rates. These countries all have lower rates of low birth weight and differ from the United States in many ways. Swedes, for example, are better educated than Americans and enjoy a higher standard of living, including a more even distribution of income. More importantly perhaps, Sweden has had a national health service and national health insurance since 1955. Medical and hospital care are free and prescription drugs are provided at a nominal fee.<sup>10</sup>

The main reason that the United States has such a poor international infant mortality ranking is because too many babies are born too soon or too small.<sup>11</sup> Any major improvement in the U.S. standing among those other developed nations awaits a reduction in the proportion of high-risk, low birth weight babies born to American mothers.<sup>12</sup>

## 2.3 The Influence of Poverty on Low Birth Weight and Infant Mortality

The link between poverty and infant mortality has been documented since the first systematic survey of infant health was conducted by the Children's Bureau in the early part of this century.<sup>13</sup> A recent study found that *financial problems during pregnancy increased the risk of delivery a low birth weight baby by 7 times*. This study controlled for differences in race, certain poor health habits, complications of pregnancy, and several other factors.<sup>14</sup> As Paneth expresses it: put more simply, poorer mothers have smaller babies and smaller babies are at higher risk of early death.<sup>15</sup>

An earlier study found that poor infants were found to face risks of death within the first year after birth 1.5 times greater than nonpoor infants, even after controlling for birth weight and a number of maternal and family characteristics.<sup>16</sup> Though whites and nonwhites alike are subject to the negative influences of poverty upon infant health, nonwhites are more likely to live in poverty than are whites.

In the United States, the mortality for black babies far exceeds that for white babies; black infants are twice as likely as white infants to be born at a low birth weight or to die before their first birthday. While some researchers have suggested that genetics may be a factor, the major reasons that black infants suffer from higher rates of low birth weight and infant mortality are the social and economic disadvantages that they face.<sup>17</sup>

In 1984 the poverty rate for black Americans (33.8 percent) was 3 times that of whites (11.5 percent).<sup>18</sup> Black babies were born to single mothers at a rate more than 4 times greater than whites (59.2 percent vs. 13.4 percent). Almost one in four of all black births were to teenagers, a rate more than double that for whites (11.1 percent).<sup>19</sup> The high rates of poverty, teen- and unwed- pregnancy were compounded by poor educational attainment, poor access to medical care and many other unfavorable environmental influences on pregnancy outcome.

## 2.4 Low Birth Weight Causes Most Infant Deaths

The birth weight of an infant is the single most important determinant of its chances of survival and healthy growth and development.<sup>20</sup>

There are two important statistical determinants of infant mortality rates. The first is the proportion of low birth weight babies (distribution of birth weights) in a population. The second is the death rate at each birth weight (the rate at which babies in each birth weight category die.)

The proportion of low birth weight babies reflects both socioeconomic and demographic circumstances. For a mother, the demographic characteristics that pose the greatest risks for delivering a baby too small or too soon are: age (younger than 17 or older than 34 years); race (black); low socioeconomic status; being unmarried; and low educational achievement.<sup>21</sup> Socioeconomic status further influences other risk factors such as access to medical care; stress; and behavioral and environmental risks, such as smoking, poor nutritional status, alcohol and substance abuse, and exposure to environmental hazards.

The death rate for each birth weight is more reflective of the quality of medical care received by the fetus and, especially, the newborn. For example, if two infants were born at very low birth weights, say 1500 grams, the infant born at a well-equipped hospital with the most modern life support systems may survive, whereas a similarly small infant may not survive at a more poorly equipped hospital.

Most researchers agree that the decline in the U.S. neonatal mortality rate that began in the mid-1960s with the advent of the neonatal intensive care unit (NICU) was largely due to decreases in the birth-weight specific mortality rates.<sup>22</sup> The babies delivered were not getting that much bigger, but the hospitals were better able to sustain life in smaller babies.

The United States competes quite favorably with other nations in birth-weight specific mortality rates. *The United States does not have high infant mortality rates due to insufficient or poor medical care per se; the United States has higher overall infant mortality rates because too many babies are born at low and very low birth weights.*<sup>23</sup> This frequently results in loss of life or the birth of "damaged survivors" -- babies whose chances for a full life are limited.

Low birth weight babies that survive are at increased risk of mental retardation, birth defects, growth and developmental problems, visual and hearing defects, delayed speech, autism, cerebral palsy, epilepsy, learning difficulties, chronic lung problems, and abuse and neglect.<sup>24</sup> Low birth weight babies that do not survive are counted among the infant mortality statistics -- at great social and emotional cost.

## 2.5 Reducing Low Birth Weight Rates Is the Key to Reducing Infant Mortality in the United States

Infant mortality can be cut and the gap between the races can be narrowed. What needs to be done is to resolve the problems that contribute to low birth weight and encourage those behavioral and environmental influences that promote the birth of bigger, healthier babies. Those efforts should be targeted to those groups or individuals who are at highest risk for delivering babies too small or too soon:

- o Teenage mothers;
- o Unmarried mothers;
- o Nonwhites, especially blacks;
- o Poorly educated women; and
- o Those living at or near poverty.

Because many of the medical risks associated with low birth weight can be evaluated in the first prenatal visit, and because interventions to modify or relieve these risks have been shown to be highly effective, early and continuous prenatal care is an integral part of any plan designed to prevent low birth weight. Table 2.5 summarizes the key maternal risk factors associated with low birth weight.

**Table 2.5 - Maternal Risk Factors Associated with Low Birth Weight<sup>25</sup>**

**A. Demographic Risks**

Age (younger than 17 or older than 34)  
Race (black)  
Low socioeconomic status  
Unmarried  
Low level of education

**B. Behavioral and Environmental Risks**

Smoking  
Poor nutritional status  
Alcohol and substance abuse  
Occupational hazards and toxic exposures

**C. Medical Risks Before Pregnancy**

Poor obstetric history  
Maternal genetics factors  
Number of previous deliveries  
(0 or more than 4)  
Low weight for height  
Fetal anomalies

**D. Medical Risks During Pregnancy**

Multiple pregnancy  
Poor weight gain  
Anemia  
Hypertension, preeclampsia and toxemia  
Certain disease such as diabetes and  
hypertension

**E. Health Care Risks**

Absent or inadequate prenatal care

**F. Associated Factors**

Physical or psychological stress

*The United States can decrease the proportion of infants born too soon or too small by emphasizing proven preventive measures: enhancing the nutritional status of girls and women in their childbearing years prior to pregnancy; guaranteeing effective medical and nutritional programs to all pregnant women and their children, and discouraging unwanted pregnancies.*

## CHAPTER THREE

### METHODOLOGY

#### 3.1 Selection of Cities

The most recent health data available at the time the study was conducted, mid-1986, were for 1984. The cities selected for the study were the 55 largest cities in the United States in 1984. City size was determined from Census Bureau-generated population estimates for July 1, 1984 (see Table 3.1A). The cities ranged in size from 279,683 in Norfolk, Virginia, the smallest of the cities studied, to New York City with a population of over seven million.

Los Angeles and Long Beach, the second and thirty-fifth largest cities in 1984, respectively, are examined together as Los Angeles County, the same manner in which health data are gathered by California health officials. As a result, the report examines 54 rather than 55 cities.

When the states were surveyed for their state infant health statistics they were also asked to provide the same data for their large cities. For many cities (23 of 55) the data were not available for the city; they were county level data. For example, when the Tennessee Registrar of Vital Statistics was asked to provide data for Nashville, data for Davidson County were sent. Davidson County is the urban county that contains Nashville and a small part of the area surrounding the city; it is about 98% urban.

The counties in the study ranged from 88 to 100 percent urban. Philadelphia, San Francisco, and Denver counties are 100 percent urban; these cities have the same boundaries as their counties. The least urban counties, Pima County (Tucson), Sedgewick (Wichita), and Travis (Austin), were all about 88 percent urban. Table 3.1B presents a listing of the cities in the study, indicating which cities are represented by county level data. The percent urban population is noted as well.

In the cities where county level data were provided, there appeared to be a dilutional or buffering effect of the suburban population on the health indices of the county. When the cities were ranked by infant mortality and low birth weight rates, the urban counties where city and county boundaries were not the same tended to have better rates than did the cities. If data for the cities alone had been available, their infant health rates would likely have been somewhat worse.

#### 3.2 Data Collection

The health statistics that appear in this report were obtained directly from the registrar of vital health statistics in each state. They are state-produced data; the values will vary slightly from nationally released figures for the states, which are prepared by the National Center for Health Statistics (NCHS). The major difference between the state and national data is that the NCHS, when preparing the national data, sorts events by residence of occurrence. The state data are frequently just reporting on place of occurrence. For example, a birth to a Maryland woman in a District of Columbia hospital will be included in among Maryland events in the national data, but may be among the District of Columbia state data.



Table 3.1A

RANK OF 55 LARGEST U.S. CITIES BY JULY 1, 1984 POPULATION ESTIMATES					
CITY	JULY 1, 1984 POPULATION	RANK	CITY	JULY 1, 1984 POPULATION	RANK
New York, NY	7,164,742	1	Oklahoma City, OK	443,172	28
Los Angeles, CA	3,096,721	2	Kansas City, MO	443,075	29
Chicago, IL	2,992,472	3	St. Louis, MO	429,296	30
Houston, TX	1,735,697	4	Atlanta, GA	426,050	31
Philadelphia, PA	1,646,713	5	Fort Worth, TX	414,562	32
Detroit, MI	1,088,973	6	Pittsburgh, PA	402,583	33
Dallas, TX	974,234	7	Austin, TX	397,001	34
San Diego, CA	960,452	8	*Long Beach, CA	378,752	35
Phoenix, AZ	853,266	9	Tulsa, OK	374,535	36
San Antonio, TX	842,779	10	Miami, FL	372,634	37
Honolulu, HI	805,266	11	Cincinnati, OH	370,481	38
Baltimore, MD	763,570	12	Baton Rouge, LA	368,571	39
San Francisco, CA	712,753	13	Portland, Oregon	355,861	40
Indianapolis, IN	710,280	14	Tucson, AZ	365,422	41
San Jose, CA	686,178	15	Minneapolis, MN	358,335	42
Memphis, TN	648,399	16	Oakland, CA	351,893	43
Washington, DC	622,823	17	Albuquerque, NM	350,275	44
Milwaukee, WI	620,811	18	Toledo, OH	343,939	45
Jacksonville, FL	577,971	19	Buffalo, NY	338,982	46
Boston, MA	570,719	20	Omaha, NE	332,237	47
Columbus, OH	566,114	21	Charlotte, NC	330,838	48
New Orleans, LA	559,101	22	Newark, NJ	314,387	49
Cleveland, OH	546,543	23	Virginia Beach, VA	308,664	50
Denver, CO	504,588	24	Sacramento, CA	304,131	51
Seattle, WA	488,474	25	Louisville, KY	269,843	52
El Paso, TX	463,809	26	Wichita, KS	263,496	..
Nashville-Davidson, TN	462,450	27	Birmingham, AL	279,813	54
			Norfolk, VA	279,683	55

\* Our study examines the cities of Los Angeles and Long Beach, California, as one combined Los Angeles/Long Beach area because that is the way in which health statistics are gathered.

TABLE 3.1B LISTING OF THE CITIES THAT ARE REPRESENTED BY

COUNTY DATA IN THIS STUDY

URBAN COUNTY	PERCENT URBAN
Jefferson County (Birmingham), AL	89.4
Maricopa County (Phoenix), AZ	95.3
Pima County (Tucson), AZ	98.2
Los Angeles County (LA/Long Beach), CA	98.9
Alameda County (Oakland), CA	98.9
Sacramento County (Sacramento), CA	96.0
San Diego County (San Diego), CA	93.2
*San Francisco County (San Francisco), CA	100.0
Santa Clara County (San Jose), CA	97.7
*Denver County (Denver), CO	100.0
Duval County (Jacksonville), FL	98.3
Dade County (Miami), FL	98.9
Sedgewick County (Wichita), KS	88.8
Douglas County (Omaha), NE	95.1
Oklahoma County (Oklahoma City), OK	97.6
Tulsa County (Tulsa), OK	94.3
Multnomah County (Portland), OR	98.0
*Philadelphia County (Philadelphia), PA	100.0
Davidson County (Nashville), TN	98.0
Travis County (Austin), TX	88.2
Dallas County (Dallas), TX	99.4
El Paso County (El Paso), TX	96.1
Tarrant County (Fort Worth), TX	96.9
Harris County (Houston), TX	96.4
Bexar County (San Antonio), TX	94.7

\* The county is the same as the city.

A survey was mailed to each state registrar asking for the following data, disaggregated by race (white, black, nonwhite, and total), for the state and for any study city located in their state:

- 1) The number of live births for 1984;
- 2) The number of infant deaths in the first year of life (0-365 days) for 1984;
- 3) The infant mortality rate (number of infant deaths per 1000 live births)  
for the years 1979-1984; and
- 4) The low birth weight percentage (percent of total live births at or below  
2500 grams) for 1979-1984.

Most of the states were able to provide a large portion of the low birth weight and infant mortality data requested. Data disaggregated for blacks were the most difficult to obtain. This study concentrates on comparing white with nonwhite health rates because at the state level, nonwhite rates were more uniformly available than were black rates. *In this study, the nonwhite population includes blacks, American Indians, Chinese, Filipinos, Japanese, Asian Indians, Koreans, Vietnamese, and all other non-Caucasian races.*

Though the states gather racial data on birth and death certificates, less than half of the states perform analyses specifically examining black data. The states send their vital statistics data on to the NCHS in Maryland, where further analyses provide nationally produced, state and national level data for all racial subgroups, including blacks.

All of the population data reported in the analyses or profiles, such as population size, racial characteristics, and poverty rates, come from the 1980 decennial survey conducted by the U.S. Bureau of Census in 1979. There were more recent population estimates for some but not all of the areas studied. For consistency, this report relies exclusively on the 1980 Census data for the population figures.

Program participation data for the Special Supplemental Food Program for Women, Infants, and Children (WIC) and the Commodity Supplemental Food Program (CSFP) are presented in Part Two of the study in the profiles of the individual cities and states. The data were obtained directly from the administering state agencies by telephone interview. The figures for "percent WIC eligibles served" for the states were obtained from the U.S. Department of Agriculture (USDA). The figures shown for percent WIC eligibles served in the cities were obtained directly from the WIC "state agencies" because the USDA does not calculate percent WIC eligibles served at the city or county level. The USDA method for estimating the total eligible population in a state is presented in Appendix B.

The city figures for percent WIC eligibles served in 1984 were provided by the states. Methods for determining the number of individuals that are income eligible for the WIC program in the cities vary. There

are some difficulties with USDA-provided figures for the states as well. They are based upon the 1980 Census population figures, which do not reflect changes in the population between 1979 and 1984.

Note: The 1980 Census data reported in this study were drawn from two different volumes: "City and County Book, 1983", U.S. Bureau of the Census, U.S. General Printing Office, 1983 and "Statistical Abstract of the United States: 1986", 106th edition, U.S. Bureau of the Census, Washington, D.C., 1985.

### 3.3 Methods of Analysis

Three analyses were performed on the health data to measure changes in infant mortality and low birth weight over the five-year study period (1979-1984): (1) percent change in the rate from 1979 to 1984; (2) annual average percent change (AAPC) in the rate over the five years (1979-1984); and (3) a trend analysis that compared the annual average percent change in the rate during the first two years of the study period, 1979-1981, to the annual average percent change in the second two years, 1982-1984.

#### Percent Change

Percent change (PC) is a simple analysis that compares the low birth weight or infant mortality rate in 1984 for a given city or state to the low birth weight or infant mortality rate in 1979. The difference or change is expressed as a percent. The rates for the intervening years (1980-1983) are not taken into account. To calculate percent change, we used the following formula:

$$[(1984 \text{ value} - 1979 \text{ value}) / 1979 \text{ value}] \times 100 \text{ percent} = \text{PC}$$

A negative value as a result of this calculation indicates a decline in the rate. For example, in Tucson the low birth weight rate for "all races" was 6.3 percent in 1979 and 5.8 percent in 1984. The percent change from 1979 to 1984 was -7.94.

$$[(5.8 - 6.3) / 6.3] \times 100 = -7.94 \text{ percent}$$

A positive value indicates that the rate was higher in 1984 than five years before, in 1979. A city where the low birth weight rate was higher at the end of the study period than at the beginning was Seattle. The change in low birth weight rates from 1979 to 1984 was 8.20 percent.

$$[(6.6 - 6.1) / 6.1] \times 100 = +8.20 \text{ percent}$$

#### Annual Rate of Change

Annual average percent change (AAPC) is a better indicator of change in health rates over the five-year period than percent change because it takes into account each of the changes in the infant mortality rates for all five years. To calculate AAPC, we used the following formula:

$$[(1980 - 1979)/1979] \times 100 \text{ percent} = A$$

$$[(1981 - 1980)/1980] \times 100 \text{ percent} = B$$

$$[(1982 - 1981)/1981] \times 100 \text{ percent} = C$$

$$[(1983 - 1982)/1982] \times 100 \text{ percent} = D$$

$$[(1984 - 1983)/1983] \times 100 \text{ percent} = E$$

---

$$(A + B + C + D + E)/5 = \text{AAPC} = \text{annual average percent change 1979-1984}$$

The AAPC statistic is useful because it gives an overall measure of the change in the infant mortality rate over the six-year period. It minimizes the influence that one unusual year's rate might have on the percent change calculation. One thing that AAPC cannot tell, however, is how the rate of change in infant mortality changed over the study time period.

#### Trend Analysis

We also conducted a "trend analysis" that uses the same annual average percent change, but which examines two two-year periods within the five-year study period. This allowed for comparison of the rates of change in the first half of the study, 1979-1981, with the rates of change over the second half of the study, 1982-1984.

**Note:** There are six years of infant mortality data between 1979 and 1984 (inclusive) but five changes, because it takes two data points to calculate one change. When conducting the trend analysis, the two-year period, 1979-1981, contained three rates, one each for 1979, 1980, and 1981. There were just two changes though, 1979-1980, and 1980-1981.

Rates of change for the two year periods were calculated as follows:

For 1979-1981:

$$[(1980 - 1979) / 1979 \times 100 \text{ percent}] + [(1981-1980)/1980 \times 100 \text{ percent}]$$

The annual rate of change for 1982-1984 was calculated using the same principle:

$$\frac{[(1983 - 1982)/1982 \times 100 \text{ percent}] + [(1984 - 1983)/1983] \times 100 \text{ percent}}{2}$$

2

By comparing the two rates, we determined whether the rate of change in an infant mortality or low birth weight rate was:

- 1) decreasing at the same or better rate than it had been in the previous two-year period; or
- 2) decreasing at a slower rate, or
- 3) increasing at a slower rate, or
- 4) increasing more rapidly.

The last category, increasing more rapidly, includes those areas where the rates had been decreasing in the first two year period but took a turn for the worse in the second two year period.

For example: in Atlanta, the AAPC for low birth weight among nonwhites was +1.29 percent for 1979-1981 and -6.03 percent for 1982-1984. By comparing the figures it was determined that low birth weight rate among nonwhites in Atlanta was decreasing more rapidly between 1982 and 1984 than in the previous two-year study period, 1979-1981. Atlanta's low birth weight rate among nonwhites was decreasing at the same or better rate.

The following additional examples show cities where the infant mortality rates were not decreasing at the same or better rate: In New Orleans, the nonwhite infant mortality rate was decreasing at a slower rate between 1982 and 1984 (-3.53 percent) than it had between 1979 and 1981 (-9.19 percent). In both periods the infant mortality rate, on average, was getting smaller or better. In the second period, however, the rate of decrease was slower than it had been in the previous time period.

In El Paso, the nonwhite infant mortality rate was increasing more slowly in 1982-1984 (5.33 percent) than in 1979-1981 (8.24 percent). In both time periods the infant mortality rate, on average, was getting higher, or worse. In the second time period the rate of increase was slower.

In Newark, the nonwhite infant mortality rate was decreasing between 1979 and 1981 (-15.05 percent) and then the rate began to worsen between 1982 and 1984 (AAPC of 5.53 percent). This is an example where the rates have changed from decreasing to taking a turn for the worse. In the first two years of the study the rates

were decreasing at a fairly rapid rate. In the second two years the infant mortality rates among nonwhites increased. Newark was categorized as "increasing more rapidly."

As the infant mortality rate drops lower and lower it is mathematically, though perhaps not biologically, easier to achieve larger percent changes. For example, if a city's infant mortality rate drops from 15 per 1,000 down to a rate of 12 per 1,000, this is a 20 percent decline. If that same city drops down by another 3 per 1,000 to 9 per 1,000, this is a 25 percent decline. Because it becomes easier to achieve the same percent change as the rates drop, *this study judges a city or state to be making progress only if the infant mortality or low birth weight rate is decreasing at the same or better rate in the second two years, 1982-1984, than it did in the first two years, 1979-1981.*

The infant mortality and low birth weight data in this report are not subject to sampling error because they are census level data (full counts of all events). However, when the number of events such as low birth weight births or infant deaths is small, the data must be observed and interpreted with caution.

## CHAPTER FOUR

### STUDY FINDINGS FOR THE LARGEST U.S. CITIES, 1979-1984

#### 4.1 Low Birth Weight Rates for All Races in America's Largest Cities

##### Status in 1984

Nearly three-quarters of the cities (40 of 54) had low birth weight rates for all races that exceeded the 1984 national low birth weight rate of 6.7 percent. The city low birth weight rates ranged from 5.2 percent in San Jose to 13.1 percent in Detroit. Table 4.1A lists the 54 largest American cities ranked by their 1984 low birth weight rates for all races. Table 4.1B shows these same cities ranked by their average low birth weight rates over the five-year study period, 1979-1984. The same 10 cities that had the highest low birth weight rates in 1984 were ranked among the 10 cities with the highest average low birth weight rates over the five-year period, demonstrating that low birth weight is an entrenched problem in these communities.

##### CHANGES IN LOW BIRTH WEIGHT, 1979-1984

##### Summary of Changes, 1979-1984

One-third of the cities' low birth weight rates were the same as or worse in 1984 than they had been five years previously. Table 4.1C summarizes the changes in the low birth weight rates for all races in the cities for 1979-1984.

While more of the cities (50 percent), on average, decreased their low birth weight rates for all races in the later time period, 1982-1984, as compared with the earlier period (40 percent), 1979-1981, only about one-third of the cities' low birth weight rates were decreasing at the same or faster rate in this later time period. The other 66 percent of the cities were not making progress. (See Chapter Three for a full definition of progress.)

##### Percent Change, 1979-1984

In 67 percent of the cities (30 of 45), low birth weight rates for all races were lower in 1984 than they were in 1979. One-third of the cities (15 of 45) had the same or higher low birth weight rates for all races in 1984 than they had five years before. There were insufficient data to judge percent change for nine cities.

##### Annual Average Percent Change, 1979-1984

For the five-year study period, 1979-1984, 70 percent of the cities (32 of 46), on average, decreased the low birth weight rates for all races. Thirty percent of the cities (14 of 46), on average, experienced increases in low birth weight for all races, and there were insufficient data to calculate AAPCs for the five-year period for eight cities.



Table 4.1A

RANKING OF CITIES BY 1984 LOW BIRTH WEIGHT PERCENTAGE FOR ALL RACES					
RANK	CITY	PERCENTAGE	RANK	CITY	PERCENTAGE
1	Detroit, MI	13.1	25-27	*Dallas, TX <sup>1</sup> Milwaukee, WI Albuquerque, NM	7.8
2	Washington, DC	12.8	28-29	*Jacksonville, FL <sup>1</sup> *Miami, FL <sup>1</sup>	7.6
3	Newark, NJ	11.9			
4	New Orleans, LA	11.5	30-31	Indianapolis, IN Columbus, OH	7.5
5	Baltimore, MD	11.4			
6	Atlanta, GA	11.2	32-33	*Wichita, KS <sup>1</sup> Toledo, OH	7.2
7	Memphis, TN	10.5			
8-9	Cleveland, OH Philadelphia, PA	10.3	34	Omaha, NE	7.1
			35	*Oakland, CA <sup>1</sup>	7.0
10	Chicago, IL	10.2	36-37	*San Antonio, TX <sup>1</sup> *Houston, TX <sup>1</sup>	6.9
11	St. Louis, MO	10.1			
12-14	Norfolk, VA Boston, MA Nashville, TN	9.3	38-40	*Oklahoma City, OK <sup>1</sup> *Austin, TX <sup>1</sup> *Fort Worth, TX <sup>1</sup>	6.8
15	*Birmingham, AL <sup>1</sup>	9.2	41-42	San Francisco, CA El Paso, TX <sup>1</sup>	6.7
16	Buffalo, NY	9.1	43-44	Virginia Beach, VA Seattle, WA	6.6
17-18	Baton Rouge, LA Kansas City, MO	9.0	45	Minneapolis, MN	6.5
19	Pittsburgh, PA	8.9	46-47	*Los Angeles/Long Beach, CA <sup>1</sup> Tulsa, OK <sup>1</sup>	6.4
20	Denver, CO	8.8			
21	Louisville, KY	8.5	48-49	*Phoenix, AZ <sup>1</sup> *Sacramento, CA <sup>1</sup>	6.3
22	New York, NY	8.4	50-51	*Tucson, AZ <sup>1</sup> *San Diego, CA <sup>1</sup>	5.8
23	Charlotte, NC	8.3			
24	Cincinnati, OH	8.0	52	*San Jose, CA <sup>1</sup>	5.2

Portland (Multnomah Co.), Oregon and Honolulu, Hawaii, figures were not available.

\* County data.

1 The figures shown represent the 1983 low birth weight percentage.

Table 4.1B

RANKING OF CITIES BY AVERAGE LOW BIRTH WEIGHT PERCENTAGE, 1979-1984					
RANK	CITY	RATE	RANK	CITY	RATE
1	District of Columbia	12.9	26-27	Albuquerque, NM Toledo, OH	8.0
2	Atlanta, GA	12.4	28-29	Indianapolis, IN Milwaukee, WI	7.9
3-4	Detroit, MI Newark, NJ	12.2	30-31	*Jacksonville, FL *Dallas, TX	7.8
5	New Orleans, LA	11.6	32	*Miami, FL	7.7
6	Baltimore, MD	11.5	33-34	*Omaha NE *Oklahoma City, OK	7.4
7	Memphis, TN	10.9	35	*Houston, TX	7.3
8	Cleveland, OH	10.6	36	*Wichita, KS	7.1
9	**Philadelphia, PA	10.5	37	*Fort Worth, TX	7.0
10	Chicago, IL	10.3	38	*Oakland, CA <sup>2</sup>	6.9
11	St. Louis, MO	10.2	39	**San Francisco, CA <sup>2</sup>	6.8
12	Norfolk, VA	9.9	40-43	Minneapolis, MN *Tulsa, OK *Austin, TX *San Antonio, TX	6.7
13	Baton Rouge, LA	9.7	44	Virginia Beach, VA	6.5
14-15	Denver (Denver Co.), CO Buffalo, NY	9.2	45-46	*LA/Long Beach, CA <sup>2</sup> El Paso (El Paso Co.), TX	6.4
16	Pittsburgh, PA	9.1	47	Seattle, WA	6.3
17-18	Louisville, KY Charlotte, NC	9.0	48	*Sacramento, CA <sup>2</sup>	6.2
19	*Nashville, TN	8.9	49-50	*Phoenix, AZ *Tucson, AZ	6.0
20-23	Birmingham, AL <sup>1</sup> Kansas City, MO New York City, NY Cincinnati, OH	8.8	51	*San Diego, CA <sup>2</sup>	5.8
24	Boston, MA	8.7	52	*San Jose, CA <sup>2</sup>	5.5
25	Columbus, OH	8.2	53-54	Honolulu, HI *Portland, OR	--

<sup>1</sup> Based on 1979-1983 data.

<sup>2</sup> Based on 1983-1984 data.

\* County data.

\*\* County co-equal with city data.

Table 4.1C

## THREE MEASURES OF CHANGE IN THE LOW BIRTH WEIGHT PERCENTAGES FOR ALL RACES IN THE CITIES, 1979-1984

CITY	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84	CITY	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84
Birmingham, AL <sup>1</sup>	8.24	2.41	1.79	--	*Omaha, NE	-5.33	-0.93	1.32	-2.35
Phoenix, AZ	5.00	1.04	0.01	4.25	Newark, NJ	-2.46	-0.41	2.85	0.00
Tucson, AZ	-7.94	-1.43	-2.38	2.13	Albuquerque, NM	-7.23	-1.14	-5.95	-3.08
Los Angeles/Long Beach, CA	--	--	--	--	Buffalo, NY <sup>1</sup>	-5.21	-1.02	-2.11	1.73
Oakland, CA	--	--	--	--	New York City, NY	-8.70	-1.80	-1.64	-1.74
Sacramento, CA	--	--	--	--	Charlotte, NC	-10.75	-2.17	-1.59	-2.16
San Diego, CA	--	--	--	--	Cincinnati, OH	-18.37	-3.67	-5.19	0.57
San Francisco, CA	--	--	--	--	Cleveland, OH	0.98	0.33	2.43	-0.68
San Jose, CA	--	--	--	--	Columbus, OH	-12.79	-2.57	0.26	-4.94
Denver, CO	-4.35	-0.72	0.27	-0.44	Toledo, OH	-17.24	-3.20	-2.61	-1.73
District of Columbia	0.79	0.18	0.81	-0.37	*Oklahoma City, OK	-6.85	-1.21	-0.51	-4.60
Jacksonville, FL	2.63	0.65	2.60	2.15	*Tulsa, OK	--	-1.48	--	--
Miami, FL	-2.56	-0.42	-1.84	-1.21	*Portland, OR	--	--	--	--
Atlanta, GA	-9.68	-1.74	0.50	-5.24	*Philadelphia, PA	-4.63	-0.89	-1.31	-0.45
Honolulu, HI	--	--	--	--	Pittsburgh PA	-2.20	-0.14	1.79	2.38
Chicago, IL	-1.92	-0.37	0.49	0.00	Memphis, TN	-1.87	-0.31	3.22	-0.92
Indianapolis, IN	-2.60	-0.36	3.85	-2.86	*Nashville, TN	5.68	1.17	-1.72	2.88
Wichita, KS	-2.70	-0.06	1.99	1.16	*Austin, TX	6.25	1.31	3.18	2.31
Louisville, KY	-1.16	-0.11	2.36	-5.40	*Dallas, TX	-1.27	-0.23	0.65	0.65
Baton Rouge, LA	-4.26	-0.46	5.70	-0.65	*El Paso, TX	6.06	1.61	1.60	1.64
New Orleans, LA	-2.54	-0.40	-3.86	-0.80	*Fort Worth, TX	-5.56	-1.04	-1.23	-0.66
Baltimore, MD	1.79	0.50	1.07	1.94	*Houston, TX	-9.21	-1.90	-2.67	-2.08
Boston, MA <sup>1</sup>	12.05	2.34	1.81	4.62	*San Antonio, TX	-1.43	-0.10	-4.34	0.81
Detroit, MI	11.97	2.37	0.59	2.78	Virginia Beach, VA	-2.94	-0.48	-1.99	0.01
Minneapolis, MA	-7.14	-1.23	1.69	0.78	Norfolk, VA	2.06	-0.48	1.27	-0.96
Kansas City, MO	3.45	0.83	0.57	-0.78	Seattle, WA	8.20	1.63	-0.82	3.23
St. Louis, MO	-5.61	-1.05	-1.40	2.63	Milwaukee, WI	0	0.13	1.91	1.51

<sup>1</sup> Birmingham figures were calculated using 1979-1983 data.

\* County data.

-- Data unavailable.

## Trend Analysis

### 1979-1981

Between 1979 and 1981, 40 percent of the cities (18 of 45), on average, had decreasing low birth weight rates for all races. Fifty-eight percent of the cities, on average, experienced increases in low birth weight rates among all races. One city, on average, had no change in its low birth weight rate for all races during this two-year period, and there were insufficient data to calculate AAPC for nine cities.

### 1982-1984

Fifty percent of the cities (22 of 44) experienced decreases, on average, in low birth weight rates among all races. The low birth weight rates for all races, on average, were increasing for 19 cities, and 3 cities on average, had no change. Combined, this meant that, on average, 50 percent of the cities had no change in their low birth weight rates or worsened during the 1982-1984 time period. There were insufficient data to calculate AAPC's for 1982-1984 for 10 cities.

### 1982-1984 vs. 1979-1981

The annual average percent change values for the 1982-1984 time period were compared with the annual average percent change values for the 1979-1981 time period. This analysis revealed that *only 34 percent of the cities' low birth weight rates for all races were improving at the same or faster rate in the second half of the study (1982-1984) than they had in the first half of the study (1976-1981)*. The remaining 66 percent were not making progress: 7 cities (16 percent) were decreasing, but at a slower rate in the second time period; 7 (16 percent) were increasing in both time periods, though at a slower rate in the later period; and 15 cities (34 percent) were increasing at the same or faster rate or changed from decreasing to increasing in the later period as compared with the earlier period. There were 10 cities with insufficient data to complete this analysis.

## 4.2 Low Birth Weight Rates Among Whites in America's Largest Cities

### Status in 1984

*In 1984, 60 percent of the largest cities in the United States (29 of 48) had white low birth weight rates that were higher than the national white low birth weight rate of 5.6 percent.* The white low birth weight rates in these cities ranged from a low of 2.2 percent in Los Angeles to a high of 7.7 percent in Albuquerque and Detroit. Table 4.2A lists the cities ranked from highest to lowest 1984 white low birth weight rates. Nine of the 10 cities with the lowest white low birth weight rates were urban counties, suggesting that lower rates from the nonurban portions of the counties may be favorably influencing the urban rates.

Table 4.2A

RANKING OF CITIES BY 1984 LOW BIRTH WEIGHT PERCENTAGE FOR WHITES					
RANK	CITY	RATE	RANK	CITY	RATE
1-2	Albuquerque, NM Detroit, MI	7.7	27-29	Columbus, OH *Oklahoma City, OK Toledo, OH	5.7
3	Cleveland, OH	7.6	30-33	*Jacksonville, FL Memphis, TN *Miami, FL *Tucson, OK	5.6
4	Atlanta, GA	7.5	34-35	*Houston, TX *Tulsa, OK	5.5
5	*Nashville, TN	7.2	36-37	Charlotte, NC Minneapolis, MN	5.4
6	Boston, MA	7.0	38-39	Cincinnati, OH Milwaukee, WI	5.3
7	New York City, NY	6.8	40	Seattle, WA	5.2
8-9	Baltimore, MD Buffalo, NY <sup>1</sup>	6.6	41	District of Columbia	5.1
10	New Orleans, LA	6.4	42	*Sacramento	4.6
11-12	*Birmingham, AL <sup>1</sup> *El Paso, TX	6.3	43	Baton Rouge, LA	4.5
13-15	Chicago, IL Philadelphia, PA *San Antonio, TX	6.2	44	*Oakland, CA	4.1
16-17	Kansas City, MO St. Louis, MO	6.1	45	*San Francisco, CA	3.9
18-19	*Dallas, TX *Phoenix, AZ	6.0	46	*San Diego, CA	3.7
20-23	Louisville, KY *Omaha, NE Pittsburgh, PA Virginia Beach, VA	5.9	47	*San Jose, CA	3.0
24-26	*Austin, TX *Fort Worth, TX Norfolk, VA	5.8	48	*Los Angeles, CA	2.2
			--	*Denver, CO	--
			--	Honolulu, HI	--
			--	Indianapolis, IN	--
			--	Newark, NJ	--
			--	*Portland, OR	--
			--	*Wichita, KS	--

<sup>1</sup> Birmingham and Buffalo figures are based on 1983 data.

\* County data.

-- Data were not available, and rankings could not be assigned to these cities.

## CHANGES IN WHITE LOW BIRTH WEIGHT 1979-1984

### Summary of Changes, 1979-1984

Twenty-eight percent of the cities had the same or worse white low birth weight rates in 1984 than they had five years previously in 1979. Table 4.2B summarizes the changes in low birth weight rates for whites for 1979-1984.

The number of cities reducing white low birth weight rates declined during the five-year study period between 1979-1984. Whereas in the 1979-1981 time period 56 percent of the cities decreased their low birth weight rates among whites, this dropped to 45 percent in the last two years of the study, 1982-1984. When the rates of change for the two time periods were compared it was found that less than 35 percent (13 of 38) of the cities decreased their white low birth weight rates at the same or faster rate.

### Percent Change, 1979-1984

The percent change analysis showed that 73 percent of the cities (29 of 40) had lower white low birth weight rates in 1984 than in 1979; 28 percent had the same or higher white low birth weight rates in 1984 than five years previously. There were insufficient data to assess percent change for white low birth weight in 14 cities.

### Annual Average Percent Change, 1979-1984

Over the five-year study period, 1979-1984, 64 percent of the cities (27 of 42), on average, were decreasing their white low birth weight rates. *Thirty-six percent of the cities had no change in their white low birth weight rates or their rates were increasing.*

### Trend Analysis

#### 1979-1981

Between 1979 and 1981, 56 percent of the largest cities (22 of 39), on average, reduced their white low birth weight rates. Seventeen of the 39 cities for which we had sufficient data to calculate AAPCs for the 1979-1981 time period either had no change or the rates increased. *On average, white low birth weight rates were the same or increasing in 44 percent of the cities over this two-year period.* There were insufficient data to calculate AAPCs for 15 cities.

#### 1982-1984

During the last two years of the study, 1982-1984, white low birth weight rates, on average, decreased in about half of the cities (17 of 38) and increased in about the same number of cities (18 of 38). Three cities experienced virtually no change (less than 0.01 percent) and there were insufficient data to calculate AAPCs for

Table 4.2E

## THREE MEASURES OF CHANGE IN THE LOW BIRTH WEIGHT PERCENTAGE FOR WHITES IN THE CITIES, 1979-1984

CITY	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84	CITY	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84
*Birmingham, AL <sup>1</sup>	6.78	2.37	--	--	*Omaha, NE	-11.94	-4.54	-5.36	1.35
*Phoenix, AZ	3.45	-0.70	-0.86	2.69	Newark, NJ	--	--	--	--
*Tucson, AZ	-8.20	-0.21	-2.49	1.21	Albuquerque, NM	-7.23	-0.96	-7.92	-3.05
*Los Angeles/Long Beach, CA	--	--	--	--	Buffalo, NY	-8.33	-1.65	0.69	--
*Oakland, CA	--	--	--	--	New York City, NY	-5.56	-1.43	-1.04	0.01
*Sacramento, CA	--	--	--	--	Charlotte, NC	-3.57	0.33	1.67	-0.89
*San Diego, CA	--	--	--	--	Cincinnati, OH	-19.70	-1.99	-8.69	4.87
*San Francisco, CA	--	--	--	--	Cleveland, OH	13.43	1.84	1.65	1.38
*San Jose, CA	--	--	--	--	Columbus, OH	-12.31	-0.43	3.34	-5.54
*Denver, CO	--	--	--	--	Toledo, OH	-17.39	-0.41	-4.16	1.08
District of Columbia	-5.56	1.26	6.48	-6.96	*Oklahoma City, OK	-9.52	0.69	0.07	-3.73
*Jacksonville, FL	-1.75	2.38	-1.09	-1.25	*Tulsa, OK <sup>3</sup>	--	-1.33	--	--
*Miami, FL	-3.43	-2.06	-0.78	-0.54	*Portland, OR	--	--	--	--
Atlanta, GA	-9.64	-2.90	-0.50	1.61	*Philadelphia, PA	-13.89	-0.80	-4.25	-4.34
Honolulu, HI	--	--	--	--	Pittsburgh PA	-10.61	0.51	-3.08	4.70
Chicago, IL	-4.62	-0.57	-2.26	-1.57	Memphis, TN	-8.20	0.92	6.46	-3.92
Indianapolis, IN	--	--	--	--	*Nashville, TN	1.41	1.29	-2.59	1.57
*Wichita, KS	--	--	--	--	*Austin, TX	9.43	0.51	6.41	1.92
Louisville, KY	-3.28	2.73	10.15	-11.25	*Dallas, TX	0	-0.28	0.05	-1.57
Baton Rouge, LA <sup>2</sup>	-23.73	-0.65	-1.64	-8.91	*El Paso, TX	-7.35	-1.35	-3.38	0.00
New Orleans, LA	-5.88	-1.81	-9.19	0.87	*Fort Worth, TX	-3.33	-0.31	0.06	-0.85
Baltimore, MD	-8.33	-1.38	-2.78	0.79	*Houston, TX	-6.78	0.01	-0.01	-4.22
Boston, MA <sup>1</sup>	29.69	2.07	5.86	6.30	*San Antonio, TX	0	-1.47	-7.54	-3.52
Detroit, MI	10.00	0.59	0.71	5.65	Virginia Beach, VA	0	-0.94	-2.48	0.14
Minneapolis, MA	-10.00	-2.30	1.03	0.98	Norfolk, VA	-24.68	-4.06	-1.69	-7.64
Kansas City, MO	-3.17	-0.88	0.95	0.01	Seattle, WA	--	-5.45	--	--
St. Louis, MO	-6.15	-3.14	-0.62	3.70	Milwaukee, WI	0	0.89	3.72	1.67

- <sup>1</sup> Figures for Alabama were calculated using 1980-1983 data.  
<sup>2</sup> Figures were calculated for 1979-1983 data.  
<sup>3</sup> Figure calculated using 1983-1984 data only.  
 -- Insufficient data were available to calculate change measures.  
 \* County data.

16 cities. *Fifty-eight percent of the cities, on average, experienced increasing white low birth weight rates or no change at all.*

#### 1982-1984 vs. 1979-1981

The trend analysis, which compared the annual average percent change from 1982 to 1984 with the annual average percent change from 1979 to 1981, found that 34 percent of the cities were making the same or better progress in reducing white low birth weight rates in 1982-1984 as compared with 1979-1981. The remaining 66 percent were not making progress: 11 percent were still decreasing but at a slower rate in the second two years studied. Nearly 16 percent of the cities were increasing, but at a slower rate than in the first two years. Forty percent of the cities' white low birth weight rates were decreasing more slowly or had changed from decreasing to increasing.

Just over 65 percent of the cities were not making progress toward reducing white low birth weight rates in 1982-1984 as compared with the previous two-year period studied. There were insufficient data to perform the trend analysis on 16 cities.

### 4.3 Low Birth Weight Rates Among Nonwhites in America's Largest Cities

#### Status in 1984

The national low birth weight rate for nonwhites in 1984 was 11.1 percent. *Fifty-seven percent of the cities studied (27 of 47) had nonwhite low birth weight rates greater than the national level.* Table 4.3A lists the cities ranked by their 1984 low birth weight rates for nonwhites. The nonwhite low birth weight rates in the cities ranged from 6.9 percent in Albuquerque to 14.8 percent in Detroit. It is interesting to note that the lowest nonwhite low birth weight rate approached the highest white low birth weight, 7.7 percent, in Albuquerque.

#### CHANGES IN NONWHITE LOW BIRTH WEIGHT, 1979-1984

##### Summary of Changes, 1979-1984

Virtually half of the cities had nonwhite low birth weight rates that were the same or worse in 1984 than in 1979. The five-year annual average percent change analysis showed that *53 percent of the cities experienced, on average, worsening in their nonwhite low birth weight rates between 1979 and 1984.* Table 4.3B summarizes the changes in nonwhite low birth weight rates in the cities from 1979 to 1984.

Between 1979 and 1981 half (19 of 38) of the cities, on average, had decreasing nonwhite low birth weight rates. From 1982 to 1984, 49 percent (17 of 35) of the cities, on average, had decreasing nonwhite low birth weight rates.

Just 26 percent (9 of 35) of the cities were decreasing their nonwhite low birth weight rates at the same or faster rate in 1982-1984 as compared to 1979-1981.



Table 4.3A

RANKING OF CITIES BY 1984 LOW BIRTH WEIGHT PERCENTAGE FOR NONWHITES					
RANK	CITY	RATE	RANK	CITY	RATE
1	Detroit, MI	14.8	29-30	Miami, FL *Tulsa, OK <sup>2</sup>	11.0
2	District of Columbia	14.5	31	*San Diego, CA	10.9
3	Philadelphia, PA	14.4	32-33	New York City, NY *Omaha	10.7
4-5	*Nashville, TN Norfolk, VA	14.3	34	*Sacramento, CA	
6-8	Buffalo, NY <sup>1</sup> Chicago, IL Pittsburgh, PA	13.9	35	*Dallas, TX	10.3
9	Baltimore, MD	13.8	36	Virginia Beach, VA	9.9
10	*Oklahoma City, OK <sup>2</sup>	13.6	37	*San Jose, CA	9.7
11-12	Kansas City, MO Memphis, TN	13.5	38	Seattle, WA	9.5
13-14	New Orleans, LA *Birmingham, AL <sup>1</sup>	13.1	39	*Fort Worth, TX	9.3
15	St. Louis, MO	13.0	40	Minneapolis, MN	9.2
16-17	Cleveland, OH Louisville, KY	12.8	41	*Phoenix, AZ	8.3
18-19	*Los Angeles, CA *Oakland, CA	12.7	42	*Austin, TX	8.7
20	Atlanta, GA	12.3	43	*Houston, TX	8.4
21	*San Francisco, CA	12.2	44-45	*San Antonio, TX *Tucson, AZ	7.4
22	*Jacksonville, FL	12.1	46-47	Albuquerque, NM *El Paso, TX	6.9
23	Columbus, OH	11.9	--	*Denver, CO	--
24-25	Boston, MA <sup>1</sup> Charlotte, NC	11.8	--	Honolulu, HI	--
26	Milwaukee, WI	11.7	--	Indianapolis, IN	--
27	Cincinnati, OH	11.6	--	Newark, NJ	--
28	Toledo, OH	11.1	--	*Portland, OR	--
			--	*Wichita, KS	--

1 Based on 1983 data.  
 2 Based on 1982 data.  
 \* County data.  
 -- Data unavailable.

Table 4.3B

## THREE MEASURES OF CHANGE IN THE LOW BIRTH WEIGHT PERCENTAGE FOR NONWHITES IN THE CITIES, 1979-1984

CITY	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 79-84	CITY	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84
*Birmingham, AL <sup>1</sup>	2.34	0.92	--	--	*Omaha, NE	--	-1.25	--	--
*Phoenix, AZ	4.76	2.03	1.19	13.77	Newark, NJ	--	--	--	--
*Tucson, AZ	-3.90	0.07	1.08	7.44	Albuquerque, NM	-23.33	-1.84	5.62	-1.73
*Los Angeles/Long Beach, CA	--	--	--	--	Buffalo, NY <sup>1</sup>	1.46	0.72	-2.00	--
*Oakland, CA	--	--	--	--	New York City, NY	-13.01	-2.72	-1.98	-2.69
*Sacramento, CA	--	--	--	--	Charlotte, NC	-14.49	-2.95	-2.94	-2.50
*San Diego, CA	--	--	--	--	Cincinnati, OH	-17.14	-3.45	-2.86	-0.84
*San Francisco, CA	--	--	--	--	Cleveland, OH	-6.57	-1.02	2.53	-1.94
*San Jose, CA	--	--	--	--	Columbus, OH	-11.19	-2.21	-2.88	-3.44
*Denver, CO	--	--	--	--	Toledo, OH	-17.78	-3.07	-1.39	-5.52
District of Columbia	3.57	0.71	1.07	0.36	*Oklahoma City, OK <sup>2</sup>	-7.09	--	-11.23	--
*Jacksonville, FL	6.14	1.86	6.28	5.86	*Tulsa, OK <sup>2</sup>	--	--	--	--
*Miami, FL	-5.98	-1.09	-7.08	-1.77	*Portland, OR	--	--	--	--
Atlanta, GA	-8.89	-1.60	1.29	-6.03	*Philadelphia, PA	0	0.08	0.16	1.42
Honolulu, HI	--	--	--	--	Pittsburgh PA	0	0.21	1.79	0.31
Chicago, IL	0	0.04	1.84	0.00	Memphis, TN	0	0.03	2.57	-0.37
Indianapolis, IN	--	--	--	--	*Nashville, TN	10.85	2.24	-0.50	4.53
*Wichita, KS	--	--	--	--	*Austin, TX	7.41	1.58	-0.32	3.65
Louisville, KY	3.23	0.73	-1.97	0.01	*Dallas, TX	-1.90	-0.23	1.62	1.52
Baton Rouge, LA	3.97	1.34	8.44	2.34	*El Paso, TX	15.00	2.98	4.11	3.34
New Orleans, LA	-2.21	-0.33	-2.94	-1.41	*Fort Worth, TX	-7.00	-1.17	-1.57	-0.31
Baltimore, MD	6.15	1.40	2.95	2.38	*Houston, TX	-11.58	-2.37	-3.72	-0.51
Boston, MA <sup>1</sup>	72	0.54	-1.10	--	*San Antonio, TX	-2.63	-0.34	-3.95	-1.18
Detroit, MI	8.82	1.85	1.02	0.34	Virginia Beach, VA	-11.61	-1.83	-2.18	-1.43
Minneapolis, MA	-12.38	-0.65	-0.45	4.60	Norfolk, VA	16.26	3.55	4.31	3.42
Kansas City, MO	6.30	1.58	1.59	-2.21	Seattle, WA	--	4.40	--	--
St. Louis, MO	-2.99	-0.49	-0.75	2.54	Milwaukee, WI	-3.94	-0.84	0.43	-0.90

- 1 Data for 1984 were unavailable; figures reflect 1979-1983 data.  
 2 Data for 1983 and 1984 were unavailable; figures reflect 1979-1982 data.  
 3 Figures shown reflect 1983-1984 data only.  
 4 County data.  
 -- Data unavailable.

### Percent Change, 1979-1984

In 51 percent of the cities (20 of 39), nonwhite low birth weight rates were lower in 1984 than in 1979. Thirty-nine percent of the cities had higher nonwhite low birth weight rates in 1984 than they had in 1979, and four cities had the same rate in 1984 as they in 1979. *Altogether, 49 percent of the cities (19 of 39) had the same or higher nonwhite low birth weight rates in 1984 than they had five years earlier in 1979.*

### Annual Average Percent Change, 1979-1984

Forty-eight percent of the cities (19 of 40), on average, decreased their nonwhite low birth weight rates over the five year study period, 1979-1984. *Fifty-three percent (21 of 40) of the cities' nonwhite low birth weight rates were increasing.* There were insufficient data to calculate AAPCs for 1979-1984 for 14 cities.

### Trend Analysis

#### 1979-1981

Half of the cities (19 of 38), on average, decreased their nonwhite low birth weight rates from 1979 to 1981. The other half (19 of 38) increased. There were insufficient data to calculate AAPCs for 1979-1981 for nonwhite low birth weight rates for 16 cities.

#### 1982-1984

Between 1982 and 1984, 49 percent (17 of 35) of the cities' nonwhite low birth weight rates, on average, decreased. Forty-six percent (16 of 35) of the cities' nonwhite low birth weight rates increased and two cities, on average, experienced no change between 1982 and 1984. *Altogether, 51 percent of the cities (18 of 35), on average, experienced either no change or an increase in their nonwhite low birth weight rates between 1982 and 1984.*

#### 1982-1984 vs. 1979-1981

The trend analysis of nonwhite low birth weight rates in the cities found that *only one-quarter of the cities (9 of 35) were decreasing their nonwhite low birth weight rates at the same or faster rate during the last two years of the study (1982-1984) as they had during the first two years (1979-1981).* The remaining 74 percent of the cities were not making progress. Twenty-three percent of the cities' nonwhite low birth weight rates were improving, but more slowly in the later period. Twenty-nine percent of the cities (10 of 35) had increasing low birth weight rates among nonwhites, but the rate of increase slowed in the second period as compared with the first. In 23 percent of the cities (8 of 35), nonwhite low birth weight rates were increasing at the same or faster rate in 1982-1984 as compared with the earlier period, 1979-1981. There were insufficient data to calculate the trend analysis for 19 cities.

#### 4.4 White vs. Nonwhite Progress Toward Reducing Low Birth Weight Rates, 1979-1984

Fewer cities made progress toward reducing nonwhite as compared to white low birth weight rates according to nearly all methods of change analysis calculated. Thirty-nine percent of the cities (15 of 39) had higher nonwhite low birth weight rates in 1984 than in 1979. Comparing this with white low birth weight rates, only 18 percent of the cities had higher 1984 low birth weight rates than they had in 1979.

The five-year annual average percent change analysis was similarly unbalanced. Sixty-four percent (27 of 42) of the cities' white low birth weight rates improved, on average, as compared with just 48 percent (19 of 40) of the cities' nonwhite low birth weight rates.

In the first of the two-year periods for which annual average percent change values were calculated, 1979-1981, whites in the cities again made better progress toward reducing low birth weight rates than did nonwhites. Fifty-six percent of the cities (22 of 39) showed decreases, on average, in their white low birth weight rates. Fifty percent of the cities (19 of 38) showed decreases in their nonwhite low birth weight rates.

In the second of the two-year periods for which annual average percent change values were calculated, nonwhite low birth weight rates decreased in a few more cities (by percentage) than did white low birth rates. Forty-five percent (17 of 38) of the cities' white low birth weight rates improved, on average, and 49 percent (17 of 35) of the cities' nonwhite low birth weight rates improved.

When the 1982-1984 time period was compared with the 1979-1981 time period, however, the pattern of poor progress among nonwhite low birth weight rates in the cities reappeared. Only 26 percent of the cities' nonwhite low birth weight rates were decreasing at the same or faster rate in the later period as compared with the earlier period. In contrast, 34 percent of the cities were decreasing their white low birth weights at the same or faster rate in 1982-1984 as in the earlier period.

#### 4.5 Infant Mortality Rates for All Races in America's Largest Cities

##### Status in 1984

*Sixty-three percent of the largest American cities (34 of 54) had infant mortality rates that exceeded the 1984 national rate of infant deaths per 1,000 live births.* The infant mortality rates ranged from a low of 5.6 in Oklahoma City up to 21.2 infant deaths per 1,000 live births in the District of Columbia. Table 4.5A lists the 54 largest American cities ranked by their 1984 infant mortality rates for all races.

Nine of the 54 cities studied had infant mortality rates that were more than 1.5 times the national rate. Of these two, Detroit and the District of Columbia were nearly twice the national rate. Table 4.5B lists the cities ranked by their average infant mortality rates over the five-year period, 1979-1984. Eight of the 10 cities with the highest 1984 infant mortality rates for all races also were among the 10 cities with the highest average infant mortality over the five-year study period, 1979-1984. For these cities it is clear that excessive infant mortality rates has been a problem for some time.

Table 4.5A

RANKING OF CITIES BY 1984 INFANT MORTALITY RATES FOR ALL RACES					
RANK	CITY	INFANT DEATH RATE PER 1,000 LIVE BIRTHS	RANK	CITY	INFANT DEATH RATE PER 1,000 LIVE BIRTHS
1	District of Columbia	21.2	28-29	Nashville, TN *San Antonio, TX	11.8
2	Detroit, MI	21.0			
3	Atlanta, GA	19.3	30	Boston, MA	11.7
4	Newark, NJ	18.6	31-32	Louisville, KY *Jacksonville, FL	11.5
5	Cleveland, OH	16.9			
6	Norfolk, VA	16.7	33	*Wichita, KS	11.1
7	Baltimore, MD	16.6	34	*Houston, TX	10.9
8	Chicago, IL	16.4	35-36	*Miami, FL Charlotte, NC	10.6
9	New Orleans, LA	16.3			
10	**Philadelphia, PA	15.5	37	Honolulu, HI	10.5
11	Pittsburgh, PA	15.1	38	*Dallas, TX	10.4
12	Memphis, TN	14.8	39	*Oakland, CA	10.2
13	St. Louis, MO	14.7	40	*Los Angeles/Long Beach, CA	10.0
14	Omaha, NE	14.6	41	*Tucson, AZ	9.9
15	Milwaukee, WI	14.3	42-43	*San Diego, CA Columbus, OH	9.5
16	Buffalo, NY	14.1			
17	Baton Rouge, LA	14.0	44	Minneapolis, MN	9.4
18	New York, NY	13.6	45-46	Toledo, OH *El Paso, TX	9.3
19	Virginia Beach, VA	13.5	47-49	Albuquerque, NM *Phoenix, AZ *Austin, TX	8.9
20	Indianapolis, IN	13.3			
21-22	Kansas City, MO Cincinnati, OH	12.8	50	**San Francisco, CA	8.8
23	*Birmingham, AL <sup>1</sup>	12.2	51	*Sacramento, CA	8.6
24	Seattle, WA	12.1	52	*San Jose, CA	8.1
25-27	**Denver, CO *Portland, OR *Fort Worth, TX	11.9	53	*Tulsa, OK	6.3
			54	*Oklahoma City, OK	5.6

<sup>1</sup> 1983 data.  
\* County data.  
\*\* Urban county co-equal with city data.

Table 4.5B

## RANKING OF CITIES BY AVERAGE INFANT MORTALITY RATES, 1979-1984

RANK	CITY/URBAN	6 YR AVERAGE INFANT MORTALITY	RANK	CITY/URBAN COUNTY	6 YR AVERAGE INFANT MORTALITY
1	District of Columbia	21.5	28	Columbus, OH	13.0
2	Detroit, MI	21.1	29	*Miami, FL	12.9
3	Atlanta GA	19.7	30-31	Seattle, WA	12.4
4	Newark, NJ	19.5	30-31	*Fort Worth, TX	12.4
5	Baton Rouge, LA	19.3	32	Virginia Beach, VA	12.3
6	Cleveland, OH	18.9	33	*San Antonio, TX	12.2
7	Chicago, IL	18.8	34	*Oklahoma City, OK	12.1
8	New Orleans, LA	18.1	35	*Dallas, TX	12.0
9	Baltimore, MD	17.7	36-37	*Portland, OR	11.9
10-11	Pittsburg, PA	17.5	36-37	Toledo, OH	11.9
10-11	**Philadelphia, PA	17.5	38-39	*Houston, TX	11.8
12	St. Louis, MO	17.1	38-39	*Wichita, KS	11.8
13	Memphis, TN	16.9	40	*Minneapolis, MN	11.5
14	Norfolk, VA	15.8	41-42	*Los Angeles/Long Beach, CA	11.1
15	New York City, NY	15.3	41-42	*Phoenix, AZ	11.1
16-17	Louisville, KY	15.0	43	**Denver, CO	10.8
16-17	Charlotte, NC	15.0	44	**San Francisco, CA <sup>2</sup>	10.5
18	Buffalo, NY	14.8	45	*Oakland, CA <sup>2</sup>	10.4
19-20	Indianapolis, IN	14.4	46	Albuquerque	10.2
19-20	Kansas City, MO	14.4	47	*Tulsa, OK	10.1
21	*Jacksonville, FL	14.1	48	El Paso, TX	9.9
22	Cincinnati, OH	13.8	49	Honolulu	9.8
23	Birmingham, AL	13.5	50	*San Diego, CA	9.7
24-25	*Omaha, NE	13.4	51	*Sacramento, CA <sup>2</sup>	9.5
24-25	*Nashville, TN <sup>1</sup>	13.4	52	*San Jose, CA <sup>2</sup>	9.2
26	Boston, MA	13.3	53	*Tucson, AZ	9.2
27	Milwaukee, WI	13.1	54	*Austin, TX	9.1

- <sup>1</sup> Data for Nashville-Davidson.  
<sup>2</sup> Two-year low birth weight average based on 1983-1984 only.  
\* County data.  
\*\* County co-equal with city data.

The cities with the lowest infant mortality rates for all races tended to be the cities that were represented by county-level data; 8 of the 10 lowest ranked cities were urban counties.

## CHANGES IN INFANT MORTALITY IN THE CITIES FOR ALL RACES 1979-1984

### Summary of Changes, 1979-1984

As a general rule, infant mortality rates decreased in more cities than did low birth weight rates. Infant mortality rates for all races dropped in 85 percent of the cities (45 of 53) from 1979 to 1984. On average, over the five-year period, 74 percent of the cities had decreasing infant mortality rates. Table 4.5C summarizes the changes in infant mortality rates for all races in the cities from 1979 to 1984.

During the 1979-1981 time period 71 percent of the cities (37 of 52), on average, decreased their infant mortality rates for all races. This dropped to 57 percent of the cities (29 of 51) in the later time period. When the rates of change during the two time periods were compared, only 35 percent (18 of 51) of the cities' infant mortality rates for all races were decreasing at the same or faster rate in the later time period.

### Percent Change, 1979-1984

Eighty-five percent of the cities (45 of 53) had lower infant mortality rates in 1984 than five years previously in 1979. Fifteen percent were higher (8 of 53), and for one city there was insufficient data to calculate a percent change for this period.

### Annual Average Percent Change, 1979-1984

Seventy-four percent of the cities (39 of 53) on average, decreased their infant mortality rates for all races. Twenty-six percent (14 of 53), on average, increased, and there were insufficient data to calculate an AAPC for infant mortality for all races for one city.

### Trend Analysis

#### 1979-1981

The annual average percent change analysis for the first of the two-year periods, 1979-1981, found that 71 percent of the cities (37 of 52), on average, had decreased infant mortality rates for all races. Twenty-nine percent of the cities (15 of 52) had increasing infant mortality rates during 1979-1981, and there were insufficient data to calculate AAPCs for two cities.

Table 4.5C

## THREE MEASURES OF CHANGE IN INFANT MORTALITY RATES FOR ALL RACES IN THE CITIES, 1979-1984

CITY	PERCENT CHANGE	AAPC 79-84	AAPC 79-81	AAPC 82-84	CITY	PERCENT CHANGE	AAPC 79-84	AAPC 79-81	AAPC 82-84
*Birmingham, AL <sup>1</sup>	-11.59	-2.46	-3.32	--	*Omaha, NE	0.69	2.11	-6.86	12.97
*Phoenix, AZ	-35.51	-8.04	-6.67	-2.17	Newark, NJ	-25.00	-4.64	-16.24	5.80
*Tucson, AZ	-2.94	0.43	-3.50	9.46	Albuquerque, NM	-21.93	-3.67	-12.13	-8.99
*Los Angeles/Long Beach, CA	-20.00	-4.36	-5.76	-3.33	Buffalo, NY	-18.50	-2.46	-1.72	9.82
*Oakland, CA	6.25	1.77	8.16	2.58	New York City, NY	-18.56	-4.01	-3.66	-5.72
*Sacramento, CA	-23.21	-4.99	-10.85	-2.75	Charlotte, NC	-41.44	-8.63	-9.17	-20.18
*San Diego, CA	-10.38	-1.55	-6.75	2.87	Cincinnati, OH	-9.86	2.66	-5.32	19.92
*San Francisco, CA	-24.79	-5.11	-5.13	-8.60	Cleveland, OH	-1.17	1.41	15.22	-1.88
*San Jose, CA	-21.36	4.24	-1.37	-0.23	Columbus, OH	-35.81	-6.81	-4.46	-22.41
*Denver, CO	13.33	4.53	-6.78	14.09	Toledo, OH	-31.62	-6.42	-3.61	-3.71
District of Columbia	-3.64	-0.07	1.84	3.07	*Oklahoma City, OK	-56.59	-12.14	4.14	-34.85
*Jacksonville, FL	-28.93	-6.34	-0.37	-12.28	*Tulsa, OK <sup>3</sup>	-42.20	-7.78	6.74	-16.83
*Miami, FL	-31.17	-7.11	-5.88	-8.58	*Portland, OR	6.25	2.04	2.77	3.67
Atlanta, GA	2.66	1.78	7.76	8.15	*Philadelphia, PA	-15.76	-3.20	-2.40	-5.60
Honolulu, HI	--	--	--	--	Pittsburgh PA	-20.94	-4.26	-6.48	-6.57
Chicago, IL	-20.00	-4.30	-3.86	-6.10	Memphis, TN	-12.43	-2.13	4.06	-3.10
Indianapolis, IN	-14.19	-2.81	-2.82	-2.15	*Nashville, TN	-25.79	-5.20	-6.29	-4.88
*Wichita, KS	-11.20	0.91	4.45	12.47	*Austin, TX	-11.00	-1.22	2.52	4.51
Louisville, KY	-22.30	-2.96	-23.04	19.32	*Dallas, TX	-22.39	-3.38	2.49	2.74
Baton Rouge, LA <sup>2</sup>	-5.40	-1.41	--	--	*El Paso, TX	-7.92	-1.44	-0.95	-6.19
New Orleans, LA	-22.01	-4.58	-9.10	-0.03	*Fort Worth, TX	-16.20	3.20	-6.00	-1.61
Baltimore, MD	-21.70	-4.60	-10.41	-0.51	*Houston, TX	-13.49	-2.42	0.84	2.09
Boston, MA <sup>1</sup>	-24.52	-3.53	-11.91	-11.91	*San Antonio, TX	-19.18	-3.30	-9.50	-2.14
Detroit, MI	-1.41	-0.14	1.44	-1.56	Virginia Beach, VA	13.45	3.14	-2.08	9.92
Minneapolis, MA	-29.32	-6.27	-8.00	-11.68	Norfolk, VA	19.29	3.17	9.23	1.54
Kansas City, MO	-30.05	-4.80	-11.35	-6.99	Seattle, WA	-11.03	-1.77	-1.09	5.70
St. Louis, MO	-29.67	-6.09	-6.80	2.34	Milwaukee, WI	12.06	2.78	1.19	8.85

1 Figures were calculated using 1979-1983 data only.  
 2 Figure calculated for 1983-1984 data only.  
 \* County data.  
 -- Insufficient data to calculate the change measures.



## 1982-1984

In the second two-year period, 1982-1984, annual average percent change calculations showed that 57 percent of the cities (29 of 51), on average, were decreasing their infant mortality rates for all races. Forty-one percent of the cities (21 of 51), on average, were increasing their rates; one city experienced no change during the 1982-1984 time period, and there were insufficient data to calculate AAPCs for three other cities.

### 1982-1984 vs. 1979-1981

The trend analysis revealed that 35 percent (18 of 51) of the cities' infant mortality rates for all races were decreasing at the same or faster rates in the 1982-1984 time period than they had in the previous time period, 1979-1981. Of the remaining 65 percent of the cities that were not making progress, 24 percent of the cities (12 of 51) had decreasing infant mortality rates, but the decreases were occurring at slower rates between 1982 and 1984 as compared with the earlier period. Four percent (2 of 51) of the cities' infant mortality rates for all races continued to increase from the earlier to the later time period, but the rate of increase had slowed in the later period, 1982-1984. Thirty-seven percent of the cities (19 of 51) were experiencing increases of their infant mortality rates for all races at the same or faster rate in the later time period, 1982-1984, as compared with the earlier period, 1979-1981. There were insufficient data to conduct the trend analysis for three cities.

## 4.6 Infant Mortality Rates Among Whites in America's Largest Cities

### Status in 1984

Half of the cities in this study had white infant mortality rates that were higher than the national white rate of 9.4 infant deaths per 1,000 live births. White infant mortality rates in the cities ranged from 5.5 in Oklahoma City up to 14.0 in Detroit. Table 4.6A shows the 54 cities ranked by their 1984 infant mortality rates for whites.

### CHANGES IN WHITE INFANT MORTALITY, 1979-1984

#### Summary of Changes, 1979-1984

Eighty-three percent of the cities (44 of 53) had lower white infant mortality rates in 1984 than in 1979. However, when the annual average percent change values were examined, only 59 percent of the cities, on average, reducing white infant mortality rates over the five-year period. Table 4.6B summarizes the changes that occurred in white infant mortality rates in the cities from 1979 to 1984.

From 1979 to 1981, 59 percent of the cities, on average, decreased their white infant mortality rates. It dropped a bit in the following time period, 1982-1984, where 52 percent of the cities, on average, had decreases in their white infant mortality rates. Thirty-five percent of the cities' white infant mortality rates were decreasing at the same or faster rate between 1982 and 1984 as they had been in the previous period, 1979-1981.

Table 4.6A

## RANKING OF CITIES BY 1984 INFANT MORTALITY RATES FOR WHITES

RANK	CITY	RATE	RANK	CITY	RATE
1-2	Detroit, MI Omaha, NE	14.0	27	*San Antonio, TX	9.5
3	Newark, NJ	13.4	28-31	Albuquerque, NM Indianapolis, IN Philadelphia, PA Sacramento, CA	9.3
4	Baltimore, MD	12.6			
5	Virginia Beach, VA	12.4			
6	*Portland, OR	12.3	32	*Tucson, AZ	9.1
7	Atlanta, GA	12.2	33-34	Houston, TX *Jacksonville, FL	9.0
8	Pittsburgh, PA	12.1			
9	Milwaukee, WI	11.7	35-36	*Los Angeles, CA Minneapolis, MN	8.9
10	New Orleans, LA	11.5	37-39	Honolulu, HI <sup>1</sup> *San Diego, CA *Wichita, KS	8.8
11	Buffalo, NY	11.4			
12	*Denver, CO	11.2	40-41	*Oakland, CA *San Jose, CA	8.6
13	Chicago, IL	11.0	42	*Phoenix, AZ	8.4
14	Boston, MA	10.9	43-44	Columbus, OH Toledo, OH	8.2
15-16	*Fort Worth, TX Norfolk, VA	10.8	45	Austin, TX	8.1
17	New York City	10.7	46	*San Francisco, CA	8.0
18	Louisville, KY	10.6	47-48	District of Columbia Memphis, TN	7.8
19	Cleveland, OH	10.4	49	Baton Rouge, LA	7.7
20-21	Seattle, WA St. Louis, MO	10.2			
22	Kansas City, MO	10.1	50	*Miami, FL	7.5
23-24	*Birmingham, AL Cincinnati, OH	9.9	51	*El Paso, TX	6.9
25	*Nashville, TN	9.8	52	Tulsa, OK	6.2
			53	Charlotte, NC	6.1
26	*Dallas, TX	9.7	54	*Oklahoma City, OK	5.5

<sup>1</sup> \* Birmingham and Honolulu figures are based on 1983 data.  
County data.

Table 4.6B

## THREE MEASURES OF CHANGE IN INFANT MORTALITY RATES FOR WHITES IN THE CITIES, 1979-1984

CITY	PERCENT CHANGE	AAPC 79-84	AAPC 79-81	AAPC 82-84	CITY	PERCENT CHANGE	AAPC 79-84	AAPC 79-81	AAPC 82-84
*Birmingham, AL <sup>1</sup>	1.02	1.13	3.93	--	*Omaha, NE	8.53	4.20	-8.24	20.92
*Phoenix, AZ	-36.36	-7.56	-8.16	-4.45	Newark, NJ	-6.29	-10.24	-16.72	21.85
*Tucson, AZ	12.35	0.61	1.39	8.05	Albuquerque, NM	-20.51	0.74	-16.76	-9.48
*Los Angeles/Long Beach, CA	-64.11	-14.92	-5.80	6.09	Buffalo, NY <sup>2</sup>	-21.38	1.19	-1.62	12.44
*Oakland, CA	-22.52	-3.20	13.25	3.16	New York City, NY	-26.71	-4.46	-6.16	-9.25
*Sacramento, CA	-20.51	-4.79	-7.97	8.54	Charlotte, NC	-42.99	-7.49	7.77	-21.87
*San Diego, CA	-39.31	0.14	-5.82	38.50	Cincinnati, OH	-18.18	8.20	-16.25	2.59
*San Francisco, CA	-41.61	-1.74	-13.83	-17.08	Cleveland, OH	-13.13	6.36	3.90	-15.00
*San Jose, CA	-44.16	-6.94	0.01	0.40	Columbus, OH	-34.40	-1.06	-1.18	-20.26
*Denver, CO	7.69	3.64	-6.99	9.56	Toledo, OH	-37.40	-1.65	-4.27	4.93
*District of Columbia	32.20	20.21	47.28	17.02	*Oklahoma City, OK	-49.07	-0.51	8.32	-34.91
*Jacksonville, FL	-18.92	0.90	7.10	-6.37	*Tulsa, OK	-37.37	1.01	8.80	-21.67
*Miami, FL	-40.94	-11.03	-11.25	-4.26	*Portland, OR	6.96	0.60	-0.79	-5.74
Atlanta, GA	-16.44	4.78	-2.93	22.10	*Philadelphia, PA	-38.00	-2.97	0.48	-18.60
Honolulu, HI	--	--	--	--	Pittsburgh PA	-25.37	-1.97	3.12	-5.03
Chicago, IL	-22.54	-4.81	-2.62	-4.55	Memphis, TN	-21.21	-0.24	-1.27	-11.68
Indianapolis, IN	-30.08	-0.56	1.06	-5.25	*Nashville, TN	-27.94	-5.23	-9.49	-5.99
*Wichita, KS	-20.72	6.41	0.85	13.39	*Austin, TX	-7.95	-6.95	2.11	7.49
Louisville, KY	-8.62	2.33	7.01	-15.94	*Dallas, TX	-10.19	2.05	3.41	9.38
Baton Rouge, LA	-39.00	-0.01	-8.52	-12.92	*El Paso, TX	-35.51	10.63	-23.04	-22.80
New Orleans, LA	-12.21	-5.23	-5.39	21.47	*Fort Worth, TX	-10.74	-3.60	-5.73	0.73
Baltimore, MD	-22.22	-8.91	-18.25	5.37	*Houston, TX	-11.76	-0.34	2.94	2.79
Boston, MA <sup>2</sup>	-5.22	-2.20	-3.78	-3.90	*San Antonio, TX	-25.78	-6.66	-8.85	-2.08
Detroit, MI	-18.13	-5.47	-13.49	22.04	Virginia Beach, VA	12.73	3.83	-2.70	11.30
Minneapolis, MA	-23.28	-4.00	-19.49	-7.56	Norfolk, VA	18.68	12.45	28.24	-5.78
Kansas City, MO	-30.82	6.67	-4.02	-2.69	Seattle, WA	-20.93	-4.00	3.85	4.73
St. Louis, MO	-22.14	-5.97	1.31	7.23	Milwaukee, WI	17.00	1.57	8.50	18.02

<sup>1</sup> The figures for Birmingham were calculated using 1983 data.  
 -- 1984 data were unavailable at the time of the survey.  
 \* County data.

Sixty-five percent of the cities were not making progress in reducing white infant mortality rates in 1982-1984 as compared with 1979-1981.

#### Percent Change, 1979-1984

The percent change analysis showed that 83 percent of the cities (44 of 53) had lower white infant mortality rates in 1984 than they had in 1979. *Seventeen percent of the cities (9 of 53) had higher rates of infant mortality among whites in 1984 than in 1979.* There were insufficient data to calculate percent change for white infant mortality for one city.

#### Annual Average Percent Change, 1979-1984

The AAPC values showed that 59 percent of the cities (31 of 53), on average, decreased their white infant mortality rates from 1979 to 1984. Forty-two percent of the cities (22 of 53), on average, had increasing white infant mortality rates, and there were insufficient data to calculate an AAPC for 1979-1984 for one city.

#### Trend Analysis

##### 1979-1981

Fifty-nine percent of the cities (31 of 53), on average, decreased their white infant mortality rates between 1979 and 1981. On average, 42 percent (22 of 53) of the cities' white infant mortality rates were increasing. There were insufficient data to calculate a two-year AAPC for one city.

##### 1982-1984

Fewer cities experienced improvements in the second time period studied than in the first time period. Fifty-two percent of the cities, (27 of 52) on average, had decreasing white infant mortality rates, and 48 percent (25 of 52) had increasing rates. There were insufficient data for two cities to calculate AAPCs for the 1982-1984 time period.

##### 1982-1984 vs. 1979-1981

When the two time periods were compared, about 55 percent (18 of 52) of the cities' white infant mortality rates were decreasing at the same or faster rate in the later time period, 1982-1984, as in the earlier time period, 1979-1981. The remaining 65 percent of the cities were not making progress: 15 percent of the cities (8 of 52) had decreasing white infant mortality rates in both periods, but the rate of decreasing was slower in the later period. Six percent of the cities (3 of 52) had increase in their white infant mortality rates in both time periods but the rate of increase was slower in 1982-1984 as compared with 1979-1981. Forty-four percent of the cities (23 of 52) were increasing at the same or faster rate in 1982-1984 than they had been between 1979 and 1981.

## 4.7 Infant Mortality Rates Among Nonwhites in America's Largest Cities

Status in 1984

Forty-seven percent of the cities (25 of 53) studied had nonwhite infant mortality rates in 1984 that were higher than the national nonwhite infant mortality rate of 16.1 infant deaths per 1,000 live births. Table 4.7A lists the cities ranked by their 1984 infant mortality rates for nonwhites. The nonwhite infant mortality rates ranged from 4.6 percent in Albuquerque up to 26.8 percent in Pittsburgh. This is a much wider range than was found among white infant mortality rates in the cities.

### CHANGES IN NONWHITE INFANT MORTALITY RATES, 1979-1984

#### Summary of Changes, 1979-1984

Nonwhite infant mortality rates in the cities declined less often than did white rates. *Thirty-five percent of the cities (18 of 52) had higher nonwhite infant mortality rates in 1984 than in 1979.* Forty-three percent of the cities (22 of 51), on average, had increases in their nonwhite infant mortality rates over the five-year period, 1979-1984. Table 4.7B summarizes the changes that occurred in nonwhite infant mortality rates from 1979 to 1984.

More cities made progress toward reducing nonwhite infant mortality rates between 1979 and 1981 (57 percent) than between 1982 and 1984 (47 percent). Only 26 percent of the cities were decreasing their nonwhite infant mortality rates at the same or better rate in the later period as in the earlier period.

#### Percent Change, 1979-1984

Sixty-five percent of the cities (34 of 52) had lower infant mortality rates for nonwhites in 1984 than in 1979. *Thirty-five percent of the cities (18 of 52) had higher nonwhite infant mortality rates in 1984 than they had five years previously,* and there were insufficient data to calculate a percent change for two cities.

#### Annual Average Percent Change, 1979-1984

The AAPC analysis of 1979-1984 showed that 57 percent (29 of 51) of the cities' nonwhite infant mortality rates were decreasing and 43 percent (22 of 51) were increasing. There were insufficient data to calculate a five-year AAPC for three cities.

#### 1979-1981

Fifty-seven percent (29 of 51) of the cities' nonwhite infant mortality rates were decreasing from 1979 to 1981. *Forty-two percent of the cities, on average, had increases in their nonwhite infant mortality rates from 1979 to 1984.* One city experienced no change during this time period, and there were insufficient data to calculate the AAPCs for 1979-1981 for 3 of the 54 cities.

Table 4.7A

## RANKING OF CITIES BY 1984 INFANT MORTALITY RATES FOR NONWHITES

RANK	CITY	RATE	RANK	CITY	RATE
1	Pittsburgh, PA	26.8	27-28	Charlotte, NC Seattle, WA	16.1
2	Norfolk, VA	24.8	29-30	*Miami *Tucson	15.9
3	Indianapolis, IN	24.5	31	*Jacksonville, FL	15.8
4	District of Columbia	24.0	32	*Birmingham, AL <sup>2</sup>	15.3
5	Detroit, MI	23.8	33	*Fort Worth, Texas	14.8
6	*Wichita, KS	23.7	34	*Denver, CO	14.4
7	Cleveland, OH	23.0	35-36	*Los Angeles, CA *Phoenix, AZ	13.4
8	Philadelphia, PA	21.8	37	*San Antonio, TX	13.3
9	Newark, NJ	21.6	38	Louisville, KY	13.0
10	Chicago, IL	21.5	39	Houston, TX	12.9
11	Atlanta, GA	21.4	40	Columbus, OH	12.8
12	Baton Rouge, LA	19.6	41	*Oakland, CA	12.5
13	Virginia Beach, VA	19.5	42	Toledo, OH	12.3
14	Memphis, TN	19.2	43	*San Diego, TX	11.8
15-16	Baltimore, MD Buffalo, NY	18.6	44	*Dallas, TX	11.5
17-18	Milwaukee, WI *Nashville, TN	18.5	45	*Portland, OR	10.7
19-20	*Oklahoma City, OK <sup>1</sup> St. Louis, MO	18.1	46	Minneapolis, MN	10.5
			47-48	*Austin, TX *El Paso, TX	10.3
21	New Orleans, LA	18.0	49	*San Francisco, CA	9.5
22	New York City, NY	17.7	50	*Tulsa, OK <sup>1</sup>	7.9
23	Kansas City, MO	16.9	51	*San Jose, CA	6.7
24-26	Boston, MA <sup>2</sup> Cincinnati, OH *Omaha, NE	16.5	52	*Sacramento, CA	6.6
			53	Albuquerque, NM	4.6
			--	Honolulu, HI	--

1 Oklahoma City and Tulsa figures calculated from 1982 data.

2 Birmingham and Boston figures based on 1983 data.

\* County data.

-- Data unavailable.

Table 4.7B

## THREE MEASURES OF CHANGE IN INFANT MORTALITY RATES FOR NONWHITES IN THE CITIES, 1979-1984

CITY	PERCENT CHANGE	AAPC 79-84	AAPC 79-81	AAPC 82-84	CITY	PERCENT CHANGE	AAPC 79-84	AAPC 79-81	AAPC 82-84
*Birmingham, AL <sup>1</sup>	-19.47	-2.96	-8.55	--	*Omaha, NE	--	-2.36	--	--
*Phoenix, AZ	-29.47	-0.26	5.21	21.52	Newark, NJ	-28.71	-4.73	-15.05	5.53
*Tucson, AZ	-39.08	-0.78	-13.07	16.91	Albuquerque, NM	-42.50	14.61	41.12	27.78
*Los Angeles/Long Beach, CA	135.09	31.09	-8.02	2.42	Buffalo, NY <sup>2</sup>	-16.96	-2.44	1.90	6.87
*Oakland, CA	60.26	10.55	3.25	11.07	New York City, NY	-10.61	-2.11	-1.02	-2.45
*Sacramento, CA	-79.05	-8.03	-30.46	-28.63	Charlotte, NC	-41.03	-7.34	-18.54	-18.98
*San Diego, CA	145.83	81.16	-2.91	-2.91	Cincinnati, OH	-2.37	4.35	5.49	18.40
*San Francisco, CA	-8.65	-0.94	2.90	0.82	Cleveland, OH	3.60	4.19	21.07	7.48
*San Jose, CA	67.50	15.38	0.04	0.26	Columbus, OH	-36.32	-6.06	-9.01	-24.63
*Denver, CO	23.08	10.78	-10.10	30.88	Toledo, OH	-18.00	-0.17	6.38	-14.28
District of Columbia	-2.83	0.11	1.40	2.83	*Oklahoma City, OK	-27.60	--	-8.64	--
*Jacksonville, FL	-37.55	-7.49	-7.78	-14.45	*Tulsa, OK <sup>3</sup>	-51.53	--	2.75	--
*Miami, FL	-22.44	-4.62	-2.59	-11.02	*Portland, OR	10.31	6.98	22.04	-0.10
Atlanta, GA	7.54	2.57	10.51	7.03	*Philadelphia, PA	0.46	0.42	-4.13	2.90
Honolulu, HI	--	--	--	--	Pittsburgh PA	-22.33	-3.95	-14.75	-8.91
Chicago, IL	-17.31	-3.61	-4.05	-6.85	Memphis, TN	-9.43	-0.92	6.95	-0.32
Indianapolis, IN	15.02	3.80	-7.08	4.21	*Nashville, TN	-13.55	-1.77	-2.25	2.13
*Wichita, KS	12.32	8.93	16.13	23.00	*Austin, TX	-12.71	-1.73	1.92	6.04
Louisville, KY	-32.99	-3.47	-7.25	-1.29	*Dallas, TX	-32.35	-6.36	1.46	-3.49
Baton Rouge, LA <sup>2</sup>	4.26	13.29	--	--	*El Paso, TX	5.10	2.45	8.24	5.33
New Orleans, LA	-23.08	-4.67	-9.19	-3.53	*Fort Worth, TX	-24.49	-4.93	-5.94	-4.91
Baltimore, MD	-20.85	-4.53	-7.51	-1.57	*Houston, TX	-15.69	-3.11	-0.96	0.86
Boston, MA <sup>1</sup>	-25.34	3.17 <sup>a</sup>	-14.88	--	*San Antonio, TX	-14.74	-2.47	-8.58	-2.22
Detroit, MI	3.93	1.13	6.60	-5.31	Virginia Beach, VA	18.18	5.71	5.00	4.16
Minneapolis, MN	-45.60	-9.20	6.22	-15.44	Norfolk, VA	22.17	7.78	11.03	9.11
Kansas City, MO	-30.74	-4.16	-18.78	-6.03	Seattle, WA	3.87	2.58	-11.17	8.94
St. Louis, MO	-30.38	-6.33	-9.41	1.11	Milwaukee, WI	5.11	2.38	-7.24	-0.89

<sup>1</sup> The figures were calculated using 1979-1983 data only.

<sup>2</sup> The Baton Rouge figures were calculated for 1983-1984 only.

<sup>3</sup> The Oklahoma figures (Tulsa and Oklahoma counties) were calculated using 1979-1982 data.

<sup>a</sup> County data.

-- Data unavailable.

## 1982-1984

In the second two-year time period, 1982-1984, 47 percent of the cities (22 of 47), on average, had decreases in their nonwhite infant mortality rates. *More than half of the cities (25 of 47), on average, suffered increases in their nonwhite infant mortality rates during 1982-1984.* There were insufficient data to calculate annual average rates of change for seven cities.

## 1982-1984 vs. 1979-1981

When the rates of change for nonwhite infant mortality in the cities for the 1982-1984 time period were compared with those for the 1979-1981 time period, *only 26 percent (12 of 47) were decreasing at the same or faster rate in the later time period as in the earlier period.* The remaining 74 percent of the cities were not making progress: 19 percent (9 of 47) had decreasing rates in both periods, but rates were decreasing more slowly in the second period. Fifteen percent of the cities (7 of 47) had increasing nonwhite infant mortality rates during both two-year periods, but the rates of increase were slower in the later period. *Forty percent of the cities (19 of 47) experienced rates of increases in their nonwhite infant mortality rates that were the same or greater in 1982-1984 as in 1979-1981.* Seven cities had insufficient data to make these comparisons.

### **4.8 White vs. Nonwhite Progress Toward Reducing Infant Mortality Rates, 1979-1984**

As with the low birth weight rates in the cities, nonwhite infant mortality rates declined in fewer cities than did the infant mortality rates for whites. More than one third of the cities (18 of 52) had higher nonwhite infant mortality rates in 1984 as in 1979. This was twice the number of cities (9 of 53) where 1984 white infant mortality rates were higher than 1979 rates.

The annual average percent change values over the five-year period studied, 1979-1984, showed a slightly more even pattern in progress toward reducing infant mortality rates between the races in the nation's largest cities. On average, 59 percent (31 of 53) of the cities' white infant mortality rates had improved and 42 percent (22 of 53) had worsened. Nonwhite infant mortality rates improved on average in 57 percent of the cities (29 of 51) and worsened in 43 percent of the cities (22 of 51).

Between 1979 and 1981 whites and nonwhites made progress in a similar number of cities: 59 percent (31 of 53) of the cities' white infant mortality rates, on average, were improved and 57 percent (29 of 51) of the cities' nonwhite infant mortality rates, on average, were improved. Between 1982 and 1984 fewer white and nonwhite infant mortality rates made progress than in the previous two-year period examined. Fifty-two percent of the cities (27 of 52) had improved white infant mortality rates and 48 percent of the cities (25 of 52) had worsened white infant mortality rates. More than half (25 of 47) of the cities' nonwhite infant mortality rates were worsening, on average, during this two year period. Forty-seven percent of the cities made progress toward reducing nonwhite infant mortality rates between 1982 and 1984.



When the rates of progress for the two time periods were compared, more cities were making the same or better rates of progress toward reducing infant mortality rates among their white population (35 percent) than among their nonwhite population (26 percent).

## 4.9 The Gap Between the Races, 1984 vs. 1979

When ratios to express the differences between nonwhite and white low birth weight and infant mortality rates were calculated it became clear that *there were tremendous disparities between nonwhite and white low birth weight and infant mortality rates*. For example, the 1984 nonwhite low birth weight rate in Detroit (14.8) was divided by the 1984 low birth weight rate for whites in the Detroit (7.7). The Nonwhite:White (NW:W) ratio for low birth weight in Detroit was  $14.8/7.7 = 1.92$ . This means that nonwhite babies in Detroit were born at low birth weights at a rate 1.92 times that of white babies.

### Gaps in Low Birth Weight Rates

*In 1984, 97 percent of the cities (38 of 39) had higher low birth weight rates for nonwhites than for whites (see Table 4.9A). There were insufficient data to calculate NW:W ratios for 12 cities. In 54 percent of the cities (21 of 39), nonwhite rates for low birth weight were more than double the white rates.*

The 11 cities with the greatest racial disparity in low birth rates in 1984 were: Baton Rouge with a NW:W ratio of 2.91; the District of Columbia, 2.84; Memphis, 2.41; Pittsburgh, 2.36; Philadelphia, 2.32; Chicago, 2.24; Kansas City and Milwaukee, both with 2.21; and Charlotte, Cincinnati, and Oklahoma City, all with 2.19. Four of these cities, the District of Columbia, Memphis, Philadelphia, and Chicago, also ranked among the 10 cities with the highest 1984 low birth weight rates. The NW:W ratios for 8 of these 11 cities were larger, or worse, in 1984 than in 1979. Cincinnati's ratio remained the same, and ratios for Charlotte and Milwaukee improved from 1979 to 1984.

In only 1 of the 39 cities for which NW:W ratios were calculated was the nonwhite low birth weight rate lower than the white rate. This was Albuquerque, with a NW:W ratio of 0.90. The 10 cities where the NW:W ratios for low birth weight were the smallest were: Albuquerque, 0.90; El Paso, 1.10; San Antonio, 1.19; Tucson, 1.26; Phoenix, 1.45; Austin, 1.50; Houston, 1.53; New York City, 1.57; and Fort Worth and Norfolk, each with 1.60.

*The gap between nonwhite and white low birth weight rates grew wider for 59 percent (23 of 39) of the cities. The gap got smaller in 41 percent of the cities. The 10 cities that experienced the greatest increase in the ratio — a widening gap between nonwhite and white low birth weight rates were: Baton Rouge, with a 36.31 percent increase; El Paso, up 24.12 percent; Philadelphia, up 16.13 percent; Baltimore, up 15.80 percent; Pittsburgh, up 11.86 percent; Buffalo, up 11.05 percent; Kansas City, up 9.78 percent; the District of Columbia, up 9.66 percent; Nashville, up 9.31 percent; and Memphis, up 8.93 percent.*

The cities where the differences between nonwhite and white low birth weight rates decreased the most were: Norfolk, down 35.22 percent; Cleveland, down 17.63 percent; Albuquerque, down 17.36 percent; Virginia

Table 4.9A

RACIAL DIFFERENCES IN LOW BIRTH WEIGHT IN THE CITIES:  
A Comparison of the Nonwhite:White Ratios for 1979 AND 1984

CITY	% 1980 BLACK POPULA- TION	NW:W RATIO 1979	NW:W RATIO 1984	PERCENT CHANGE 1979-1984	CITY	% 1980 BLACK POPULA- TION	NW:W RATIO 1979	NW:W RATIO 1984	PERCENT CHANGE 1979-1984
Birmingham, AL (Jeff Co.) <sup>1</sup>	33.3	2.17	2.08	-4.15	Omaha, NE	12.1	--	--	--
Phoenix, AZ (Maricopa Co.)	3.2	1.47	1.45	1.27	Newark, NJ	58.3	--	--	--
Tucson, AZ (Pima Co.)	2.7	1.32	1.26	4.68	Albuquerque, NM	2.3	1.08	0.90	-17.36
Los Angeles/Long Beach, CA	12.6	--	--	--	Buffalo, NY <sup>2</sup>	26.7	1.90	2.11	11.05
Oakland, CA (Alameda Co.)	18.4	--	--	--	New York City, NY	25.3	1.71	1.57	-7.89
Sacramento, CA (Sacramento Co)	7.5	--	--	--	Charlotte, NC	31.1	2.46	2.19	-11.33
San Diego, CA (San Diego Co.)	--	--	--	--	Cincinnati, OH	33.9	2.12	2.19	3.18
San Francisco, CA (S.F. Co.)	12.7	--	--	--	Cleveland, OH	43.8	2.04	1.68	-17.63
San Jose, CA (Santa Clara Co)	3.3	--	--	--	Columbus, OH	22.1	2.06	2.09	1.27
Denver, CO (Denver Co.)	3.5	--	--	--	Toledo, OH	17.4	1.96	1.95	-0.47
District of Columbia	70.2	2.59	2.84	9.66	Oklahoma City, OK	12.3	2.02	2.19	8.42
Jacksonville, FL (Duvall Co.)	24.6	2.00	2.16	8.04	Tulsa, OK	9.3	--	--	--
Miami, FL (Dade Co.)	17.3	1.96	2.02	-2.63	Portland, OR	5.3	--	--	--
Atlanta, GA	66.6	1.63	1.64	0.83	Philadelphia, PA	37.8	2.00	2.32	16.13
Honolulu, HI	1.2	--	--	--	Pittsburgh PA	24.0	2.11	2.36	11.86
Chicago, IL	39.8	2.14	2.24	4.84	Memphis, TN	47.6	2.21	2.41	8.93
Indianapolis, IN	21.8	--	--	--	Nashville, TN	23.2	1.82	1.99	9.31
Wichita, KS (Sedgewick Co.)	8.7	--	--	--	Austin, TX	10.7	1.53	1.50	1.85
Louisville, KY	21.2	2.03	2.17	6.72	Dallas, TX	18.4	1.75	1.72	-1.90
Baton Rouge, LA	36.4	2.14	2.91	36.31	El Paso, TX	3.8	0.88	1.10	24.13
New Orleans, LA	55.3	2.00	2.08	3.91	Fort Worth, TX	11.7	1.67	1.60	-3.79
Baltimore, MD	54.8	1.81	2.09	15.80	Houston, TX	19.6	1.61	1.53	-5.15
Boston, MA <sup>2</sup>	22.5	2.00	2.08	3.91	San Antonio, TX	7.0	1.23	1.19	-3.25
Detroit, MI	63.0	1.94	1.92	-1.07	Virginia Beach, VA	10.0	1.90	1.68	-11.58
Minneapolis, MA	7.7	1.75	1.70	-2.65	Norfolk, VA	35.2	2.47	1.60	-35.22
Kansas City, MO	27.3	2.02	2.21	9.78	Seattle, WA	19.8	--	--	--
St. Louis, MO	45.5	2.06	2.13	3.38	Milwaukee, WI	9.4	2.32	2.21	-4.74

- <sup>1</sup> The Birmingham 1980 and 1984 low birth weight percentages were unavailable at the time of the survey; these figures were calculated substituting 1980 & 1983 data for 1979 & 1984.  
<sup>2</sup> The Boston and Buffalo figures substitute 1983 data for 1984 data.  
 -- When surveyed, the Registrars were unable to provide sufficient data to perform these calculations.

Beach, down 11.58 percent; Charlotte, down 11.33 percent; Houston, down 5.15 percent; Milwaukee, down 4.74 percent; Birmingham, down 4.15 percent; Fort Worth, down 3.79 percent; and San Antonio, down 3.25 percent in 1984 as compared to 1979.

### Gaps in Infant Mortality Rates

*In 90 percent (47 of 52) of the cities in 1984, the infant mortality rates were greater for nonwhites than for whites (See Table 4.9B). In 65 percent of the cities (34 of 52), the nonwhite infant mortality rates were more than 1.5 times the white rates. In more than 20 percent of the cities (11 of 52), the nonwhite rates were more than double the white rates. In the District of Columbia, with a large nonwhite population, the ratio was 3.08: nonwhite infants died at rates that were more than 3 times the white rates.*

The 10 cities with the greatest racial differences in infant mortality rates in 1984 were: the District of Columbia with a NW:W ratio of 3.08; Wichita, 2.69; Charlotte, 2.64; Indianapolis, 2.63; Baton Rouge, 2.55; Memphis, 2.46; Philadelphia and Pittsburgh, 2.34; Norfolk, 2.30; and Cleveland, 2.21 (refer to Table 4.9C). Four of these cities, the District of Columbia, Philadelphia, Norfolk, and Cleveland, were also among the 10 cities with the highest 1984 infant mortality rates. The NW:W ratios for 9 of these 10 cities were actually larger (worse) in 1984 than they had been in 1979. Only the District of Columbia had narrowed the NW:W gap from 1979 to 1984.

In just 5 of the 52 cities for which ratios could be calculated were the nonwhite infant mortality rates better than those for whites. These cities were: Portland, 0.87; San Jose, 0.78; Tulsa, 0.75; Sacramento, 0.71; and Albuquerque, 0.49.

A ranking of the cities according to the change in this NW:W ratio between 1979 and 1984 shows that 10 cities that experienced the greatest increase in the ratio, a widening gap between nonwhite and white infant mortality, were: Los Angeles, with a 555.08 percent increase, San Diego, up 305.07 percent; Santa Clara, up 199.94 percent; Indianapolis, up 64.50 percent; El Paso, up 62.98 percent; Philadelphia, up 62.03 percent; San Francisco, up 56.43 percent; Wichita, up 41.68 percent; Baton Rouge, up 39.34 percent; and Louisville, up 35.77 percent.

The cities that experienced the greatest reductions in the NW:W ratio for infant mortality from 1979 to 1984, an improvement in the racial gap, were: Sacramento, down 73.64 percent; Tulsa, down 54.55 percent; Tucson, down 45.77 percent; Oklahoma City, down 40.69 percent; Miami, down 31.34 percent; Minneapolis, down 29.09 percent; Albuquerque, down 27.66 percent; the District of Columbia, down 26.50 percent; Dallas, down 24.68 percent; and Newark, down 23.92 percent. There were insufficient data for seven cities to calculate the percent change in the infant mortality NW:W ratios from 1979 to 1984.

## 4.10 Poverty Rates and Poor Low Birth Weight and Infant Mortality Rates

As discussed more thoroughly in Chapter Two, babies born into poverty are at increased risk of low birth weight and infant death. The 54 cities in this study were ranked by their poverty rates, based on the 1980 Census

Table 4.9B

**RACIAL DIFFERENCES IN INFANT MORTALITY IN THE CITIES:  
A Comparison of the Nonwhite:White Ratios for 1979 AND 1984**

CITY	% 1980 BLACK POPULA- TION	NW:W RATIO 1979	NW:W RATIO 1984	PERCENT CHANGE 1979-1984	CITY	% 1980 BLACK POPULA- TION	NW:W RATIO 1979	NW:W RATIO 1984	PERCENT CHANGE 1979-1984
Birmingham, AL (Jeff Co.) <sup>1</sup>	33.3	1.94	1.55	-20.10	Omaha, NE	12.1	--	--	--
Phoenix, AZ (Maricopa Co.)	3.2	1.44	1.60	10.73	Newark, NJ	58.3	2.12	1.61	-23.92
Tucson, AZ (Pima Co.)	2.7	3.22	1.75	-45.77	Albuquerque, NM	2.3	0.68	0.49	-27.66
Los Angeles/Long Beach, CA	12.6	0.23	1.51	555.08	Buffalo, NY <sup>2</sup>	26.7	1.54	1.63	5.62
Oakland, CA (Alameda Co.)	18.4	0.70	1.45	106.84	New York City, NY	25.3	1.36	1.65	21.98
Sacramento, CA (Sacramento Co.)	7.5	2.69	0.71	-73.64	Charlotte, NC	31.1	2.55	2.64	3.45
San Diego, CA (San Diego Co.)	5.6	0.33	1.34	305.07	Cincinnati, OH	33.9	1.40	1.67	19.33
San Francisco, CA (S.F. Co.)	12.7	0.76	1.19	56.43	Cleveland, OH	43.8	1.85	2.21	19.54
San Jose, CA (Santa Clara Co.)	3.3	0.26	0.78	199.94	Columbus, OH	22.1	1.61	1.56	-2.92
Denver, CO (Denver Co.)	3.5	1.13	1.29	14.29	Toledo, OH	17.4	1.15	1.50	31.00
District of Columbia	70.2	4.19	3.08	-26.50	Oklahoma City, OK <sup>4</sup>	12.3	2.31	1.37	-40.69
Jacksonville, FL (Duval Co.)	24.6	2.28	1.76	-22.98	Tulsa, OK <sup>4</sup>	9.3	1.65	0.75	-54.55
Miami, FL (Dade Co.)	17.3	1.61	2.12	-31.34	Portland, OR	5.3	0.84	0.87	3.13
Atlanta, GA	66.6	1.36	1.75	28.69	Philadelphia, PA	37.8	1.45	2.34	62.03
Honolulu, HI	1.2	--	--	--	Pittsburgh PA	24.0	2.24	2.33	4.07
Chicago, IL	39.8	1.83	1.95	6.75	Memphis, TN	47.6	2.14	2.46	14.95
Indianapolis, IN	21.8	1.60	2.63	64.50	Nashville, TN	23.2	1.57	1.89	19.97
Wichita, KS (Sedgewick Co.)	8.7	1.90	2.69	41.68	Austin, TX	10.7	1.34	1.27	-5.17
Louisville, KY	21.2	1.23	1.67	35.77	Dallas, TX	18.4	1.57	1.19	-24.68
Baton Rouge, LA <sup>2</sup>	36.4	1.83	2.55	39.34	El Paso, TX	3.8	0.92	1.49	62.98
New Orleans, LA	55.3	1.79	1.57	-12.37	Fort Worth, TX	11.7	1.62	1.37	-15.40
Baltimore, MD	54.8	1.45	1.48	1.76	Houston, TX	19.6	1.50	1.43	-4.44
Boston, MA <sup>1</sup>	24.5	1.92	1.77	-7.81	San Antonio, TX	7.0	1.22	1.40	14.75
Detroit, MI	63.0	1.34	1.70	26.94	Virginia Beach, VA	10.0	1.50	1.57	4.67
Minneapolis, MA	7.7	1.66	1.16	-29.09	Norfolk, VA	35.2	2.23	2.30	3.14
Kansas City, MO <sup>3</sup>	27.3	1.67	1.67	0.12	Seattle, WA	19.8	1.20	1.58	31.67
St. Louis, MO	45.5	1.98	1.77	-10.59	Milwaukee, WI	9.4	1.84	1.58	-14.13

- 1 The 1984 infant mortality rate was unavailable; the figure shown is for 1983.  
 2 Figures based on 1980 rather than 1979 data.  
 3 Figures differed at the third decimal place.  
 4 Figures based on 1982 rather than 1984 data.

Table 4.9C

RANKING OF CITIES BY 1984 NONWHITE:WHITE RATIOS FOR INFANT MORTALITY							
RANK	CITY	1984 IMR NW:W	1984 LBW NW:W	RANK	CITY	1984 IMR NW:W	1984 LBW NW:W
1	District of Columbia	3.08	2.84	31	Columbus, OH	1.56	2.09
2	Wichita, KS (Sedgewick Co.)	2.69	2.39	32	Birmingham, AL (Jeff'son Co.) <sup>1</sup>	1.55	2.08
3	Charlotte, NC	2.64	2.19	33	Los Angeles/Long Beach, CA	1.51	--
4	Indianapolis, IN	2.63	--	34	Toledo, OH	1.50	1.95
5	Baton Rouge, LA	2.55	2.91	35	El Paso, TX (El Paso Co.)	1.49	1.10
6	Memphis, TN	2.46	2.41	36	Baltimore, MD	1.48	2.09
7	Philadelphia, PA (Phila. Co.)	2.34	2.32	37	Oakland, CA (Alameda Co.)	1.45	--
8	Pittsburgh, PA	2.33	2.36	38	Houston, TX (Harris Co.)	1.43	1.53
9	Norfolk, VA	2.30	1.60	39	San Antonio, TX (Bexar Co.)	1.40	1.19
10	Cleveland, OH	2.22	1.68	40-41	Oklahoma City, OK <sup>3</sup>	1.37	2.19
					Fort Worth, TX (Tarrant Co.)	1.37	1.60
11	Miami, FL (Dade Co.)	2.12	2.02	42	San Diego, CA (San Diego Co.)	1.34	--
12	Chicago, IL	1.95	2.24	43	Denver, CO (Denver Co.)	1.29	--
13	Nashville, TN (Davidson Co.)	1.89	1.99	44	Austin, TX (Travis Co.)	1.27	1.50
14-15	Boston, MA <sup>1</sup>	1.77	1.84	45-46	San Francisco, CA (S.F. Co.)	1.19	--
	St. Louis, MO	1.77	2.13		Dallas, TX (Dallas Co.)	1.19	1.72
16	Jacksonville, FL (Duvall Co.)	1.76	2.16	47	Minneapolis, MN	1.18	1.70
17-18	Tucson, AZ (Pima Co.)	1.75	1.26	48	Portland, OR	0.87	--
	Atlanta, GA	1.75	1.64				
19	Detroit, MI	1.70	1.92	49	San Jose, CA (Santa Clara Co.)	0.78	--
20-22	Louisville, KY	1.67	2.17	50	Tulsa, OK <sup>3</sup>	0.75	--
	Kansas City, MO	1.67	2.21				
	Cincinnati, OH	1.67	2.19				
23	New York City, NY	1.65	1.57	51	Sacramento, CA (Sacramento Co.)	0.71	--
24	Buffalo, NY <sup>2</sup>	1.63	2.11				
25	Newark, NJ	1.61	--	52	Albuquerque, NM	0.49	0.90
26	Phoenix, AZ (Maricopa Co.)	1.60	1.45	53	Honolulu, HI	--	--
27-28	Seattle, WA	1.58	--	54	Omaha, NE	--	--
	Milwaukee, WI	1.58	2.21				
29-30	New Orleans, LA	1.57	2.08				
	Virginia Beach, VA	1.57	1.68				

- <sup>1</sup> Both ratios were calculated using 1983 data.  
<sup>2</sup> The Low Birthweight Ratio is based on 1983 data.  
<sup>3</sup> The Infant Mortality Ratio is based on 1982 data.  
 -- Insufficient data available to calculate ratios.

data (see Table 4.10A). The 1980 Census provided the best national data set available for detailed city and urban county poverty rates at the time of this study.

Nearly 70 percent of the cities (37 of 54) studied had poverty rates greater than the U.S. average, which was 11.7 percent at the time of the 1980 Census. Thirty-seven percent of the cities (20 of 54) had poverty rates more than 1.5 times the national poverty rate. The poverty rate for Newark was 32.8, which was more than 2.5 times greater than the national average, and more than 4.5 times the poverty rate of San Jose. San Jose was the least poor city in our study, where only 7.1 percent of the 1979 population lived below the poverty line.

When county level data are compared with the city data, it is interesting to note that only 6 of the 22 urban counties fall in the half of the cities with the highest poverty rates. This pattern may be the result of the suburban buffering effect mentioned earlier. In half of the cities with the lowest rates of poverty, there are 16 urban counties. Philadelphia, Denver, and San Francisco are not counted as counties because the cities are the same as the counties.

*The findings of this study confirm the earlier research: areas with high poverty rates have higher low birth weight and infant mortality rates than areas which low poverty rates.* Nine of the 10 cities with the highest 1984 low birth weight rates for all races were among the 13 poorest cities according to 1980 Census data. Seven of the 10 cities with the highest infant mortality rates in 1984 were among the 10 poorest cities.

Seven of the 10 cities with the highest 1984 low birth weight rates were among the 13 cities with the lowest poverty rates in 1980. Four of the 10 cities with the lowest 1984 infant mortality rates were among the ten cities with the lowest poverty rates.

Higher poverty rates among blacks and other nonwhites negatively influence their low birth weight and infant mortality rates. For this reason, the racial composition of a city's population is closely linked to the health status of the infants in that city.

When the 54 cities in this study were ranked by the percent of the population that was black (see Table 4.10B) based on 1980 Census figures, the 10 cities with the highest low birth weight and infant mortality rates were among the 13 cities with the highest percent of black residents. This should not be surprising: *8 of the 10 cities with the largest percent black residents were among the 10 cities with the highest poverty rates.*

The associations between poverty and race and low birth weight and infant mortality rates can be seen dramatically in Table 4.10C. That table ranks the cities by average (1979-1984) infant mortality rates, side-by-side with the cities' low birth weight rates, poverty rates, and percent black population.

Table 4.10A

## RANKING OF CITIES BY POVERTY RATE (1980 CENSUS)

RANK	CITY	NUMBER LIVING AT OR BELOW POVERTY LEVEL	RATE	RANK	CITY	NUMBER LIVING AT OR BELOW POVERTY LEVEL	RATE
1	Newark, NJ	106,900	32.8	27	Milwaukee, WI	85,300	13.8
2	Atlanta, GA	112,600	27.5	28-29	**Denver, CO	65,800	13.7
3	New Orleans, LA	143,800	26.4		**San Francisco, CA	91,200	
4	Baltimore, MD	176,500	22.9	30	Toledo, OH	47,500	13.6
5	Cleveland, OH	124,900	22.9	31	Minneapolis, MN	48,000	13.5
6	Detroit, MI	258,600	21.9	32	*Los Angeles, CA	984,800	13.4
7-8	St. Louis, MO	96,800	21.8	33	Kansas City, MO	58,000	13.2
	Memphis, TN	138,700		34	*Tucson, AZ	67,700	13.0
9	*El Paso, TX	101,700	21.7	35	Nashville, TN	55,000	12.6
10-11	Buffalo, NY	72,300	20.7	36-37	Albuquerque, NM	40,700	12.4
	Norfolk, VA	48,100			Charlotte, NC	38,300	
12	**Philadelphia, PA	340,500	20.6	38	Indianapolis, IN	79,200	11.5
13	Chicago, IL	601,460	20.3	39-40	Omaha, NE	34,900	11.4
14	Boston, MA	106,800	20.2		*Portland, OR	62,600	
15	New York, NY	1,392,000	20.0	41-42	*Oakland, CA	121,700	11.3
16	Cincinnati, OH	73,000	19.7		*San Diego, CA	198,500	
17	Louisville, KY	56,200	19.3	43-44	*Sacramento, CA	86,500	11.2
18	Baton Rouge, LA	39,200	18.7		*Seattle, WA	53,000	
19	District of Columbia	113,000	18.6	45	*Oklahoma, CA	59,600	10.7
20	*San Antonio, TX	177,100	18.5	46	**Dallas, TX	162,000	10.6
21-22	Columbus, OH	84,200	16.5	47	*Phoenix, AZ	156,800	10.5
	Pittsburgh, PA	67,300		48	*Houston, TX	247,000	10.4
23	*Jacksonville, FL	88,600	15.8	49	Honolulu, HI	35,800	10.0
24	*Birmingham, AL	101,500	15.3	50	*Tulsa, OK	45,600	9.9
25	*Miami, FL	240,900	15.0	51	Fort Worth, TX	79,100	9.4
26	*Austin, TX	57,500	14.4	52	Wichita, KS	32,800	9.1
				53	Virginia Beach, VA	22,300	8.9
				54	San Jose, CA	90,300	7.1

\* Data were available only at the county level.

\*\* Urban county that is co-equal with city limits.

Table 4.10B

RANKING OF CITIES BY PERCENT BLACK POPULATION (1980 CENSUS)					
RANK	CITY	% BLACK	RANK	CITY	% BLACK
1	District of Columbia	70.2	28	Houston, TX	19.6
2	Atlanta, GA	66.6	29-30	Dallas, TX Oakland, CA	18.4
3	Detroit, MI	63.0			
4	Newark, NJ	58.3	31	Toledo, OH	17.4
5-6	Baton Rouge, LA New Orleans, LA	55.3	32	Miami, FL	17.3
			33	San Francisco, CA	12.7
7	Baltimore, MD	54.8	34	Los Angeles, CA	12.6
8	Memphis, TN	47.6	35	Oklahoma City, OK	12.3
9	St. Louis, MO	45.5	36	Omaha, NE	12.1
10	Cleveland, OH	43.8	37	Fort Worth, TX	11.7
11	Chicago, IL	39.8	38	Austin, TX	10.7
12	Philadelphia, PA	37.8	39	Virginia Beach, VA	10.0
13	Norfolk, VA	35.2	40	Milwaukee, WI	9.4
14	Cincinnati, OH	33.9	41	Tulsa, OK	9.3
15	Birmingham, AL	33.3	42	Wichita, KS	8.7
16	Charlotte, NC	31.1	43	Minneapolis, MN	7.7
17	Kansas City, MO	27.3	44	Sacramento, CA	7.5
18	Buffalo, NY	26.7	45	San Antonio, TX	7.0
19	New York City, NY	25.3	46	San Diego, CA	5.6
20	Jacksonville, FL	24.6	47	Portland, OR	5.3
21	Pittsburgh, PA	24.0	48	El Paso, TX	3.8
22	Nashville, TN	23.2	49	Denver, CO	3.5
23	Boston, MA	22.5	50	San Jose, CA	3.3
24	Columbus, OH	22.1	51	Phoenix, AZ	3.2
25	Indianapolis, IN	21.8	52	Tucson, AZ	2.7
26	Louisville, TN	21.2	53	Albuquerque, NM	2.3
27	Seattle, WA	19.8	54	Honolulu, HI	1.2



Table 4.10C

CITIES RANKED BY AVERAGE INFANT MORTALITY RATES WITH LOW BIRTH WEIGHT AND POVERTY RATES  
AND PERCENT BLACK POPULATION

IMR RANK	CITY/URBAN	AVERAGE IMR (79-84)	AVERAGE LBW (79-84)	PERCENT BLACK POP (1980)	PERCENT BELOW POVERTY (1980)
1	District of Columbia	21.5	1.9	70.2	18.6
2	Detroit, MI	21.1	12.2	63.0	21.9
3	Atlanta GA	19.7	12.4	66.6	27.5
4	Newark, NJ	19.5	12.2	58.3	32.8
5	Baton Rouge, LA	19.3	9.7	36.4	18.7
6	Cleveland, OH	18.9	10.6	43.8	22.1
7	Chicago, IL	18.8	10.3	39.8	20.3
8	New Orleans, LA	18.1	11.6	55.3	26.4
9	Baltimore, MD	17.7	11.5	54.8	22.9
10-11	*Pittsburgh, PA	17.5	9.1	24.0	16.5
10-11	Philadelphia, PA	17.5	10.5	37.8	20.6
12	St. Louis, MO	17.1	10.2	45.5	21.8
13	Memphis, TN	16.9	10.9	47.6	21.8
14	Norfolk, VA	15.8	9.7	35.2	20.7
15	New York City, NY	15.3	8.8	25.3	20.0
16-17	Louisville, KY	15.0	9.0	28.2	19.3
16-17	Charlotte, NC	15.0	9.0	31.1	12.4
18	Buffalo, NY	14.8	9.2	26.7	20.7
19-20	Indianapolis, IN	14.4	7.9	21.8	11.5
19-20	Kansas City, MO	14.4	8.8	27.3	13.2
21	*Jacksonville, FL	14.1	7.8	24.6	15.8
22	Cincinnati, OH	13.8	8.8	33.9	19.7
23	*Birmingham, AL	13.5	8.8	33.3	15.3
24-25	*Omaha, NE	13.4	7.4	12.1	11.4
24-25	*Nashville, TN	13.4	8.9	23.2	12.6 <sup>a</sup>
26	Boston, MA	13.3	8.8	22.5	20.2
27	Milwaukee, WI	13.1	7.9	9.4	13.8
28	Columbus, OH	13.0	8.2	22.1	16.5
29	*Miami, FL	12.9	7.7	13.8	13.5
30-31	Seattle, WA	12.4	6.3	19.8	11.2
30-31	Fort Worth, TX	12.4	7.0	11.7	9.4
32	Virginia Beach, VA	12.3	6.5	10.0	8.9
33	*San Antonio, TX	12.2	6.7	7.0	18.5
34	*Oklahoma City, OK	12.1	7.4	12.3	10.7
35	*Dallas, TX	12.0	7.8	18.4	10.6
36-37	*Portland, OR	11.9	-N/A-	5.3	11.4
36-37	Toledo, OH	11.9	8.0	17.4	13.6
38-39	*Houston, TX	11.8	7.3	19.6	10.4
38-39	*Wichita, KS	11.8	7.1	8.7	9.1
40	Minneapolis, MN	11.5	6.7	7.7	13.5
41-42	*Los Angeles/Long Beach, CA	11.1	6.4 <sup>b</sup>	12.6	13.4
41-42	*Phoenix, AZ	11.1	6.0	3.2	10.5
43	*Denver, CO	10.8	9.2	3.5	13.7
44*	*San Francisco, CA	10.5	6.8 <sup>b</sup>	12.7	13.7
45*	*Oakland, CA	10.4	6.9 <sup>b</sup>	18.4	11.3
46	Albuquerque	10.2	8.0	2.3	12.4
47	*Tulsa, OK	10.1	-N/A-	9.3	9.9
48	*El Paso, TX	9.9	6.4	3.8	21.7
49	Honolulu	9.9	-N/A-	1.2	10.0
50	*San Diego, CA	9.7	5.8 <sup>b</sup>	5.6	11.3
51	*Sacramento, CA	9.5	6.2 <sup>b</sup>	7.5	11.2
52	*San Jose, CA	9.2	5.5 <sup>b</sup>	3.3	7.1
53	*Tucson, AZ	9.2	6.0	2.7	13.0
54	*Austin, TX	9.1	5.7	10.7	14.4

<sup>a</sup> Data for Nashville-Davidson.  
<sup>b</sup> Average based on 1983-1984 only.  
<sup>\*</sup> County data.

## CHAPTER FIVE

### STUDY FINDINGS FOR THE STATES, 1979-1984

#### 5.1 Low Birth Weight For All Races In The States

##### Status in 1984

Half (25 of 50) of the states had low birth weight rates in 1984 that were higher than the national rate of 6.7 percent. The state low birth weight rates ranged from a low of 4.8 percent in North Dakota to a high of 8.8 percent in two states, Mississippi and South Carolina. Table 5.1A lists the states ranked by their 1984 low birth weight rates for all races. These rankings, based upon a single year's data, closely match the rankings of states by average 1979-1984 low birth weight rates (see Table 5.1B). Nine of the 10 states with the highest 1984 low birth weight rates were among the 10 states with the greatest average low birth weight rates during the five-year study period. This pattern was repeated at the other end of the spectrum, with 9 of 10-states with the lowest 1984 low birth weight rates among the 10 states with the lowest average low birth weight rates.

As expected, high infant mortality rates were strongly associated with high low birth weights. Table 5.1C shows the states ranked by their 1984 infant mortality rates. Each state's low birth weight rate, percent black population, and poverty rate (1980) are also presented in this table.

#### CHANGES IN LOW BIRTH WEIGHT RATES FOR ALL RACES IN THE STATES

##### Summary of Changes, 1979-1984

Sixty-eight percent of the states had lower low birth weight rates for all races in 1984 than in 1979. Similarly, on average, over the five-year period, 1979-1984, 70 percent of the states decreased their low birth weight rates for all races. Table 5.1D summarizes the changes which occurred in low birth weight rates for all races in the states from 1979 to 1984.

Improvements were concentrated in the earlier of the two time periods studied. From 1979 to 1981, 65 percent of the states, on average, decreased their low birth weight rates. This dropped to 41 percent between 1982 and 1984. Just one-quarter of the states decreased their low birth weight rates for all races at the same or greater rate in 1982-1984 as in 1979-1981.

##### Percent Change, 1979-1984

Sixty-eight percent (34 of 50) of the states had lower rates of low birth weight for all races in 1984 than in 1979. Sixteen percent (8 of 50) of the states had the same low birth weight rate in both 1979 and 1984, and 16 percent (8 of 50) had higher low birth weight rates in 1984 than in 1979. *One-third of the states had either the same or worse rates of low birth weight in 1984 than five years before in 1979.*

Table 5.1A

RANKING OF STATES BY 1984 LOW BIRTH WEIGHT PERCENTAGE FOR ALL RACES					
RANK	STATE	PERCENTAGE	RANK	STATE	PERCENTAGE
1-2	Mississippi South Carolina	8.8	26	Pennsylvania	6.7
			27	Missouri	6.6
3	Louisiana	8.6	28	Ohio	6.5
4	Georgia	8.2	29-30	Indiana Oklahoma	6.3
5	Tennessee	8.0			
6	Alabama <sup>1</sup>	7.9	31-34	Arizona Kansas Rhode Island Vermont	6.1
7	North Carolina	7.8			
8-9	Arkansas Colorado	7.6	35-37	California Massachusetts Montana	5.9
10	New Mexico		38	Utah	5.6
11-12	Florida Maryland	7.4	39	Nebraska	5.4
13-16	Delaware Hawaii Nevada Virginia	7.3	40	Maine	5.3
17	Connecticut	7.2	41-45	Idaho Oregon South Dakota Washington Wisconsin	5.1
18-19	Illinois Wyoming	7.1	46	New Hampshire	5.0
20-22	Kentucky Michigan New York	7.0	47-49	Alaska Iowa Minnesota	4.9
23-24	New Jersey	6.9	50	North Dakota	4.8
25	Texas	6.8			

<sup>1</sup> 1983 data.

Table 5.1B

RANKING OF STATES BY AVERAGE LOW BIRTH WEIGHT PERCENTAGE, 1979-1984 <sup>1</sup>					
RANK	STATE	RATE	RANK	STATE	RATE
1-2	South Carolina Mississippi	8.8	25-28	Hawaii Missouri Pennsylvania Ohio	6.7
3	Louisiana	8.6	29	Oklahoma	6.6
4	Georgia	8.5	30	Indiana	6.3
5	Tennessee	8.0	31-32	Kansas Rhode Island	6.2
6-8	Alabama <sup>2</sup> Colorado North Carolina	7.9	33-35	Arizona Massachusetts Vermont	6.0
9-10	Maryland New Mexico	7.7	36	California	5.9
11	Delaware <sup>2</sup>	7.6	37	Montana	5.6
12-13	Arkansas Florida	7.5	38-39	Nebraska Utah	5.5
14	Virginia	7.4	40-43	Alaska Idaho Maine Wisconsin	5.3
15-16	Illinois New York	7.3	44-45	New Hampshire Washington	5.2
17	Nevada	7.2	46	South Dakota	5.1
18	Wyoming	7.1	47-49	Iowa Minnesota Oregon	5.0
19-21	Kentucky Michigan New Jersey	7.0	50	North Dakota	4.8
22	Texas	6.9			
23-24	Connecticut West Virginia	6.8			

1 The average is unweighted and was calculated for the six-year period 1979-1984.

2 Average based on data from 1979 to 1983.

3 Average based on data from 1979 through 1982 and 1984.

Table 5.1C

STATES RANKED BY AVERAGE INFANT MORTALITY RATES WITH LOW BIRTH WEIGHT AND POVERTY RATES AND PERCENT BLACK POPULATION					
IMR RANK	STATE	AVERAGE IMR (79-84)	AVERAGE LBW (79-84)	PERCENT BLACK POP (1980)	PERCENT BELOW POVERTY (1980)
1-2	South Carolina	15.8	8.8	30.4	16.6
	Mississippi	15.8	8.8	35.2	23.9
3	Georgia	14.1	8.5	26.8	16.6
4	Alabama	13.8	7.9	25.6	18.9
5-6	North Carolina	13.7	7.9	22.4	14.8
	Louisiana	13.7	8.6	29.4	18.6
7	Illinois	13.6	7.3	14.7	11.0
8-9	Virginia	13.1	7.4	18.9	11.8
	Florida	13.1	7.5	13.8	13.5
10	Delaware	12.8	7.6	16.2	11.9
11-12	Maryland	12.7	7.7	22.8	9.8
	Tennessee	12.7	8.0	15.8	16.5
13	Alaska	12.6	5.3	3.5	10.7
14	Michigan	12.5	7.0	12.9	10.4
15	New York	12.2	7.3	13.7	13.4
16-18	Pennsylvania	12.0	6.7	8.8	10.5
	West Virginia	12.0	6.8	3.3	15.0
	Kentucky	12.0	7.0	7.1	17.6
19	Missouri	11.9	6.7	10.5	12.2
20-21	Ohio	11.8	6.7	10.0	10.3
	Oklahoma	11.8	6.6	6.8	13.4
22	Nevada	11.7	7.2	6.4	8.7
23-25	New Jersey	11.6	7.0	12.6	9.5
	Indiana	11.6	6.3	7.6	9.7
	Hawaii	11.6	6.7	1.8	9.9
26-27	Texas	11.5	6.9	12.0	14.7
	Arkansas	11.5	7.5	16.4	19.0
28	Rhode Island	11.4	6.2	3.0	10.3
29	Connecticut	11.1	6.8	7.0	8.0
30	New Mexico	11.0	7.7	1.8	17.6
31-32	Wyoming	10.9	7.1	0.6	7.9
	Arizona	10.9	6.0	2.8	13.2
33-34	South Dakota	10.7	5.1	0.3	16.9
	Washington	10.7	5.2	2.6	9.8
35	Oregon	10.6	5.0	1.4	10.7
36	North Dakota	10.5	4.8	0.5	12.6
37-38	Kansas	10.4	6.2	5.3	10.1
	Nebraska	10.4	5.5	3.1	10.7
39-40	Montana	10.3	5.6	0.3	12.3
	California	10.3	5.9	7.7	11.4
41-42	Idaho	10.1	5.3	0.3	12.6
	Wisconsin	10.1	5.3	3.9	8.7
43-45	Colorado	10.0	7.9	3.5	17.6
	Iowa	10.0	5.0	1.4	10.1
	Utah	10.1	5.3	0.6	10.3
46	New Hampshire	9.9	5.2	0.4	8.5
47-48	Minnesota	9.8	5.0	1.3	9.5
	Massachusetts	9.8	6.0	3.9	9.6
49	Maine	9.2	5.3	0.3	13.0
50	Vermont	9.0	6.0	0.2	12.1

Table 5.1D

THREE MEASURES OF CHANGE IN THE LOW BIRTH WEIGHT PERCENTAGE FOR ALL RACES  
IN THE STATES, 1979-1984

STATE	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84	STATE	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84
Alabama	0	0	0	0	Montana	5.36	1.08	- 0.89	2.68
Alaska	-15.52	- 3.18	- 7.13	-3.83	Nebraska	- 3.57	- 6.72	- 0.89	- 0.91
Arizona	0	0.04	- 0.79	2.56	Nevada	- 2.67	- 0.17	- 1.83	4.87
Arkansas	7.04	1.45	2.21	1.43	New Hampshire	-15.25	- 3.14	- 7.91	- 1.92
California	- 1.67	- 0.33	- 1.68	0	New Jersey	- 4.17	- 0.81	- 1.40	0.80
Colorado	- 7.32	- 1.48	- 1.22	-0.60	New Mexico	- 7.41	- 1.48	- 3.74	- 1.30
Connecticut	- 8.33	- 1.64	- 1.98	-0.68	New York	- 9.09	- 1.88	- 1.95	- 2.07
Delaware	- 0.05	- 1.21	- 1.11	--	North Carolina	- 3.70	- 0.74	- 1.23	- 1.26
Florida	- 5.13	- 1.03	- 2.59	-0.67	North Dakota	- 5.88	- 1.14	- 5.02	0
Georgia	- 6.82	- 1.40	- 1.72	-1.20	Ohio	- 4.41	- 0.88	0	- 1.46
Hawaii	9.23	2.47	--	--	Oklahoma	- 3.08	- 0.55	- 0.81	- 3.72
Idaho	- 1.92	- 0.24	- 0.93	-1.63	Oregon	0	- 1.32	1.98	--
Illinois	- 4.05	- 0.80	- 0.04	-0.69	Pennsylvania	- 4.29	- 0.82	- 2.80	0.76
Indiana	3.28	0.66	1.64	-0.78	Rhode Island	- 8.96	- 1.78	- 6.15	0
Iowa	- 2.00	- 0.33	0.02	1.16	South Carolina	- 1.12	- 0.21	0.03	- 0.55
Kansas	- 4.69	- 0.79	- 0.38	-0.81	South Dakota	2.00	0.43	2.96	0
Kentucky	0	0.03	0.78	0.01	Tennessee	1.27	0.26	0.63	0.63
Louisiana	0	0.02	- 0.58	1.21	Texas	- 2.86	- 0.58	- 0.71	- 0.72
Maine	1.92	0.57	1.98	2.22	Utah	0	0.05	- 1.74	0
Maryland	- 5.13	- 0.94	- 0.55	0.14	Vermont	0	0.04	0.06	1.68
Massachusetts	- 3.28	- 0.66	- 0.82	0	Virginia	- 3.95	- 0.80	- 1.32	0
Michigan	- 1.41	- 0.27	- 1.41	0.01	Washington	- 1.92	- 0.35	1.00	0.02
Minnesota	- 3.92	- 0.75	0.98	0.02	West Virginia	1.47	0.37	2.25	1.49
Mississippi	0	0.01	- 0.57	-0.56	Wisconsin	- 5.56	- 1.01	- 0.93	1.22
Missouri	- 1.49	- 0.29	0.01	0.01	Wyoming	- 6.58	- 1.17	- 6.72	0.01

-- Data unavailable.

## Annual Average Percent Change, 1979-1984

Seventy percent of the states (35 of 50) on average, decreased their low birth weight rates for all races during the five-year study period, 1979-1984. Twenty-six percent of the states, on average, increased their low birth weight rates for all races. Two states had average rates of change equal to or approximately zero. *On average, 30 percent of the states' low birth weight rates for all races made no progress or worsened over the five-year period.*

### Trend Analysis

#### 1979-1981

In the first of the two-year periods examined by annual average percent change analysis, 65 percent of the states (32 of 49) on average, decreased their low birth weight rates for all races. Twenty-nine percent (14 of 49) of the states' low birth weight rates for all races rates increased and three states experienced no change during this two-year span. *Altogether, 35 percent (17 of 49) of the states' low birth weight rates either did not improve or actually worsened during this two-year period. There were insufficient data to calculate this value for one state.*

#### 1982-1984

In the second of the two-year periods examined, 1982-1984, only 41 percent of the states (19 of 46) were decreasing their low birth weight rates for the all races. Thirty-five percent (16 of 46) were increasing and 24 percent (11 of 46) experienced no change. This means that, *on average, nearly 60 percent of the states (27 of 46) had made no change or increased their low birth weight rates for all races between 1982-1984.* This is far worse than the 35 percent of the states that made no change or increased their low birth weight rates for all races between 1979 and 1981.

#### 1982-1984 vs. 1979-1981

One-quarter (12 of 47) of the states were decreasing their low birth weight rates at the same or faster rate in 1982-1984 than between 1979 and 1981. The remaining 75 percent did not make progress: 14 percent of the states (7 of 47) decreased their white low birth rates for all races during both of the two-year periods, but at slower rates between 1982 and 1984 than previously. Thirteen percent (6 of 47) of the states' low birth weight rates for all races were increasing more slowly in the later period than in the earlier period, and 47 percent (22 of 47) of the states were increasing their low birth weight rates for all the races at the same or faster rate in 1982-1984 as compared with the earlier 1979-1981 time period.

## 5.2 Low Birth Weight Rates Among Whites in the States

### Status In 1984

The national low birth weight rate for whites, compiled by the National Center for Health Statistics, was 5.6 percent in 1984. *Forty-six percent of the states in 1984 had white low birth weight rates higher than the national rate.* The white low birth weight rates ranged from 4.4 percent in Alaska up to 7.7 percent in New Mexico. Table 5.2A lists the states ranked by their 1984 white low birth weight rates.

### Summary of Changes, 1979-1984

Eighty percent of the states had lower rates of low birth weight for whites in 1984 as compared with 1979. The results of the annual average percent analysis were identical with percent change analysis, showing improvement in 80 percent of the states. Table 5.2B summarizes changes in white low birth weight rates in the states from 1979 to 1984.

Progress toward reducing white low birth weight in the states was much stronger between 1979 and 1981 than in 1982-1984. In the earlier period, 69 percent of the states decreased white low birth weight rates. This dropped rather dramatically to 47 percent in the later period.

Thirty-two percent of the states decreased their white low birth weight rates at the same or faster rate in 1982-1984 as compared with 1979-1981.

### Percent Change, 1979-1984

Eighty percent (35 of 44) of the states had lower white low birth weight rates in 1984 than in 1979. *Eighteen percent (8 of 44) of the states had higher white low birth weight rates in 1984 than in 1979.* One had the same white low birth weight rate in 1984 as in 1979. There were insufficient data to calculate percent change for six of the states for this five-year period.

### Annual Average Percent Change, 1979-1984

Interestingly, the AAPC analysis for white low birth weight rates in the states was identical with the percent change analysis for the five year period, 1979-1984. Eighty-percent (35 of 44) of the states' low birth weight rates for whites, on average, decreased and 18 percent (8 of 44) increased during these years. There were insufficient data to calculate AAPCs for six states.



Table 5.2A

## RANKING OF STATES BY 1984 LOW BIRTH WEIGHT RATES FOR WHITES

RANK	STATE	RATE	RANK	STATE	RATE
1	New Mexico	7.7	24-27	Connecticut Delaware Pennsylvania Rhode Island	5.6
2	Colorado	7.3			
3	Wyoming	7.1			
4	Nevada	6.7	28-30	Kansas Missouri Ohio	5.5
5	West Virginia	6.6			
6-7	Kentucky Tennessee	6.4	31-34	Maryland Massachusetts Michigan Utah	5.4
8	South Carolina	6.3			
9-10	Mississippi North Carolina	6.1	35	Illinois	5.3
11-13	Alabama <sup>1</sup> Arkansas Florida	6.0	36-37	California Idaho	5.2
			38	Nebraska <sup>1</sup>	5.0
14-16	Arizona Georgia Hawaii <sup>1</sup>	5.9	39	Oregon	4.9
17-19	Oklahoma Texas Virginia	5.8	40	Indiana	4.8
			41	Minnesota	4.7
20-23	Iowa <sup>2</sup> Louisiana Montana New York	5.7	42	Wisconsin	4.6
			43-44	Washington North Dakota	4.5
			45	Alaska	4.4
			--	Maine	--
			--	New Hampshire	--
			--	New Jersey	--
			--	South Dakota	--
			--	Vermont	--

<sup>1</sup> Alabama, Hawaii, and Nebraska figures are based on 1983 data.

<sup>2</sup> Iowa figure is based on 1982 data.

-- Data unavailable.

Table 5.2B

## THREE MEASURES OF CHANGE IN THE LOW BIRTH WEIGHT PERCENTAGE FOR WHITES IN THE STATES, 1979-1984

STATE	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84	STATE	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84
Alabama	3.45	0.95	0.95	--	Montana	3.64	0.73	0	0.93
Alaska	-13.73	- 2.62	- 5.88	--	Nebraska	- 3.85	- 0.77	- 1.92	0
Arizona	- 1.67	- 0.32	- 1.68	-1.75	Nevada	11.67	2.68	5.62	--
Arkansas	5.26	1.07	0.91	1.77	New Hampshire	--	--	--	--
California	- 1.89	- 0.36	- 1.89	0.98	New Jersey	--	--	--	--
Colorado	- 6.41	- 1.27	0	-0.62	New Mexico	- 4.94	- 0.93	- 4.40	- 0.62
Connecticut	-11.11	- 2.29	- 4.05	-1.68	New York	- 9.52	- 1.97	- 2.41	- 1.69
Delaware	- 6.67	- 1.46	- 6.77	--	North Carolina	- 3.17	- 0.62	- 2.41	- 0.86
Florida	- 1.64	- 0.32	- 1.65	0.85	North Dakota	- 8.16	- 1.52	- 6.32	- 2.13
Georgia	- 7.81	- 1.58	- 2.30	-0.83	Ohio	- 3.51	- 0.70	0.88	- 1.75
Hawaii	15.70	9.13	--	--	Oklahoma	- 3.33	- 0.61	1.71	- 4.05
Idaho	- 1.89	- 0.24	- 0.91	-2.57	Oregon	--	--	--	--
Illinois	- 5.36	- 1.07	- 0.86	-1.82	Pennsylvania	- 5.08	- 1.01	- 3.44	0
Indiana	- 1.72	- 0.55	- 1.72	--	Rhode Island	- 8.20	- 1.50	- 5.88	1.21
Iowa	0	- 0.01	--	--	South Carolina	1.61	0.34	- 0.78	1.64
Kansas	- 6.78	- 1.23	- 1.31	-0.89	South Dakota	--	--	--	--
Kentucky	- 1.54	- 0.27	0.84	-0.77	Tennessee	- 1.54	- 0.29	- 0.77	0.82
Louisiana	- 5.00	- 1.02	- 0.33	-0.86	Texas	- 1.69	- 0.33	0.01	- 0.85
Maine	--	--	--	--	Utah	- 1.82	- 0.31	- 0.80	- 0.91
Maryland	- 6.90	- 1.34	- 0.78	0.07	Vermont	--	--	--	--
Massachusetts	- 5.26	- 1.06	- 0.88	0.02	Virginia	- 4.92	- 0.98	- 1.64	- 0.88
Michigan	- 6.90	- 1.41	- 0.86	-1.79	Washington	- 8.16	- 1.59	0.02	- 1.95
Minnesota	- 4.08	- 0.76	1.02	0.09	West Virginia	1.54	0.37	3.08	0.01
Mississippi	7.02	1.46	- 0.79	0.86	Wisconsin	- 8.00	- 1.56	- 2.02	1.25
Missouri	- 1.75	- 0.33	0.93	0	Wyoming	- 5.33	- 0.93	- 6.13	0.01

-- Data unavailable.

## Trend Analysis

### 1979-1981

Sixty-nine percent of the states (29 of 42) decreased their white low birth weight rates in the first of the two-year periods examined, 1979-1981. Twenty-four percent (10 of 42) of the states' white low birth weight rates increased, three states experienced no change, and there were insufficient data to calculate AAPCs for 1979-1981 for eight states.

### 1982-1984

On average, 47 percent (18 of 38) of the states decreased their white low birth weight rates. Forty percent (15 of 38) of the states' white low birth weight rates increased during this two-year period, and five states, on average, experienced no change. *On average, more than 50 percent (20 of 38) of the states' white low birth weight rates made no change or increased during the 1982-1984 time period. There were insufficient data to calculate AAPCs for 1982-1984 for 12 states.*

### 1982-1984 vs. 1979-1981

Thirty-two percent of the states (12 of 37) were decreasing their low birth weight rates during 1982-1984 that were the same or faster than in the 1979-1981 time period. Of the remaining 68 percent, 22 percent of the states (8 of 37) decreased their white low birth weight rates in both time periods, but at a slower rate in 1982-1984. Eight percent (3 of 37) increased during both time periods, but not so rapidly in 1982-1984 as in 1979-1981. Thirty-eight percent of the states (14 of 37) were increasing at the same or faster rate in the later period than they had in the earlier period. There were 13 states for which data were insufficient to conduct the trend analysis.

## 5.3 Low Birth Weight Rates Among Nonwhites in the States

### Status in 1984

*In 1984, 22 states had nonwhite low birth weight rates that exceeded the 1984 national nonwhite rate of 11.1 percent. The low birth weight rates for nonwhites in the states ranged from 6.1 percent in Wyoming up to 13.4 percent in both Michigan and Pennsylvania. Table 5.3A lists the states ranked by their 1984 nonwhite low birth weight rates.*

### CHANGES IN LOW BIRTH WEIGHT RATES AMONG NONWHITES IN THE STATES

#### Summary of Changes, 1979-1984

Two-thirds of the states had lower low birth weight rates among nonwhites in 1984 as in 1979. On average, 58 percent of the states experienced improvement in their low birth weight rates for nonwhites between 1979 and

Table 5.3A

RANKING OF STATES BY LOW BIRTH WEIGHT RATE FOR NONWHITES					
RANK	STATE	RATE	RANK	STATE	RATE
1-2	Michigan Pennsylvania	13.4	27	Nevada	10.6
3	Illinois	13.1	28	Rhode Island	10.1
4	Tennessee	13.0	29	Indiana	9.5
5	Louisiana	12.9	30	Oklahoma <sup>1</sup>	9.1
6	West Virginia	12.7	31-33	Idaho Nebraska <sup>1</sup> Texas	8.2
7	South Carolina	12.6	34	Wisconsin	7.9
8	Delaware	12.4	35	California	7.6
9	Georgia	12.3	36	Hawaii <sup>1</sup>	7.5
10-11	Arkansas Missouri	12.2	37	North Dakota	7.2
12	Connecticut	12.1	38	Arizona	7.1
13-14	Kentucky Ohio	12.0	39	Utah <sup>1</sup>	7.0
15	Virginia	11.8	40-41	Montana Oregon	6.9
16-18	Florida Mississippi North Carolina	11.7	42	New Mexico	6.6
19-20	Alabama <sup>1</sup> Iowa <sup>2</sup>	11.6	43	Minnesota	6.4
21	Maryland	11.5	44	Alaska	6.2
22	Kansas	11.3	45	Wyoming	6.1
23-24	Massachusetts <sup>1</sup> New York	10.9	--	Maine	--
25-26	Colorado Wisconsin	10.8	--	New Hampshire New Jersey	--
			--	South Dakota Vermont	--

<sup>1</sup> Alabama, Massachusetts, Oklahoma, Nebraska, Hawaii, and Utah figures are based on 1983 data.  
<sup>2</sup> Iowa figure is based on 1982 data.  
 -- Data unavailable; could not be ranked.

1984. Table 5.3B summarizes the changes in low birth weight rates among nonwhites in the states from 1979 to 1984.

As with white low birth weight rates, progress toward reducing nonwhite low birth weight rates occurred more strongly in the earlier period (65 percent) as compared with the later period (50 percent.) Thirty-eight percent of the states' nonwhite low birth weight rates continued to improve in 1982-1984 at the same or faster rate as compared with 1979-1981.

#### Percent Change, 1979-1984

One-third (14 of 42) of the states had higher nonwhite low birth weight rates in 1984 than they had in 1979. The other two-thirds (28 of 42) of the states had lower nonwhite low birth weight rates in 1984 as compared with 1979. There were eight states with insufficient data to calculate percent change during this time period.

#### Annual Average Percent Change, 1979-1984

Fifty-eight percent of the states (25 of 43), on average, decreased their nonwhite low birth weight rates. Forty-two percent (18 of 43) of the states' low birth weight rates among nonwhite, on average, were increasing. There were seven states where this analysis could not be performed due to insufficient data.

#### Trend Analysis

##### 1979-1981

In the first of the two-year periods studied, 1979-1981, 65 percent of the states (26 of 40), on average, were decreasing their nonwhite low birth weight rates. Thirty-three percent of the states (13 of 40) were increasing and one state, on average, experienced no change. There were insufficient data for 10 of the states to calculate this two-year AAPC value.

##### 1982-1984

During the later of the two-year study periods, 1982-1984, 50 percent (17 of 34) of the states made progress toward reducing their nonwhite low birth weight rates. Forty-four percent (15 of 34), on average, were increasing and two experienced no change over this two-year period. *On average, nonwhite low birth weight rates in 50 percent of the states made no change or increased during the 1982-1984 period.* There were insufficient data to calculate the AAPC for 16 states.

##### 1982-1984 vs. 1979-1981

Just 38 percent (13 of 34) of the states' nonwhite low birth weight rates were decreasing at the same or better rate in 1982-1984 as compared with 1979-1981. Of the remaining 62 percent, 12 percent (4 of 34) were decreasing

Table 5.3B

## THREE MEASURES OF CHANGE IN THE LOW BIRTH WEIGHT PERCENTAGE FOR NONWHITES IN THE STATES, 1979-1984

STATE	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84	STATE	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84
Alabama	- 1.69	- 0.42	- 0.42	--	Montana	15.00	3.31	0.78	9.17
Alaska	-13.89	- 1.43	- 7.90	-12.88	Nebraska	--	- 0.72	--	--
Arizona	1.43	0.58	0.73	6.35	Nevada	-39.77	- 7.52	-20.81	3.49
Arkansas	8.93	1.92	5.12	-0.31	New Hampshire	--	--	--	--
California	27.94	5.72	- 1.44	0.58	New Jersey	--	--	--	--
Colorado	-12.20	- 2.25	- 7.25	-1.70	New Mexico	-21.43	- 4.60	- 5.49	- 4.02
Connecticut	- 6.20	- 0.59	2.64	-2.23	New York	-10.66	- 2.20	- 2.87	- 2.21
Delaware	- 0.80	0.39	5.24	--	North Carolina	- 3.31	- 0.65	- 1.24	- 1.65
Florida	- 4.10	- 0.82	- 2.07	0.01	North Dakota	- 1.37	0.60	- 3.36	13.70
Georgia	- 3.91	- 0.78	- 0.37	-1.20	Ohio	- 6.25	- 1.22	0	- 1.09
Hawaii	8.70	2.23	--	--	Oklahoma	- 6.19	0.40	- 4.67	--
Idaho	1.23	3.91	5.56	--	Oregon	--	--	--	--
Illinois	- 1.50	- 0.25	0.80	0.80	Pennsylvania	0.75	0.23	- 0.25	2.33
Indiana	- 4.92	- 1.64	- 3.33	--	Rhode Island	- 6.48	- 1.17	- 2.31	- 4.50
Iowa	- 4.04	- 0.96	--	--	South Carolina	- 0.79	- 0.13	0.43	- 1.15
Kansas	- 4.11	- 0.67	- 1.31	-1.69	South Dakota	--	--	--	--
Kentucky	1.69	0.43	- 2.14	5.43	Tennessee	- 4.00	0.83	3.58	0
Louisiana	4.03	0.82	0.81	1.24	Texas	- 3.53	- 0.69	- 1.15	0.63
Maine	--	--	--	--	Utah	--	--	--	--
Maryland	- 2.54	- 0.34	- 0.58	-0.28	Vermont	--	--	--	--
Massachusetts	2.83	1.01	- 2.39	--	Virginia	0.85	0.22	0.53	- 1.25
Michigan	3.08	0.68	- 1.12	0.07	Washington	11.27	2.41	2.21	5.48
Minnesota	- 9.86	- 1.92	2.82	-2.94	West Virginia	4.10	1.07	- 4.61	13.90
Mississippi	- 2.50	- 0.49	- 0.41	-1.65	Wisconsin	- 4.42	- 0.75	- 0.40	1.20
Missouri	- 0.81	- 0.12	- 0.81	0.51	Wyoming	-33.70	- 6.95	- 9.71	-10.99

-- Data unavailable.

in both periods, but the rate of decrease was slower in the later period. One state was increasing in both periods, but the rate of increase was slower in the later period. *Forty-seven percent (16 of 34) of the states' low birth weight rates among nonwhites were increasing at the same or faster rate in 1982-1984 than in 1979-1981.*

## **5.4 White vs. Nonwhite Progress Toward Reducing Low Birthweight Rates, 1979-1984**

Eighty percent of the states had lower white infant mortality rates in 1984 than in 1979. In contrast, only 66 percent of the states reduced their nonwhite low birth weight rates from 1979 to 1984. On average, 80 percent of the states had decreased white infant mortality rates over the five-year period 1979-1984. Fifty-eight percent of the states, on average, had lower nonwhite low birth weight rates.

In the 1979-1981 time period, 69 percent of the states, on average, reduced their white low birth weight rates and 65 percent of the states, on average, reduced their nonwhite low birth weight rates. In the 1982-1984 time period, less progress in reducing low birth weight rates was made. On average, 47 percent of the states reduced their white low birth weight rates during the 1982-1984 period, and 50 percent of the states reduced their nonwhite low birth weight rates.

Nonwhite rates of improvement were more sustained than were rates of improvement for white low birth weight. Thirty-eight percent of the states' nonwhite low birth weight rates were decreasing at the same or faster rate in 1982-1984 as compared with 1979-1981. Only 32 percent of the states were decreasing their white low birth weight rates at the same or faster rate in 1982-1984 as compared with 1979-1981.

## **5.5 Infant Mortality Rates for All Races in the States**

### **Status in 1984**

*Thirty-four percent of the states (17 of 50) had infant mortality rates that exceeded in the 1984 national rate of 10.8 infant deaths per 1,000 live births. Table 5.5A shows the states ranked from highest to lowest by their 1984 infant mortality rates for all races. The 1984 infant mortality rate in South Carolina, 14.7, was nearly twice the rate in Maine, 8.1.*

The states were ranked by average infant mortality rates for the five year period, 1979-1984 (see Table 5.5B). Eight of the 10 states with the highest 1984 infant mortality rate were among the 10 states with the highest average infant mortality rates.

### **CHANGES IN INFANT MORTALITY FOR ALL RACES IN THE STATES**

#### **Summary of Changes, 1979-1984**

Infant mortality rates for all races were lower in 1984 than in 1979 for all but two states. On average, over

Table 5.5A

## RANKING OF STATES BY 1984 INFANT MORTALITY RATES FOR ALL RACES

IMR RANK	STATE	RATE	IMR RANK	STATE	RATE
1	South Carolina	14.7	26-27	Connecticut Missouri	10.3
2	Mississippi	14.4			
3	Georgia	13.4	28-30	Colorado New Hampshire Washington	10.2
4	Alabama <sup>1</sup>	13.1			
5	North Carolina	12.5	31	South Dakota	10.0
6	Virginia	12.3	32-33	Rhode Island Wisconsin	9.9
7	Louisiana	12.1			
8	Illinois	12.0	34-35	Kansas Oregon	9.8
9	Tennessee	11.8			
10	Michigan	11.7	36	Idaho	9.7
11	Kentucky	11.6	37-38	Nebraska New Mexico	9.6
12-13	Alaska <sup>1</sup> Nevada	11.3	39	Arizona	9.5
14-15	Maryland Wyoming	11.1	40	California	9.4
16	West Virginia	11.0	41	Hawaii	9.2
17	New York	10.9	42	Utah	9.1
18-20	Arkansas Florida New Jersey	10.8	43-45	Delaware <sup>1</sup> Iowa Massachusetts	8.9
21-22	Indiana Oklahoma	10.5	46-48	Minnesota Montana Vermont	8.8
23-25	Texas Ohio Pennsylvania	10.4	49	North Dakota	8.2
			50	Maine	8.1

<sup>1</sup> 1983 data.



Table 5.5B

RANKING OF STATES BY AVERAGE INFANT MORTALITY RATES FOR ALL RACES, 1979-1984					
RANK	STATE	RATE	RANK	STATE	RATE
1-2	Mississippi South Carolina	15.8	27-26	Arkansas Texas	11.5
3	Georgia	14.1	28	Rhode Island	11.4
4	Alabama	13.8	29	Connecticut	11.1
5-6	Louisiana North Carolina	13.7	30	New Mexico	11.0
7	Illinois	13.6	31-32	Arizona Wyoming	10.9
8-9	Florida Virginia	13.1	33-34	Washington South Dakota	10.7
10	Delaware	12.8	35	Oregon	10.6
11-12	Tennessee Maryland	12.7	36	North Dakota	10.5
13	Alaska	12.6	37-38	Nebraska Kansas	10.4
14	Michigan	12.5	39-40	California Montana	10.3
15	New York	12.2	41-43	Utah Wisconsin Idaho	10.1
16-18	Kentucky Pennsylvania West Virginia	12.0	44-45	Colorado Iowa	10.0
19	Missouri	11.9	46	New Hampshire	9.9
20-21	Ohio Oklahoma	11.8	47-48	Massachusetts Minnesota	9.8
22	Nevada	11.7	49	Maine	9.2
23-25	Hawaii Indiana New Jersey	11.6	50	Vermont	9.0

the five-year period, 1979-1984, 94 percent of the states, decreased their infant mortality rates for all races. Table 5.5C summarizes the changes in infant mortality rates for all races from 1979 to 1984.

Slightly more states made progress in the earlier as compared with the later time period (88 percent vs. 80 percent). Half of the states had sustained improvement in their infant mortality rates for all races from the earlier to the later time period.

#### **Percent Change, 1979-1984**

All but two states had lower infant mortality rates for all races in 1984 than in 1979.

#### **Annual Average Percent Change, 1979-1984**

Ninety-four percent (47 of 50) of states, on average, decreased their infant mortality rates over the five-year period. Six percent (3 of 50) of the states had increases in their infant mortality rates.

#### **Trend Analysis**

##### **1979-1981**

Eighty-eight percent (43 of 49) of the states, on average, decreased their infant mortality rates between 1979 and 1981; 12 percent (6 of 49) increased, and there was insufficient information to calculate an AAPC for one state.

##### **1982-1984**

Eighty percent (37 of 46) of the states, on average, experienced improvements in their infant mortality rates in the second two-year period, 1982-1984. Twenty percent (9 of 46) of the states, on average, had increases in their infant mortality rates. There were insufficient data to calculate AAPCs for four states.

##### **1982-1984 vs. 1979-1981**

Half (23 of 46) of the states' infant mortality rates were decreasing at the same or faster rate in the later period than in 1979-1981. Of the remaining half of the states that did not make progress, 33 percent (15 of 46) of the states' infant mortality rates were improving on average over both periods, but at a slower rate in 1982-1984. Seventeen percent (8 of 46) were increasing at the same or faster rate in 1982-1984 than in the 1979 to 1981 period. There were insufficient data to make comparisons between the two time periods for four states.

Table 5.5C

## THREE MEASURES OF CHANGE IN THE INFANT MORTALITY RATES FOR ALL RACES, 1979-1984

STATE	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84	STATE	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84
Alabama <sup>1</sup>	- 8.39	- 1.77	- 4.49	--	Montana	-17.76	- 3.31	1.09	- 6.56
Alaska	-29.37	- 5.87	- 9.83	1.84	Nebraska	-17.24	- 3.56	- 7.39	- 2.02
Arizona	-26.92	- 5.74	- 5.53	1.09	Nevada	-16.30	- 3.13	- 4.10	2.78
Arkansas	-18.18	- 3.70	- 5.84	3.44	New Hampshire	- 0.97	1.06	- 2.94	- 1.10
California	-16.81	- 3.58	- 4.94	-2.06	New Jersey	-15.63	- 3.00	- 8.77	- 3.92
Colorado	- 2.86	- 0.40	- 2.89	5.95	New Mexico	-32.39	- 6.56	-17.63	- 8.14
Connecticut	-14.88	- 2.92	- 0.08	-2.63	New York	-19.26	- 4.12	- 4.50	- 6.61
Delaware <sup>1</sup>	-45.73	-13.69	-12.66	--	North Carolina	-17.76	- 3.75	- 6.80	- 4.48
Florida	-27.57	- 6.18	- 5.17	-8.08	North Dakota	-31.09	- 7.01	- 2.47	-11.95
Georgia	-10.67	- 2.08	- 0.31	0.08	Ohio	-18.75	- 4.03	- 1.95	- 4.88
Hawaii	- 1.96	- 0.06	--	--	Oklahoma	-16.00	- 3.24	- 2.74	- 7.49
Idaho	- 3.96	- 0.29	- 3.84	-1.25	Oregon	- 9.26	- 1.58	0.65	- 3.68
Illinois	-20.53	- 4.45	- 4.05	-6.00	Pennsylvania	-22.39	- 4.88	- 5.64	- 4.88
Indiana	-17.97	- 3.83	- 4.36	-3.50	Rhode Island	-29.79	- 5.76	- 7.68	0.54
Iowa	-16.04	- 2.93	- 2.39	-5.94	South Carolina	-13.53	- 2.77	- 2.19	- 4.42
Kansas	-10.91	- 2.10	0.36	-1.98	South Dakota	-11.50	- 2.25	- 0.39	- 0.76
Kentucky	0.87	0.33	3.31	-1.67	Tennessee	-12.59	- 2.55	- 3.36	- 0.63
Louisiana	-21.94	- 4.70	4.93	-2.86	Texas	-19.38	- 4.17	- 5.17	- 1.80
Maine	-16.49	- 2.99	4.93	-3.45	Utah	-14.95	- 4.31	- 4.29	--
Maryland	-23.97	- 5.30	- 6.32	-3.81	Vermont	8.64	3.89	3.52	- 2.65
Massachusetts	-17.59	- 3.64	- 5.71	-6.00	Virginia	-16.89	- 3.54	- 7.73	- 2.30
Michigan	-12.03	- 2.46	- 0.32	-1.66	Washington	-10.53	- 1.89	- 3.75	- 1.92
Minnesota	-17.76	- 3.67	- 2.27	-2.97	West Virginia	-19.71	- 3.86	- 1.43	- 1.73
Mississippi	3.18	- 3.88	- 6.41	-7.29	Wisconsin	- 8.33	- 1.62	- 2.31	- 2.63
Missouri	-24.82	- 5.43	- 3.48	-6.14	Wyoming	-15.91	- 2.24	- 5.93	6.13

<sup>1</sup> The 1984 data for Alabama and Delaware were unavailable at the time of the survey; figures shown are calculated through 1983.

-- Data unavailable.

## 5.6 Infant Mortality Rates Among Whites in the States

### Status in 1984

The 1984 white infant mortality rate for the nation was 9.4 infant deaths per 1,000 live births. *Forty-two percent (20 of 48) of the states had 1984 white infant mortality rates higher than the national average.* The highest white infant mortality rate in 1984 was 11.0, and four states were co-ranked at this high level: Kentucky, Nevada, South Carolina, and Wyoming. Table 5.6A lists the states ranked from highest to lowest 1984 infant mortality rates for whites. Delaware had the lowest white infant mortality rate at 6.2 infant deaths per 1,000. Two states, Vermont and New Hampshire, did not report infant mortality rates for whites.

### CHANGES IN WHITE INFANT MORTALITY RATES IN THE STATES

#### Summary of Changes, 1979-1984

White infant mortality rates were lower in 98 percent of the states in 1984 than in 1979. On average, 94 percent of the states' white infant mortality rates decreased over the five-period 1979-1984. Table 5.6B summarizes the changes which occurred in white infant mortality rates from 1979 to 1984 in the states.

Eighty-seven percent of the states, on average, decreased their white infant mortality rates from 1979 to 1981. This dropped to 77 percent between 1982 and 1984.

Forty-three percent of the states were experiencing decreases in white infant mortality rates of the same or greater magnitude in 1982-1984 as compared with 1979-1981. The remaining 57 percent of the states were not making progress.

#### Percent Change, 1979-1984

Ninety-eight percent (47 of 48) of the states had lower white infant mortality rates in 1984 than in 1979. Only one state, Kentucky, had a higher white infant mortality rate in 1984 than in 1979. As mentioned above, data for whites were not available for two states.

#### Annual Average Percent Change Analysis, 1979-1984

On average, over the five-year period, 1979-1984, 94 percent (45 of 48) of the states had decreases in their white infant mortality rates. Three states' white infant mortality rates had increased, on average and two states had no data available to judge.

Table 5.6A

RANKING OF STATES BY 1984 INFANT MORTALITY RATES FOR WHITES					
RANK	STATE	RATE	RANK	STATE	RATE
1-4	Kentucky Nevada South Carolina Wyoming	11.1	27-28	Arkansas Utah	9.1
5	West Virginia	10.8	29-35	California Maryland Minnesota Missouri New Jersey New York Wisconsin	9.0
6	Oklahoma	10.5			
7	Alabama <sup>1</sup>	10.3			
8-9	Georgia Washington	10.1	36-38	Kansas Louisiana Montana	8.9
10-11	Colorado North Carolina	10.0	39-41	Indiana Pennsylvania South Dakota	8.8
12-14	Mississippi Oregon Virginia	9.9	42-44	Arizona Massachusetts Maine <sup>1</sup>	8.7
15	Tennessee	9.8			
16	Idaho	9.7	45	Florida	8.5
17-18	Iowa New Mexico	9.6	46	Hawaii	8.0
19-20	Michigan Rhode Island	9.5	47	North Dakota	7.9
21-22	Illinois Texas	9.4	48	Delaware <sup>1</sup>	6.2
23-26	Alaska Connecticut Nebraska Ohio	9.2	--	New Hampshire	--
			--	Vermont	--

-- Data unavailable, rankings could not be made.

<sup>1</sup> Alabama, Maine, and Delaware figures are based on 1983 data.

Table 5.6B

THREE MEASURES OF CHANGE IN INFANT MORTALITY RATES FOR WHITES IN THE STATES, 1979-1984									
STATE	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84	STATE	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84
Alabama	- 8.85	- 2.11	- 4.71	0	Montana	-16.04	- 2.89	- 1.97	- 5.26
Alaska	-31.85	- 5.88	- 7.74	-1.40	Nebraska	-17.12	- 3.42	- 8.70	- 2.02
Arizona	-30.40	- 6.83	- 7.47	-1.67	Nevada	- 8.26	- 1.28	- 2.51	5.90
Arkansas	-16.51	- 2.97	- 6.61	.59	New Hampshire	--	--	--	--
California	-46.75	-10.54	- 3.57	-3.67	New Jersey	-13.46	- 2.61	- 7.28	- 3.18
Colorado	-3.85	-0.55	- 1.82	4.95	New Mexico	-26.72	- 5.04	-15.20	- 8.04
Connecticut	-14.81	- 2.99	- 1.76	-2.37	New York	-23.08	- 5.06	- 6.14	- 6.50
Delaware <sup>1</sup>	-50.40	-14.69	-17.19	--	North Carolina	-10.71	- 2.02	- 1.77	- 4.22
Florida	-30.89	- 6.99	- 7.96	-8.06	North Dakota	-28.18	- 6.16	- 0.72	-10.98
Georgia	-13.68	- 2.72	- 4.34	3.13	Ohio	-20.69	- 4.53	- 3.51	- 5.49
Hawaii	-11.11	- 4.51	2.11	26.78	Oklahoma	- 7.08	- 1.23	0.45	- 7.03
Idaho	- 3.96	-0.46	-3.57	-1.88	Oregon	- 8.33	- 1.40	0.65	- 2.28
Illinois	-21.67	- 4.72	- 3.39	-6.18	Pennsylvania	-27.27	- 6.10	- 6.29	- 7.06
Indiana	-18.64	- 3.90	- 4.56	-3.31	Rhode Island	-22.76	- 4.22	- 3.70	1.56
Iowa	-14.56	- 2.58	- 1.57	-5.40	South Carolina	- 9.76	- 1.64	1.31	- 3.80
Kansas	-12.75	- 2.43	- 0.45	-3.12	South Dakota	-4.35	- 0.43	3.43	3.66
Kentucky	2.80	0.72	5.24	-1.75	Tennessee	-14.78	- 2.87	- 5.90	- 0.77
Louisiana	-25.83	- 5.63	- 7.68	-1.97	Texas	-12.96	- 2.66	- 3.76	0.60
Maine <sup>1</sup>	-10.31	- 2.02	4.93	0	Utah <sup>1</sup>	-15.74	- 2.67	- 5.68	- 8.30
Maryland	-21.05	- 4.42	- 3.51	0.01	Vermont	--	--	--	--
Massachusetts	-16.35	- 3.29	- 5.94	-5.01	Virginia	-20.80	- 4.40	- 7.88	- 3.58
Michigan	-16.67	- 3.43	- 2.04	-1.04	Washington	-12.93	- 2.46	- 5.12	- 1.51
Minnesota	-14.29	- 2.86	- 2.26	-1.39	West Virginia	-19.40	- 3.81	- 2.20	- 2.57
Mississippi	-16.91	- 3.54	- 6.51	-2.34	Wisconsin	-12.62	- 2.51	- 2.91	2.30
Missouri	-25.62	- 5.50	- 1.36	-5.54	Wyoming	-15.91	- 1.73	- 3.76	6.01

<sup>1</sup> The 1984 data for Alabama, Delaware, Maine, and Utah were not available; the figures shown were calculated using the 1983 data.

-- Insufficient data available to perform calculations.

## Trend Analysis

### 1979-1981

The analysis of change in the first two-year period studied, 1979-1981, found that, on average, 87 percent of the states (40 of 46) had decreases in their white infant mortality rates. Thirteen percent (6 of 46) of the states white infant mortality rates had increased, and there were insufficient data for four states.

### 1982-1984

In the later two-year period, 1982-1984, fewer states, on average, were reducing their white infant mortality rates as compared to 1979-1981. Seventy-seven percent (33 of 43) of the states, on average, were decreasing their white infant mortality rates; 21 percent were increasing; and there were insufficient data for seven states.

### 1982-1984 vs. 1979-1981

When the two time periods were compared, it was found that 43 percent (20 of 47) of the states' white infant mortality rates were improving at the same or faster rate in later period as in the earlier period. The remaining 57 percent of the states were not making progress. Thirty-two percent (15 of 47) of the states' white infant mortality rates were decreasing in both periods, but the rate of decrease in the later period was slower than in the earlier period. One state's white infant mortality rates was increasing in both time periods, but not as rapidly in 1982-1984 as in 1979-1981. *Twenty-three percent of the states experienced increases of their white infant mortality rates at the same or faster rate in 1982-1984 as compared with 1979-1981.*

## 5.7 Infant Mortality Among Nonwhites in the States

### Status in 1984

In 1984 the infant mortality rate among nonwhites in this nation was 16.1 per 1,000 live births. *Half of the states (23 of 46) had nonwhite infant mortality rates that exceeded the national rate.* Data for the other four states were not available for nonwhites in 1984. The states are ranked from highest to lowest by their 1984 nonwhite infant mortality rates on Table 5.7A. The highest nonwhite infant mortality rate, 20.7 per 1,000, was in Michigan; the lowest, 7.0 per 1,000, was in Utah. More than half of the states had nonwhite infant mortality rates greater than twice Utah's rate. The states with the highest infant mortality rates among nonwhites were concentrated in the southeast and, to a lesser extent, in the industrial mid-west. The states with the lowest nonwhite infant mortality rates were generally west of the Mississippi River.

Table 5.7A

## RANKING OF STATES BY 1984 INFANT MORTALITY RATES FOR NONWHITES

RANK	STATE	RATE	RANK	STATE	RATE
1	Michigan	20.7	26	West Virginia	15.2
2	Illinois	20.4	27	New York	14.3
3	South Carolina	20.2	28	Arizona	14.0
4	Pennsylvania	20.0	29	Rhode Island	13.7
5	Georgia	19.5	30	Colorado	12.2
6-7	Mississippi Virginia	19.2	31	Nevada	12.1
8	Tennessee	18.5	32	Texas	11.8
9-10	North Carolina Wisconsin	18.4	33	Oklahoma <sup>1</sup>	11.6
11	Alabama <sup>1</sup>	18.3	34-35	North Dakota Washington	10.9
12	Iowa	17.8	36	California	10.8
13	Florida	17.7	37	Wyoming	10.5
14	Kansas	17.6	38	Nebraska <sup>1</sup>	10.3
15-16	Connecticut Kentucky	17.1	39	Idaho	10.1
17	Missouri	17.0	40	Indiana	10.0
18	Louisiana	16.9	41	New Mexico	9.9
19	Ohio	16.8	42	Hawaii <sup>1</sup>	9.0
20-21	Delaware <sup>1</sup> New Jersey	16.7	43	Minnesota	8.6
22	Alaska	16.5	44	Oregon	8.4
23	Massachusetts <sup>1</sup>	16.4	45	Montana	8.2
24	Arkansas	16.0	46	Utah <sup>1</sup>	7.0
25	Maryland	15.4	--	New Hampshire	--
			--	Maine	--
			--	South Dakota	--
			--	Vermont	--

<sup>1</sup> Alabama, Delaware, Massachusetts, Oklahoma, Nebraska, Hawaii, and Utah figures based on 1983 data.

-- Data unavailable, so rankings could not be made.



## CHANGES IN NONWHITE INFANT MORTALITY IN THE STATES

### Summary of Changes, 1979-1984

Eighty-nine percent of the states had lower nonwhite infant mortality rates in 1984 than in 1979. Over the five-year period, 1979-1984, 84 percent of the states, on average, decreased their nonwhite infant mortality rates. Table 5.7B summarizes the changes in nonwhite infant mortality rates which occurred from 1979 to 1984 in the states.

Progress toward reducing nonwhite infant mortality rates was fairly evenly split over the two-year periods. Between 1979-1981, 74 percent of the states' nonwhite infant mortality rates decreased on average. Between 1982-1984, 70 percent saw decreased in their nonwhite infant mortality rates, on average.

### Percent Change, 1979-1984

Eighty-nine percent (40 of 45) of the states had lower rates of infant mortality for nonwhites in 1984 than in 1979. *Eleven percent (5 of 45) of states' nonwhite infant mortality rates were higher in 1984 than in 1979.* There were insufficient data for five states to calculate percent change for the nonwhite population.

### Annual Average Percent Change, 1979-1984

Eighty-four percent (38 of 45) of the states, on average, decreased their nonwhite infant mortality rates over the five-year period studied, 1979-1984. Sixteen percent (7 of 45) increased over this period and there were insufficient data to calculate the five-year AAPC for five states.

### Trend Analysis

#### 1979-1981

Seventy-four percent (32 of 43) of the states' nonwhite infant mortality rates decreased, on average, between 1979 and 1981. One-quarter (11 of 43) of the states' nonwhite infant mortality rates increased, on average, between 1979 and 1981, and there were insufficient data to calculate this two-year AAPC for seven states.

#### 1982-1984

On average, 70 percent of the states (28 of 40) decreased their nonwhite infant mortality rates. One state experienced no changes over this period, and the remaining 28 percent (11 of 40), on average, increased their nonwhite infant mortality rates. There were 10 states for which data were not available to calculate AAPC values.

Table 5.7B

THREE MEASURES OF CHANGE IN INFANT MORTALITY RATES FOR NONWHITES IN THE STATES, 1979-1984									
STATE	PERCENT CHANGE 79-84	AAPC 79-84	AAPC 79-81	AAPC 82-84	STATE	PERCENT CHANGE 75-84	AAPC 79-84	AAPC 79-81	AAPC 82-84
Alabama	- 6.15	- 0.86	- 3.07	--	Montana	-33.33	- 3.89	16.72	- 9.77
Alaska	-26.01	- 5.18	-11.28	5.90	Nebraska	-38.32	-10.83	--	--
Arizona	-35.78	- 2.37	- 8.73	22.47	Nevada	-46.22	-11.58	-12.61	-11.07
Arkansas	-11.11	- 2.12	- 2.40	-0.55	New Hampshire	--	--	--	--
California	116.00	25.11	- 6.10	2.97	New Jersey	-19.32	- 3.64	-11.08	- 5.99
Colorado	4.27	3.19	- 8.78	16.44	New Mexico	-52.63	-12.51	-27.36	- 7.62
Connecticut	-14.93	- 2.33	4.96	-3.59	New York	-24.34	- 5.36	- 2.91	- 7.41
Delaware	-39.93	-11.73	- 9.77	--	North Carolina	-21.86	- 4.51	-11.20	- 3.62
Florida	-19.91	- 4.30	- 2.26	-6.83	North Dakota	-50.90	-12.86	-14.55	-17.17
Georgia	- 5.34	- 0.91	3.35	-0.17	Ohio	-15.15	- 2.91	- 2.79	- 4.54
Hawaii	-16.67	- 4.24	--	--	Oklahoma	-36.96	-10.82	-14.34	--
Idaho	- 8.18	58.08	8.40	157.70	Oregon	-27.59	- 5.70	-1.10	-16.88
Illinois	-18.73	- 3.99	- 5.26	-5.61	Pennsylvania	- 7.	- 1.33	- 5.14	2.07
Indiana	-16.04	- 3.12	- 3.36	-4.94	Rhode Island	-57.32	- 8.70	-20.96	- 5.31
Iowa	-45.65	- 8.56	- 9.58	18.19	South Carolina	-14.41	- 3.01	- 4.33	- 4.57
Kansas	- 5.88	- 0.36	2.13	5.17	South Dakota	--	--	--	--
Kentucky	- 9.52	- 1.34	- 6.82	0.03	Tennessee	- 8.87	- 1.50	1.62	- 0.09
Louisiana	-18.36	- 3.83	5.30	-4.34	Texas	-24.36	- 5.38	- 5.87	- 4.32
Maine	--	--	--	--	Utah	--	--	--	--
Maryland	-27.01	- 5.91	- 9.41	-7.96	Vermont	--	--	--	--
Massachusetts	2.50	0.83	- 1.23	-4.63	Virginia	- 8.57	- 1.65	- 6.34	- 0.22
Michigan	- 6.33	- 1.19	4.21	-5.74	Washington	5.83	1.86	3.35	- 3.92
Minnesota	-38.57	- 9.14	- 4.37	-12.23	West Virginia	-30.91	- 3.69	0.22	11.66
Mississippi	-18.64	- 3.94	- 6.43	-4.15	Wisconsin	6.98	1.40	0.59	0.32
Missouri	-22.73	- 4.72	-10.29	-6.87	Wyoming	-16.67	7.43	- 2.49	7.73

-- Data unavailable; calculations could not be made.

## 1982-1984 vs. 1979-1981

When the two time periods were compared, it was found that 43 percent (17 of 40) of the states' nonwhite-infant mortality rates were decreasing at the same or faster rate between 1982 and 1984 as they had been between 1979 and 1981. The remaining 57 percent of the states did not make progress toward reducing their nonwhite infant mortality rates. Twenty-eight percent of the states (11 of 40) decreased their nonwhite infant mortality rates during both time periods, but rates were slower in the later time period, 1982-1984. One state's nonwhite-infant mortality rate was increasing more slowly in the later period. Twenty-eight percent (11 of 40) of the states' nonwhite infant mortality rates were increasing at the same or faster rate in 1982-1984 as compared with 1979-1981. There were insufficient data for the remaining 10 states to make this comparison.

### 5.8 White vs. Nonwhite Progress Toward Reducing Infant Mortality Rates, 1979-1984

Percent change analysis showed that 98 percent of the states had lower white infant mortality rates in 1984 as in 1979. Nonwhite infant mortality rates were lower in 89 percent of the states. On average, white rates were lower over the five-year period in 94 percent of the states as compared with 84 percent of the states with improved nonwhite rates.

Progress was slightly stronger in the first of the two-year periods examined, 1979-1981, for both groups. Eighty-seven percent of the states' white rates decreased between 1979 and 1981, dropping to 77 percent between 1982 and 1984.

Nonwhite infant mortality rates on average, decreased in 74 percent of the states between 1979 and 1981 and 70 percent of the states between 1982 and 1984.

The trend analysis showed that 43 percent of the states were making the same or better rates of progress in reducing white infant mortality rates in 1982-1984 as in 1979-1981. Forty-three percent of the states were also making the same or better rates of progress in reducing their nonwhite infant mortality rates in 1982-1984 as in 1979-1981.

### 5.9 The Gap Between the Races, 1984 vs. 1979

Low birth weight and infant mortality rates for the states were gathered for whites, nonwhites and all races combined. Ratios to express the differences between the racial groups were calculated. (See Section 4.9 for a full description.) These ratios demonstrated that great differences do exist between nonwhite and white low birth weight and infant mortality rates. Nonwhite suffered higher rates of both low birth weight and infant mortality than did whites.

## Gaps in Low Birth Weight

*In 1984, low birth weight rates were higher for nonwhites than for whites in 96 percent (43 of 45) of the states. Data were unavailable for five states, so ratios to express the racial differences in low birth weight rates in those states were not calculated. These states were: Maine, New Hampshire, New Jersey, South Dakota, and Vermont. In 42 percent of the states (19 of 45), nonwhite rates for low birth weight were at least double the white rates. The Nonwhite:White (NW:W) ratios for low birth weight in the states in 1979 and in 1984 are shown on Table 5.9A. Only two states had better nonwhite than white low birth weight rates in 1984. They were New Mexico and Wyoming. These states both had a NW:W ratio for low birth weight of 0.86.*

The 10 states that had the greatest differences in low birth weight rates between nonwhites and whites were: Michigan, 2.48; Illinois, 2.47; Pennsylvania, 2.39; Wisconsin, 2.35; Louisiana, 2.26; Missouri, 2.22; Delaware, 2.21; Ohio, 2.18; Connecticut, 2.16; and Maryland, 2.13. The low birth weight ratios in 9 of these 10 states were worse in 1984 than they had been in 1979. Only Ohio's NW:W ratio for low birth weight was better in 1984 than it had been in 1979.

*The gap in low birth weight rates between the races grew wider for 63 percent (7 of 43) of the states from 1979 to 1984. In 37 percent of the states (16 of 43), the gap in low birth weight rates between the races narrowed. There were insufficient data to calculate the change in the gap for the seven of the states. A ranking of the states' low birth weights by the change in this NW:W ratio of low birth weights from 1979 to 1984 showed that the 10 states where the racial gap was widened to the greatest extent were: California, up 30.40 percent; Washington, up 21.16 percent; Montana, up 10.96 percent; Massachusetts, up 10.75 percent; Michigan, up 10.71 percent; Louisiana, up 9.5 percent; Oklahoma, up 8.02 percent; North Dakota, up 7.40 percent; Delaware, up 6.25 percent; and Pennsylvania, up 6.15 percent.*

The 10 states where progress toward narrowing the gap between nonwhite and white low birth weight rates in the states was most dramatic were: Nevada, where the ratio between nonwhite and white low birth weight dropped by 46.07 percent from 1979 to 1984; Wyoming, down 29.96 percent; New Mexico, down 17.25 percent; Mississippi, down 8.89 percent; Colorado, down 6.18 percent; Minnesota, down 6.02 percent; Hawaii, down 5.93 percent; Alabama, down 4.93 percent; Iowa, down 4.04 percent; and Nebraska, down by 2.96 percent.

## Gaps in Infant Mortality

*In 1984, the infant mortality rates for nonwhites were greater than for whites in 87 percent (40 of 46) of the states. Almost 60 percent of the states (27 of 46) studied had nonwhite infant mortality rates that were more than 1.5 times the white rates. In 13 percent (6 of 46) of the states, the nonwhite infant mortality rates were more than double the white rates. In Delaware, the ratio was 2.69; nonwhite rates were more than 2.5 times the white rates.*

The states are listed on Table 5.9B ranked by their 1984 NW:W ratio for infant mortality. The 10 states with the greatest racial inequality in infant mortality rates in 1984 were: Delaware, with a NW:W ratio of 2.69; Pennsylvania, 2.27; Michigan, 2.18; Illinois, 2.17; Florida, 2.08; Wisconsin, 2.04; Kansas, 1.98; Mississippi and Virginia, each 1.94; and Georgia and Massachusetts, each 1.93. Nine of those 10 states in the eastern half of the United

Table 5.9A

RACIAL DIFFERENCES LOW BIRTH WEIGHT IN THE STATES:  
A Comparison of the Nonwhite:White Ratios for 1979 AND 1984

STATE	% 1980 BLACK POPULA- TION	NW:W RATIO 1979	NW:W RATIO 1984	PERCENT CHANGE 1979-1984	STATE	% 1980 BLACK POPULA- TION	NW:W RATIO 1979	NW:W RATIO 1984	PERCENT CHANGE 1979-1984
Alabama <sup>1</sup>	25.6	2.03	1.93	-4.93	Montana	0.3	1.09	1.21	10.96
Alaska <sup>2</sup>	3.5	1.41	1.40	-0.19	Nebraska <sup>1</sup>	3.1	1.69	1.64	- 2.96
Arizona	2.8	1.17	1.20	3.15	Nevada	6.4	2.93	1.58	-46.07
Arkansas	16.4	1.76	2.03	3.48	New Hampshire <sup>4</sup>	0.4	--	--	--
California	7.7	1.28	1.67	30.40	New Jersey <sup>4</sup>	12.6	--	--	--
Colorado	3.5	1.58	1.48	-6.18	New Mexico	1.8	1.04	0.86	-17.35
Connecticut	7.0	2.05	2.16	5.52	New York	13.7	1.94	1.91	- 1.25
Delaware <sup>1</sup>	16.2	2.08	2.21	6.25	North Carolina <sup>2</sup>	22.4	1.92	1.92	- 0.14
Florida	13.8	2.00	1.95	-2.50	North Dakota	0.5	1.49	1.60	7.40
Georgia	26.8	2.00	2.08	4.24	Ohio	10.0	2.25	2.18	-2.84
Hawaii <sup>1</sup>	1.8	1.35	1.27	- 5.93	Oklahoma <sup>1</sup>	6.8	1.62	1.49	8.02
Idaho	0.3	1.53	1.58	3.18	Oregon	1.4	--	1.41	--
Illinois	14.7	2.38	2.47	4.07	Pennsylvania	8.8	2.25	2.39	6.15
Indiana <sup>3</sup>	7.6	2.10	2.04	2.86	Rhode Island	3.0	1.77	1.80	1.87
Iowa	1.4	2.06	1.99	- 4.04	South Carolina	30.4	2.05	2.00	- 2.36
Kansas	5.3	2.00	2.05	2.73	South Dakota <sup>4</sup>	0.3	--	--	--
Kentucky	7.1	1.82	1.88	3.28	Tennessee	15.8	1.92	2.03	5.62
Louisiana	29.4	2.97	2.26	9.51	Texas	12.0	1.44	1.41	1.87
Maine <sup>4</sup>	0.3	--	--	--	Utah	0.6	--	1.27	--
Maryland	22.8	2.03	2.13	4.68	Vermont <sup>4</sup>	0.2	--	--	--
Massachusetts <sup>1</sup>	3.9	1.86	2.06	10.75	Virginia	18.9	1.92	2.03	6.07
Michigan	12.9	2.24	2.48	10.71	Washington	2.6	1.45	1.76	21.16
Minnesota	1.3	1.45	1.36	- 6.02	West Virginia	3.3	1.88	1.92	2.52
Mississippi	35.2	2.11	1.92	-8.89	Wisconsin	3.9	2.26	2.35	3.89
Missouri	10.5	2.20	2.22	0.99	Wyoming	0.6	1.23	0.86	-29.96

<sup>1</sup> Alabama, Delaware, Hawaii, Nebraska, and Oklahoma figures are based on 1983 data.

<sup>2</sup> The ratios for Alaska and North Carolina differed at the third decimal place.

<sup>3</sup> The Indiana figure was calculated using 1982 data.

<sup>4</sup> Data for nonwhites were not available for Maine, New Hampshire, South Dakota, and Vermont.

-- Data unavailable; ratios could not be calculated.

Table 5.9B

## RANKING OF STATES BY 1984 NONWHITE: WHITE RATIOS FOR INFANT MORTALITY

RANK	STATE	1984 IMR NW:W	1984 LBW NW:W	RANK	STATE	1984 IMR NW:W	1984 LBW NW:W
1	Delaware <sup>1</sup>	2.69	2.21	28	Rhode Island	1.44	1.80
2	Pennsylvania	2.27	2.39	29	West Virginia	1.41	1.92
3	Michigan	2.18	2.48	30	North Dakota	1.38	1.60
4	Illinois	2.17	2.47	31	Texas	1.26	1.41
5	Florida	2.08	1.95	32	Colorado	1.22	1.43
6	Wisconsin	2.04	2.35	33	California	1.20	1.67
7	Kansas	1.98	2.05	34	Iowa	1.14	1.98
8-9	Mississippi	1.94	1.92	35	Nebraska <sup>1</sup>	1.12	1.64
	Virginia	1.94	2.03				
10-11	Georgia	1.93	2.08	36-37	Nevada	1.09	1.58
	Massachusetts	1.93	2.06		Oklahoma <sup>1</sup>	1.09	1.49
12	Louisiana	1.90	2.26	38	Washington	1.08	1.76
13-14	Missouri	1.89	2.22	39	Idaho	1.04	1.58
	Tennessee	1.89	2.03				
15-16	Connecticut	1.86	2.16	40	New Mexico	1.03	0.86
	New Jersey	1.86	--				
17	Indiana	1.85	2.04	41	Minnesota	0.96	1.36
18	Ohio	1.83	2.18	42	Wyoming	0.95	0.86
19-20	North Carolina <sup>2</sup>	1.82	1.92	43-44	Hawaii <sup>1</sup>	0.92	1.27
	South Carolina	1.82	2.00		Montana	0.92	1.21
21	Alaska	1.79	1.41	45	Oregon	0.85	1.41
22	Alabama <sup>1</sup>	1.78	1.93	46	Utah	0.80	1.27
23	Arkansas	1.76	2.03	--	Maine	--	--
24	Maryland	1.71	2.13	--	New Hampshire	--	--
25	Arizona	1.61	1.20	--	South Dakota	--	--
26	New York	1.59	1.91	--	Vermont	--	--
27	Kentucky	1.55	1.88				

<sup>1</sup> Both ratios are based on 1983 data.

<sup>2</sup> LBW ratio based on 1983 data.

<sup>3</sup> Data for nonwhites were unavailable for Maine, New Hampshire, South Dakota, and Vermont. These states have very small nonwhite populations.

-- Insufficient data available to calculate a NW:W ratio.

States. Five of these 10 states, Michigan, Illinois, Mississippi, Virginia, and Georgia, were also among the 10 states with the highest 1984 infant mortality rates. The NW:W infant mortality ratios for 9 of these 10 states were actually larger (worse) in 1984 than they had been in 1979. Only Mississippi had a slightly lower ratio, 1.94 in 1984, than its 1979 ratio, of 1.98.

Only 6 of the 46 states for which ratios could be calculated had better infant mortality rates for nonwhites than for whites. These states were Minnesota, 0.96; Wyoming, 0.95; Hawaii and Montana, each 0.92; Oregon, 0.85; and Utah, 0.80.

The NW:W ratios for infant mortality in the states in 1979 and 1984 were compared (see Table 5.9C). *The nonwhite: white gap in infant mortality widened in 47 percent (21 of 45) of the states from 1979 to 1984.* It narrowed in 53 percent of the states. There were insufficient data to calculate the gap for five other states.

When ranked according to the change in the NW:W ratios for infant mortality rate between 1979 and 1984, the 10 states that experienced the greatest increase in this ratio, a widening gap between nonwhite and white infant mortality were: California, with a 305.60 percent increase; Pennsylvania, up 27.31 percent; Massachusetts, up 25.32 percent; Wisconsin, up 22.43 percent; Washington, up 21.54 percent; Delaware, up 21.17 percent; Florida, up 15.90 percent; Virginia, up 15.44 percent; Michigan, up 12.40 percent; and Louisiana, up 10.08 percent.

The states that experienced the greatest reductions in the NW:W ratios from 1979 to 1984, an improvement in the racial gap for infant mortality were: Rhode Island, down 44.74 percent; Nevada, down 41.38 percent; Iowa, down 36.39 percent; New Mexico, down 35.36 percent; Oklahoma, down 33.13 percent; North Dakota, down 31.62 percent; Nebraska, down 25.32 percent; Minnesota, down 23.33 percent; Hawaii, down 23.30 percent; and Oregon, down by 21.00 percent. There were insufficient data to calculate the percent change in ratios for five states.

## 5.10 Poverty Rates and Poor Low Birth Weight and Infant Mortality Rates

The 50 states were ranked according to their poverty rates, based on 1980 Census data (see Table 5.10A). Fifty-two percent (26 of 50) of the states had poverty rates greater than the U.S. average, which was 11.7 at the time of the 1980 Census. The poverty rate for Mississippi was 23.9 percent, which was more than twice the national average and more than triple the poverty rate of Wyoming, the least poor state where only 7.9 percent of the population lived below the poverty line. Map 5.10A displays the states shaded by poverty rates. The first quartile, most deeply shaded, represents the fourth of the states with the highest 1980 poverty rates. The fourth of the states without shading had the lowest poverty rates in 1980.

By comparing the maps of the states that present poverty (Map 5.10A), black population (Map 5.10B), low birth weight (Map 5.10C), and infant mortality (Map 5.10D) the relationships between race and poverty; and among poverty, low birth weight, and infant mortality become visible. Table 5.10B, 5.1A, and 5.5A, respectively, show the states ranked by percent black population, low birth weight, and infant mortality.

States with high poverty rates are concentrated in the southeastern part of the United States. These states have many black residents, many of whom are poor. The states with the highest infant mortality rates are also concentrated in the southeast, and to a lesser extent in the industrial mid-west.

Table 5.9C

**RACIAL DIFFERENCES IN INFANT MORTALITY IN THE STATES:  
A Comparison of the Nonwhite: White Ratios for 1979 and 1984**

STATE	% 1980 BLACK POPULA- TION	NW:W RATIO 1979	NW:W RATIO 1984	PERCENT CHANGE 1979-1984	STATE	% 1980 BLACK POPULA- TION	NW:W RATIO 1979	NW:W RATIO 1984	PERCENT CHANGE 1979-1984
Alabama <sup>1</sup>	25.6	1.73	1.78	2.89	Montana	0.3	1.16	0.92	-22.60
Alaska	3.5	1.65	1.79	8.57	Nebraska <sup>1</sup>	3.1	1.50	1.12	-25.32
Arizona	2.8	1.74	1.61	-7.73	Nevada	6.4	1.86	1.09	-41.38
Arkansas	16.4	1.65	1.76	6.47	New Hampshire <sup>3</sup>	0.4	--	--	--
California	7.7	0.30	1.20	305.60	New Jersey	12.6	1.99	1.86	- 6.77
Colorado	3.5	1.13	1.22	8.44	New Mexico	1.8	1.60	1.03	-35.36
Connecticut <sup>2</sup>	7.0	1.86	1.86	-0.13	New York	13.7	1.52	1.59	- 1.64
Delaware <sup>1</sup>	16.2	2.22	2.69	21.17	North Carolina	22.4	2.08	1.82	-12.52
Florida	13.8	1.80	2.08	15.90	North Dakota	0.5	2.02	1.38	-31.62
Georgia	26.8	1.76	1.93	9.66	Ohio	10.0	1.71	1.83	6.98
Hawaii <sup>1</sup>	1.8	1.20	0.92	-23.30	Oklahoma <sup>1</sup>	6.8	1.63	1.09	-33.13
Idaho	0.3	1.09	1.04	-4.40	Oregon	1.4	1.07	0.85	-21.00
Illinois	14.7	2.09	2.17	3.76	Pennsylvania	8.8	1.79	2.27	27.31
Indiana	7.6	1.80	1.85	3.20	Rhode Island	3.0	2.61	1.44	-44.74
Iowa	1.4	1.79	1.14	-36.39	South Carolina	30.4	1.92	1.82	- 5.15
Kansas	5.3	1.83	1.98	7.87	South Dakota <sup>3</sup>	0.3	--	--	--
Kentucky	7.1	1.77	1.55	-11.99	Tennessee	15.8	1.77	1.89	6.94
Louisiana	29.4	1.72	1.90	10.08	Texas	12.0	1.44	1.26	-13.09
Maine <sup>3</sup>	0.3	--	--	--	Utah	0.6	--	0.80	--
Maryland	22.8	1.85	1.71	-7.55	Vermont <sup>3</sup>	0.2	--	--	--
Massachusetts <sup>1</sup>	3.9	1.54	1.93	25.32	Virginia	18.9	1.68	1.94	15.44
Michigan	12.9	1.94	2.18	12.40	Washington	4.6	0.89	1.08	21.54
Minnesota	1.3	1.33	0.96	-23.33	West Virginia	3.3	1.64	1.41	-14.28
Mississippi	35.2	1.98	1.94	-2.21	Wisconsin	3.9	1.67	2.04	22.43
Missouri	10.5	1.82	1.89	3.89	Wyoming <sup>2</sup>	0.6	0.95	0.95	-0.90

<sup>1</sup> The Alabama, Delaware, Hawaii, Nebraska, Massachusetts, and Oklahoma figures are based on 1983 data.

<sup>2</sup> The ratios for Connecticut and Wyoming differed at the third decimal place.

<sup>3</sup> Data for nonwhites were not available for Maine, New Hampshire, South Dakota, and Vermont.

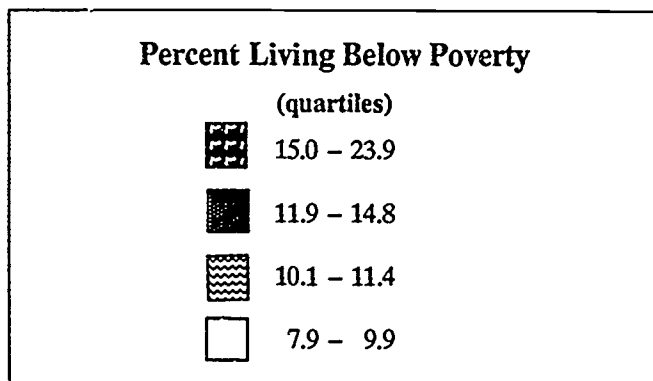
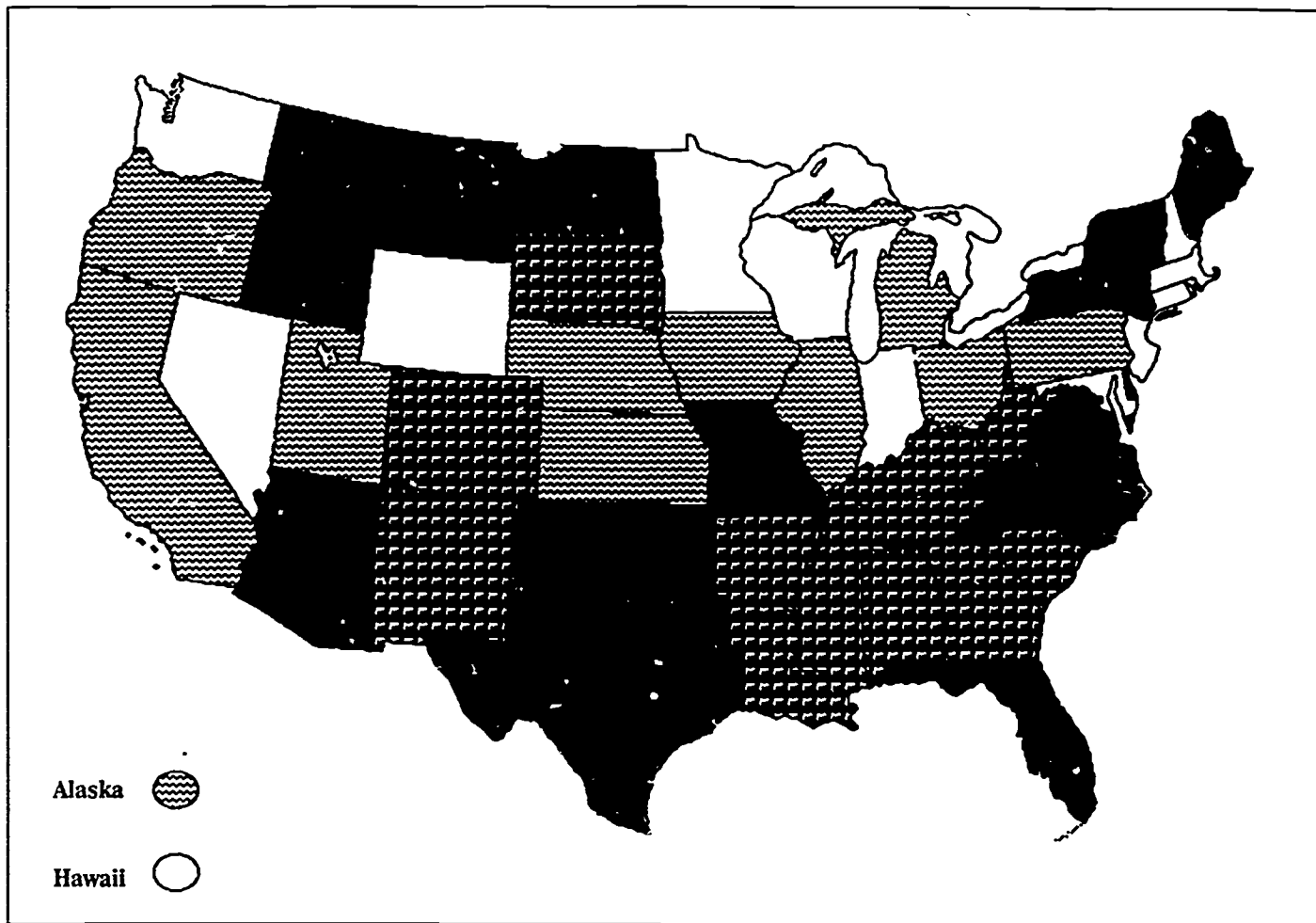
-- Ratios could not be calculated due to unavailability of data.



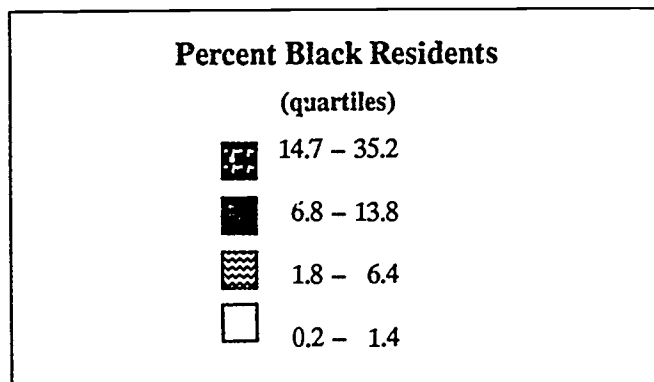
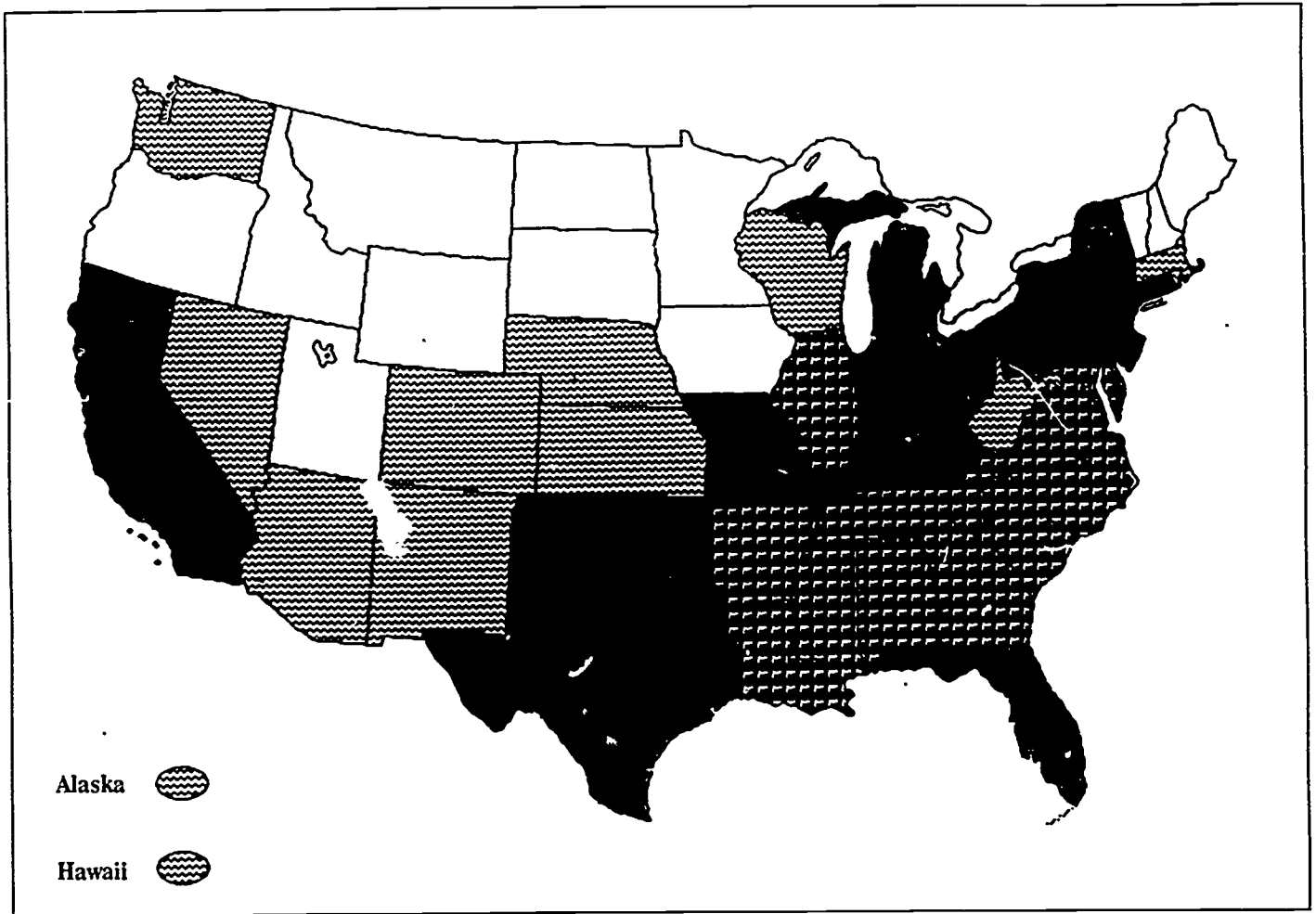
Table 5.10A

RANKING OF STATES BY POVERTY RATE (1980 CENSUS)							
RANK	STATE	PERCENT	NUMBER LIVING BELOW POVERTY LEVEL	RANK	STATE	PERCENT	NUMBER LIVING BELOW POVERTY LEVEL
1	Mississippi	23.9%	587,000	25-26	Delaware Virginia	11.9%	68,000 611,000
2	Arkansas	19.0%	424,000	27	California	11.4%	2,627,000
3	Alabama	18.9%	720,000	28	Illinois	11.0%	1,231,000
4	Louisiana	18.6%	765,000	29-31	Alaska Nebraska Oregon	10.7%	42,000 163,000 274,000
5-7	Colorado Kentucky New Mexico	17.6%	285,000  626,000				
8	South Dakota	16.9%	113,000	32	Pennsylvania	10.5%	1,210,000
9-10	Georgia South Carolina	16.6%	884,000 500,000	33	Michigan	10.4%	946,000
11	Tennessee	16.5%	736,000	34-36	Ohio Rhode Island Utah	10.3%	1,089,000 94,000 148,000
12	West Virginia	15.0%	287,000				
13	North Carolina	14.8%	40,000	37-38	Iowa Kansas	10.1%	286,000 232,000
14	Texas	14.7%	2,036,000				
15	Florida	13.5%	1,287,000	39	Hawaii	9.9%	92,000
16-17	Oklahoma New York	13.4%	394,000 2,299,000	40-41	Maryland Washington	9.8%	405,000 396,000
18	Arizona	13.2%	351,000	42	Indiana	9.7%	516,000
19	Maine	13.0%	141,000	43	Massachusetts	9.6%	532,000
20-21	Idaho North Dakota	12.6%	117,000 79,000	44-45	Minnesota New Jersey	9.5%	375,000 689,000
22	Montana	12.3%	94,000	46-47	Nevada Wisconsin	8.7%	69,000 398,000
23	Missouri	12.2%	582,000	48	New Hampshire	8.5%	75,000
24	Vermont	12.1%	59,000	49	Connecticut	8.0%	243,000
				50	Wyoming	7.9%	36,000

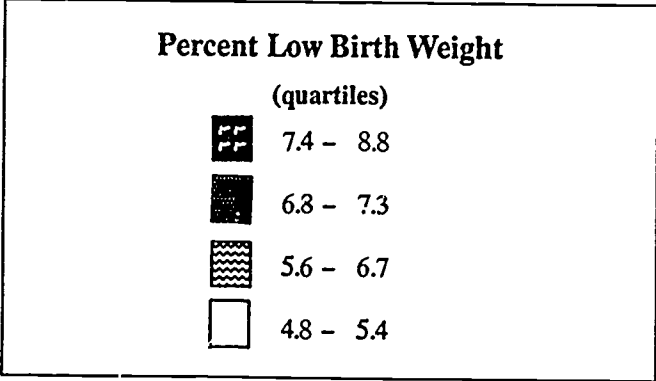
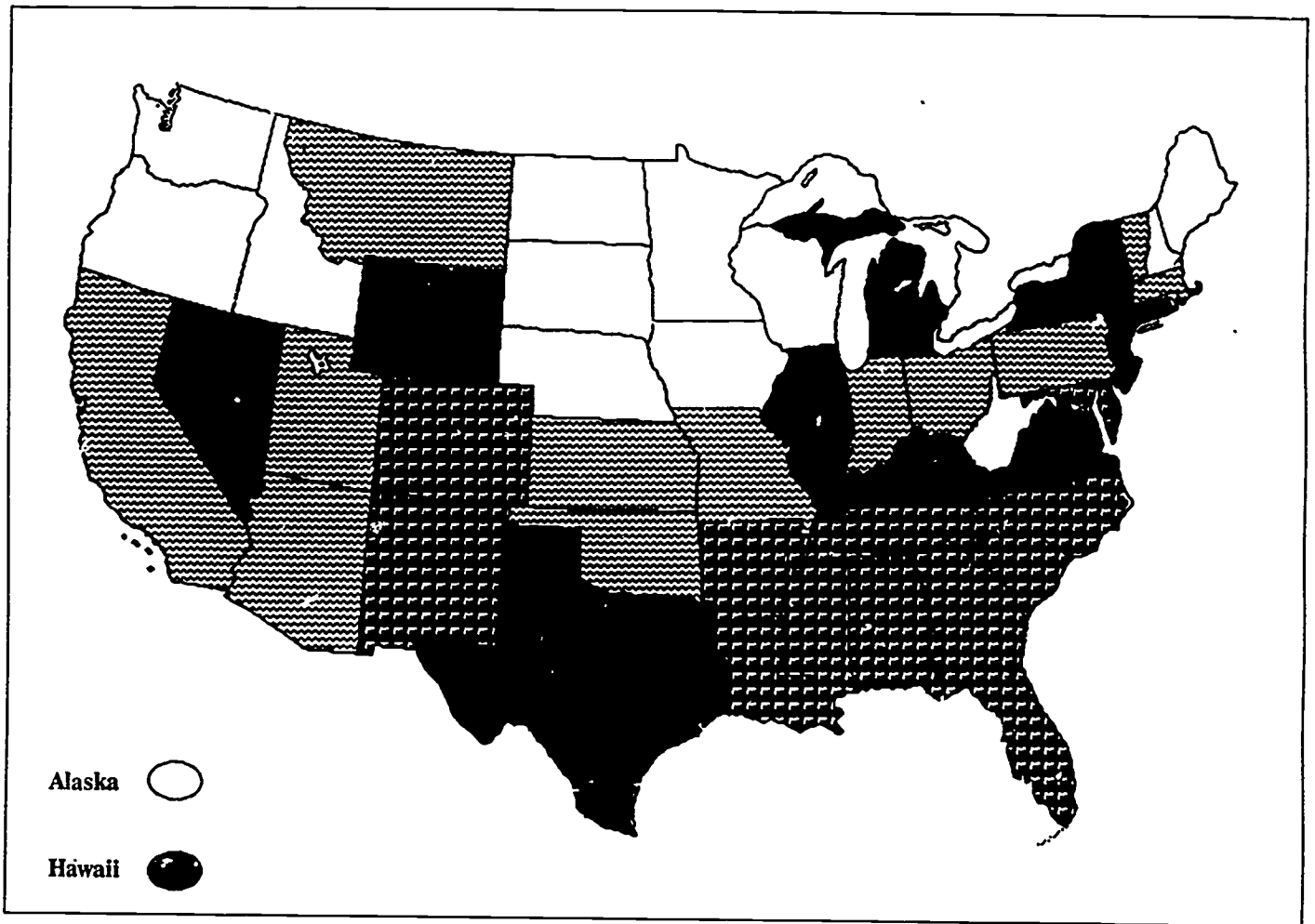
Map 5.10A States by Poverty Rates, 1980 Census



Map 5.10B States by Percent Black Population, 1980 Census



Map 5.10C States, Low Birth Weight, 1984



Map 5.10D States by Infant Mortality Rate, 1984

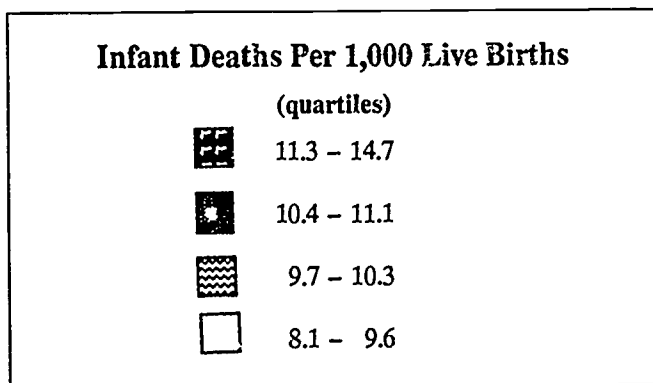
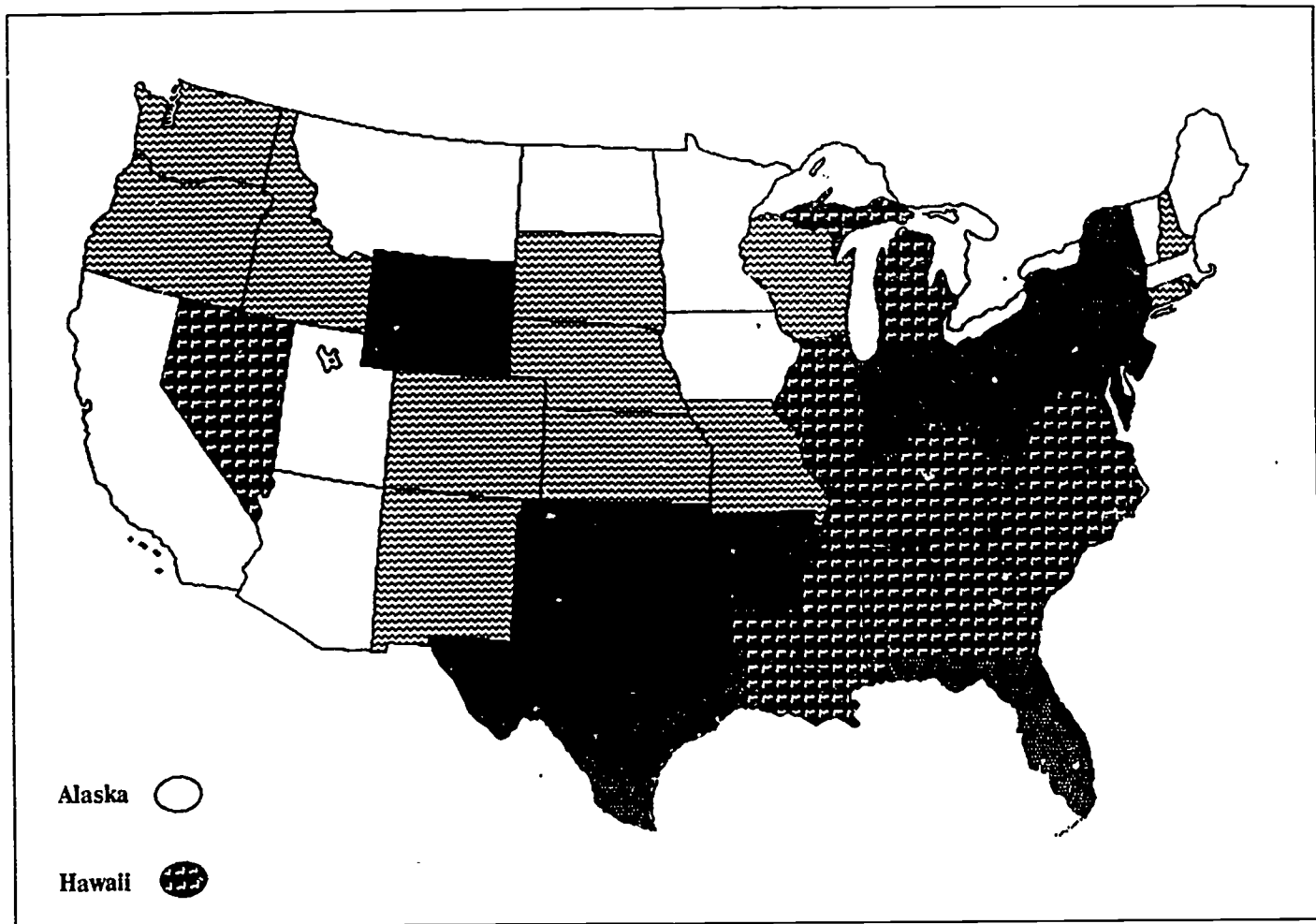


Table 5.10B

RANKING OF STATES BY PERCENT BLACK POPULATION (1980 CENSUS)					
RANK	STATE	RATE	RANK	STATE	RATE
1	Mississippi	35.2%	22	Indiana	7.6%
2	South Carolina	30.4%	23	Kentucky	7.1%
3	Louisiana	29.4%	24	Connecticut	7.0%
4	Georgia	26.8%	25	Oklahoma	6.8%
5	Alabama	25.6%	26	Nevada	6.4%
6	Maryland	22.8%	27	Kansas	5.3%
7	North Carolina	22.4%	28-29	Wisconsin Massachusetts	3.9%
8	Virginia	18.9%	30-31	Colorado Alaska	3.5%
9	Arkansas	16.4%	32	West Virginia	3.3%
10	Delaware	16.2%	33	Nebraska	3.1%
11	Tennessee	15.8%	34	Rhode Island	3.0%
12	Illinois	14.7%	35	Arizona	2.8%
13	Florida	13.8%	36	Washington	2.6%
14	New York	13.7%	37-38	New Mexico Hawaii	1.8%
15	Michigan	12.5%	39-40	Oregon Iowa	1.4%
16	New Jersey	12.6%	41	Minnesota	1.3%
17	Texas	12.0%	42-43	Wyoming Utah	0.6%
18	Missouri	10.5%	44	North Dakota	0.5%
19	Ohio	10.0%	45	New Hampshire	0.4%
20	Pennsylvania	8.8%	46-49	South Dakota Montana Maine Idaho	0.3%
21	California	7.7%	50	Vermont	0.2%

Table 5.1C shows the states ranked by average (1979-1984) infant mortality rates. Low birth weight and poverty rates and the percent black population are also presented side-by-side with the infant mortality rates. This again provides a visual reminder of how interrelated poverty is with infant health.

Seven states with the largest percent black population were ranked among the 13 poorest states. When the 10 states with the worst 1984 infant mortality rates were compared with the poorest states, 7 of the 10 states with the worst infant mortality rates were among the 13 poorest states.

# Part II

---

## The Profiles



**BIRMINGHAM (Jefferson County), ALABAMA**

NUMBER OF LIVE BIRTHS (1984): 10,112<sup>a</sup>

NUMBER OF INFANT DEATHS (1984): 123<sup>a</sup>

TOTAL POPULATION (1980): 671,324

NUMBER (and percent) LIVING BELOW POVERTY (1980): 101,500 (15.3%)

**RACIAL COMPOSITION (BY PERCENT)**

White: 66.2

Nonwhite: 33.8 (The Nonwhite population is 98.6% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 12,118

PERCENT WIC "ELIGIBLES" SERVED: 54.8

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

**I N F A N T M O R T A L I T Y R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	9.8	11.1	10.5	8.7	9.9	N/A	10.0 <sup>b</sup>	1.13 <sup>b</sup>
Nonwhite	19.0	20.1	15.5	9.9	15.3	N/A	18.0 <sup>b</sup>	-2.96 <sup>b</sup>
TOTAL	13.8	15.0	12.7	13.6	12.2	N/A	13.5 <sup>b</sup>	-2.46 <sup>b</sup>

Nonwhite to white ratio (1979): 1.94 (1984): 1.55<sup>a</sup> (Percent Change In Ratio 1979-1984): -20.10<sup>a</sup>

**L O W B I R T H W E I G H T P E R C E N T**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	NA	5.9	5.8	5.7	6.3	NA	5.9 <sup>c</sup>	2.37 <sup>c</sup>
Nonwhite	NA	12.8	12.7	12.1	13.1	NA	12.7 <sup>c</sup>	0.92 <sup>c</sup>
TOTAL	8.5	8.9	8.8	8.5	9.2	NA	8.8 <sup>b</sup>	2.41 <sup>b</sup>

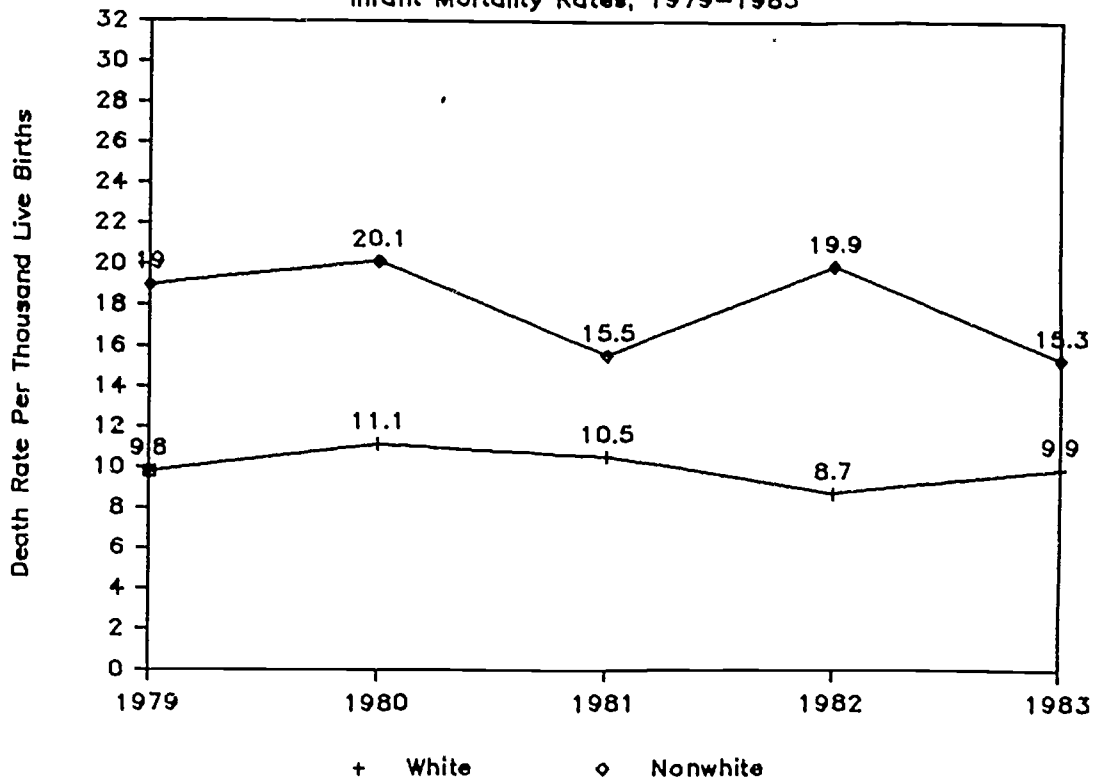
Nonwhite to white ratio (1979): 2.17<sup>d</sup> (1984): 2.08<sup>e</sup> (Percent Change In Ratio 1979-1984): 4.15<sup>f</sup>

**Footnotes:**

- a 1983 data.
- b Figure based on 1979-1983 data.
- c Figure based on 1980-1983 data.
- d Figure based on 1980 data.
- e Figure based on 1983 data.
- f Figure based on 1980, and 1983 data.

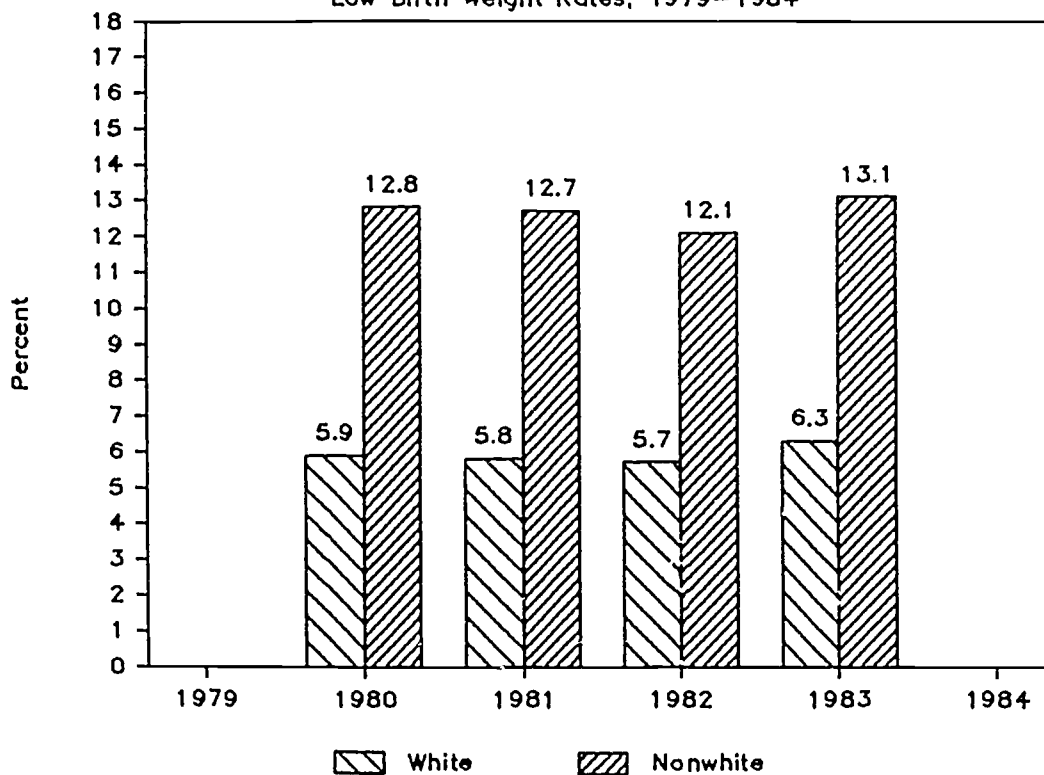
# Jefferson County (Birmingham), AL

Infant Mortality Rates, 1979-1983



# Jefferson County (Birmingham), AL

Low Birth Weight Rates, 1979-1984



PHOENIX (Maricopa County), ARIZONA

NUMBER OF LIVE BIRTHS (1984): 30,711

NUMBER OF INFANT DEATHS (1984): 272

TOTAL POPULATION (1980): 1,509,052

NUMBER (and percent) LIVING BELOW POVERTY (1980): 156,800 (10.5)

RACIAL COMPOSITION (BY PERCENT)

White: 87.5

Nonwhite: 12.5 (The Nonwhite population is 25.4% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 10,551

PERCENT WIC "ELIGIBLES" SERVED: 31.2

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	13.2	12.8	11.1	9.2	8.8	8.4	10.6	-7.36
Nonwhite	19.0	19.2	21.0	9.5	9.1	13.4	15.2	-0.26
TOTAL	13.8	13.4	12.0	9.3	9.2	8.9	11.1	-8.04

Nonwhite to White ratio (1979): 1.44 (1984): 1.60 (Percent Change In Ratio 1979-1984): 10.83

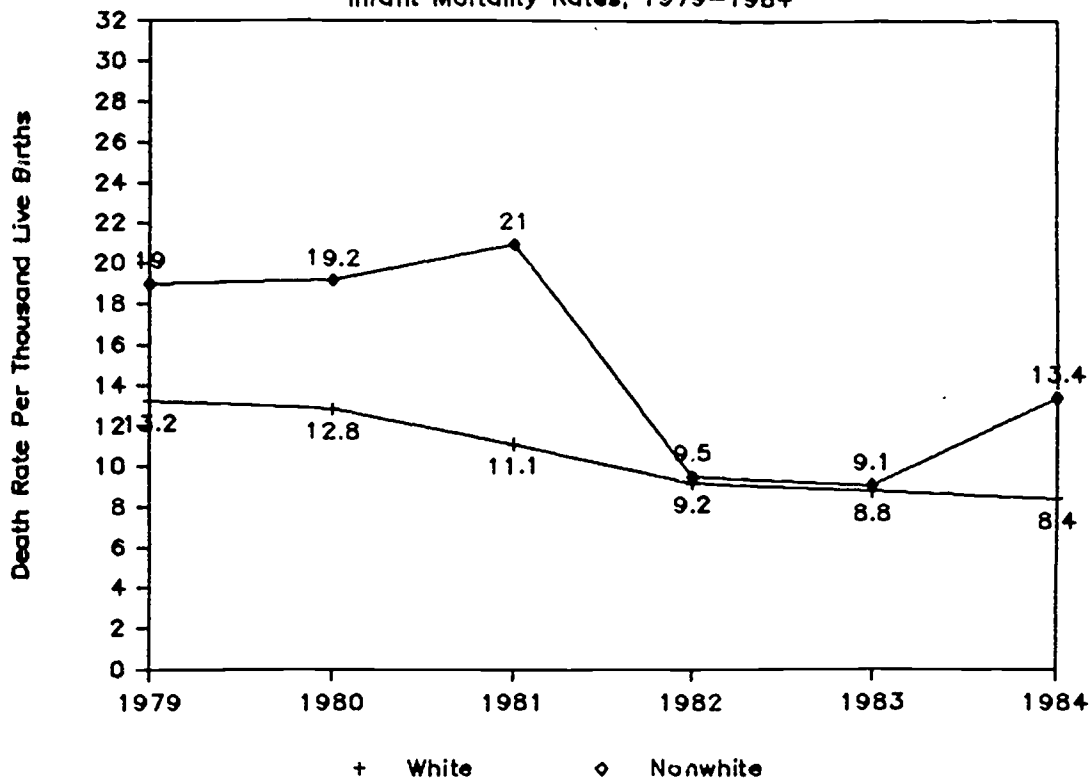
LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.8	5.8	5.7	5.7	5.6	6.0	5.8	-0.70
Nonwhite	8.4	8.4	8.6	6.9	8.8	8.8	8.3	2.03
TOTAL	6.0	6.1	6.0	5.8	5.9	6.3	6.0	1.04

Nonwhite to White ratio (1979): 1.47 (1984): 1.45 (Percent Change In Ratio 1979-1984): 1.27

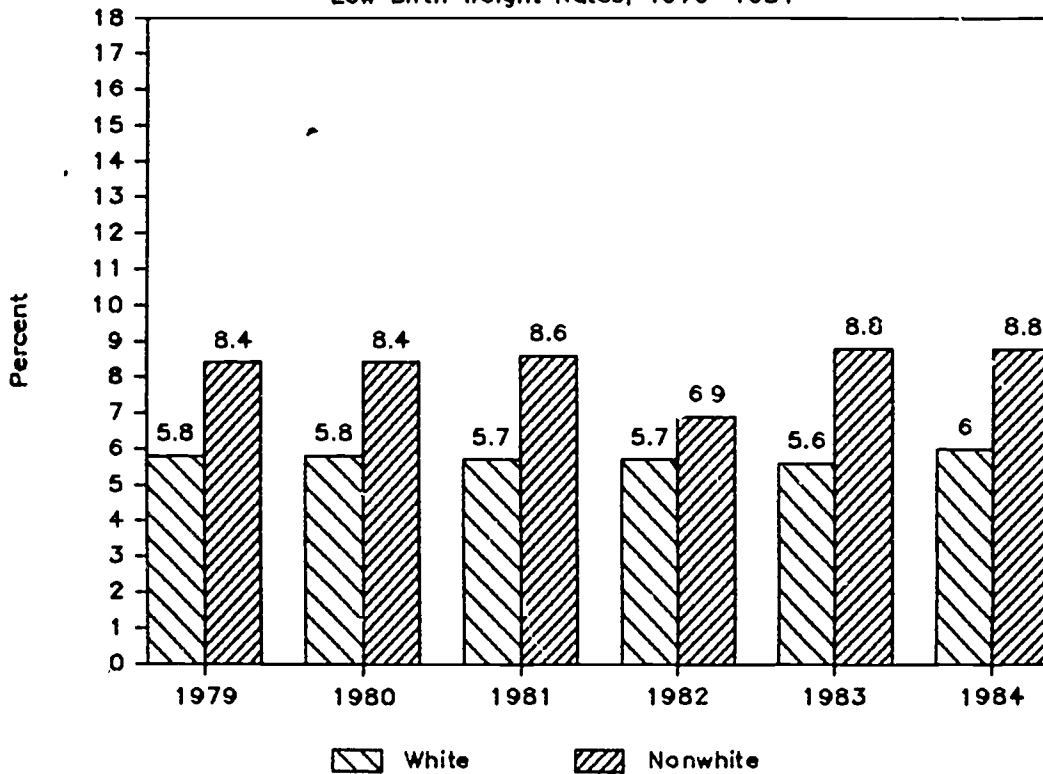
# Maricopa County (Phoenix), AZ

## Infant Mortality Rates, 1979-1984



# Maricopa County (Phoenix), AZ

## Low Birth Weight Rates, 1979-1984



TUCSON (Pima County), ARIZONA

NUMBER OF LIVE BIRTHS (1984): 9,678

NUMBER OF INFANT DEATHS (1984): 96

TOTAL POPULATION (1980): 531,443

NUMBER (and percent) LIVING BELOW POVERTY (1980): 67,700 (13%)

RACIAL COMPOSITION (BY PERCENT)

White: 84.3

Nonwhite: 15.7 (The Nonwhite population is 17.2% Black and 32% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 4,127

PERCENT WIC "ELIGIBLES" SERVED: 31.9

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.<sup>a</sup>

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	8.1	7.2	8.2	7.8	8.2	9.1	8.1	0.61
Nonwhite	26.1	14.9	17.4	11.9	16.0	15.9	17.0	-4.78
TOTAL	10.2	8.1	9.2	8.3	9.7	9.9	9.2	0.43

Nonwhite to White ratio (1979): 3.22 (1984): 1.75 (Percent Change In Ratio 1979-1984): -45.77

LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.1	6.0	5.8	5.5	6.0	5.6	5.8	-0.21
Nonwhite	7.7	8.5	7.8	6.5	7.8	7.4	7.6	0.07
TOTAL	6.3	6.3	6.0	5.6	6.2	5.8	6.0	-1.43

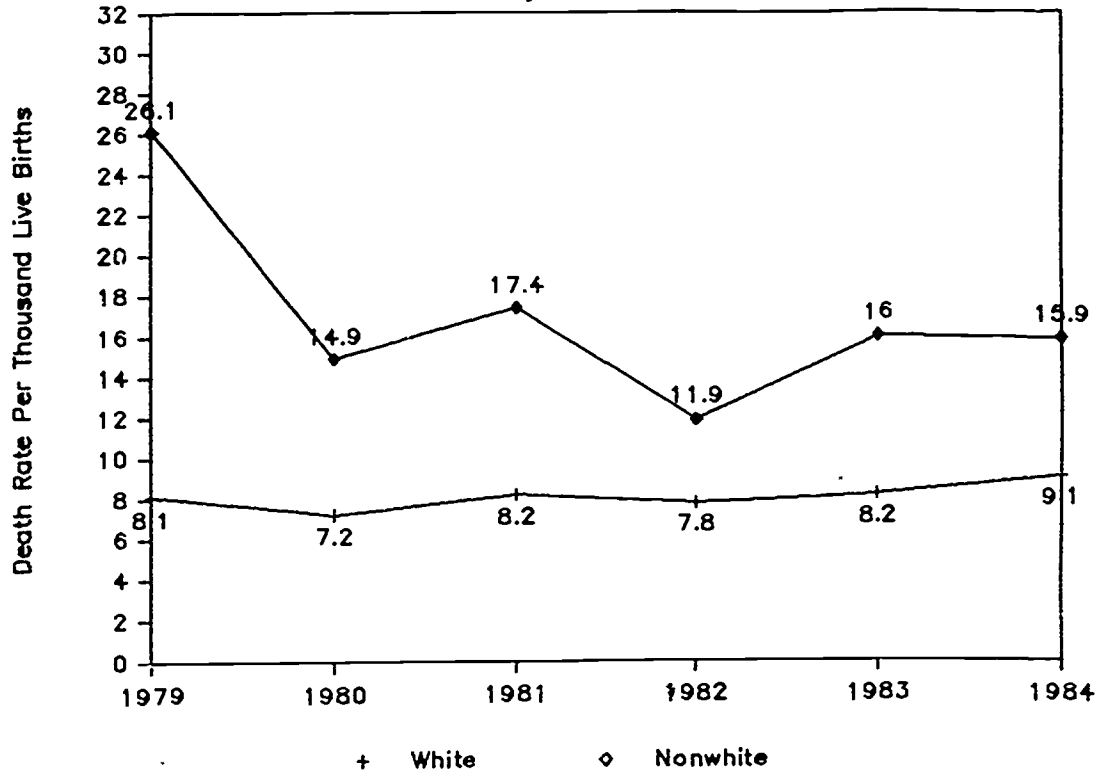
Nonwhite to White ratio (1979): 1.32 (1984): 1.26 (Percent Change In Ratio 1979-1984): 4.68

Footnotes:

<sup>a</sup> Program for Tucson approved by USDA in August 1986.

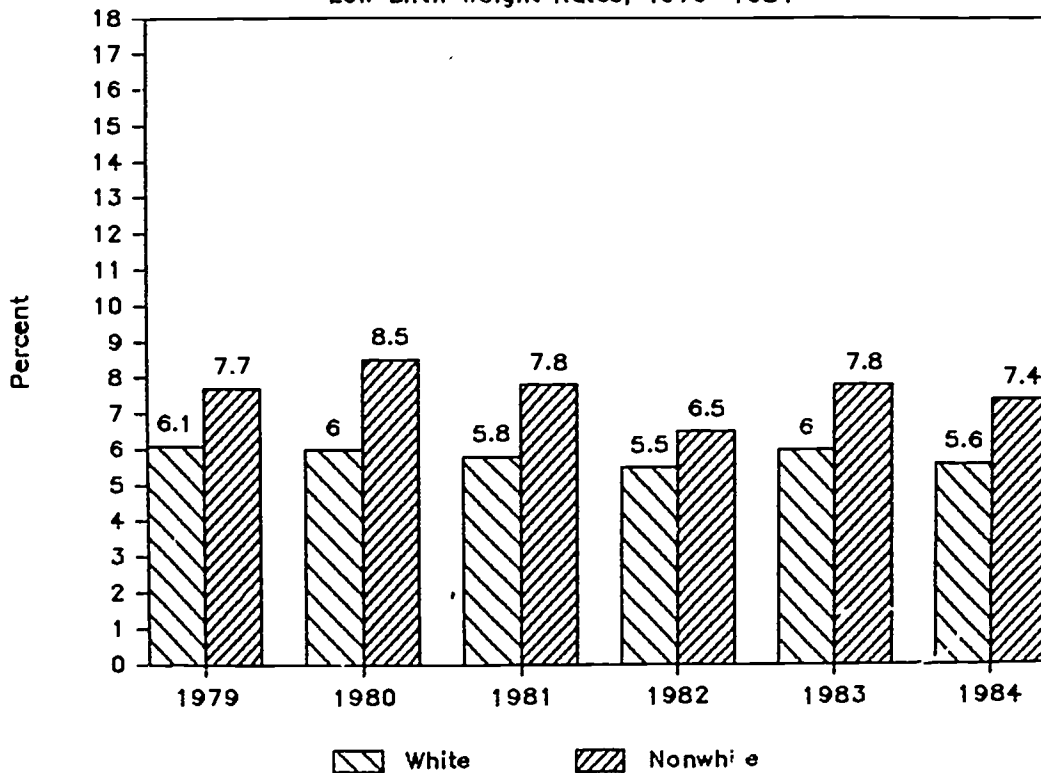
## Pima County (Tucson), AZ

Infant Mortality Rates, 1979-1984



## Pima County (Tucson), AZ

Low Birth Weight Rates, 1979-1984



LOS ANGELES AND LONG BEACH (Los Angeles County), CALIFORNIA

NUMBER OF LIVE BIRTHS (1984): 145,077                      NUMBER OF INFANT DEATHS (1984): 1,451  
 TOTAL POPULATION (1980): 7,477,503                      NUMBER (and percent) LIVING BELOW POVERTY (1980): 984,800 (13.4%)

RACIAL COMPOSITION (BY PERCENT)

White: 68.7  
 Nonwhite: 31.3 (The Nonwhite is 40.3% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 105,505      PERCENT WIC "ELIGIBLES" SERVED: 27.6  
 AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	24.8	23.0	22.0	10.1	9.2	8.9	16.3	-14.92
Nonwhite	5.7	5.6	4.8	12.8	13.7	13.4	9.3	31.09
TOTAL	12.5	11.9	11.1	10.7	10.3	10.0	11.1	-4.36

-----  
 Nonwhite to White ratio (1979): 0.23      (1984): 1.51      (Percent Change In Ratio 1979-1984): 556.52

L O W B I R T H W E I G H T P E R C E N T <sup>a</sup>

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	--	---	---	---	---	2.2	2.2 <sup>b</sup>	---
Nonwhite	--	---	---	---	---	12.7	1.27 <sup>b</sup>	---
TOTAL	---	---	---	---	6.3	6.4	6.4 <sup>c</sup>	00.0 <sup>c</sup>

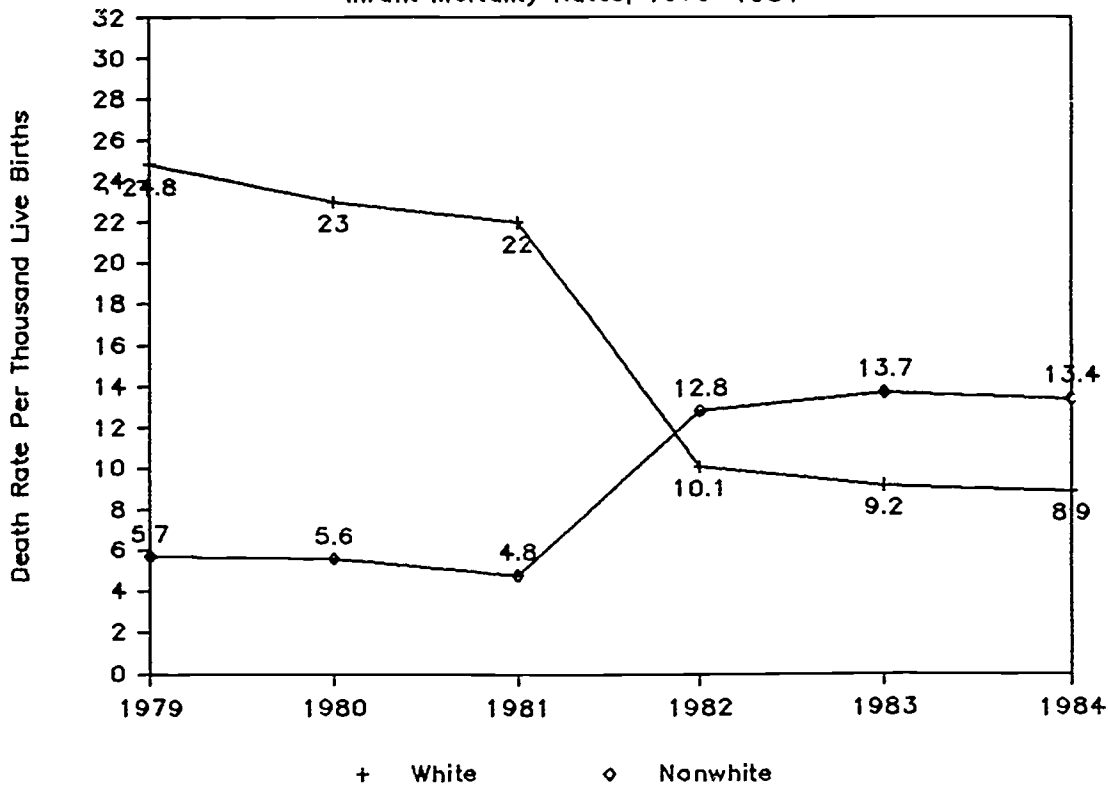
-----  
 Nonwhite to White ratio (1979): ---      (1984): 5.77      (Percent Change In Ratio 1979-1984): ---

Footnotes:

- a California Registrar was unable to provide data for much of this table.
- b Figure based on 1984 data alone.
- c Figure based on 1983 and 1984 data only.

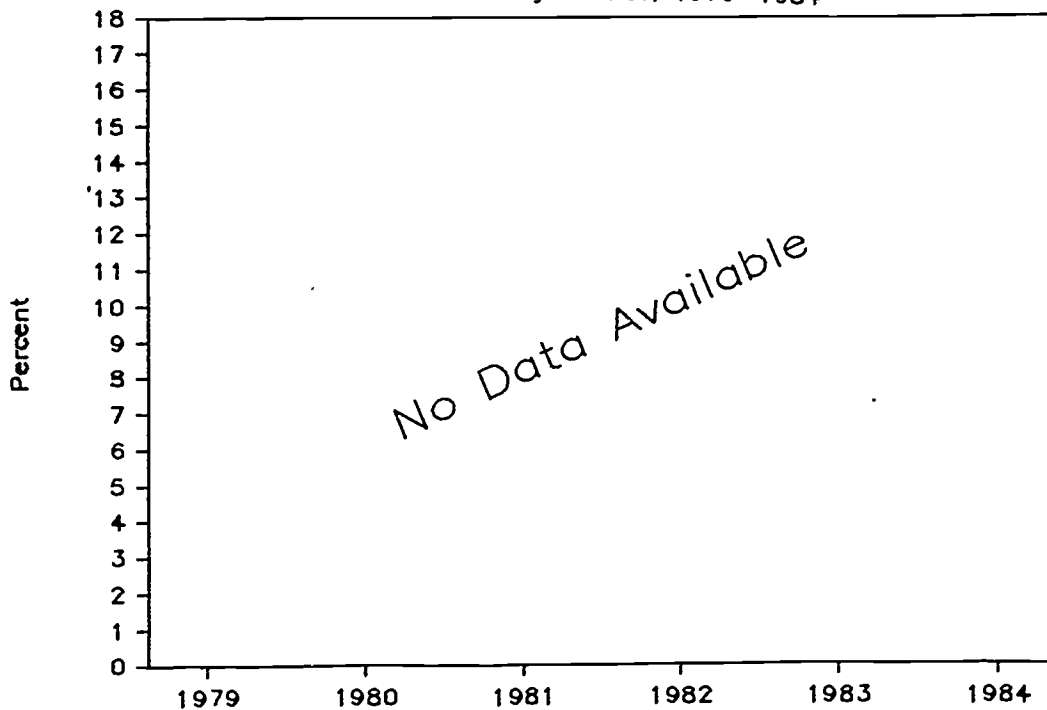
# Los Angeles County (LA/Long Beach), CA

Infant Mortality Rates, 1979-1984



# Los Angeles County (LA/Long Beach), CA

Low Birth Weight Rates, 1979-1984





OAKLAND (Alameda County), CALIFORNIA

NUMBER OF LIVE BIRTHS (1984): 19,255                      NUMBER OF INFANT DEATHS (1984): 196  
 TOTAL POPULATION (1980): 1,105,379                      NUMBER (and percent) LIVING BELOW POVERTY (1980): 121,700 (11.3%)

RACIAL COMPOSITION (BY PERCENT)

White: 67.8

Nonwhite: 32.2 (The Nonwhite population 57% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 13,920      PERCENT WIC "ELIGIBLES" SERVED: 34.1

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.1	14.5	13.9	9.2	8.4	8.6	11.0	-3.20
Nonwhite	7.8	8.4	8.3	10.3	12.9	12.5	10.0	10.55
TOTAL	9.6	11.5	11.1	9.7	10.2	10.2	10.4	1.77

-----  
 Nonwhite to white ratio (1979): 0.70      (1984): 1.45      (Percent Change In Ratio 1979-1984): 106.84

L O W   B I R T H   W E I G H T   P E R C E N T <sup>a</sup>

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	---	---	---	---	---	4.1	4.1 <sup>b</sup>	---
Nonwhite	---	---	---	---	---	12.7	12.7 <sup>b</sup>	---
TOTAL	---	---	---	---	6.7	7.0	6.9 <sup>c</sup>	---

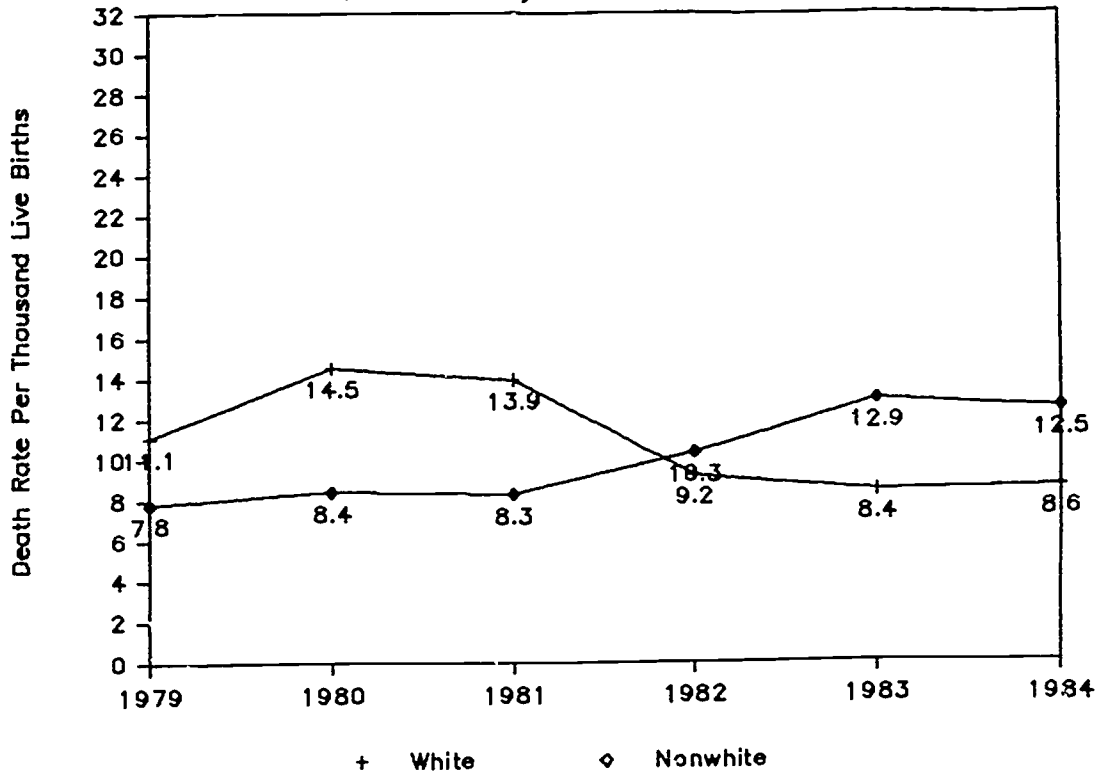
-----  
 Nonwhite to white ratio (1979): ---      (1984): 3.1      (Percent Change In Ratio 1979-1984): ---

Footnotes:

- a California Registrar was unable to provide data for much of this table.
- b Figure based on 1984 data alone.
- c Figure based on 1983-4 data only.

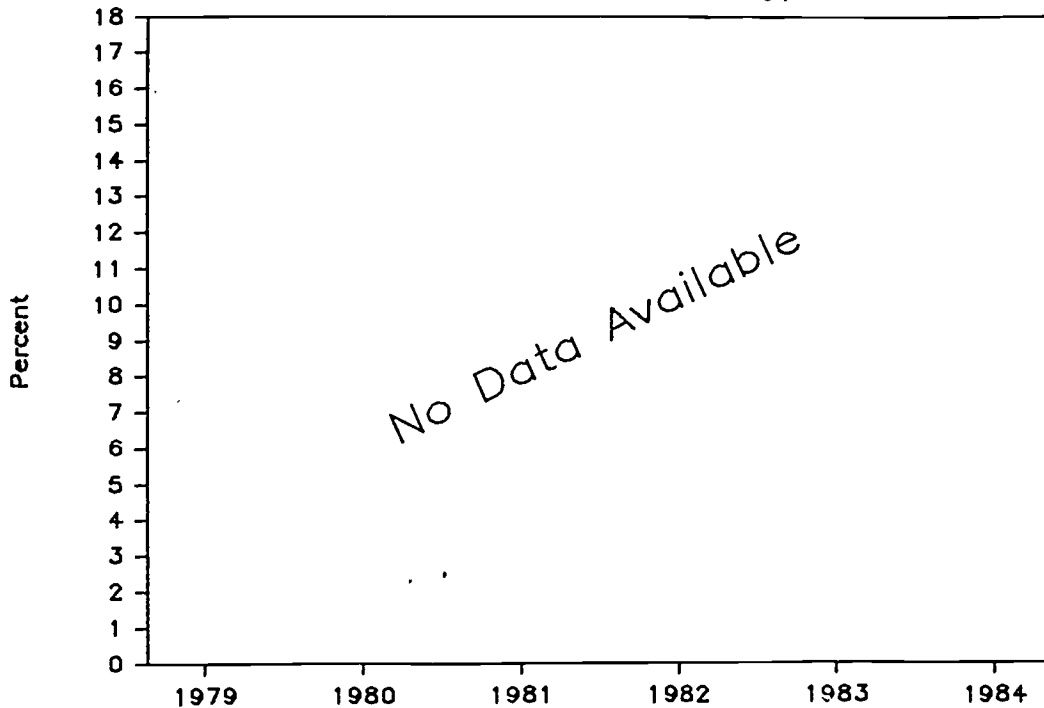
# Alameda County (Oakland), CA

Infant Mortality Rates, 1979-1984



# Alameda County (Oakland), CA

Low Birth Weight Rates, 1979-1984



SACRAMENTO (Sacramento County), CALIFORNIA

NUMBER OF LIVE BIRTHS (1984): 14,950                      NUMBER OF INFANT DEATHS (1984): 129  
 TOTAL POPULATION (1980): 783,381                      NUMBER (and percent) LIVING BELOW POVERTY (1980): 86,500 (11.2%)

RACIAL COMPOSITION (BY PERCENT)

White: 81.2  
 Nonwhite: 18.8 (The Nonwhite population is 39.9% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 5,545                      PERCENT WIC "ELIGIBLES" SERVED: 15  
 AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.7	11.9	9.8	7.9	8.8	9.3	9.9	-4.79
Nonwhite	31.5	6.1	7.3	13.0	9.8	6.6	12.4	-8.03
TOTAL	11.2	10.1	8.9	9.1	9.1	8.6	8.0	-4.99

-----  
 Nonwhite to White ratio (1979): 2.69                      (1984): 0.71                      (Percent Change In Ratio 1979-1984): -73.64

L O W B I R T H W E I G H T P E R C E N T <sup>a</sup>

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	---	---	---	---	---	4.6	4.6 <sup>b</sup>	---
Nonwhite	---	---	---	---	---	10.7	10.7 <sup>b</sup>	---
TOTAL	---	---	---	---	6.1	6.3	6.2 <sup>c</sup>	3.28 <sup>c</sup>

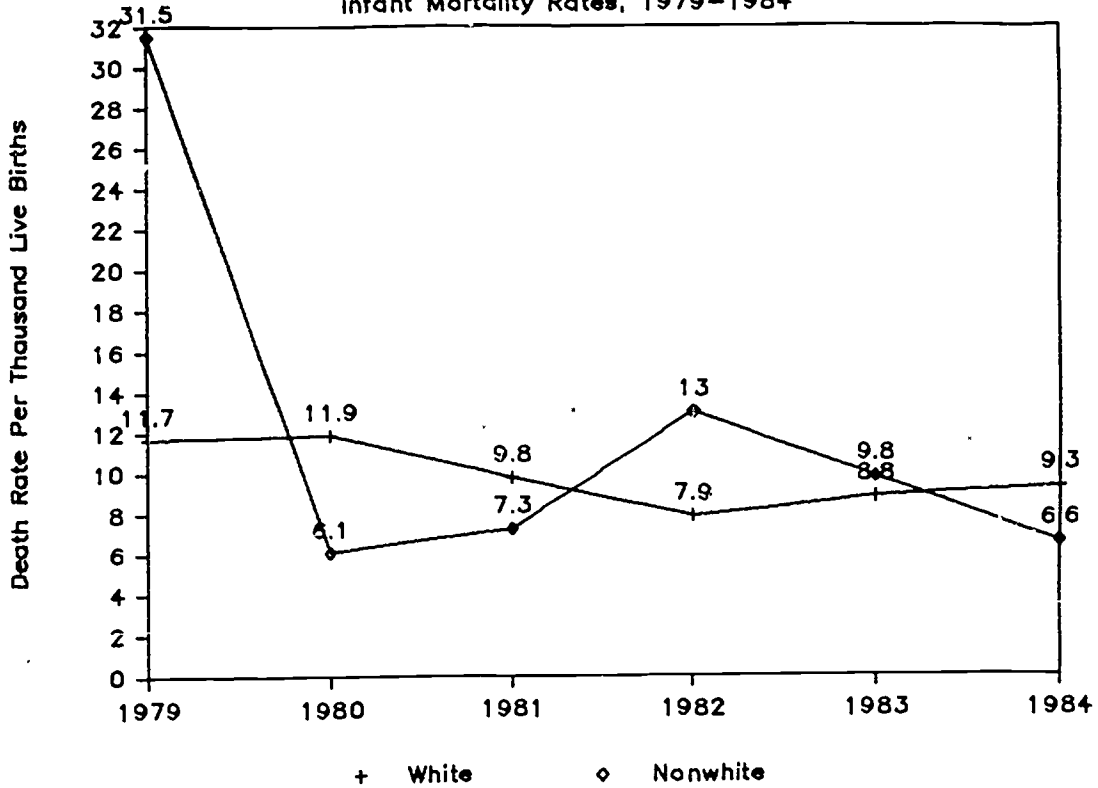
Nonwhite to White ratio (1979): ---                      (1984): 2.32                      (Percent Change In Ratio 1979-1984): ---

Footnotes:

- a California Registrar was unable to provide data for much of this table.
- b Figure based on 1984 data alone.
- c Figure based on 1983 and 1984 data only.

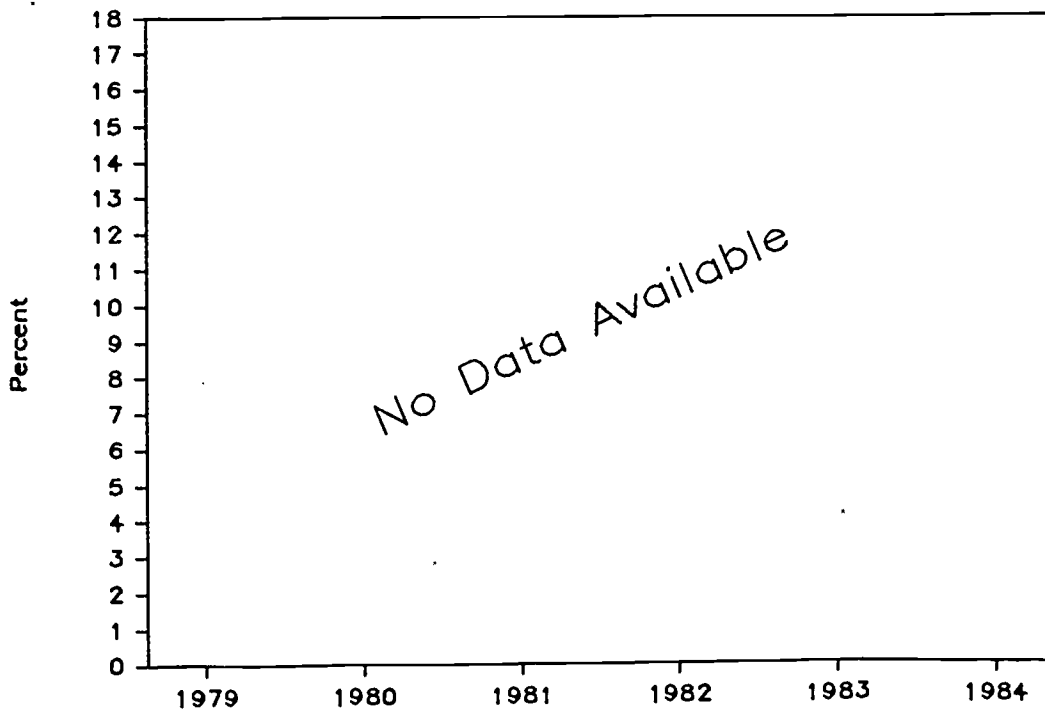
# Sacramento County (Sacramento), CA

Infant Mortality Rates, 1979-1984



# Sacramento County (Sacramento), CA

Low Birth Weight Rates, 1979-1984



SAN DIEGO (San Diego County), CALIFORNIA

NUMBER OF LIVE BIRTHS (1984): 35,709                      NUMBER OF INFANT DEATHS (1984): 339  
 TOTAL POPULATION (1980): 1,861,846              NUMBER (and percent) LIVING BELOW POVERTY (1980): 198,500 (11.3%)

RACIAL COMPOSITION (BY PERCENT)

White: 81.9  
 Nonwhite: 18.1 (The Nonwhite population is 30.9% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 11,505      PERCENT WIC "ELIGIBLES" SERVED: 11.1  
 AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	14.5	15.6	12.6	4.9	8.5	8.8	10.8	0.14
Nonwhite	4.8	5.7	4.3	23.6	9.7	11.8	10.0	81.16
TOTAL	10.6	11.4	9.0	9.0	8.8	9.5	9.7	-1.55

Nonwhite to White ratio (1979): 0.33      (1984): 1.34      (Percent Change In Ratio 1979-1984): 305.07

LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	---	---	---	---	---	3.7	3.7 <sup>b</sup>	---
Nonwhite	---	---	---	---	---	10.9	10.9 <sup>b</sup>	---
TOTAL	---	---	---	---	5.8	5.8	5.8 <sup>c</sup>	0.00 <sup>c</sup>

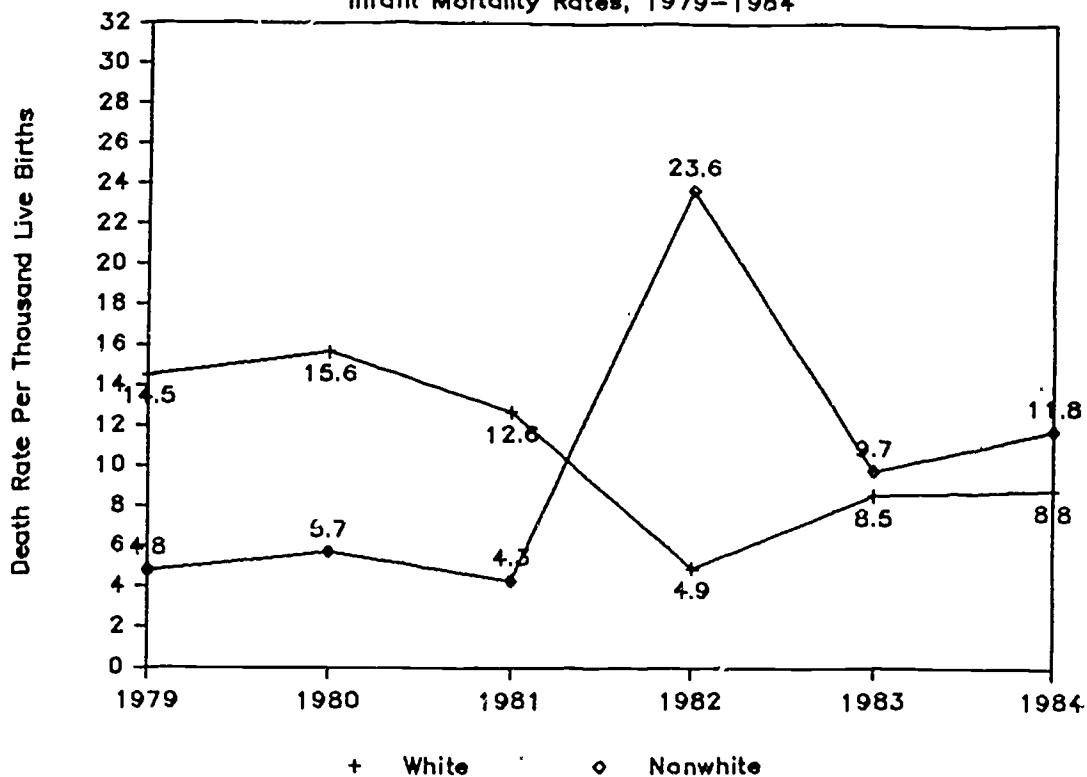
Nonwhite to White ratio (1979): ---      (1984): 2.95      (Percent Change In Ratio 1979-1984): ---

Footnotes:

- a California Registrar was unable to provide data for much of this table.
- b Figure based on 1984 data alone.
- c Figure based on 1983 and 1984 data only.

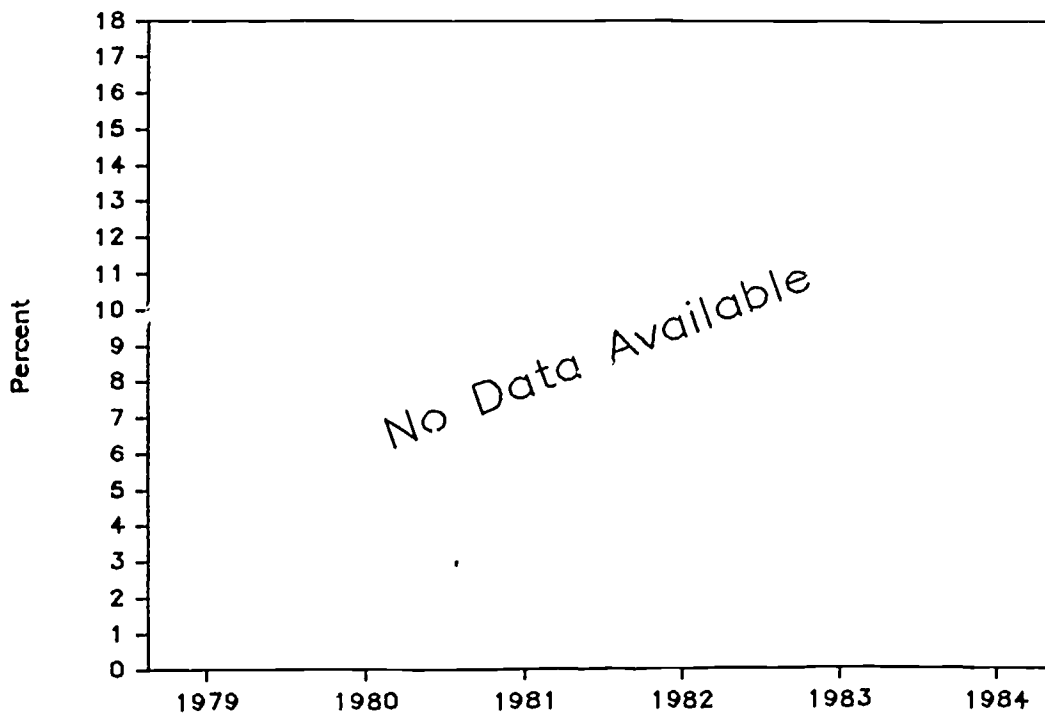
# San Diego County (San Diego), CA

Infant Mortality Rates, 1979-1984



# San Diego County (San Diego), CA

Low Birth Weight Rates, 1979-1984



i

119

**SAN FRANCISCO (co-equal with San Francisco County), CALIFORNIA**

NUMBER OF LIVE BIRTHS (1984): 9,550

NUMBER OF INFANT DEATHS (1984): 84

TOTAL POPULATION (1980): 678,974

NUMBER (and percent) LIVING BELOW POVERTY (1980): 91,200 (13.7%)

**RACIAL COMPOSITION (BY PERCENT)**

White: 59.2

Nonwhite: 40.8 (The Nonwhite population is 31.1% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 7,340

PERCENT WIC "ELIGIBLES" SERVED: 29.7

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 5,355

**I N F A N T M O R T A L I T Y R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	13.7	12.8	10.1	12.1	12.0	8.0	11.5	-1.74
Nonwhite	10.4	8.9	10.7	9.4	10.2	9.5	9.9	-0.94
TOTAL	11.7	10.5	10.5	10.7	11.0	8.8	10.5	-5.11

Nonwhite to White ratio (1979): 0.76      (1984): 1.19      (Percent Change In Ratio 1979-1984): 56.43

**L O W B I R T H W E I G H T P E R C E N T**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	---	---	---	---	---	3.9	3.9 <sup>b</sup>	---
Nonwhite	---	---	---	---	---	12.2	12.2 <sup>b</sup>	---
TOTAL	---	---	---	---	6.9	6.7	6.8 <sup>c</sup>	-2.90 <sup>c</sup>

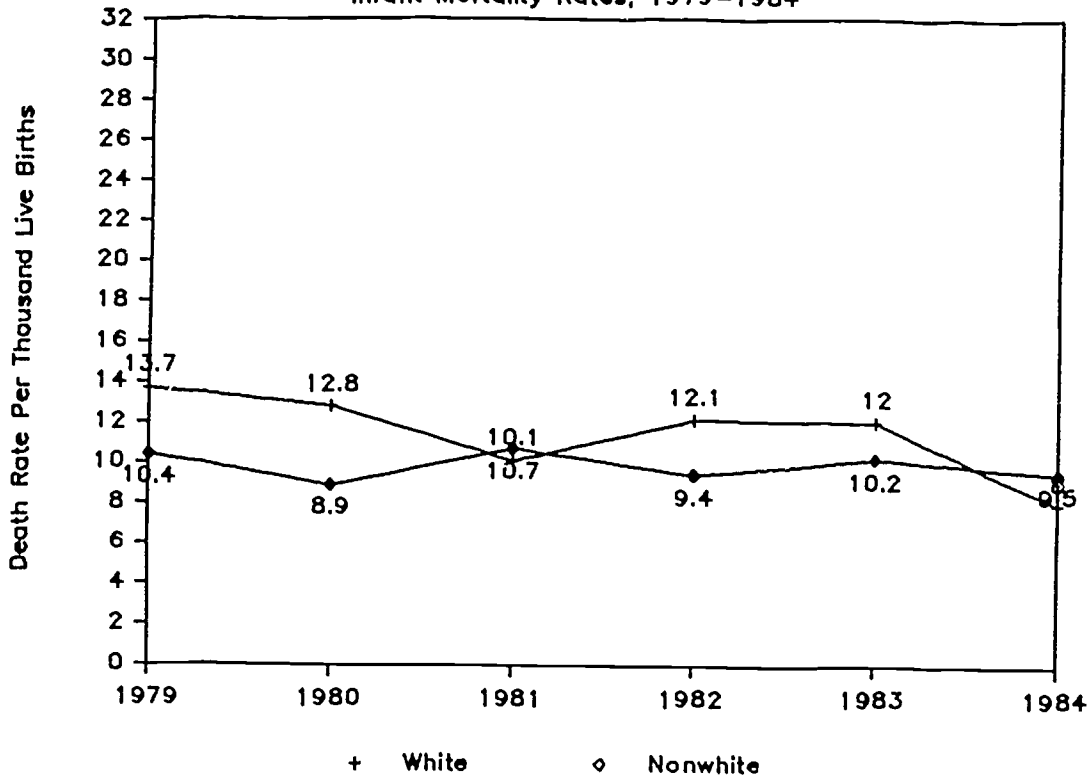
Nonwhite to White ratio (1979): ---      (1984): 3.13      (Percent Change In Ratio 1979-1984): ---

**Footnotes:**

- a California Registrar was unable to provide data for much of this table.
- b Figure based on 1984 data alone.
- c Figure based on 1983 and 1984 data only.

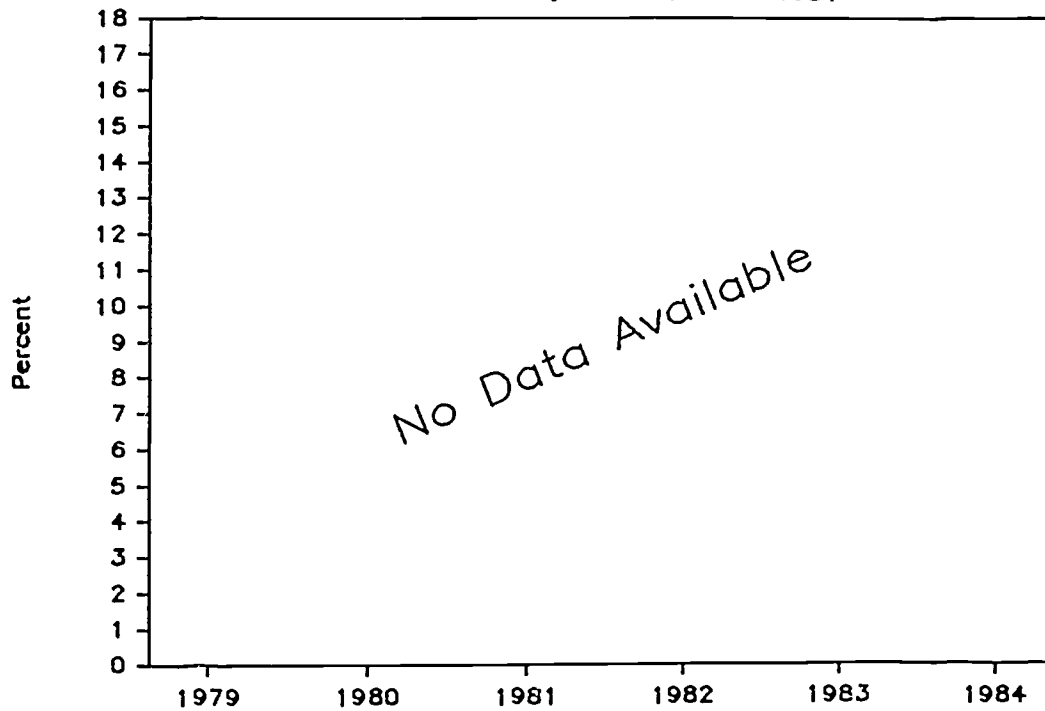
# San Francisco, California

## Infant Mortality Rates, 1979-1984



# San Francisco, California

## Low Birth Weight Rates, 1979-1984





**SAN JOSE (Santa Clara County), CALIFORNIA**

NUMBER OF LIVE BIRTHS (1984): 23,681                      NUMBER OF INFANT DEATHS (1984): 193  
 TOTAL POPULATION (1980): 1,295,071                      NUMBER (and percent) LIVING BELOW POVERTY (1984): 90,300 (7.1%)

**RACIAL COMPOSITION (BY PERCENT)**

White: 79.6  
 Nonwhite: 20.4 (The Nonwhite population is 16.2% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 6,137                      PERCENT WIC "ELIGIBLES" SERVED: 16.6  
 AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

**I N F A N T   M O R T A L I T Y   R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	15.4	15.2	15.4	8.6	9.4	8.6	12.1	6.97
Nonwhite	4.0	3.1	3.8	6.7	7.2	6.7	5.3	15.38
TOTAL	10.3	9.7	10.0	8.2	8.9	8.1	9.2	-4.24

Nonwhite to White ratio (1979): 0.26                      (1984): 0.78                      (Percent Change In Ratio 1979-1984): 199.94

**L O W   B I R T H   W E I G H T   P E R C E N T <sup>a</sup>**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	---	---	---	---	---	3.0	3.0 <sup>b</sup>	---
Nonwhite	---	---	---	---	---	9.7	9.7 <sup>b</sup>	---
TOTAL	---	---	---	---	5.8	5.2	5.5 <sup>c</sup>	-10.34 <sup>c</sup>

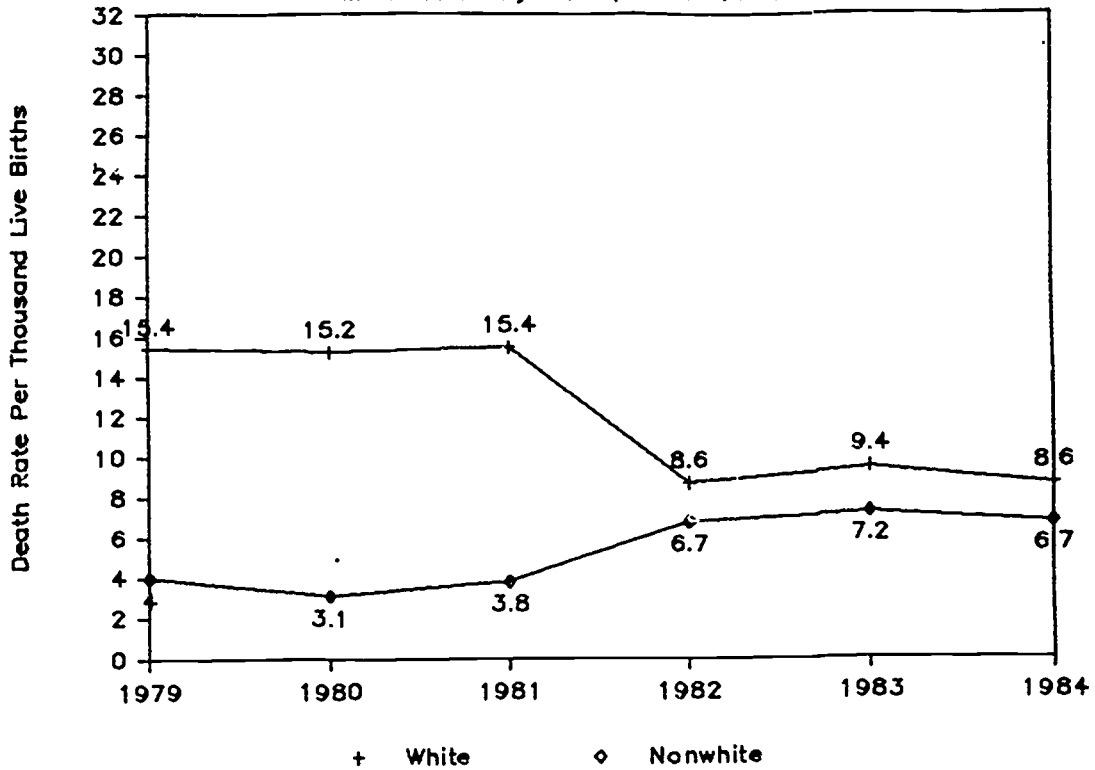
Nonwhite to white ratio (1979): ---                      (1984): 3.23                      (Percent Change In Ratio 1979-1984): ---

**Footnotes:**

- <sup>a</sup> California Registrar was unable to provide data for much of this table.
- <sup>b</sup> Figure based on 1984 data alone.
- <sup>c</sup> Figure based on 1983 and 1984 data only.

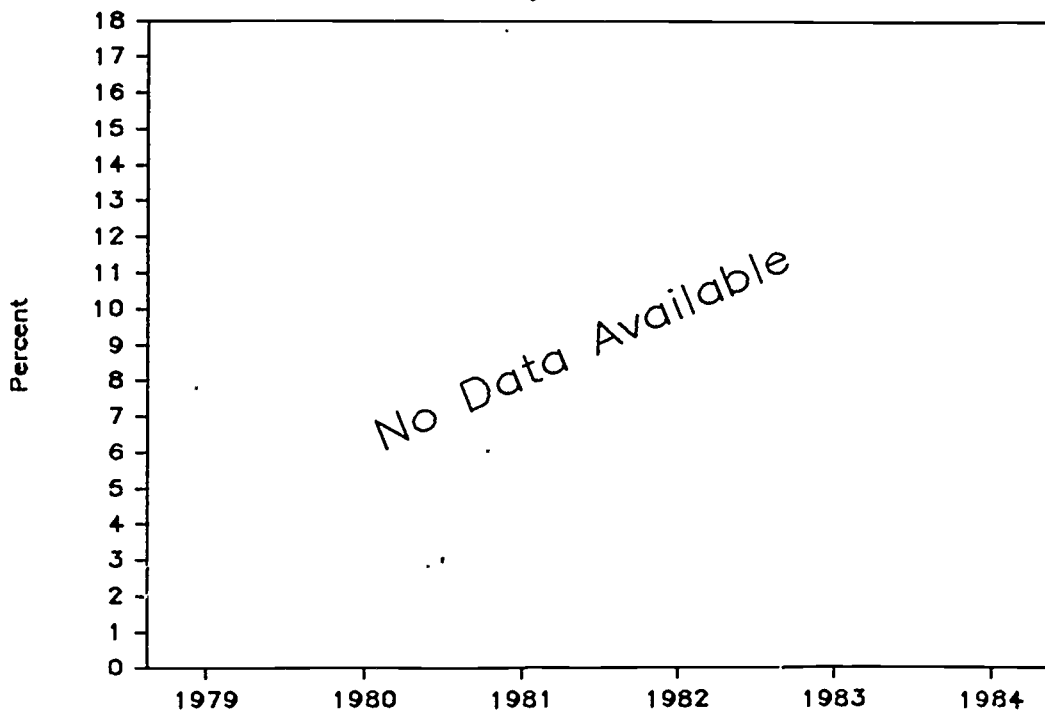
# Santa Clara County (San Jose), CA

Infant Mortality Rates, 1979-1984



# Santa Clara County (San Jose), CA

Low Birth Weight Rates, 1979-1984



**DENVER (co-equal with Denver County), COLORADO**

NUMBER OF LIVE BIRTH (1984): 8,917

NUMBER OF INFANT DEATHS (1984): 106

TOTAL POPULATION (1980): 492,635

NUMBER (and percent) LIVING BELOW POVERTY (1980): 65,800 (13.4%)

**RACIAL COMPOSITION (BY PERCENT)**

White: 76.3

Nonwhite: 23.7 (The Nonwhite population is 12% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): No Program

PERCENT WIC "ELIGIBLES" SERVED: ---

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 7,242

**I N F A N T M O R T A L I T Y R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.4	11.1	8.8	9.5	11.8	11.2	10.5	3.64
Nonwhite	11.7	14.5	8.1	9.1	15.2	14.4	12.2	10.78
TOTAL	10.5	11.9	8.7	9.4	12.5	11.9	10.8	4.53

Nonwhite to White ratio (1979): 1.13 (1984): 1.29 (Percent Change In Ratio 1979-1984): 14.29

**L O W B I R T H W E I G H T P E R C E N T a**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	---	---	---	---	---	---	---	---
Nonwhite	---	---	---	---	---	---	---	---
TOTAL	9.2	9.9	9.2	8.9	9.3	8.8	9.2	-0.72

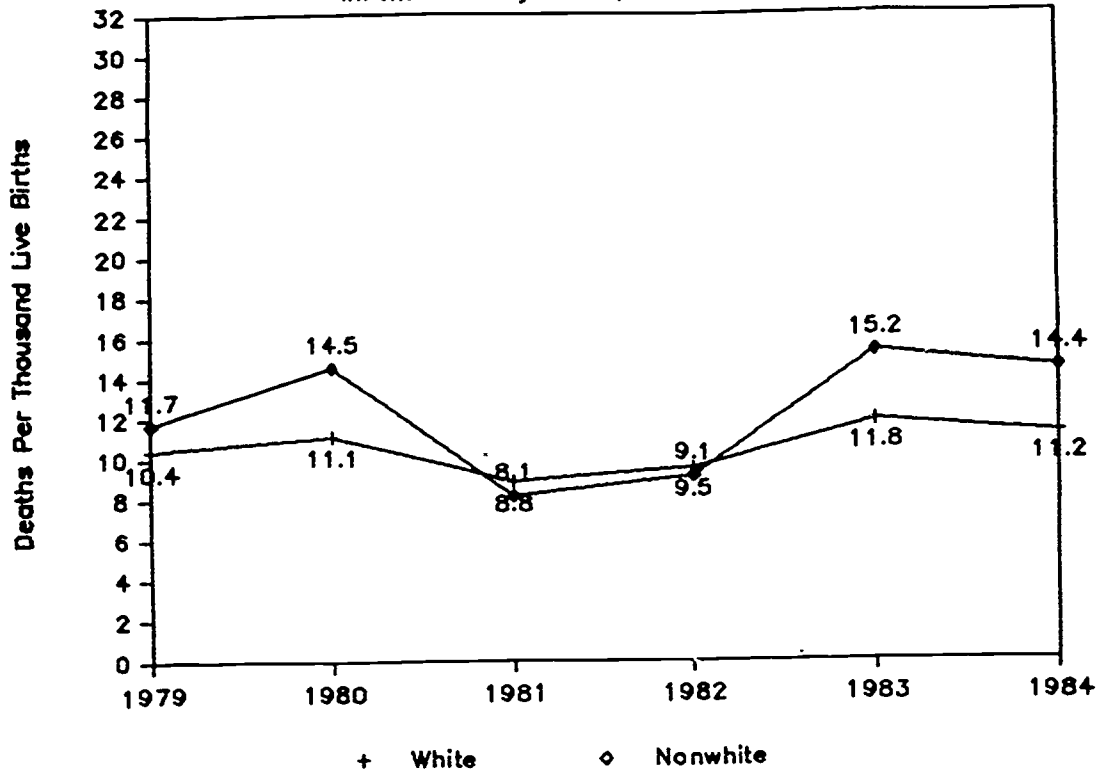
Nonwhite to White ratio (1979): --- (1984): --- (Percent Change In Ratio 1979-1984): ---

**Footnotes:**

a Colorado Department of Health could not provide low birth weight data, disaggregated by race, for Denver.

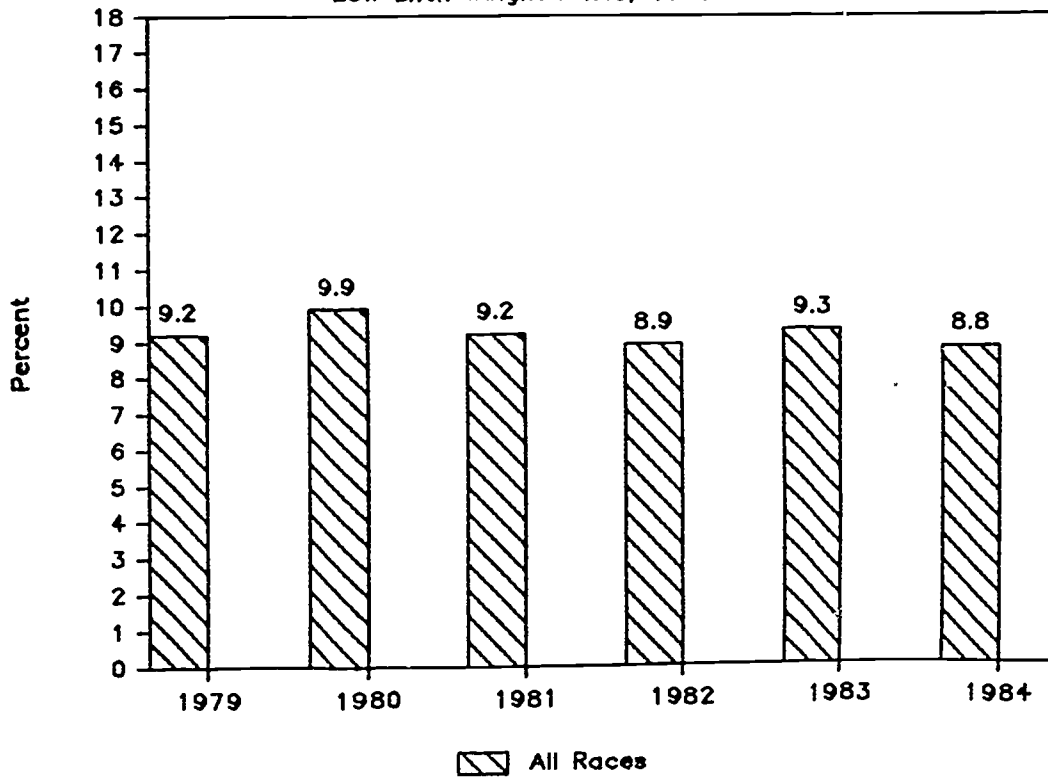
## Denver, Colorado

### Infant Mortality Rates, 1979-1984



## Denver, Colorado

### Low Birth Weight Rates, 1979-1984



THE DISTRICT OF COLUMBIA

NUMBER OF LIVE BIRTHS (1984): 9,549

NUMBER OF INFANT DEATHS (1984): 202

TOTAL POPULATION (1980): 638,333

NUMBER (and percent) LIVING BELOW POVERTY (1980): 113,000 (18.6%)

RACIAL COMPOSITION (BY PERCENT)

White: 27.4

Nonwhite: 72.6 (The Nonwhite population is 96.7% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 11,392<sup>a</sup> PERCENT WIC "ELIGIBLES" SERVED: 50%<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 7,059<sup>b</sup>

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White <sup>c</sup>	5.9	13.1	9.5	6.0	8.6	7.8	8.5	20.21
Nonwhite	24.7	26.6	25.3	23.3	20.2	24.0	24.0	0.11
TOTAL	22.0	24.6	22.6	20.3	18.2	21.2	21.5	-0.07

Nonwhite to White ratio (1979): 4.19 (1984): 3.08 (Percent Change In Ratio 1979-1984): -26.50

LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.4	6.1	6.1	5.9	5.7	5.1	5.7	1.26
Nonwhite	14.0	14.3	14.3	14.4	14.7	14.5	14.4	0.71
TOTAL	12.7	13.1	12.9	12.9	13.1	12.8	12.9	0.18

Nonwhite to White ratio (1979): 2.59 (1984): 2.84 (Percent Change In Ratio 1979-1984): 9.66

Footnotes:

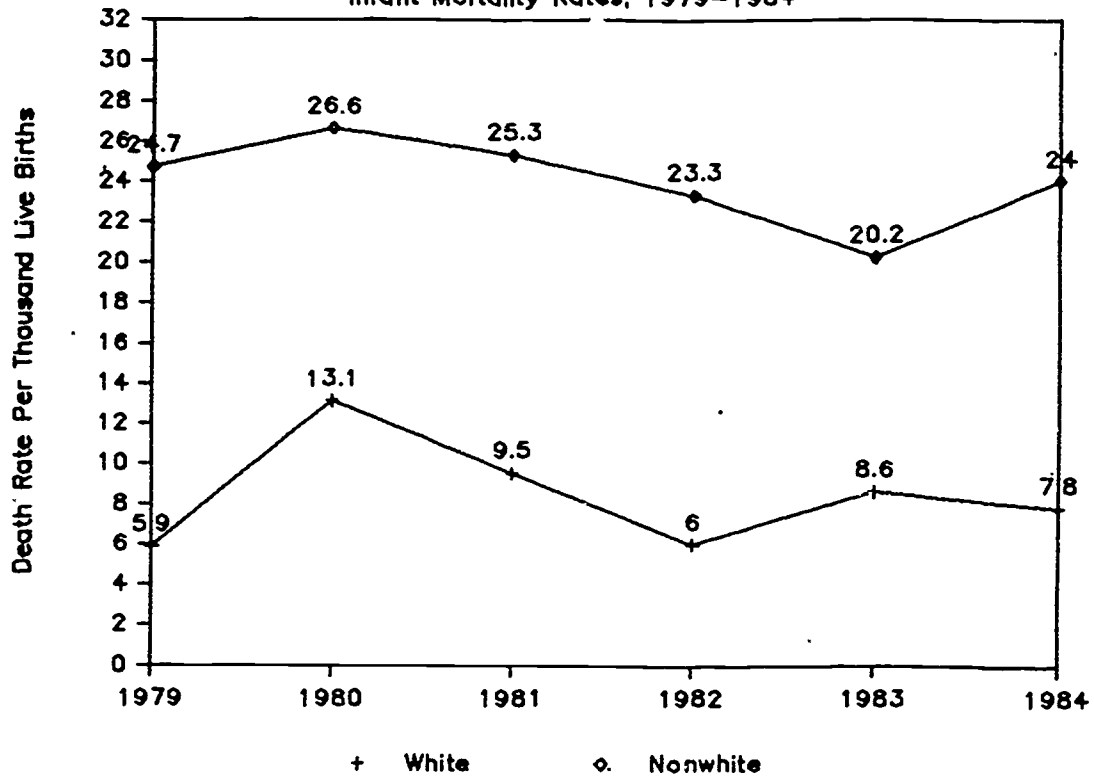
a Figure provided by USDA.

b Figure from, "The Commodity Supplemental Food Program: A Successful Program Held in Check", 1985, Center on Budget and Policy Priorities, Washington, D.C.

c The White population in the District is relatively small, and the White health statistics should be evaluated with caution.

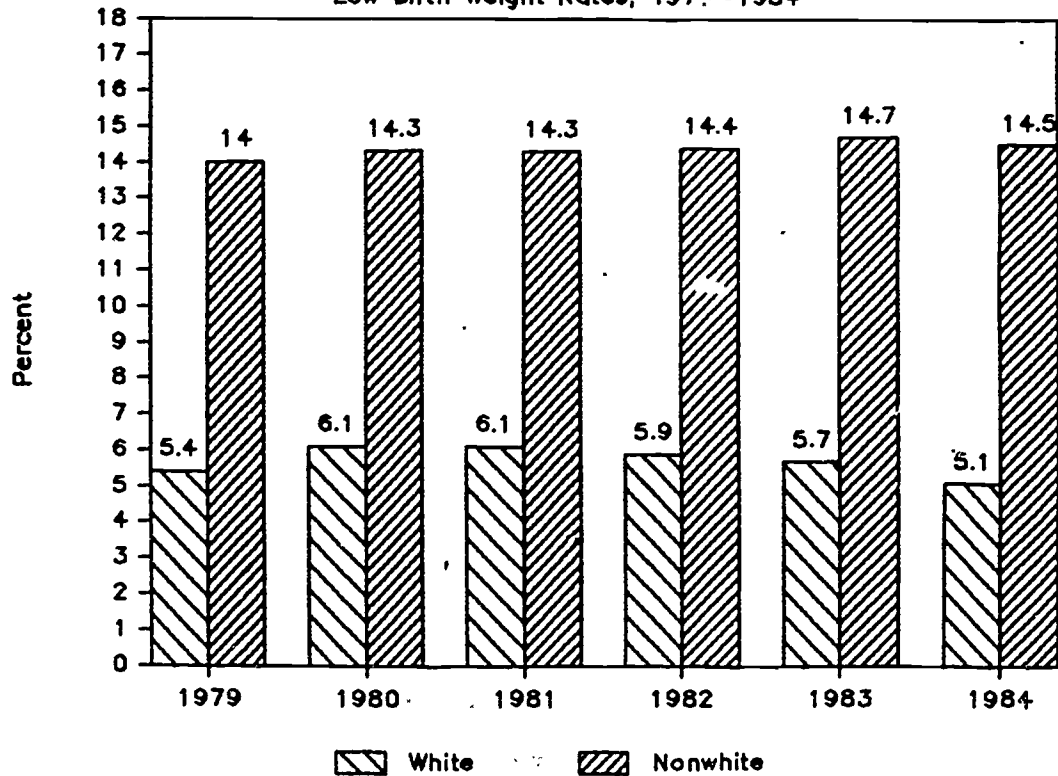
## District of Columbia

Infant Mortality Rates, 1979-1984



## District of Columbia

Low Birth Weight Rates, 1979-1984



JACKSONVILLE (Duvall County), FLORIDA

NUMBER OF LIVE BIRTHS (1984): 11,318

NUMBER OF INFANT DEATHS (1984): 128

TOTAL POPULATION (1980): 571,003

NUMBER (and percent) LIVING BELOW POVERTY (1980): 88,600 (15.8%)

RACIAL COMPOSITION (BY PERCENT)

White: 73.7

Nonwhite: 26.3 (The Nonwhite population is 75.9% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 4,496

PERCENT WIC "ELIGIBLES" SERVED: 23.7

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.1	11.3	12.7	10.5	11.3	9.0	11.0	0.90
Nonwhite	25.3	21.6	21.4	22.9	14.9	15.8	20.3	-7.49
TOTAL	15.9	14.7	15.7	14.7	12.5	11.3	14.1	-6.34

Nonwhite to White ratio (1979): 2.28 (1984): 1.76 (Percent Change In Ratio 1979-1984): -22.98

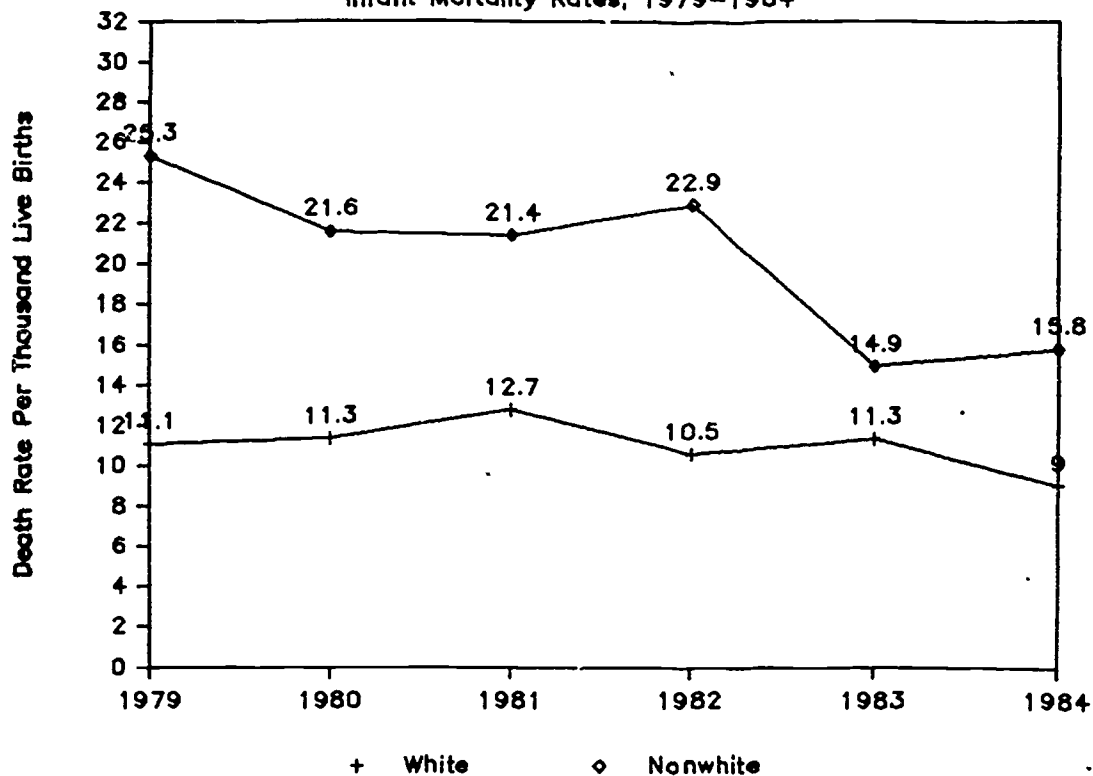
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.7	6.3	5.5	5.8	6.3	5.6	5.9	2.38
Nonwhite	11.4	10.7	12.7	10.8	11.6	12.1	11.6	1.86
TOTAL	7.6	7.8	8.0	7.5	8.1	7.8	7.8	0.65

Nonwhite to White ratio (1979): 2.00 (1984): 2.16 (Percent Change In Ratio 1979-1984): 8.04

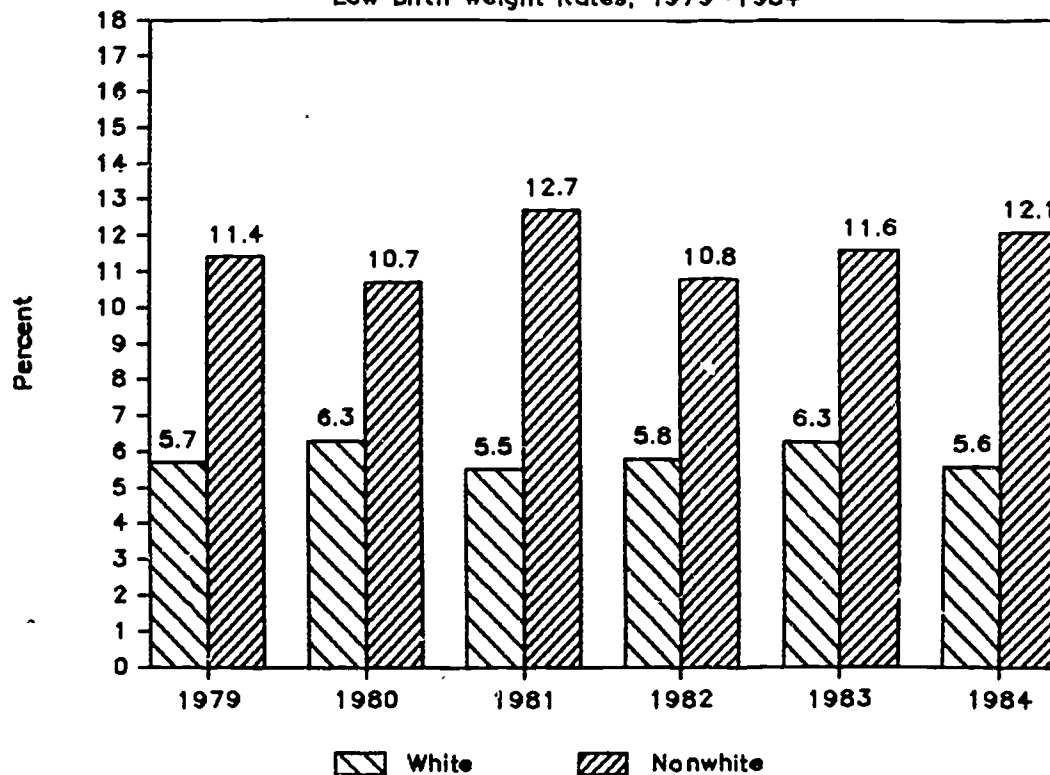
## Duval County (Jacksonville), FL

Infant Mortality Rates, 1979-1984



## Duval County (Jacksonville), FL

Low Birth Weight Rates, 1979-1984





MIAMI (Dade County), FLORIDA

NUMBER OF LIVE BIRTHS (1984): 26,521

NUMBER OF INFANT DEATHS (1984): 280

TOTAL POPULATION (1980): 1,625,781

NUMBER (and percent) LIVING BELOW POVERTY (1980): 240,900 (15%)

RACIAL COMPOSITION (BY PERCENT)

White: 77.2

Nonwhite: 22.8 (The Nonwhite population is 75.9% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 14,529

PERCENT WIC "ELIGIBLES" SERVED: 25.5

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.7	11.1	10.0	8.3	7.0	7.5	9.4	-11.03
Nonwhite	20.5	18.2	19.3	20.1	18.4	15.9	18.7	-4.62
TOTAL	15.4	13.7	13.6	12.7	11.2	10.6	12.9	-7.11

Nonwhite to white ratio (1979): 1.61 (1984): 2.12 (Percent Change In Ratio 1979-1984): 31.34

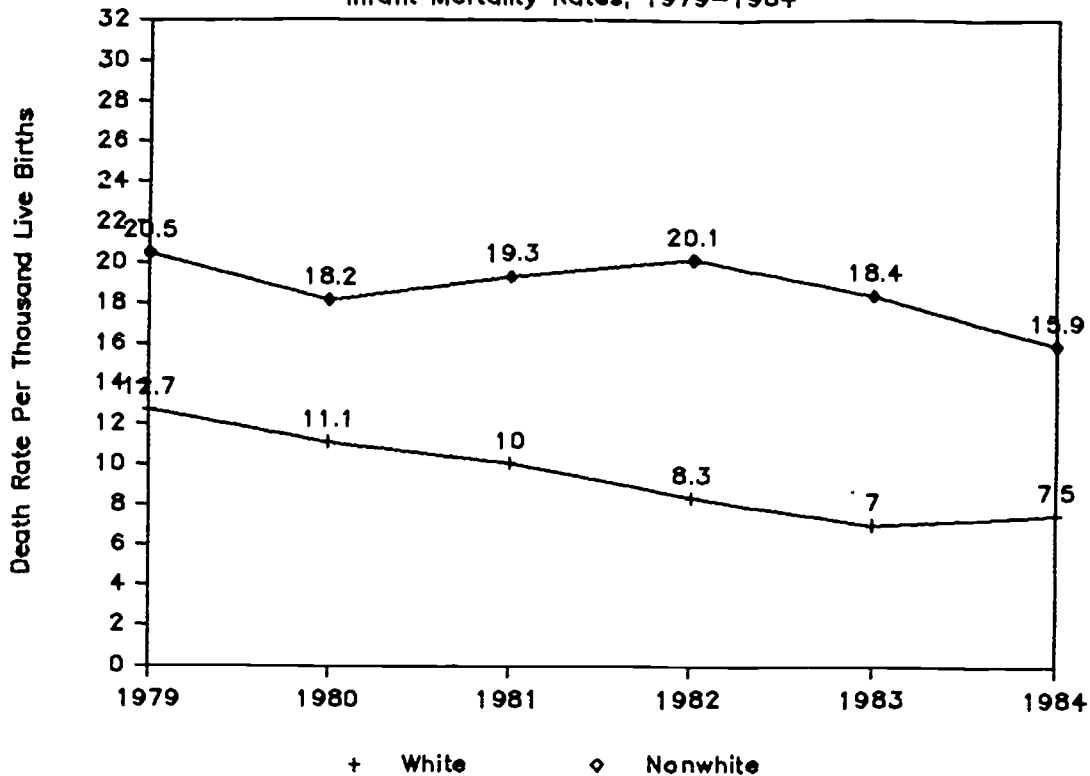
LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.8	6.0	5.7	5.7	5.2	5.6	5.7	-2.66
Nonwhite	11.7	11.3	10.5	11.4	11.1	11.0	11.2	-1.09
TOTAL	7.8	8.0	7.5	7.8	7.4	7.6	7.7	-0.42

Nonwhite to white ratio (1979): 1.96 (1984): 2.02 (Percent Change In Ratio 1979-1984): -2.63

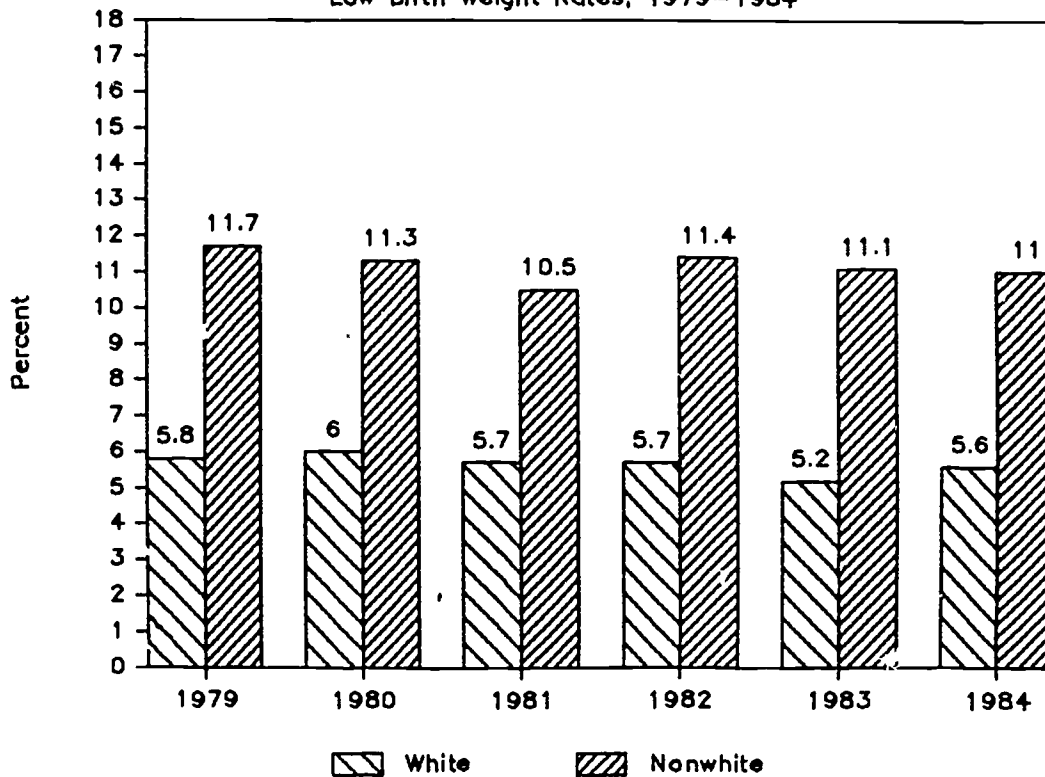
## Dade County (Miami), FL

Infant Mortality Rates, 1979-1984



## Dade County (Miami), FL

Low Birth Weight Rates, 1979-1984



ATLANTA, GEORGIA

NUMBER OF LIVE BIRTHS (1984): 7,967

NUMBER OF INFANT DEATHS (1984): 154

TOTAL POPULATION (1980): 425,022

NUMBER (and percent) LIVING BELOW POVERTY (1980): 112,600 (27.5%)

RACIAL COMPOSITION (BY PERCENT)

White: 32.5

Nonwhite: 67.5 (The Nonwhite population is 98.7% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 10,163

PERCENT WIC "ELIGIBLES" SERVED: 35%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	14.6	18.1	12.7	9.0	14.3	12.2	13.5	4.78
Nonwhite	19.9	21.8	24.3	18.9	22.4	21.4	21.5	2.57
TOTAL	18.8	21.0	21.8	16.8	20.6	19.3	19.7	1.78

Nonwhite to White ratio (1979): 1.36 (1984): 1.75 (Percent Change In Ratio 1979-1984): 28.69

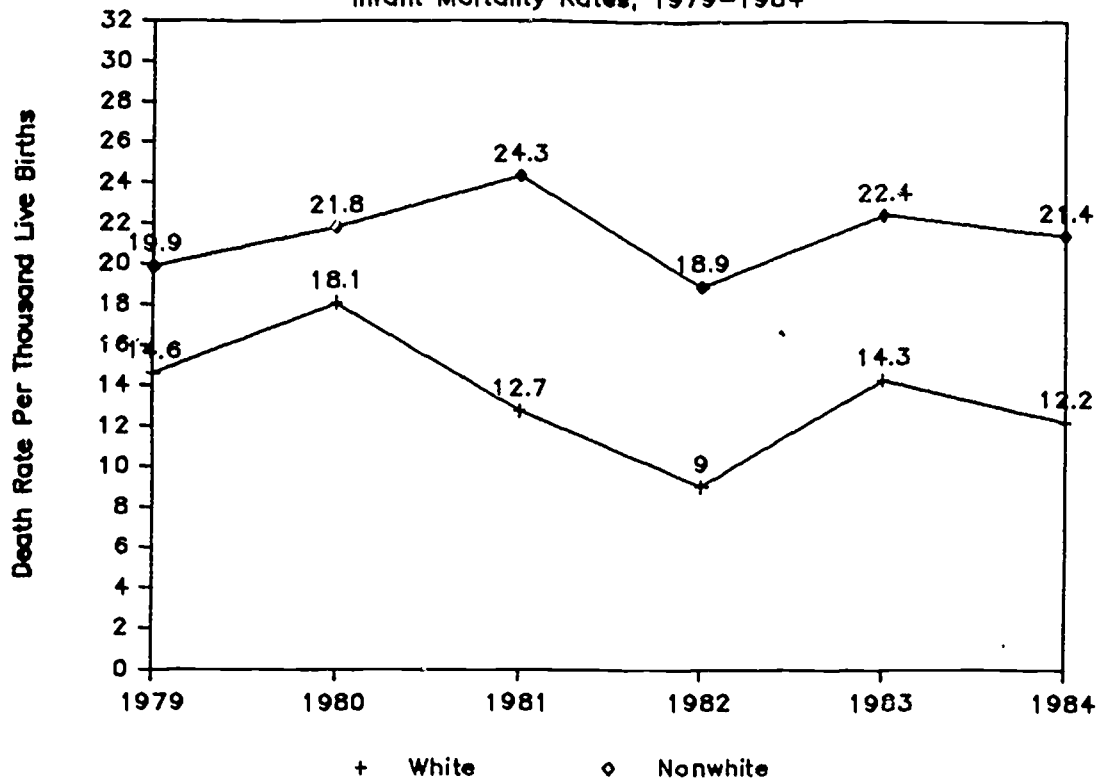
LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	8.3	10.7	7.5	7.4	6.5	7.5	8.0	-2.90
Nonwhite	13.5	14.5	13.8	14.0	14.1	12.3	13.7	-1.60
TOTAL	12.4	13.7	12.4	12.5	12.4	11.2	12.4	-1.74

Nonwhite to White ratio (1979): 1.63 (1984): 1.64 (Percent Change In Ratio 1979-1984): 0.83

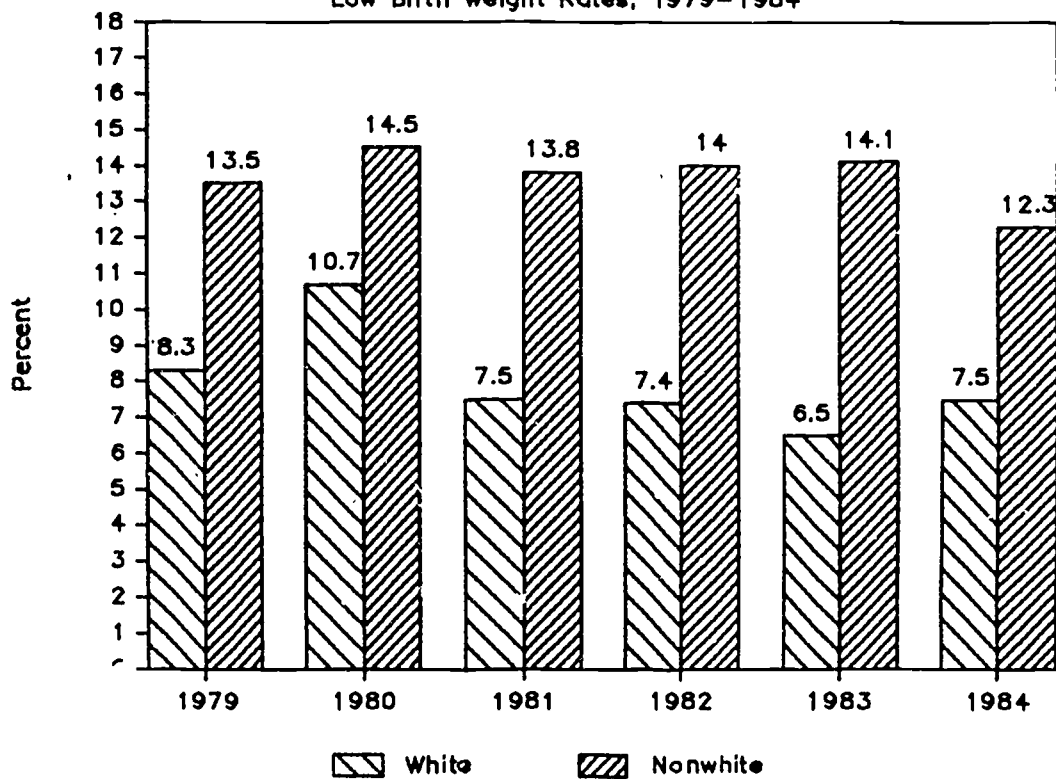
## Atlanta, Georgia

### Infant Mortality Rates, 1979-1984



## Atlanta, Georgia

### Low Birth Weight Rates, 1979-1984



HONOLULU, HAWAII

NUMBER OF LIVE BIRTHS (1984): 5,713

NUMBER OF INFANT DEATHS (1984): 60

TOTAL POPULATION (1980): 365,048

NUMBER (and percent) LIVING BELOW POVERTY (1980): 35,800 (10%)

RACIAL COMPOSITION (BY PERCENT)

White: 29.9

Nonwhite: 70.1 (The Nonwhite population is 95.4% Asian and Pacific Islands.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 2,070

PERCENT WIC "ELIGIBLES" SERVED: N/A

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

INFANT MORTALITY RATE<sup>a</sup>

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	---	---	---	---	8.8	---	---	---
Nonwhite	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	9.1	10.5	---	---

Nonwhite to White ratio (1979): --- (1984): --- (Percent Change In Ratio 1979-1984): ---

LOW BIRTH WEIGHT PERCENT<sup>a</sup>

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	---	---	---	---	---	---	---	---
Nonwhite	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---

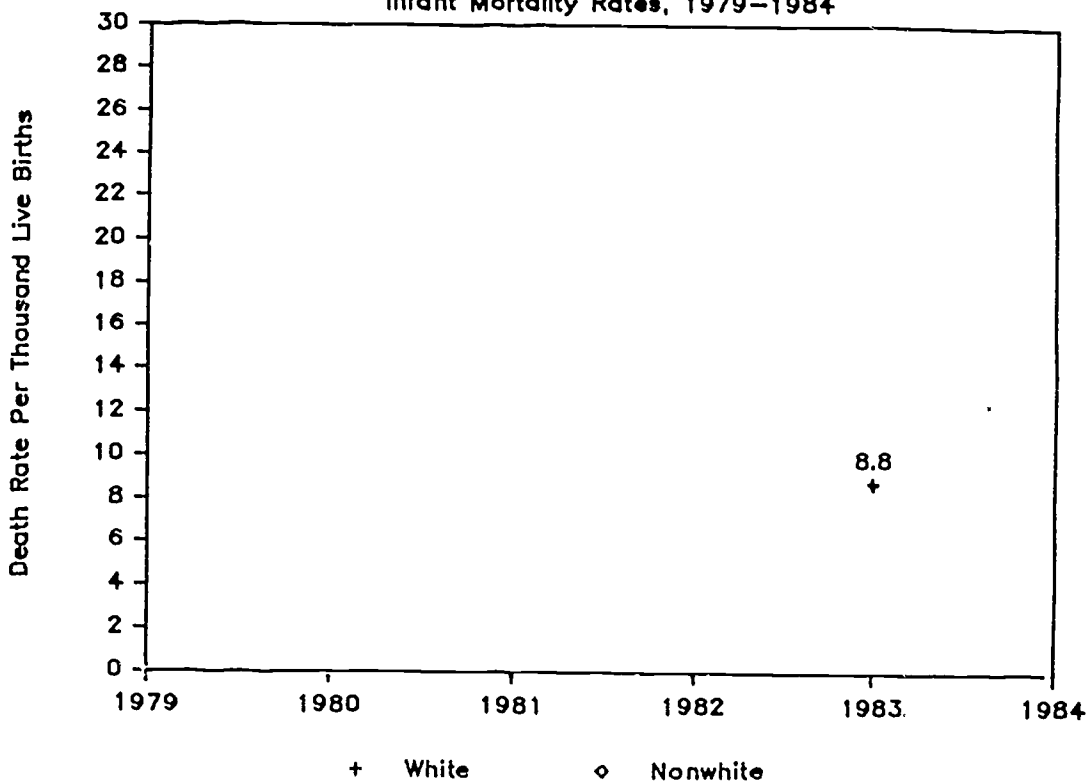
Nonwhite to White ratio (1979): --- (1984): --- (Percent Change In Ratio 1979-1984): ---

Footnotes:

<sup>a</sup> The Hawaii Research and Statistics Office was unable to provide us with the infant health statistic for Honolulu.

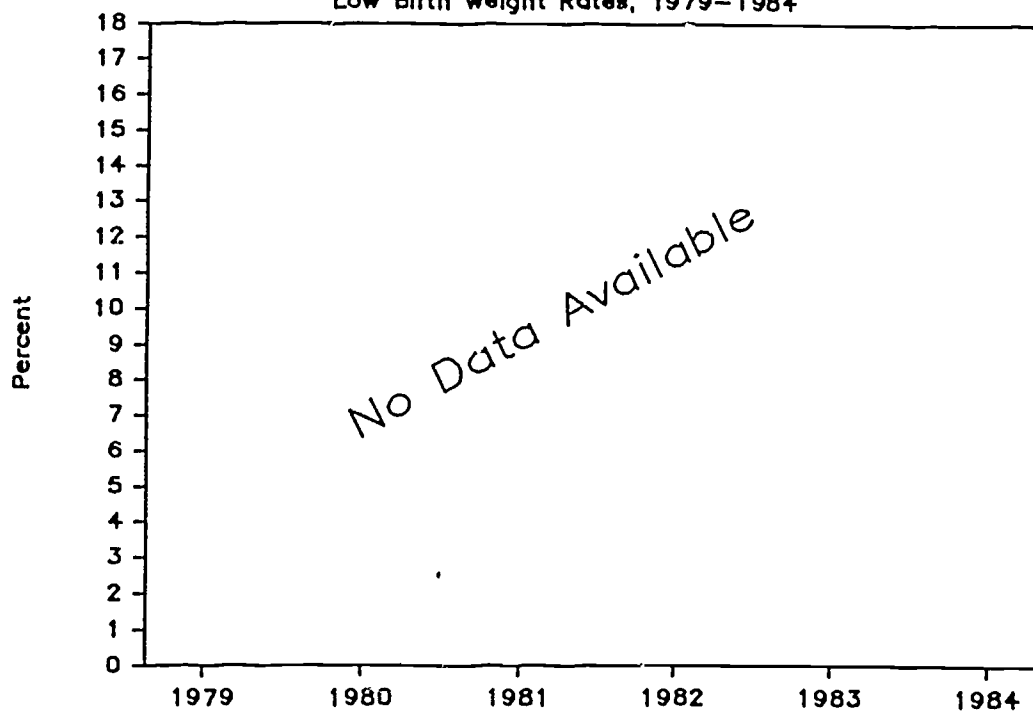
# Honolulu, Hawaii

## Infant Mortality Rates, 1979-1984



# Honolulu, Hawaii

## Low Birth Weight Rates, 1979-1984



CHICAGO, ILLINOIS

NUMBER OF LIVE BIRTHS (1984): 53,535<sup>a</sup>      NUMBER OF INFANT DEATHS (1984): 941<sup>a</sup>  
 TOTAL POPULATION (1980): 3,005,072      NUMBER (and percent) LIVING BELOW POVERTY (1980): 601,400 (20.3%)

RACIAL COMPOSITION (BY PERCENT)

White: 50.3

Nonwhite: 49.7 (The Nonwhite population is 80.2% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 49,622      PERCENT WIC "ELIGIBLES" SERVED: 24.7%  
 AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 4,762<sup>b</sup>

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	14.2	14.8	13.4	12.1	11.0	11.0	12.8	-4.81
Nonwhite	26.0	25.9	23.9	24.8	23.6	21.5	24.3	-3.61
TOTAL	20.5	20.7	18.9	18.6	17.6	16.4	18.8	-4.30

Nonwhite to White ratio (1979): 1.83      (1984): 1.95      (Percent Change In Ratio 1979-1984): 6.75

LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.5	6.6	6.2	6.4	6.3	6.2	6.4	-0.57
Nonwhite	13.9	13.7	14.4	13.9	14.0	13.9	14.0	0.04
TOTAL	10.4	10.3	10.5	10.2	10.3	10.2	10.3	-0.37

Nonwhite to White ratio (1979): 2.14      (1984): 2.24      (Percent Change In Ratio 1979-1984): 4.84

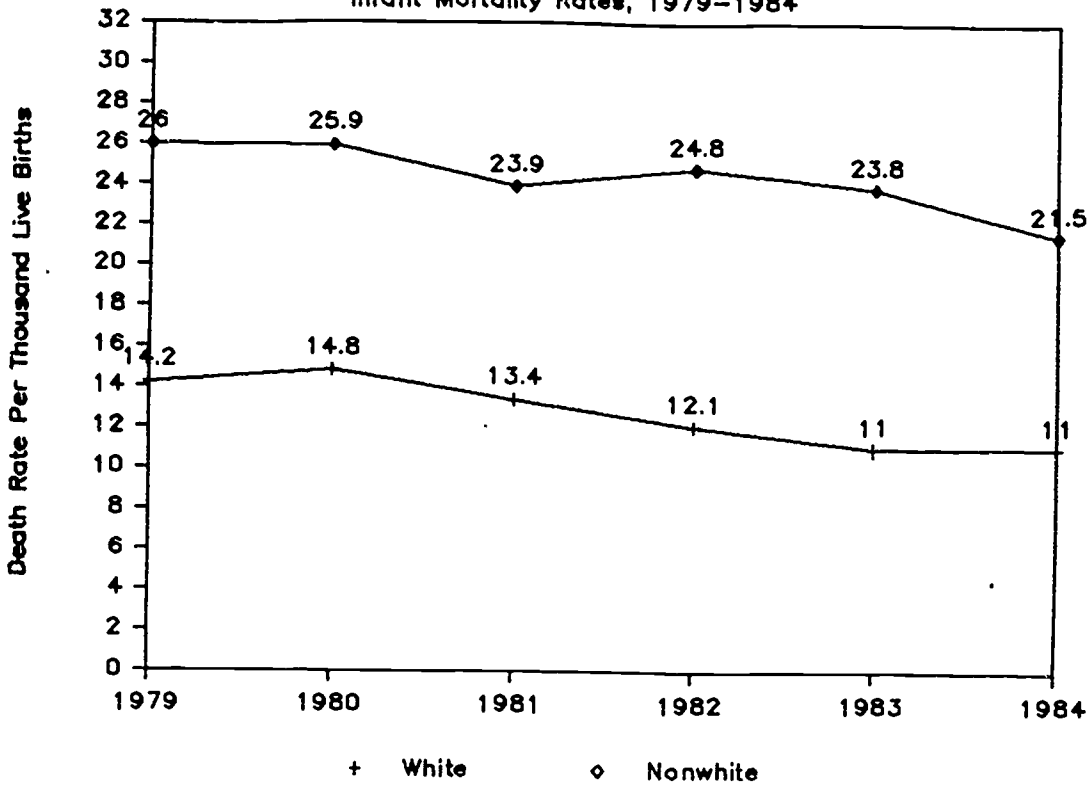
Footnotes:

a 1983 data.

b year end data.

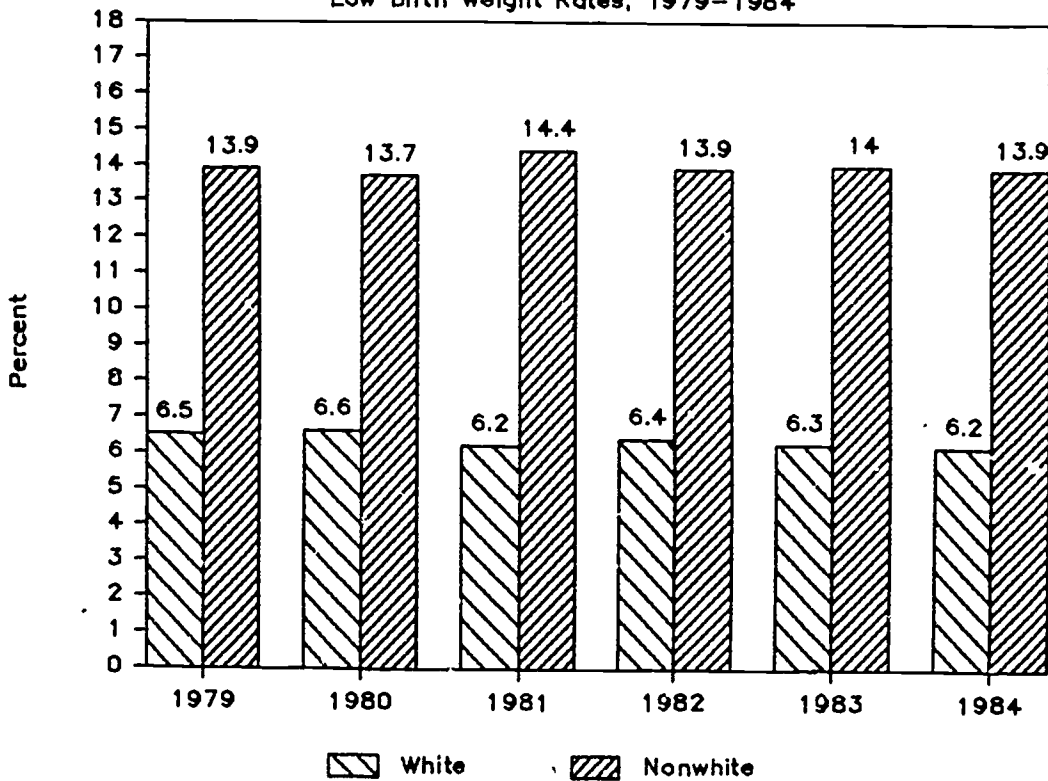
## Chicago, Illinois

### Infant Mortality Rates, 1979-1984



## Chicago, Illinois

### Low Birth Weight Rates, 1979-1984





INDIANAPOLIS, INDIANA

NUMBER OF LIVE BIRTHS (1984): 12,812                      NUMBER OF INFANT DEATHS (1984): 171  
 TOTAL POPULATION (1980): 700,807                      NUMBER (and percent) LIVING BELOW POVERTY (1980): 79,200 (11.5%)

RACIAL COMPOSITION (BY PERCENT)

White: 77.1  
 Nonwhite: 22.9 (The Nonwhite population is 80.2% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 6,350                      PERCENT WIC "ELIGIBLES" SERVED: 25.4  
 AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	13.3	11.5	13.3	10.8	12.3	9.3	11.8	-0.56
Nonwhite	21.3	21.8	18.2	22.7	21.8	24.5	21.7	3.80
TOTAL	15.5	14.3	14.6	14.0	14.9	13.3	14.4	-2.81

-----  
 Nonwhite to White ratio (1979): 1.60      (1984): 2.63      (Percent Change In Ratio 1979-1984): 64.50

L O W   B I R T H   W E I G H T   P E R C E N T <sup>a</sup>

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	---	---	---	---	---	---	---	---
Nonwhite	---	---	---	---	---	---	---	---
TOTAL	7.7	7.8	8.1	8.0	8.4	7.5	7.9	-0.36

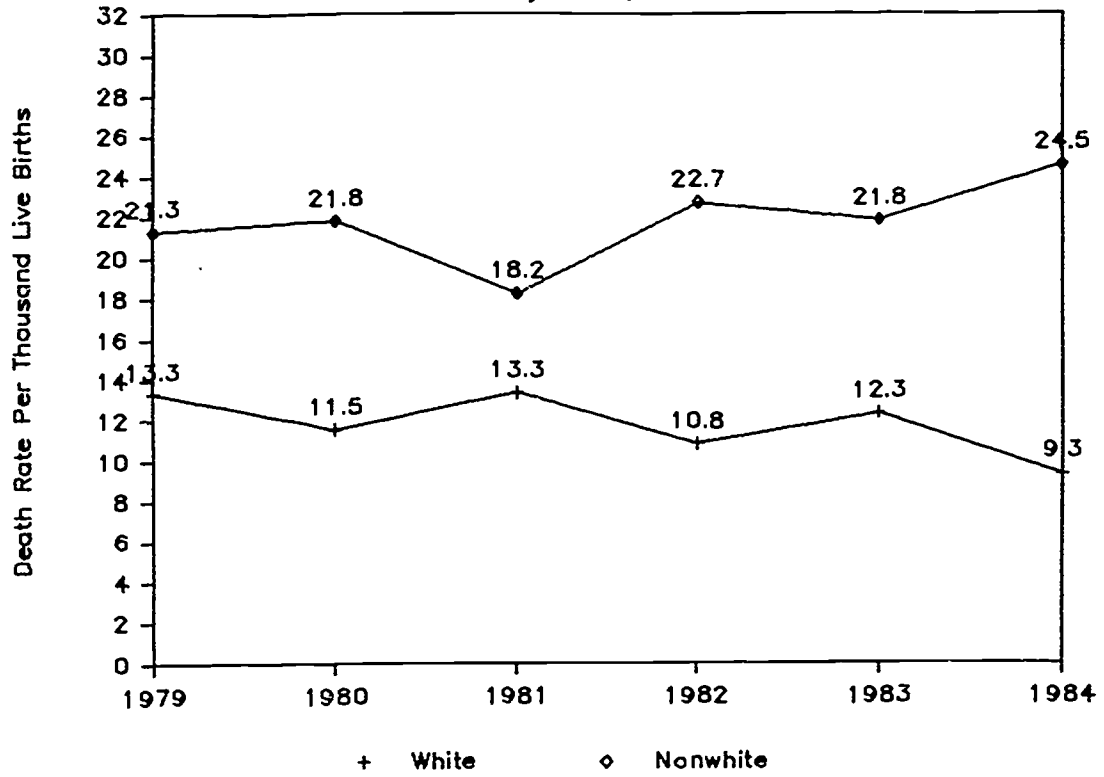
-----  
 Nonwhite to White ratio (1979): ---      (1984): ---      (Percent Change In Ratio 1979-1984): ---

Footnotes:

<sup>a</sup> Indiana Department of Public Health Statistics was unable to provide low birth weight figures, disaggregated by race, for Indianapolis.

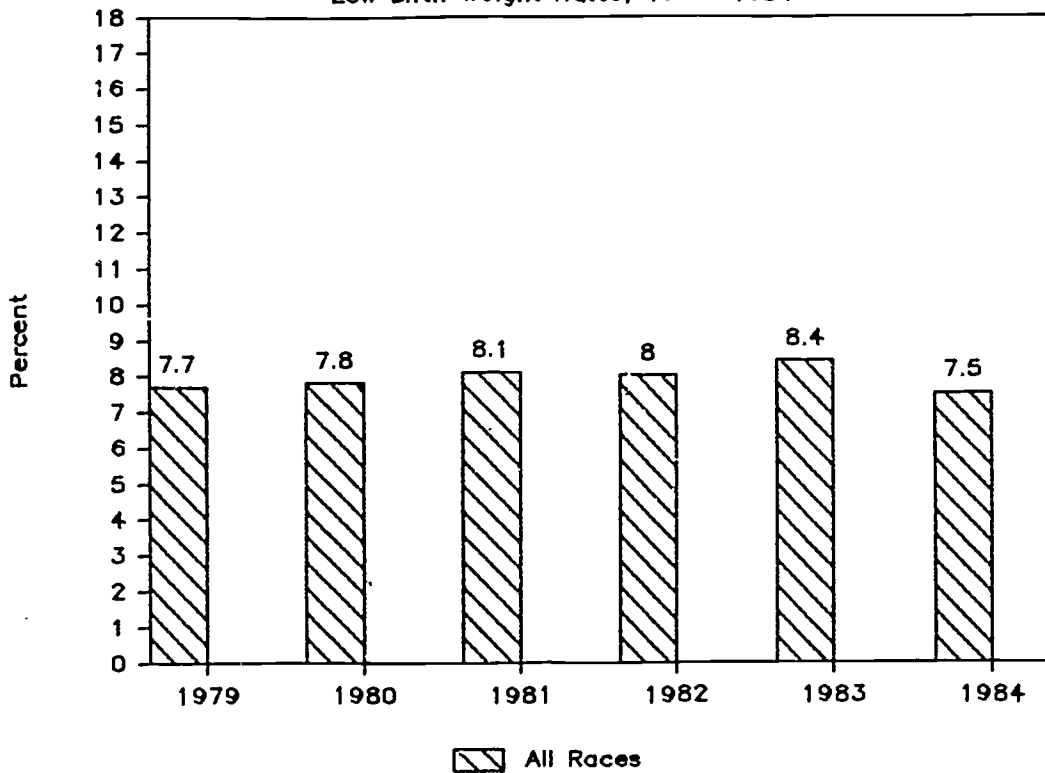
## Indianapolis, Indiana

Infant Mortality Rates, 1979-1984



## Indianapolis, Indiana

Low Birth Weight Rates, 1979-1984



WICHITA (Sedgewick County), KANSAS

NUMBER OF LIVE BIRTHS (1984): 7,327

NUMBER OF INFANT DEATHS (1984): 81

TOTAL POPULATION (1980): 366,531

NUMBER (and percent) LIVING BELOW POVERTY (1980): 32,800 (9.1%)

RACIAL COMPOSITION (BY PERCENT)

White: 87.3

Nonwhite: 12.7 (The Nonwhite population is 68.1% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 3,675<sup>a</sup>      PERCENT WIC "ELIGIBLES" SERVED: 37<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.1	10.2	11.2	8.1	12.8	8.8	10.4	6.41
Nonwhite	21.1	15.6	24.7	16.4	15.9	23.7	19.6	8.93
TOTAL	12.5	11.0	13.3	9.4	13.3	11.1	11.8	0.91

Nonwhite to White ratio (1979): 1.90      (1984): 2.69      (Percent Change In Ratio 1979-1984): 41.68

L O W   B I R T H   W E I G H T   P E R C E N T <sup>b</sup>

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	---	---	---	---	---	---	---	---
Nonwhite	---	---	---	---	---	---	---	---
TOTAL	7.4	6.7	7.6	7.1	6.5	7.2	7.1	-0.06

Nonwhite to White ratio (1979): ---      (1984): --      (Percent Change In Ratio 1979-1984): ---

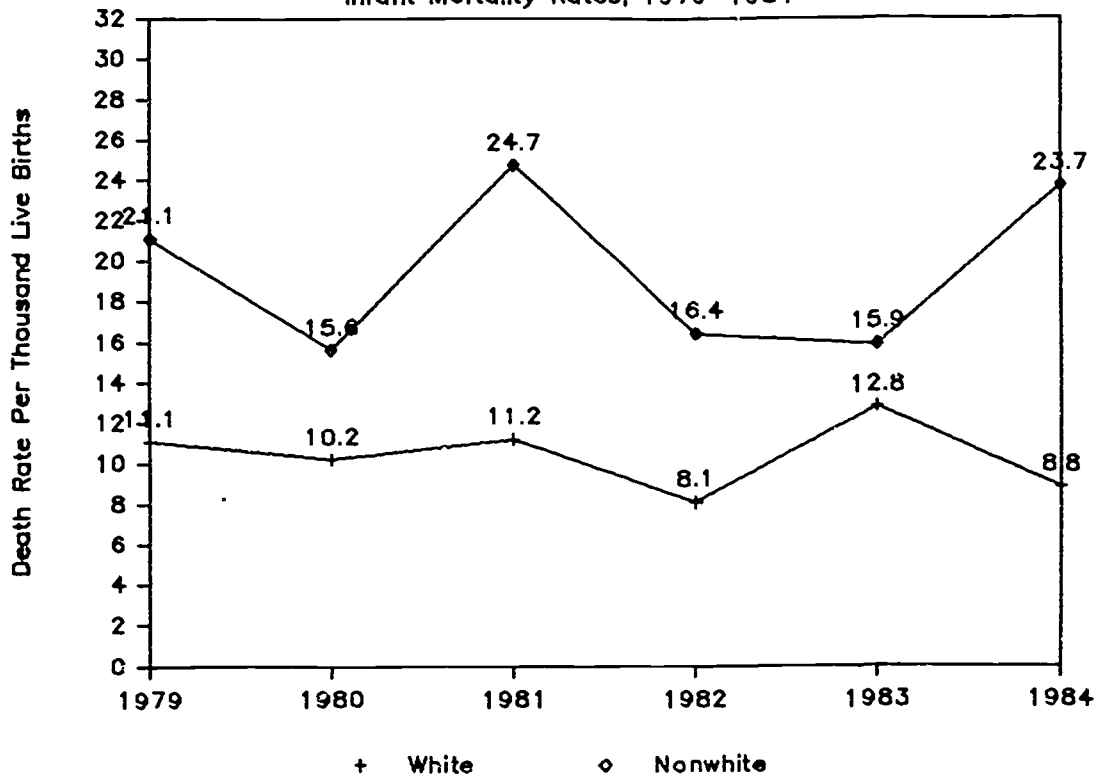
Footnotes:

a Figures represent WIC participation in the city of Wichita only.

b Kansas Office of Information Systems and Computing was unable to provide low birth weight data, disaggregated by race, for Sedgewick County.

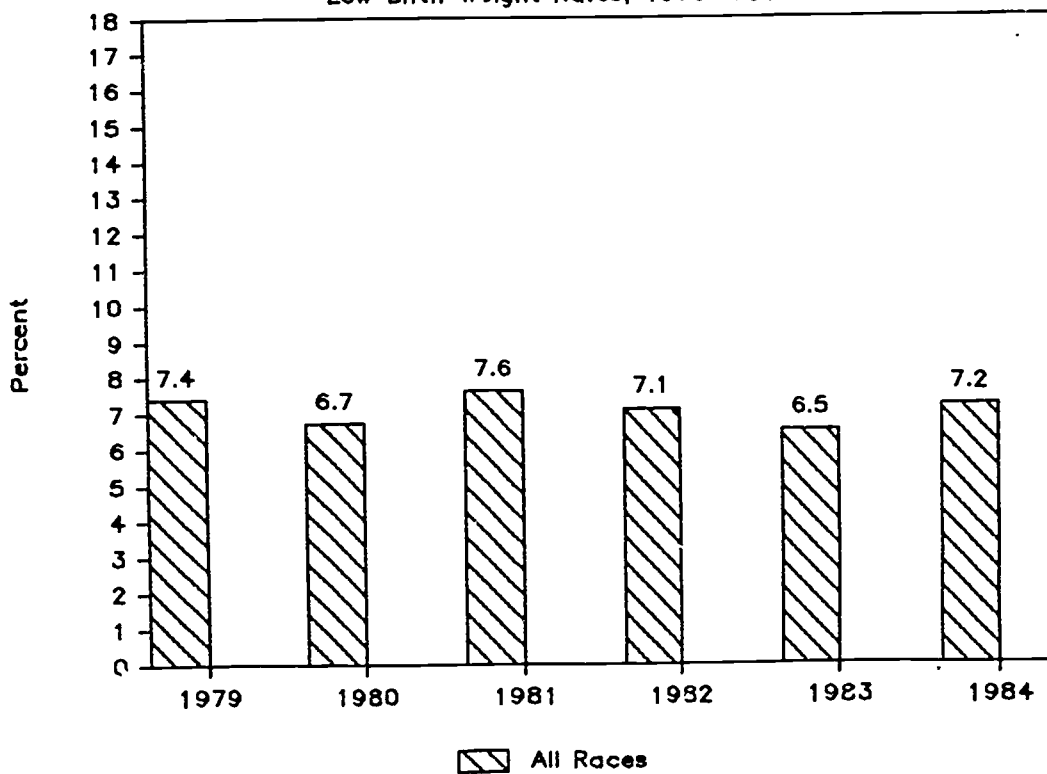
## Sedgewick County (Wichita), KS

Infant Mortality Rates, 1979-1984



## Sedgewick County (Wichita), KS

Low Birth Weight Rates, 1979-1984



LOUISVILLE, KENTUCKY

NUMBER OF LIVE BIRTHS (1984): 4,256

NUMBER OF INFANT DEATHS (1984): 49

TOTAL POPULATION (1980): 298,451

NUMBER (and percent) LIVING BELOW POVERTY (1980): 56,200 (19.3%)

RACIAL COMPOSITION (BY PERCENT)

White: 71.1

Nonwhite: 29 (The Nonwhite population is 97.5% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 6,674<sup>a</sup>

PERCENT WIC "ELIGIBLES" SERVED: 28.7<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): ---

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981 <sup>a</sup>	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.6	13.4	13.2	15.0	12.6	10.6	12.7	2.33
Nonwhite	19.4	22.8	15.5	22.2	18.9	13.0	18.6	-3.47
TOTAL	14.8	17.1	14.0	17.7	14.9	11.5	15.0	-2.96

Nonwhite to White ratio (1979): 1.23 (1984): 1.67 (Percent Change In Ratio 1979-1984): -26.67

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.1	6.8	7.4	7.5	6.9	5.9	6.8	2.73
Nonwhite	12.4	12.6	11.9	12.8	13.0	12.8	12.6	0.73
TOTAL	8.6	9.1	9.0	9.5	9.1	8.5	9.0	-0.11

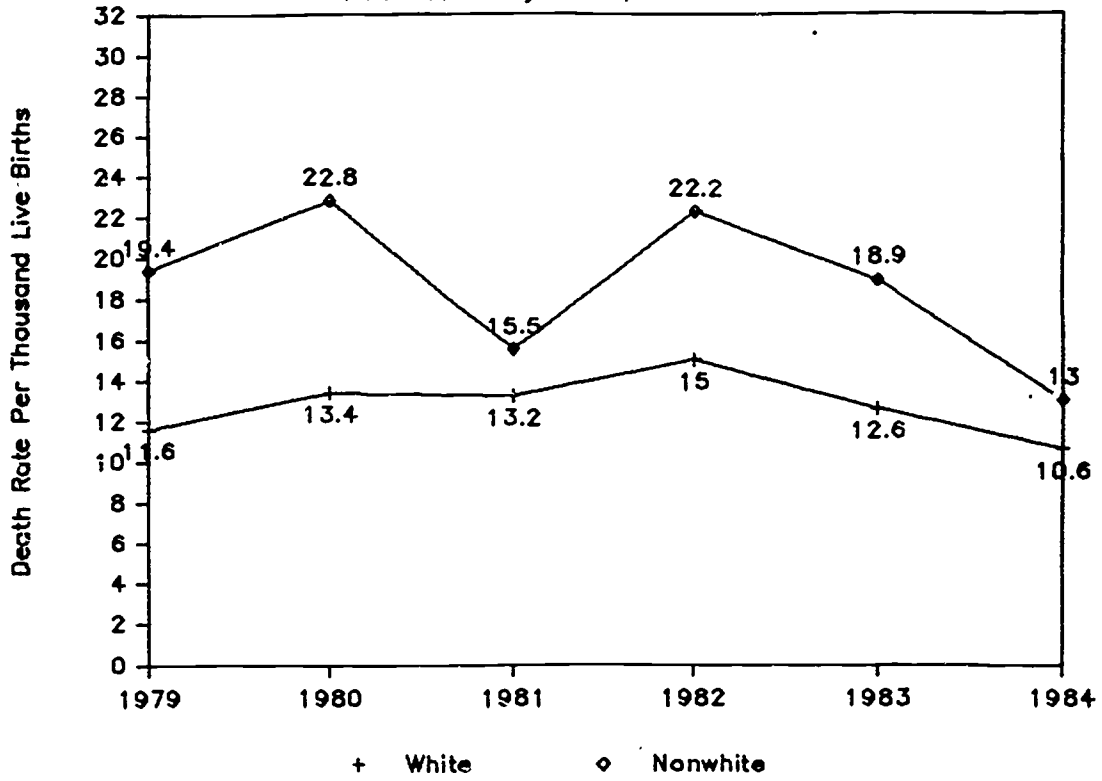
Nonwhite to White ratio (1979): 2.03 (1984): 2.17 (Percent Change In Ratio 1979-1984): 6.72

Footnotes:

<sup>a</sup> WIC figures represent Jefferson County WIC participation.

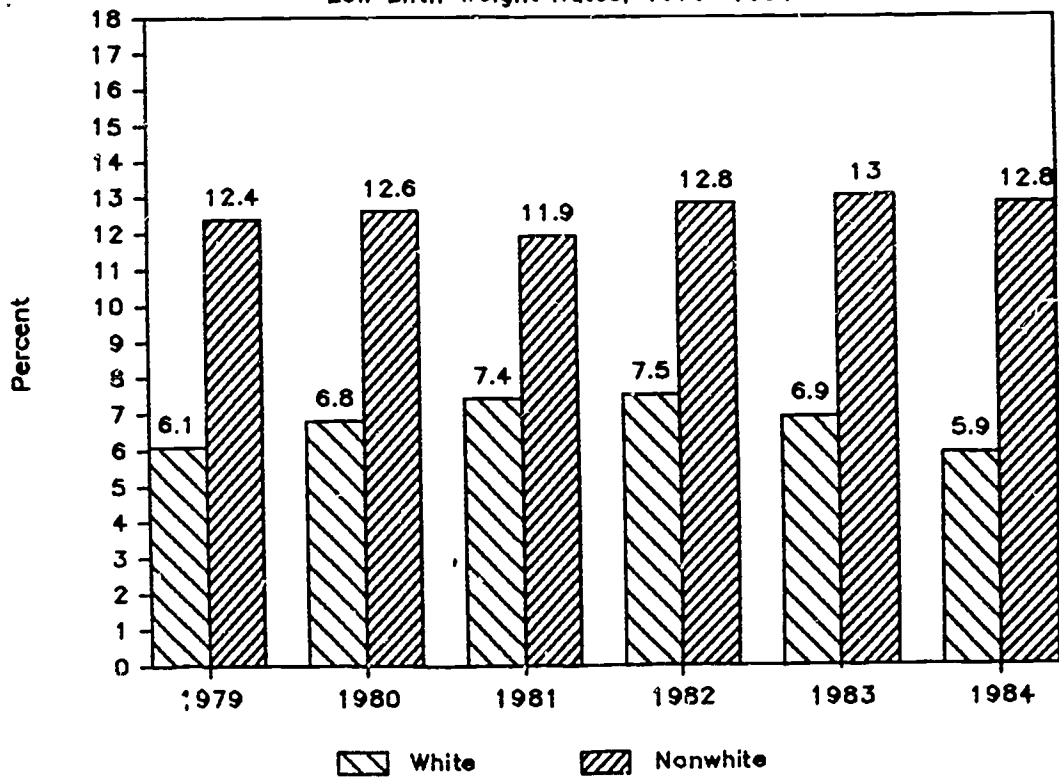
## Louisville, Kentucky

### Infant Mortality Rates, 1979-1984



## Louisville, Kentucky

### Low Birth Weight Rates, 1979-1984



**BATON ROUGE, LOUISIANA**

NUMBER OF LIVE BIRTHS (1984): 5,206

NUMBER OF INFANT DEATHS (1984): 73

TOTAL POPULATION (1980): 219,419

NUMBER (and percent) LIVING BELOW POVERTY (1980): 39,200 (18.7%)

**RACIAL COMPOSITION (BY PERCENT)**

White: 62.2

NonWhite: 37.8 (The Nonwhite population is 96.2% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 4,637

PERCENT WIC "ELIGIBLES" SERVED: 32.3<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

**I N F A N T M O R T A L I T Y R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.0	10.3	9.2	10.5	10.8	7.7	9.9	-0.01
Nonwhite	N/A	18.8	N/A	N/A	17.3	19.6	18.6 <sup>b</sup>	13.29 <sup>c</sup>
TOTAL	N/A	14.8	N/A	N/A	14.2	14.0	14.3 <sup>b</sup>	-1.41 <sup>c</sup>

Nonwhite to White ratio (1979): 1.83<sup>b</sup> (1984): 2.55 (Percent Change In Ratio 1979-1984): 39.34<sup>b</sup>

**L O W B I R T H W E I G H T P E R C E N T**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.9	6.6	5.6	5.5	5.6	4.5	5.6	-0.65
Nonwhite	12.6	13.2	14.8	12.6	14.0	13.1	13.4	1.34
TOTAL	9.4	10.1	10.5	9.2	10.0	9.0	9.7	-0.46

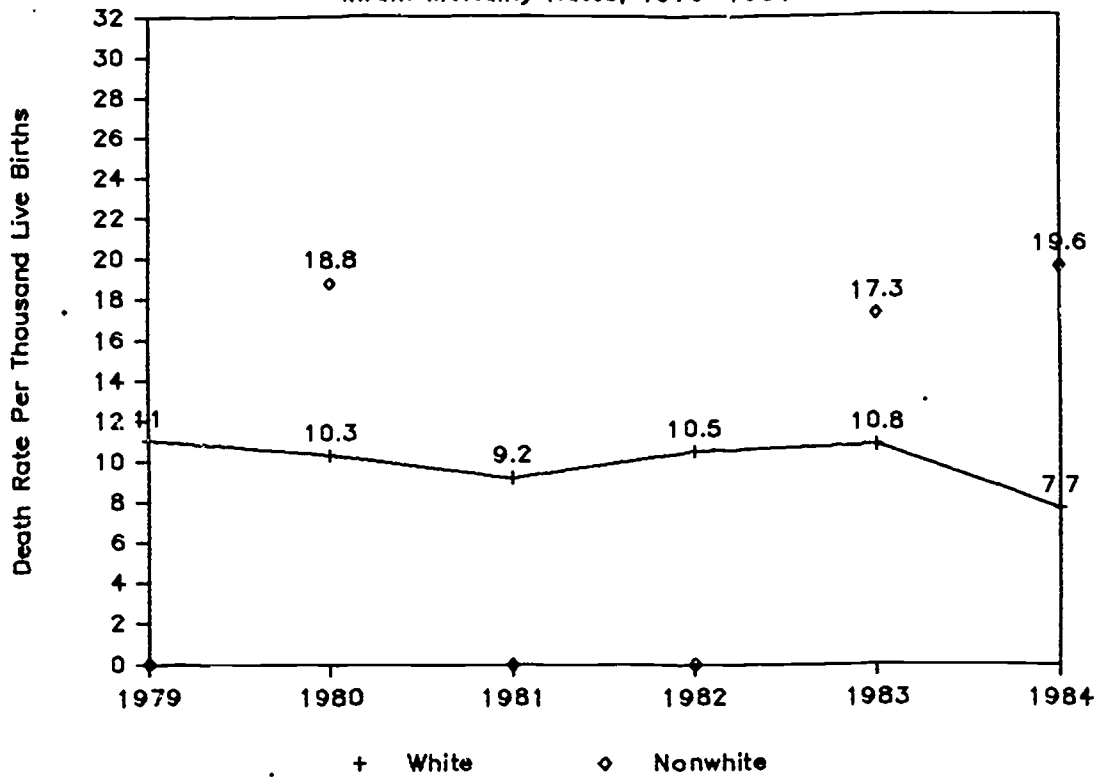
Nonwhite to White ratio (1979): 2.14 (1984): 2.91 (Percent Change In Ratio 1979-1984): 36.31

**Footnotes:**

- a May 1983 data only.
- b Figure calculated using 1980 and 1983-1984 data only.
- c Figure calculated using 1983-1984 data only.
- d Figure calculated using 1980 data.

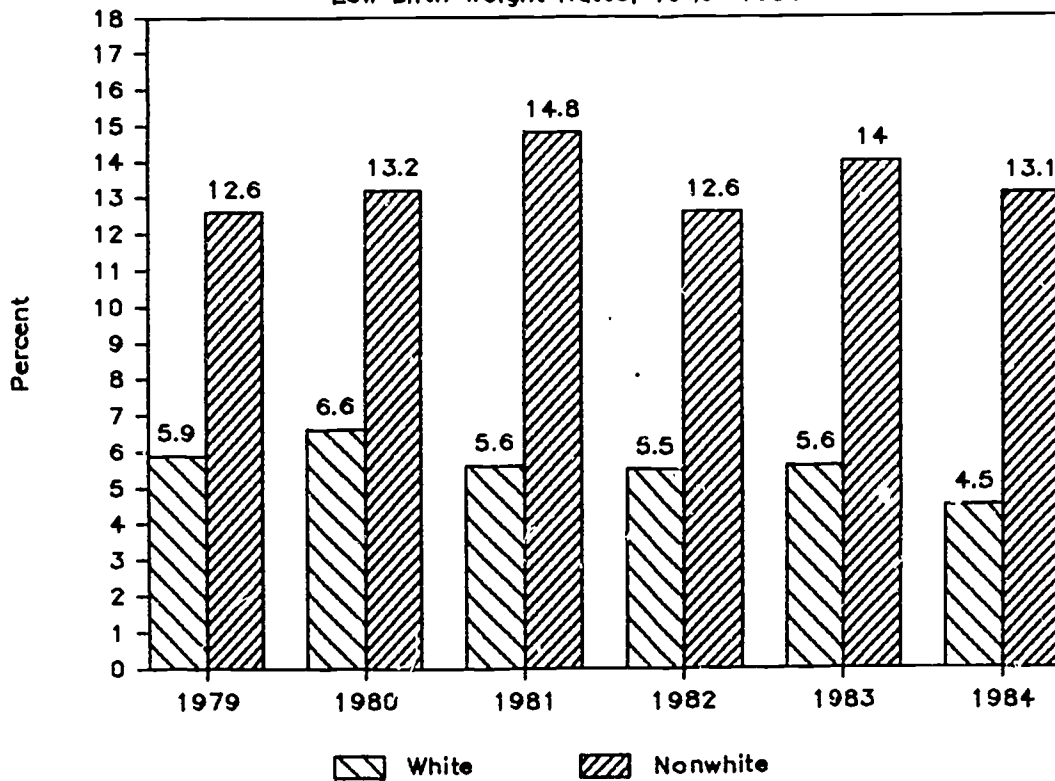
# Baton Rouge, Louisiana

## Infant Mortality Rates, 1979-1984



# Baton Rouge, Louisiana

## Low Birth Weight Rates, 1979-1984





NEW ORLEANS, LOUISIANA

NUMBER OF LIVE BIRTHS (1984): 10,430

NUMBER OF INFANT DEATHS (1984): 170

TOTAL POPULATION (1980): 557,515

NUMBER (and percent) LIVING BELOW POVERTY (1980): 143,800 (26.4%)

RACIAL COMPOSITION (BY PERCENT)

White: 42.7

Nonwhite: 57.3 (The Nonwhite population is 96.5% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 6,955

PERCENT WIC "ELIGIBLES" SERVED: 20.5<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 19,722<sup>b</sup>

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	13.1	11.8	11.7	7.8	9.2	11.5	10.8	-5.23
Nonwhite	23.4	23.4	19.1	19.5	20.5	18.0	20.7	-4.67
TOTAL	20.9	20.2	17.2	16.4	17.6	16.3	18.1	-4.58

Nonwhite to White ratio (1979): 1.79 (1984): 1.57 (Percent Change In Ratio 1979-1984): -12.37

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.8	6.4	5.6	6.3	6.1	6.4	6.3	-1.81
Nonwhite	13.6	13.6	12.6	13.7	12.0	13.3	13.5	-0.33
TOTAL	11.8	11.6	10.9	11.7	12.0	11.5	11	-0.40

Nonwhite to White ratio (1979): 2.00 (1984): 2.08 (Percent Change In Ratio 1979-1984): 3.91

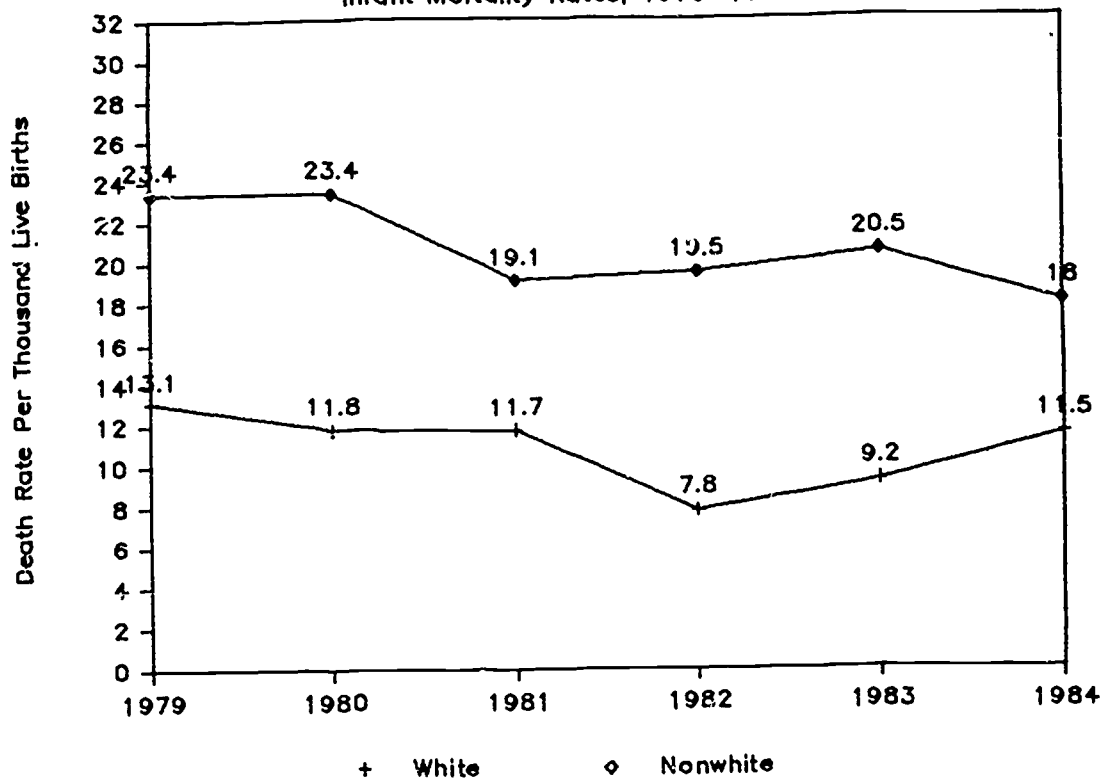
Footnotes:

<sup>a</sup> Figure reflects May, 1983 data.

<sup>b</sup> Figure obtained from, "The Commodity Supplemental Food Program: A Successful Program Held in Check" Center on Budget and Policy Priorities, Washington, D.C. 1985.

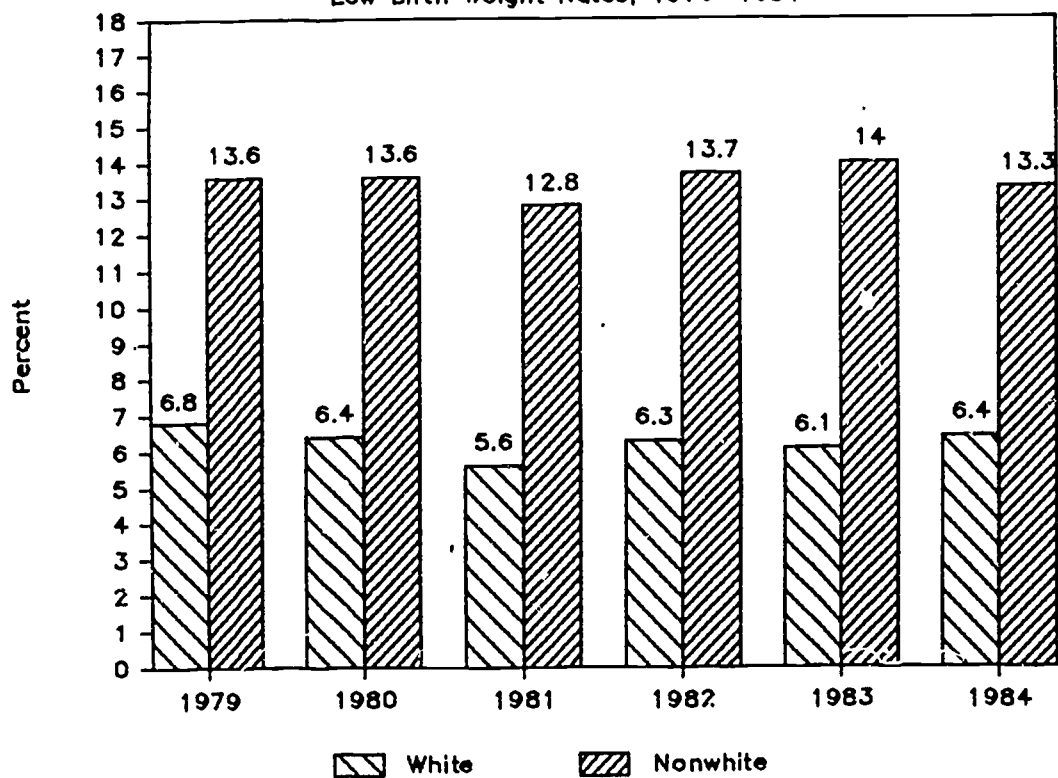
# New Orleans, Louisiana

Infant Mortality Rates, 1979-1984



# New Orleans, Louisiana

Low Birth Weight Rates, 1979-1984



**BALTIMORE, MARYLAND**

NUMBER OF LIVE BIRTHS (1984): 12,932

NUMBER OF INFANT DEATHS (1984): 215

TOTAL POPULATION (1980): 766,775

NUMBER (and percent) LIVING BELOW POVERTY (1980): 176,500 (22.9%)

**RACIAL COMPOSITION (BY PERCENT)**

White: 44.1

Nonwhite: 55.9 (The Nonwhite population is 98% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 23,201

PERCENT WIC "ELIGIBLES" SERVED: 62.7%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

**I N F A N T M O R T A L I T Y R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	16.2	12.6	10.8	12.0	9.7	12.6	12.3	-8.91
Nonwhite	23.5	21.4	20.1	19.2	19.1	18.6	20.3	-4.53
TOTAL	21.2	18.4	17.0	16.8	16.0	16.6	17.7	-4.60

Nonwhite to White ratio (1979): 1.45

(1984): 1.48

(Percent Change In Ratio 1979-1984): 1.76

**L O W B I R T H W E I G H T P E R C E N T**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	7.2	7.2	6.8	6.5	6.7	6.6	6.8	-1.38
Nonwhite	13.0	14.4	13.7	13.2	14.2	13.8	13.8	1.40
TOTAL	11.2	12.0	11.4	11.0	11.8	11.4	11.5	0.50

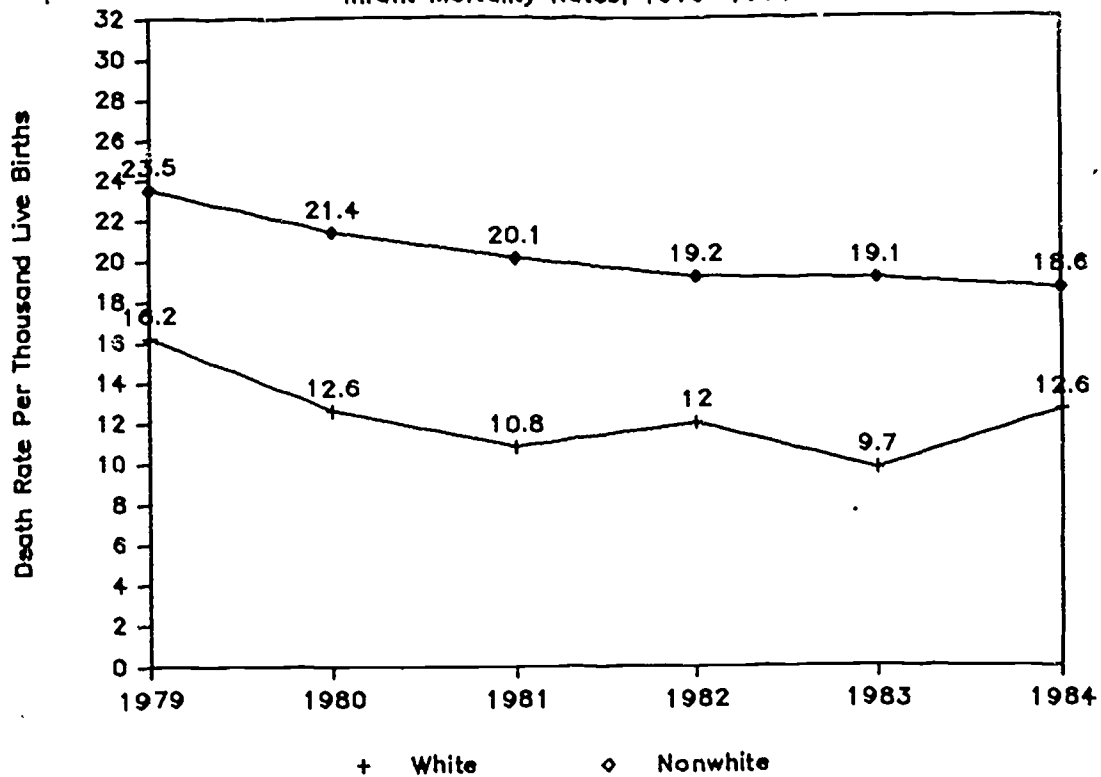
Nonwhite to White ratio (1979): 1.81

(1984): 2.09

(Percent Change In Ratio 1979-1984): 15.80

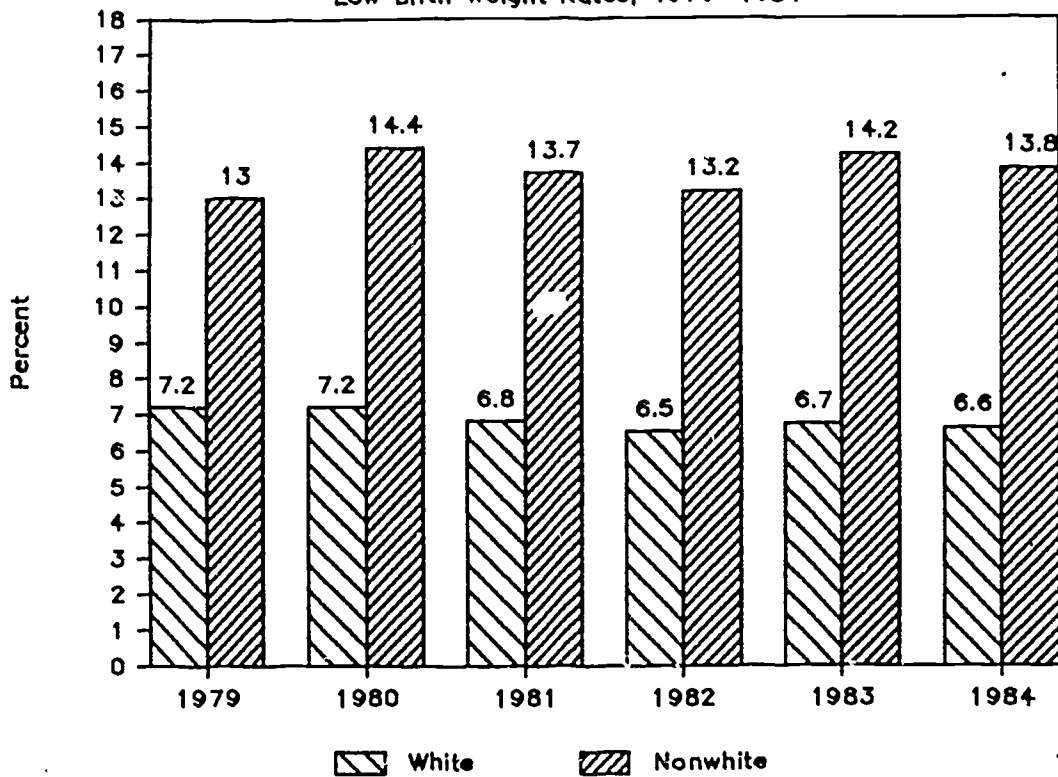
# Baltimore, Maryland

Infant Mortality Rates, 1979-1984



# Baltimore, Maryland

Low Birth Weight Rates, 1979-1984



**BOSTON, MASSACHUSETTS**

NUMBER OF LIVE BIRTHS (1984): 8,526

NUMBER OF INFANT DEATHS (1984): 100

TOTAL POPULATION (1980): 562,994

NUMBER (and percent) LIVING BELOW POVERTY (1980): 106,800 (20.2%)

**RACIAL COMPOSITION (BY PERCENT)**

White: 70.5

Nonwhite: 29.6 (The Nonwhite population is 76% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 16,000<sup>a</sup>

PERCENT WIC "ELIGIBLES" SERVED: 63

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

**I N F A N T M O R T A L I T Y R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.5	8.8	10.2	12.4	9.3	10.9	10.5	-2.20
Nonwhite	22.1	19.3	16.0	23.5	16.5	NA	19.5 <sup>b</sup>	-3.17 <sup>b</sup>
TOTAL	15.5	13.0	12.0	15.8	11.5	11.7	13.3	-3.53

Nonwhite to White ratio (1979): 1.92      (1984): 1.77<sup>c</sup>      (Percent Change In Ratio 1979-1984): -7.81<sup>c</sup>

**L O W B I R T H W E I G H T P E R C E N T**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.8	6.1	6.5	6.2	6.4	7.0	6.3	2.07
Nonwhite	11.6	12.2	11.3	11.6	11.8	NA	11.7 <sup>b</sup>	0.54 <sup>b</sup>
TOTAL	8.3	8.6	8.6	8.5	8.7	9.3	8.7	2.34

Nonwhite to White ratio (1979): 2.00      (1984): 1.84<sup>c</sup>      (Percent Change In Ratio 1979-1984): -8.00<sup>c</sup>

**Footnotes:**

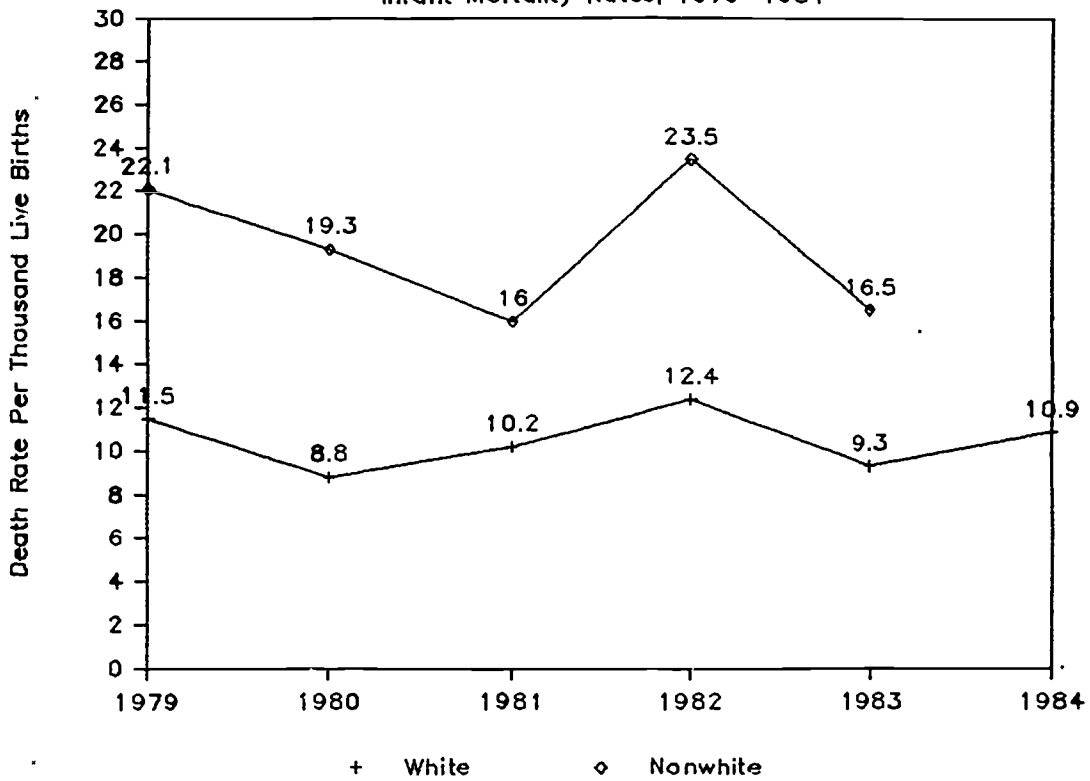
<sup>a</sup> Figure reflects June 1984 WIC participation only.

<sup>b</sup> Figure based on 1979-1983 data only.

<sup>c</sup> Figure based on 1983 data.

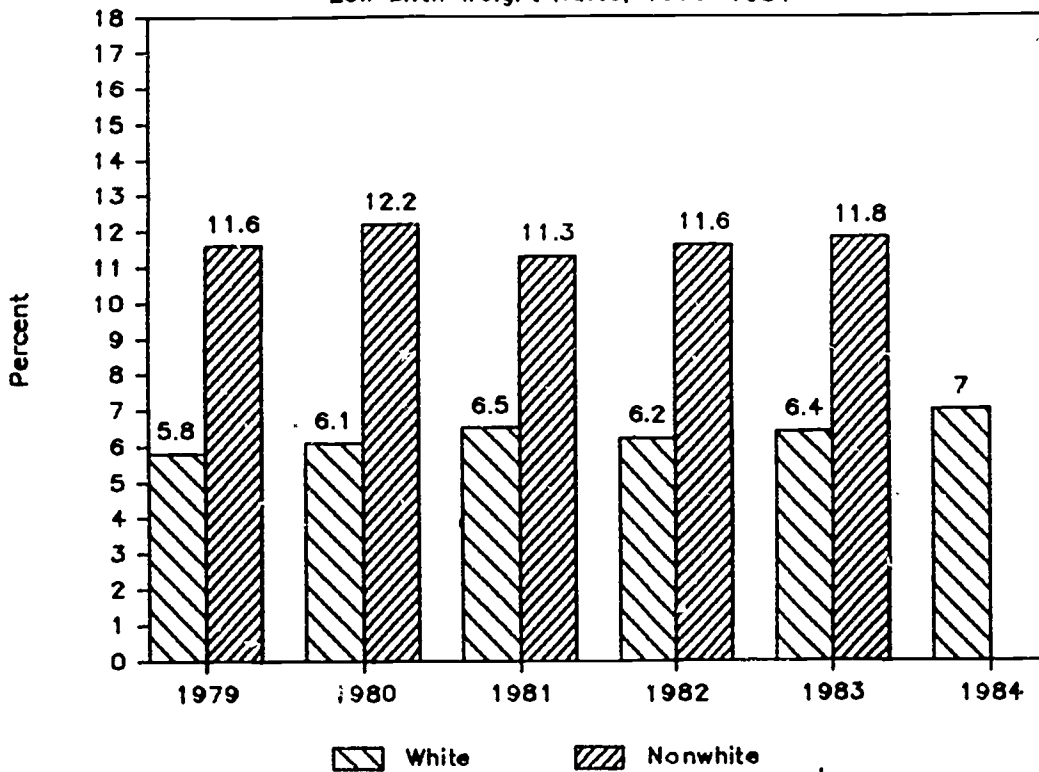
# Boston, Massachusetts

Infant Mortality Rates, 1979-1984



# Boston, Massachusetts

Low Birth Weight Rates, 1979-1984



DETROIT, MICHIGAN

NUMBER OF LIVE BIRTHS (1984): 18,517

NUMBER OF INFANT DEATHS (1984): 338

TOTAL POPULATION (1980): 1,203,339

NUMBER (and percent) LIVING BELOW POVERTY (1980): 258,600 (21.9%)

RACIAL COMPOSITION (BY PERCENT)

White: 35

Nonwhite: 65.1 (The Nonwhite population is 96.9% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 23,060<sup>a</sup>

PERCENT WIC "ELIGIBLES" SERVED: 31.7<sup>b</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	17.1	11.1	12.0	9.4	11.4	14.0	12.5	-5.47
Nonwhite	22.9	25.1	26.0	26.8	22.9	23.8	24.6	1.13
TOTAL	21.3	21.0	21.9	21.8	19.8	21.0	21.1	-0.14

Nonwhite to White ratio (1979): 1.34 (1984): 1.70 (Percent Change In Ratio 1979-1984): 26.94

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	7.0	7.1	7.1	6.9	7.2	7.7	7.2	0.59
Nonwhite	13.6	12.7	13.8	14.7	14.9	14.8	14.1	1.85
TOTAL	11.7	11.1	11.8	12.4	12.8	13.1	12.2	2.37

Nonwhite to White ratio (1979): 1.94 (1984): 1.92 (Percent Change In Ratio 1979-1984): -1.07

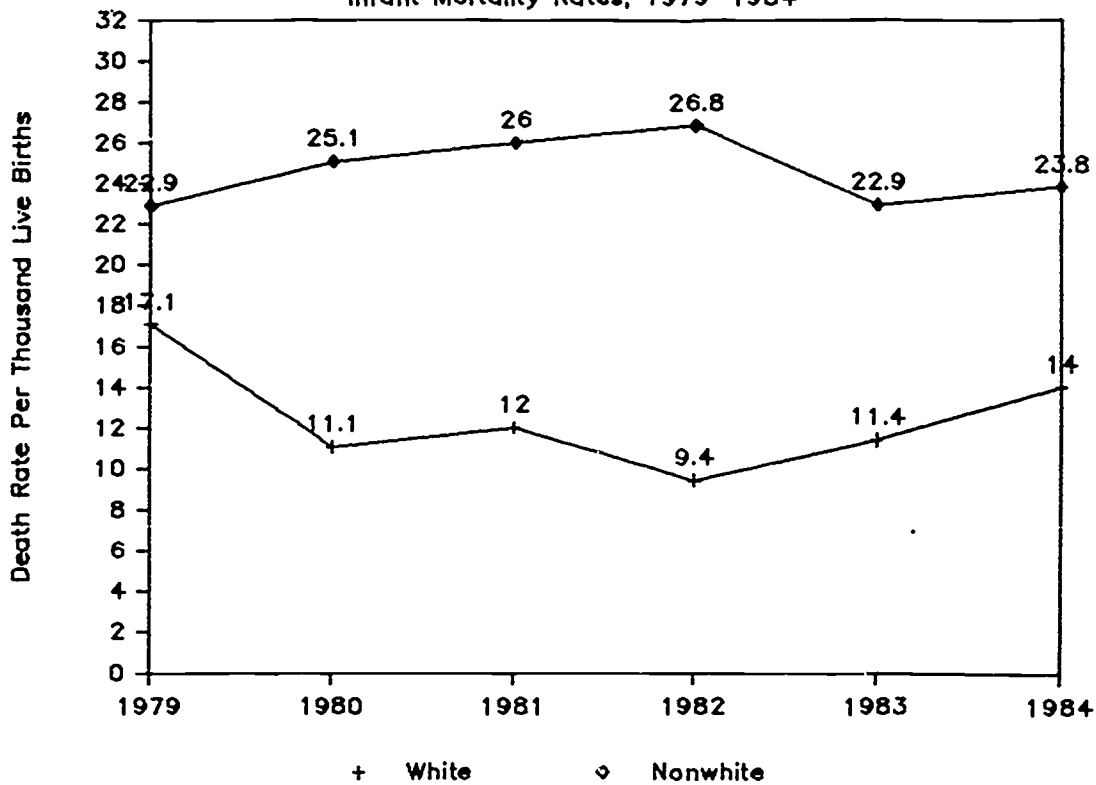
Footnotes:

<sup>a</sup> Wayne County WIC participation is 29,060.

<sup>b</sup> Percent WIC eligibles served calculated for Wayne County only.

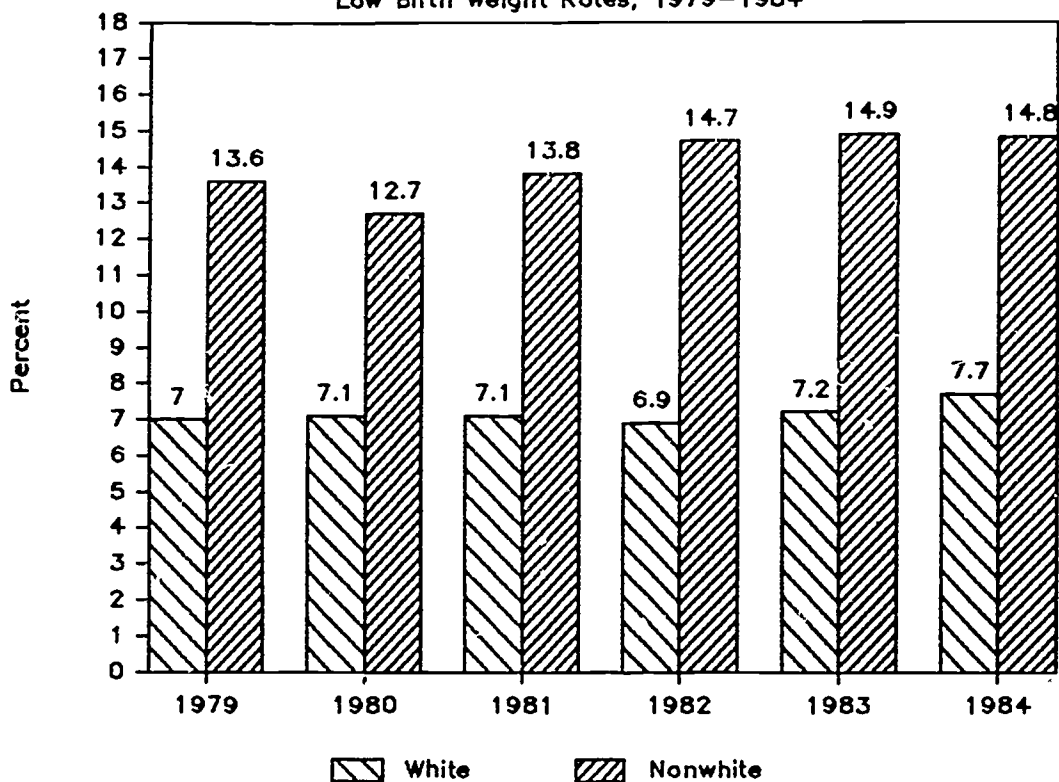
## Detroit, Michigan

### Infant Mortality Rates, 1979-1984



## Detroit, Michigan

### Low Birth Weight Rates, 1979-1984





MINNEAPOLIS, MINNESOTA

NUMBER OF LIVE BIRTHS (1984): 6,299

NUMBER OF INFANT DEATHS (1984): 59

TOTAL POPULATION (1980): 370,951

NUMBER (and percent) LIVING BELOW POVERTY (1980): 48,000 (13.5%)

RACIAL COMPOSITION (BY PERCENT)

White: 87.7

Nonwhite: 12.3 (The Nonwhite population is 62.7% Black)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 11,108

PERCENT WIC "ELIGIBLES" SERVED: 36.8%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 426

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.6	9.8	7.5	10.8	8.1	8.9	9.5	-4.00
Nonwhite	19.3	23.2	21.4	15.5	10.1	10.5	16.7	-9.20
TOTAL	13.3	13.1	11.2	12.1	10.0	9.4	11.5	-6.27

Nonwhite to White ratio (1979): 1.66 (1984): 1.18 (Percent Change In Ratio 1979-1984): -29.09

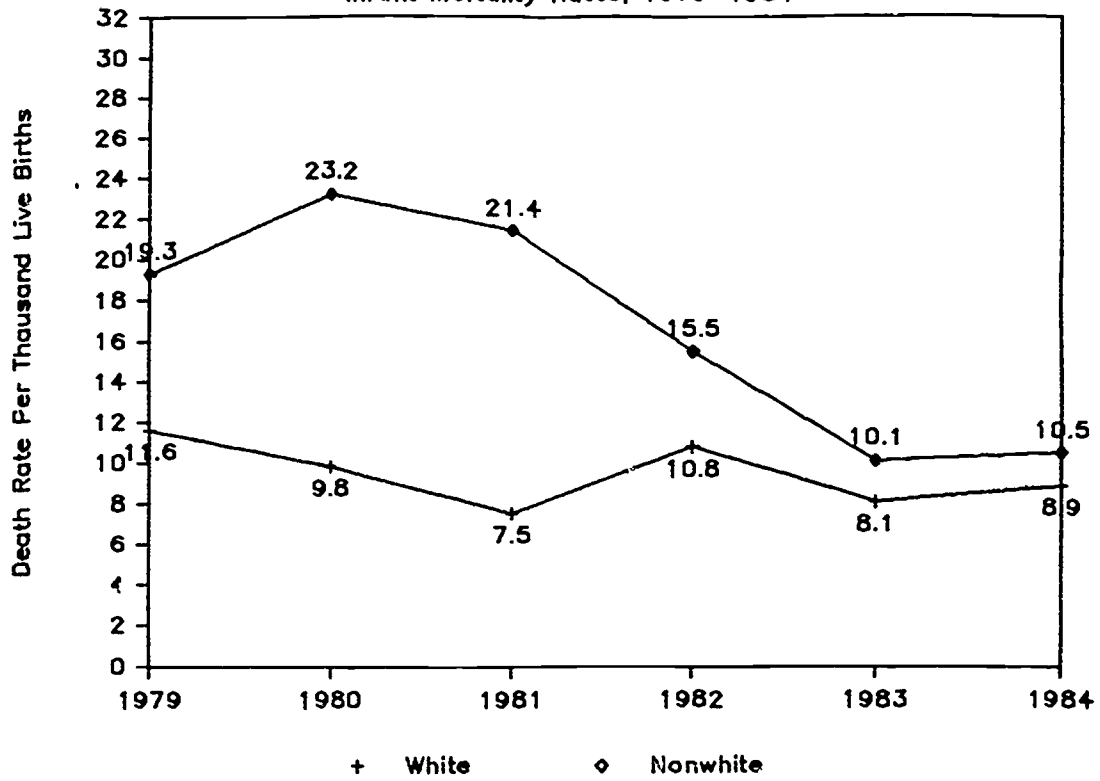
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.0	5.2	6.0	5.3	5.2	5.4	5.5	-2.30
Nonwhite	10.5	10.7	10.4	9.2	6.8	9.2	9.5	-0.65
TOTAL	7.0	6.6	7.2	6.4	6.5	6.5	6.7	-1.23

Nonwhite to White ratio (1979): 1.75 (1984): 1.70 (Percent Change In Ratio 1979-1984): -2.65

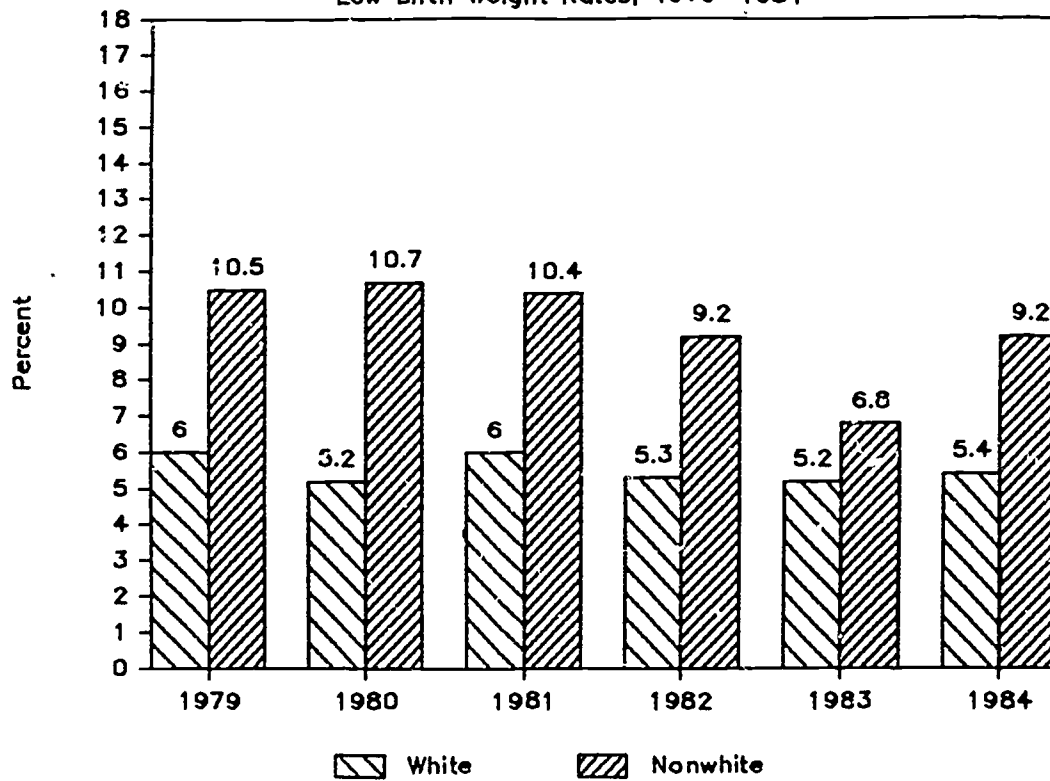
# Minneapolis, Minnesota

Infant Mortality Rates, 1979-1984



# Minneapolis, Minnesota

Low Birth Weight Rates, 1979-1984



**KANSAS CITY, MISSOURI**

NUMBER OF LIVE BIRTHS (1984): 7,716

NUMBER OF INFANT DEATHS (1984): 99

TOTAL POPULATION (1980): 448,159

NUMBER (and percent) LIVING BELOW POVERTY (1980): 58,000 (13.2)

**RACIAL COMPOSITION (BY PERCENT)**

White: 70

Nonwhite: 30 (The Nonwhite population is 91% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 6,887<sup>a</sup>

PERCENT WIC "ELIGIBLES" SERVED: 35.4<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

**I N F A N T M O R T A L I T Y R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	14.6	12.1	13.2	13.3	18.7	10.1	13.7	6.67
Nonwhite	24.4	18.2	16.0	20.6	14.2	16.9	18.4	-4.16
TOTAL	18.3	14.4	14.2	16.0	10.8	12.8	14.4	-4.80

Nonwhite to White ratio (1979): 1.67      (1984): 1.67      (Percent Change In Ratio 1979-1984): 0.12

**L O W B I R T H W E I G H T P E R C E N T**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.3	6.0	6.4	6.1	6.0	6.1	6.2	-0.88
Nonwhite	12.7	13.2	13.1	14.3	12.4	13.5	13.2	1.58
TOTAL	8.7	8.7	8.8	9.2	8.4	9.0	8.8	0.83

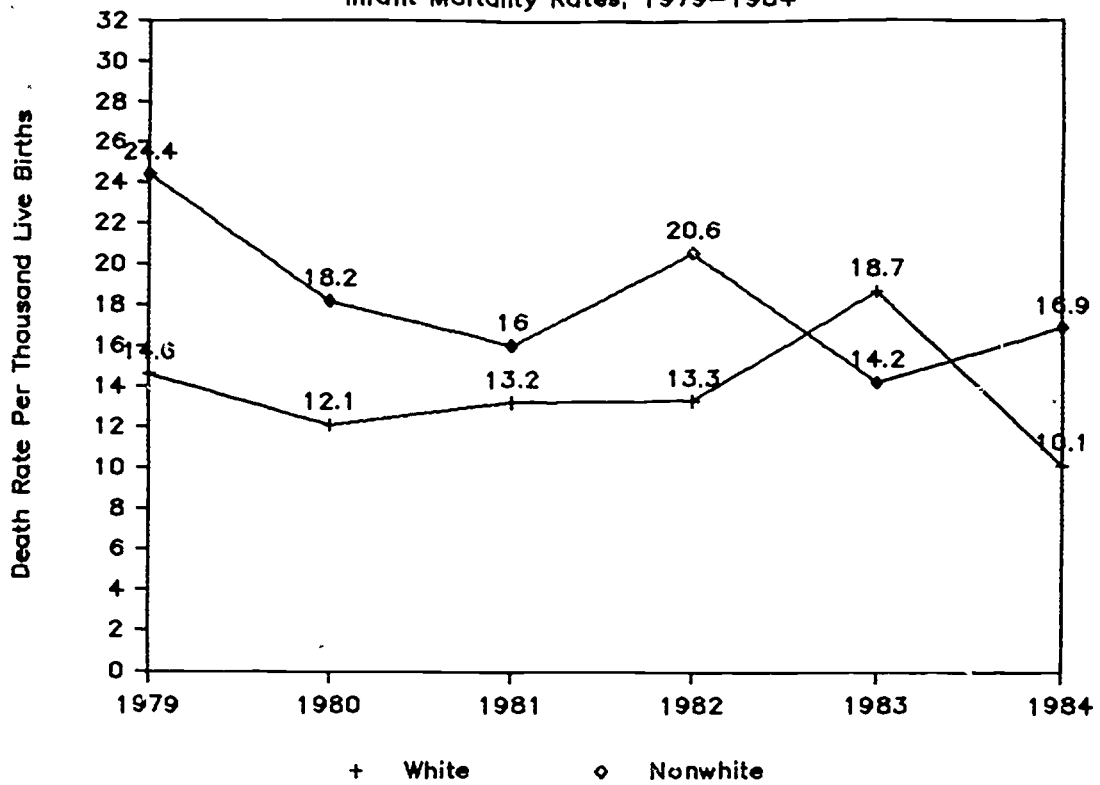
Nonwhite to White ratio (1979): 2.02      (1984): 2.21      (Percent Change In Ratio 1979-1984): 9.78

**Footnotes:**

<sup>a</sup> Figures reflects WIC participation and eligibility in Jackson County.

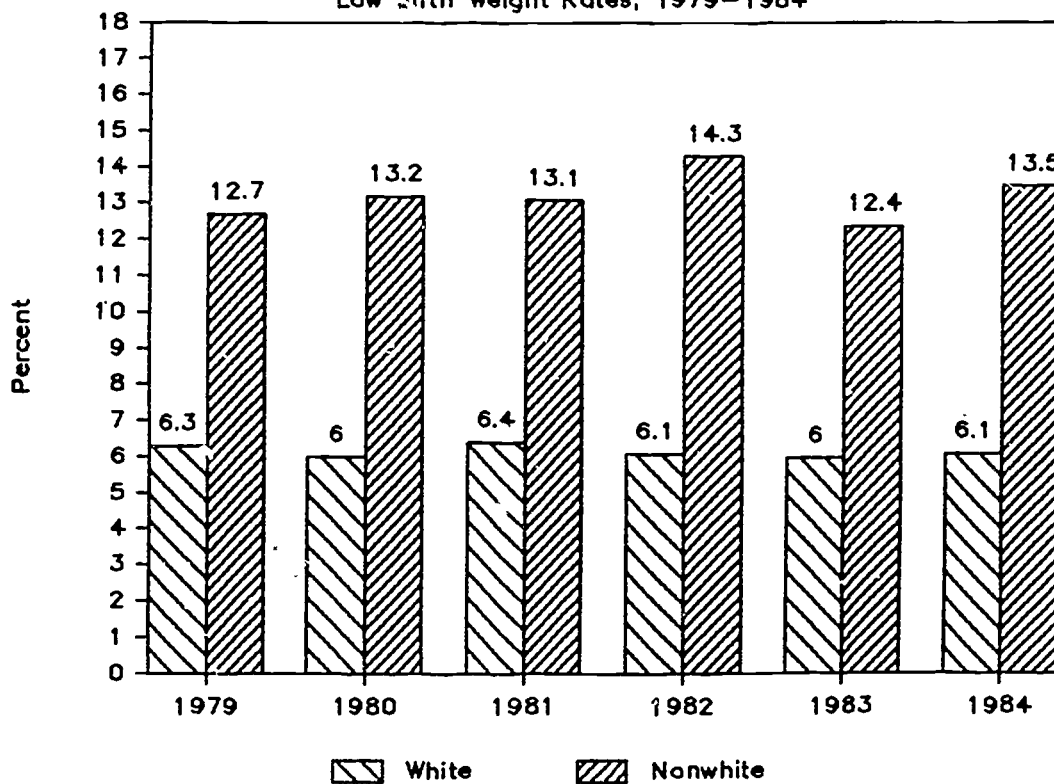
# Kansas City, Missouri

## Infant Mortality Rates, 1979-1984



# Kansas City, Missouri

## Low Birth Weight Rates, 1979-1984



ST. LOUIS, MISSOURI

NUMBER OF LIVE BIRTHS (1984): 7,869

NUMBER OF INFANT DEATHS (1984): 116

TOTAL POPULATION (1980): 453,085

NUMBER (and percent) LIVING BELOW POVERTY (1980): 96,800 (21.8%)

RACIAL COMPOSITION (BY PERCENT)

White: 53.6

Nonwhite: 46.4 (The Nonwhite population is 98% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 9,041

PERCENT WIC "ELIGIBLES" SERVED: 30.9

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	13.1	12.5	13.4	8.9	9.0	10.2	11.2	-5.97
Nonwhite	26.0	22.6	21.3	18.1	21.0	18.1	21.2	-6.33
TOTAL	20.9	18.4	18.1	14.2	16.1	14.7	17.1	-6.09

Nonwhite to White ratio (1979): 1.98 (1984): 1.77 (Percent Change In Ratio 1979-1984): -10.59

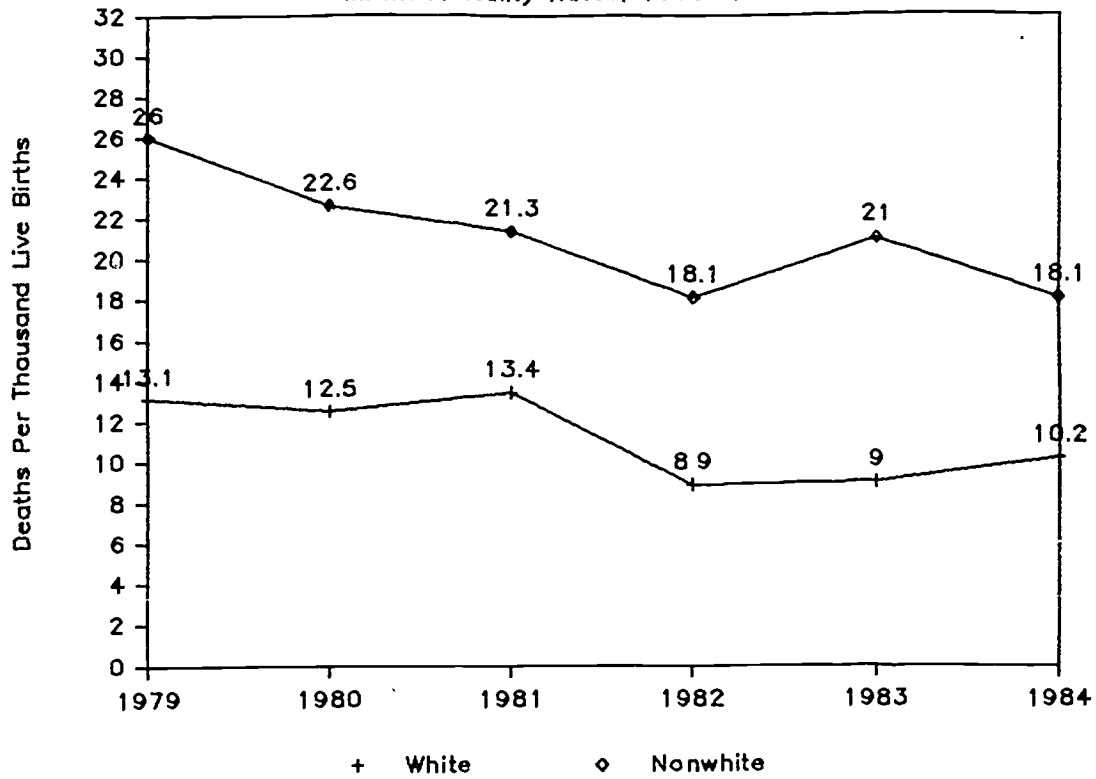
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.5	6.1	6.4	5.7	5.5	6.1	6.1	-3.14
Nonwhite	13.4	13.4	13.2	12.4	13.4	13.0	13.1	-0.49
TOTAL	10.7	10.4	10.4	9.6	10.2	10.1	10.2	-1.05

Nonwhite to White ratio (1979): 2.06 (1984): 2.13 (Percent Change In Ratio 1979-1984): 3.38

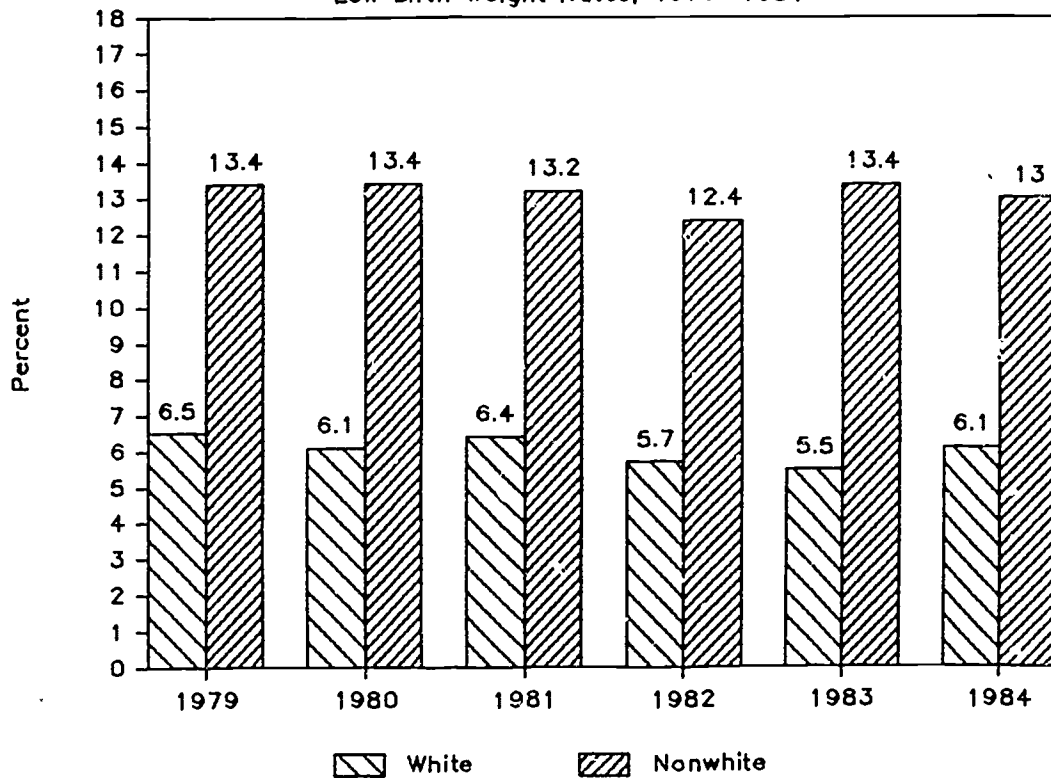
## St. Louis, Missouri

### Infant Mortality Rates, 1979-1984



## St. Louis, Missouri

### Low Birth Weight Rates, 1979-1984



**OMAHA (Douglas County), NEBRASKA**

NUMBER OF LIVE BIRTHS (1984): 5,756

NUMBER OF INFANT DEATHS (1984): 84

TOTAL POPULATION (1980): 314,255

NUMBER (and percent) LIVING BELOW POVERTY (1980): 34,900 (11.4%)

**RACIAL COMPOSITION (BY PERCENT)**

White: 85.6

Nonwhite: 14.4 (The Nonwhite population is 84% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 5,704<sup>a</sup>

PERCENT WIC "ELIGIBLES" SERVED: N/A

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

**I N F A N T M O R T A L I T Y R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.9	14.0	10.5	9.9	9.8	14.0	11.9	4.20
Nonwhite	20.0	22.3	16.7	18.2	14.8	16.5	18.1	-2.36
TOTAL	14.5	16.4	12.0	11.8	11.0	14.6	13.4	2.11

Nonwhite to White ratio (1979): 1.55      (1984): 1.17      (Percent Change In Ratio 1979-1984): -24.5

**L O W B I R T H W E I G H T P E R C E N T**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.7	6.4	6.0	5.8	5.3	5.9	6.0	-4.54
Nonwhite	11.6	11.4	13.1	12.4	11.1	10.7	11.7	-1.25
TOTAL	7.5	7.6	7.7	7.5	6.7	7.1	7.4	-0.93

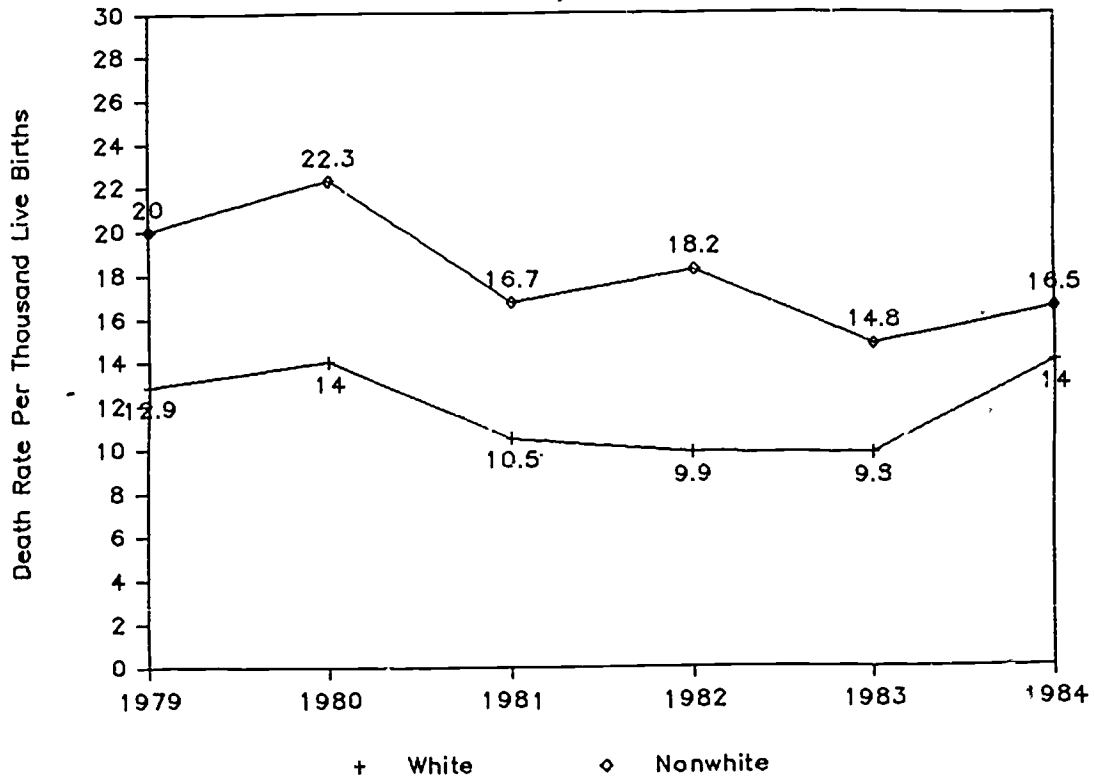
Nonwhite to White ratio (1979): 1.73      (1984): 1.81      (Percent Change In Ratio 1979-.984): 4.62

**Footnotes:**

<sup>a</sup> WIC figures are for Douglas and Sarpy Counties.

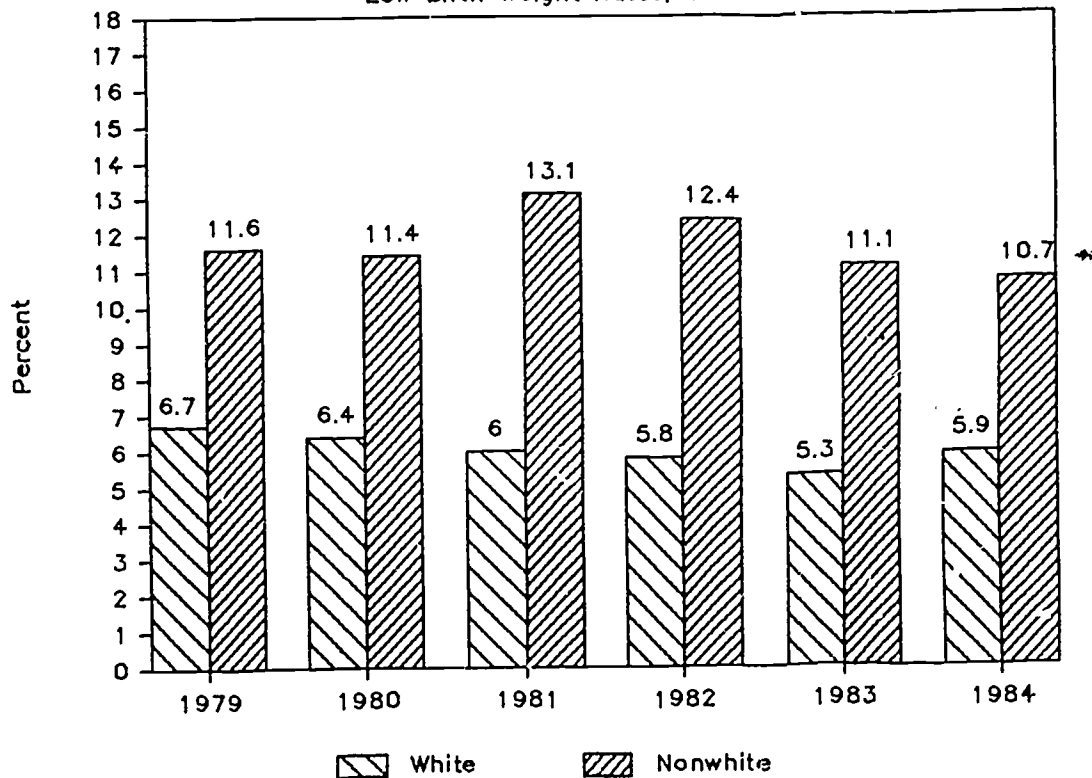
## Omaha (Douglas County), Nebraska

Infant Mortality Rates, 1979-1984



## Omaha (Douglas County), Nebraska

Low Birth Weight Rates, 1979-1984





NEWARK, NEW JERSEY

NUMBER OF LIVE BIRTHS (1984): 5,486

NUMBER OF INFANT DEATHS (1984): 102

TOTAL POPULATION (1980): 349,248

NUMBER (and percent) LIVING BELOW POVERTY (1980): 106,900 (32.8%)

RACIAL COMPOSITION (BY PERCENT)

White: 32.6

Nonwhite: 67.4 (The Nonwhite population is 86.5% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 6,350

PERCENT WIC "ELIGIBLES" SERVED: 57.2<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	14.3	12.4	9.9	10.5	8.0	13.4	11.41	-10.24
Nonwhite	30.3	22.9	21.6	20.6	27.0	21.6	24.0	-4.73
TOTAL	24.8	19.2	17.3	16.9	20.2	18.6	19.5	-4.64

Nonwhite to White ratio (1979): 2.12 (1984): 1.61 (Percent Change In Ratio 1979-1984): -23.92

LOW BIRTH WEIGHT PERCENT<sup>b</sup>

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	---	---	---	---	---	---	---	---
Nonwhite	---	---	---	---	---	---	---	---
TOTAL	12.2	12.3	12.9	11.9	11.9	11.9	12.2	-0.41

Nonwhite to white ratio (1979): --- (1984): --- (Percent Change In Ratio 1979-1984): ---

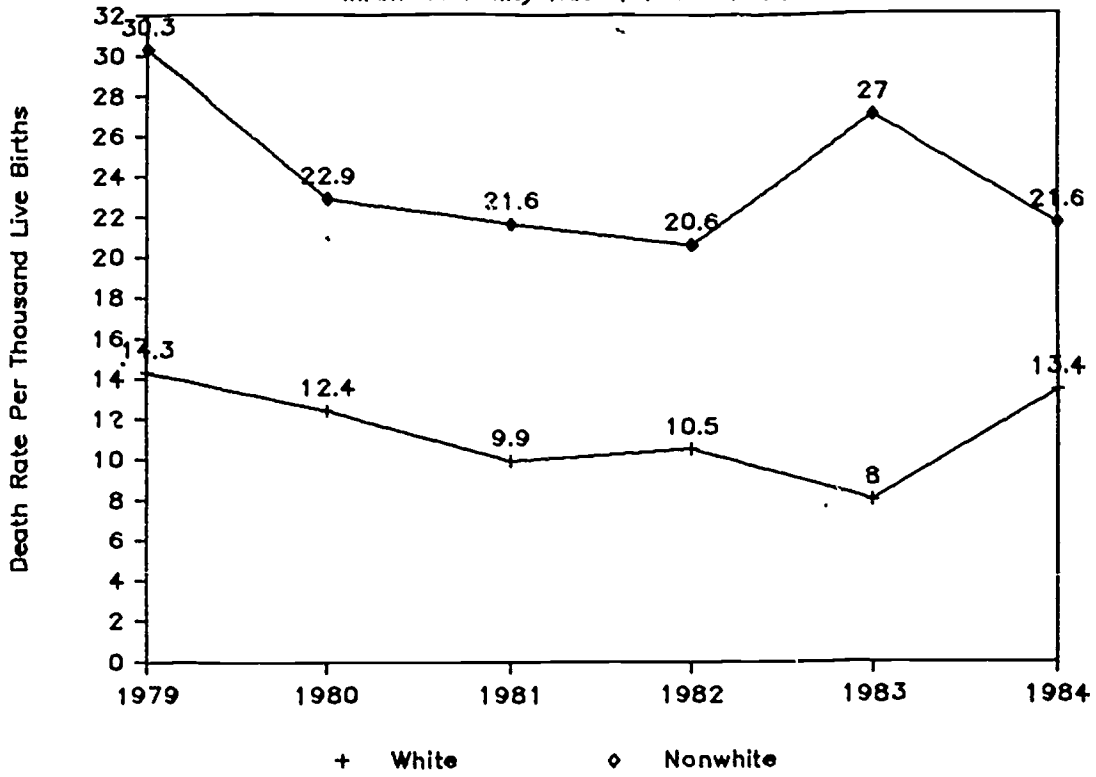
Footnotes:

<sup>a</sup> Number of eligibles calculated by State agency using 1984 vital health statistics.

<sup>b</sup> New Jersey Public Health Statistic could not provide low birth weight data, disaggregated by race, for Newark.

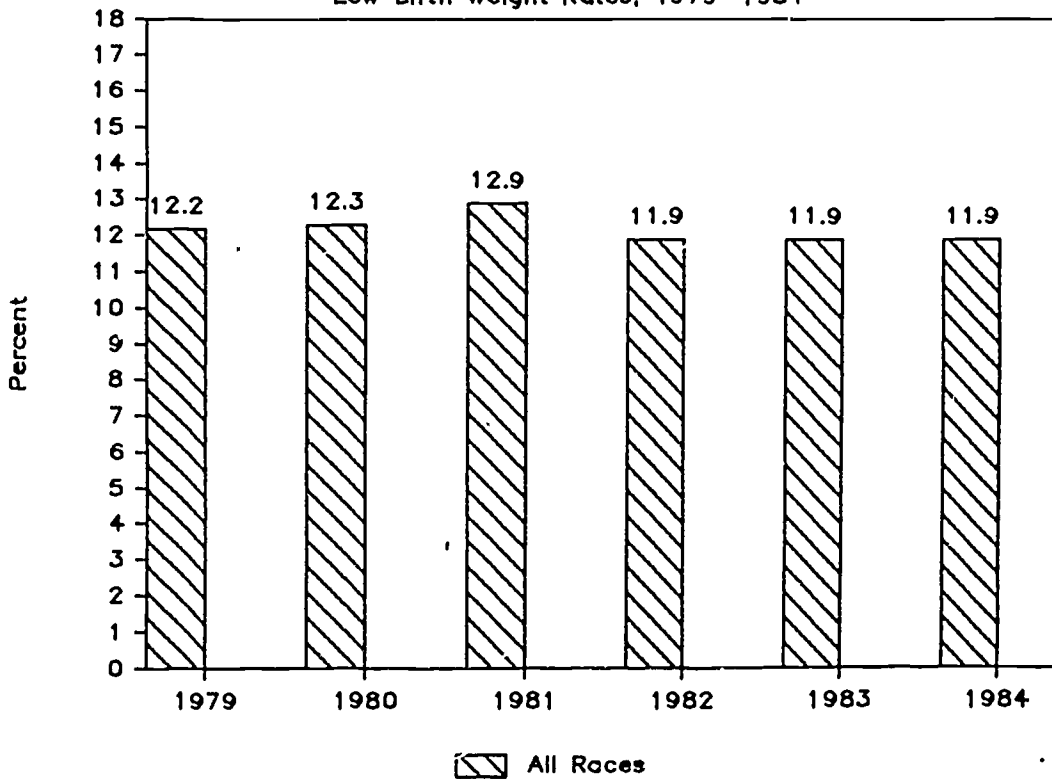
## Newark, New Jersey

Infant Mortality Rates, 1979-1984



## Newark, New Jersey

Low Birth Weight Rates, 1979-1984



ALBUQUERQUE, NEW MEXICO

NUMBER OF LIVE BIRTHS (1984): 7,192

NUMBER OF INFANT DEATHS (1984): 64

TOTAL POPULATION (1980): 331,767

NUMBER (and percent) LIVING BELOW POVERTY (1980): 40,700 (12.4%)

RACIAL COMPOSITION (BY PERCENT)

White: 83.1

Nonwhite: 16.9 (The Nonwhite population is 13.7% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 4,244

PERCENT WIC "ELIGIBLES" SERVED: 25.3

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.7	10.0	8.1	11.4	11.0	9.3	10.25	0.4
Nonwhite	8.0	11.8	15.9	5.6	12.2	4.6	9.7	14.61
TOTAL	11.4	10.2	8.8	10.9	11.1	8.9	10.2	-3.67

Nonwhite to White ratio (1979): 0.68 (1984): 0.49 (Percent Change In Ratio 1979-1984): -27.66

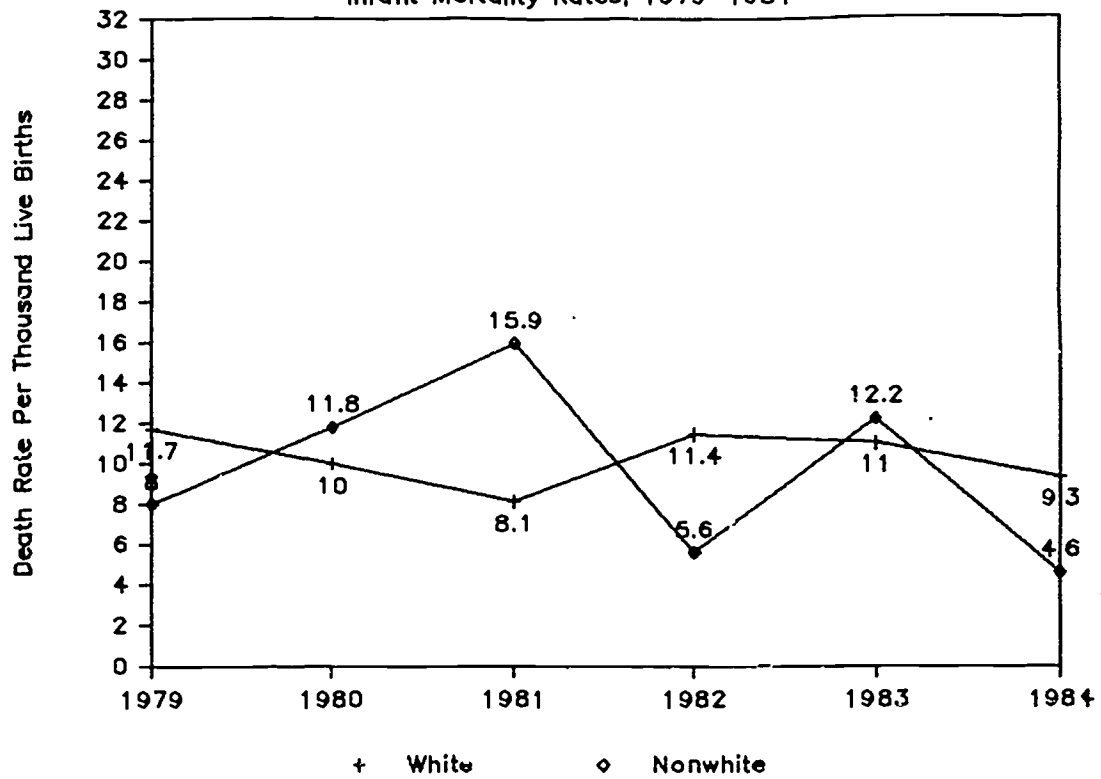
LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	8.3	8.2	7.0	8.2	7.7	7.7	7.9	-0.96
Nonwhite	9.0	10.1	10.0	8.3	11.2	6.9	9.25	-1.84
TOTAL	8.3	8.4	7.3	8.2	8.1	7.7	8.0	-1.14

Nonwhite to White ratio (1979): 1.08 (1984): 0.90 (Percent Change In Ratio 1979-1984): -17.36

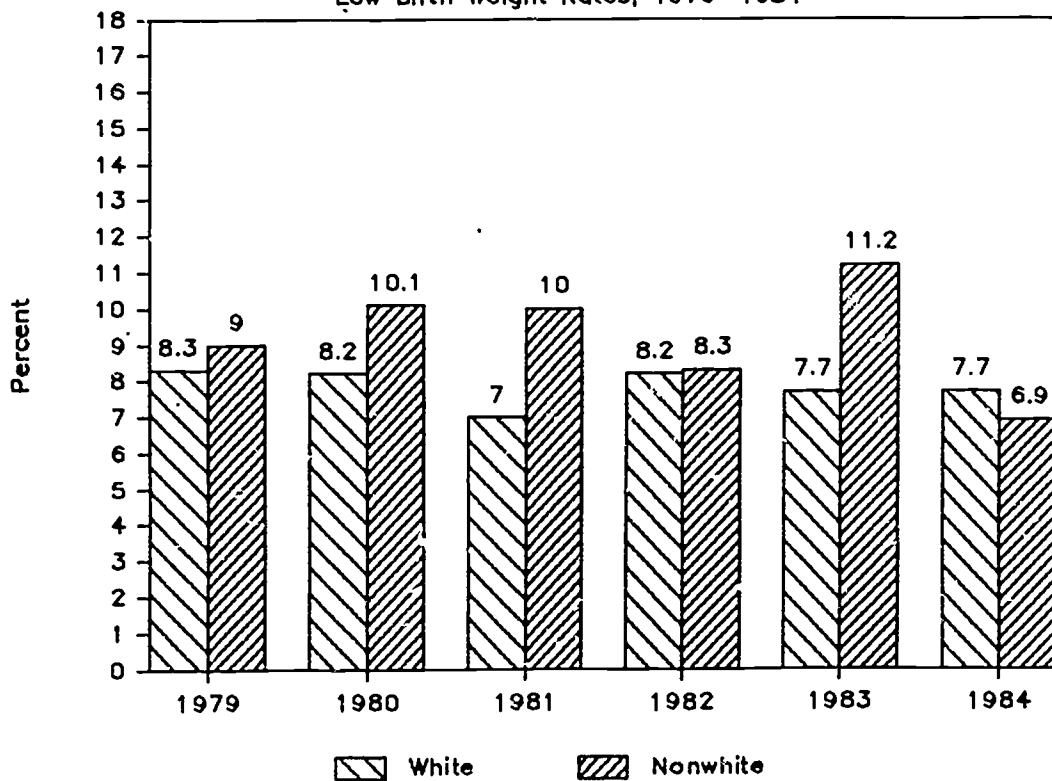
# Albuquerque, New Mexico

## Infant Mortality Rates, 1979-1984



# Albuquerque, New Mexico

## Low Birth Weight Rates, 1979-1984



**BUFFALO, NEW YORK**

NUMBER OF LIVE BIRTHS (1984): 5,756

NUMBER OF INFANT DEATHS (1984): 81

TOTAL POPULATION (1980): 357,870

NUMBER (and percent) LIVING BELOW POVERTY (1980): 72,300 (20.7%)

**RACIAL COMPOSITION (BY PERCENT)**

White: 70.8

Nonwhite: 29.2 (The Nonwhite population is 91.6% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 11,565<sup>a</sup> PERCENT WIC "ELIGIBLES" SERVED: 40.5<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

**I N F A N T M O R T A L I T Y R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	14.5	10.0	12.9	9.4	12.7	11.4	11.8	1.19
Nonwhite	22.4	24.0	23.2	16.3	16.9	18.6	20.2	-2.44
TOTAL	17.3	15.1	16.5	11.8	14.2	14.1	14.8	-2.46

Nonwhite to White ratio (1979): 1.54 (1984): 1.63 (Percent Change In Ratio 1979-1984): 5.62

**L O W P I R T H W E I G H T P E R C E N T**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	7.2	6.4	7.2	6.4	6.6	NA	6.8 <sup>b</sup>	-1.65 <sup>b</sup>
Nonwhite	13.7	14.9	13.0	13.1	13.9	NA	13.7 <sup>b</sup>	0.72 <sup>b</sup>
TOTAL	9.6	9.4	9.2	8.8	9.2	9.1	9.2	-1.02

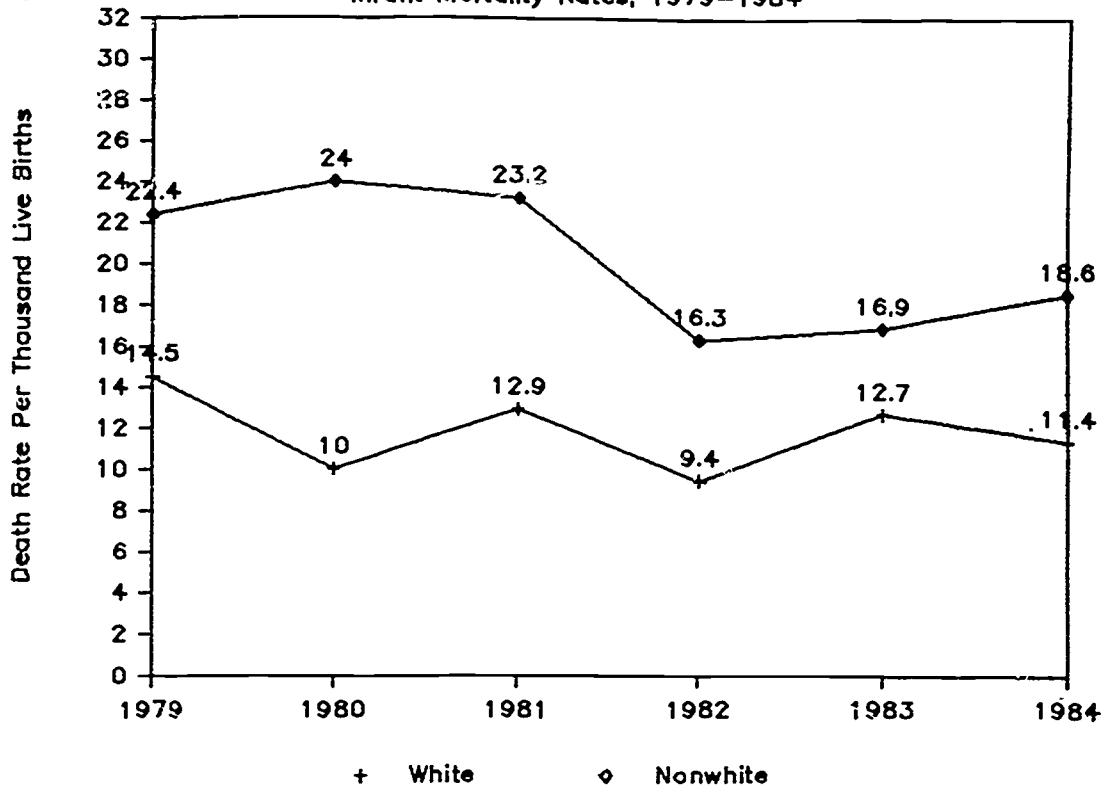
Nonwhite to White ratio (1979): 1.90 (1984): 2.11<sup>c</sup> (Percent Change In Ratio 1979-1984): 11.05<sup>d</sup>

**Footnotes:**

- a Figures reflect WIC participation in all of Erie County.
- b Figures calculated using 1979-1983 data.
- c Figure calculated using 1983 data.
- d Figure calculated using 1979 and 1983 data.

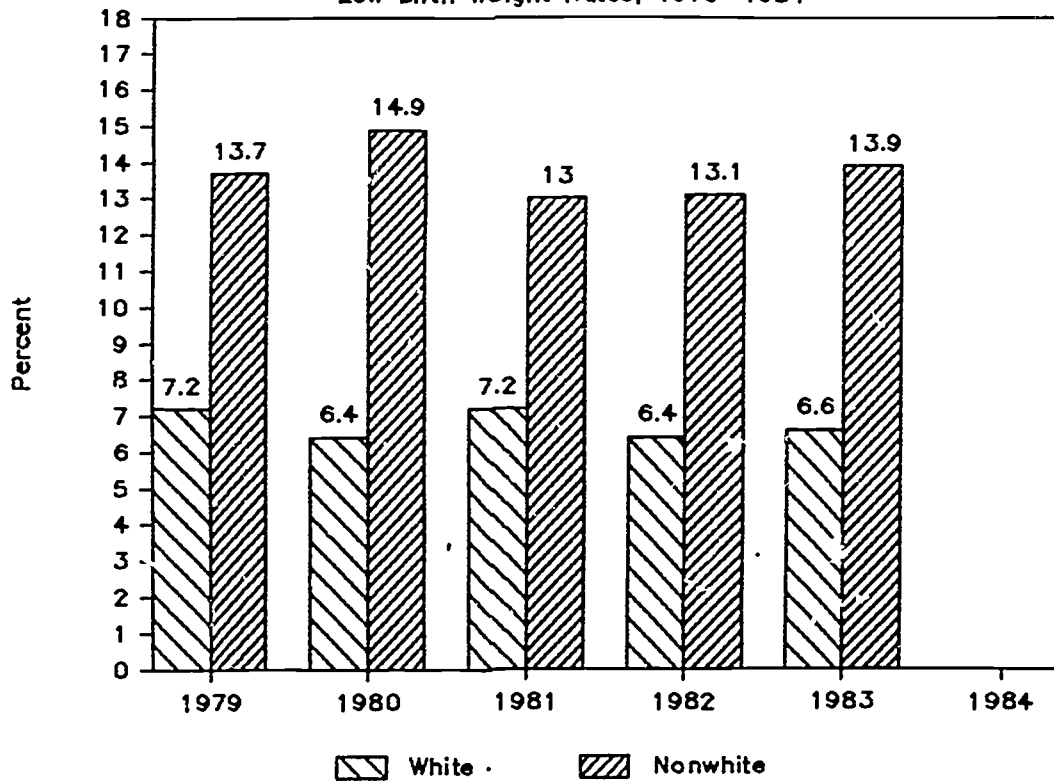
## Buffalo, New York

Infant Mortality Rates, 1979-1984



## Buffalo, New York

Low Birth Weight Rates, 1979-1984



167

NEW YORK CITY, NEW YORK

NUMBER OF LIVE BIRTHS (1984): 113,332

NUMBER OF INFANT DEATHS (1984): 1,540

TOTAL POPULATION (1980): 7,071,639

NUMBER (and percent) LIVING BELOW POVERTY (1980): 1,392,000 (20%)

RACIAL COMPOSITION (BY PERCENT)

White: 61.5

Nonwhite: 38.5 (The Nonwhite population is 65.7% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 151,058 PERCENT WIC "ELIGIBLES" SERVED: 44.8

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	14.6	14.6	12.8	13.0	11.5	10.7	12.9	-4.46
Nonwhite	19.8	18.2	19.3	18.6	18.3	17.7	18.7	-2.11
TOTAL	16.7	16.1	15.5	15.3	14.3	13.6	15.2	-4.01

Nonwhite to White ratio (1979): 1.36 (1984): 1.65 (Percent Change In Ratio 1979-1984): 21.98

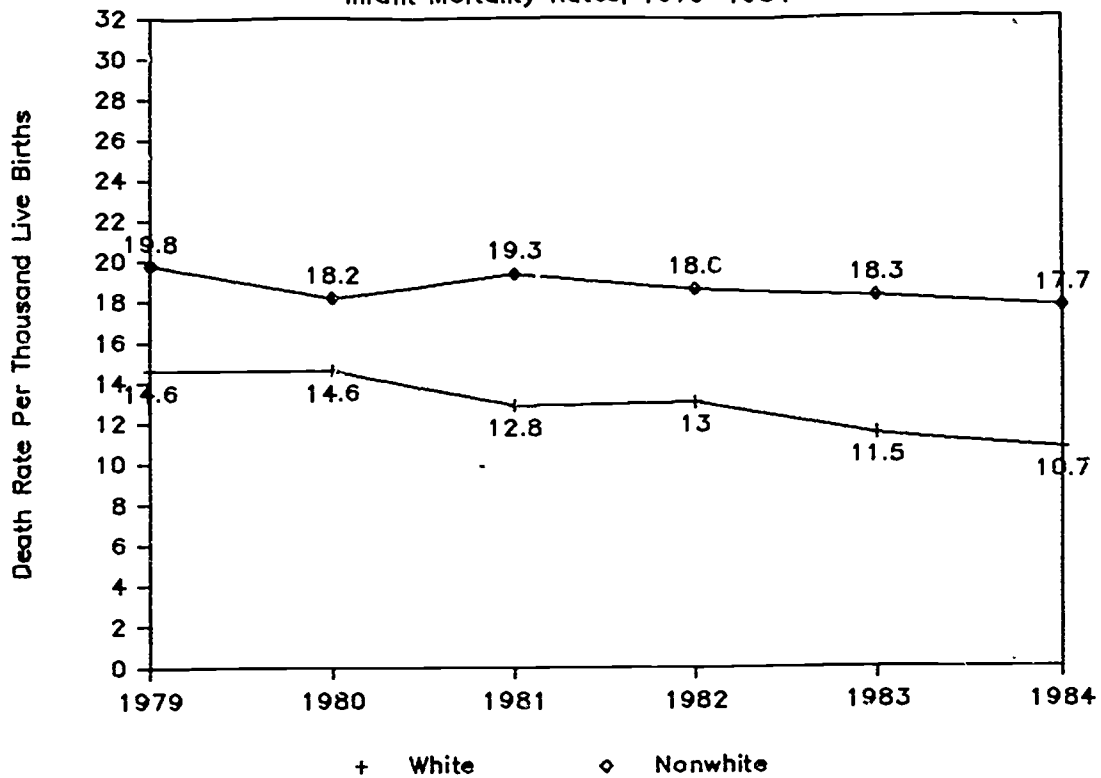
LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	7.2	7.1	7.0	6.8	6.7	6.8	7.0	-1.43
Nonwhite	12.3	11.6	11.8	11.3	11.1	10.7	11.5	-2.72
TOTAL	9.2	9.0	8.9	8.7	8.5	8.4	8.8	-1.80

Nonwhite to White ratio (1979): 1.71 (1984): 1.57 (Percent Change In Ratio 1979-1984): 7.89

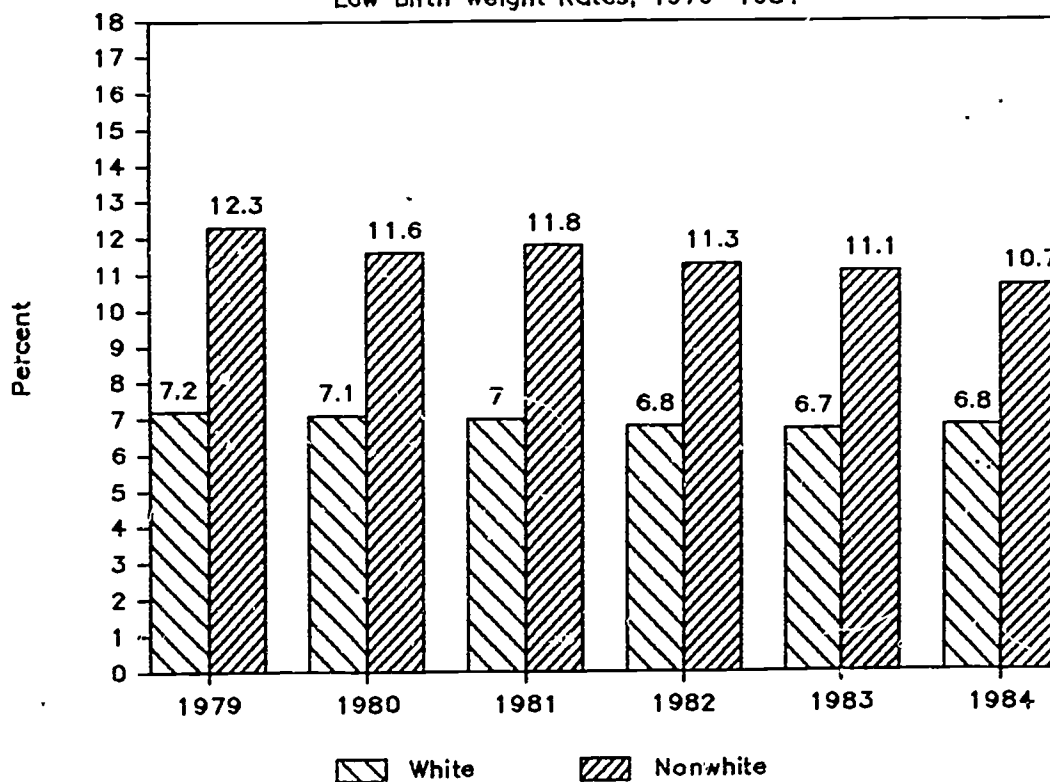
# New York, New York

## Infant Mortality Rates, 1979-1984



# New York, New York

## Low Birth Weight Rates, 1979-1984



169



CHARLOTTE, NORTH CAROLINA

NUMBER OF LIVE BIRTHS (1984): 5,017

NUMBER OF INFANT DEATHS (1984): 53

TOTAL POPULATION (1980): 314,447

NUMBER (and percent) LIVING BELOW POVERTY (1980): 38,300 (12.3%)

RACIAL COMPOSITION (BY PERCENT)

White: 67.5

Nonwhite: 32.5 (The Nonwhite population is 95.8% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 2,615

PERCENT WIC "ELIGIBLES" SERVED: 38

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.7	13.4	12.1	10.6	6.3	6.1	9.9	-7.49
Nonwhite	27.3	24.0	18.0	24.9	17.7	16.1	21.3	-7.34
TOTAL	18.1	18.0	14.8	17.1	11.4	10.6	15.0	-3.63

Nonwhite to White ratio (1979): 2.55      (1984): 2.64      (Percent Change In Ratio 1979-1984): 3.45

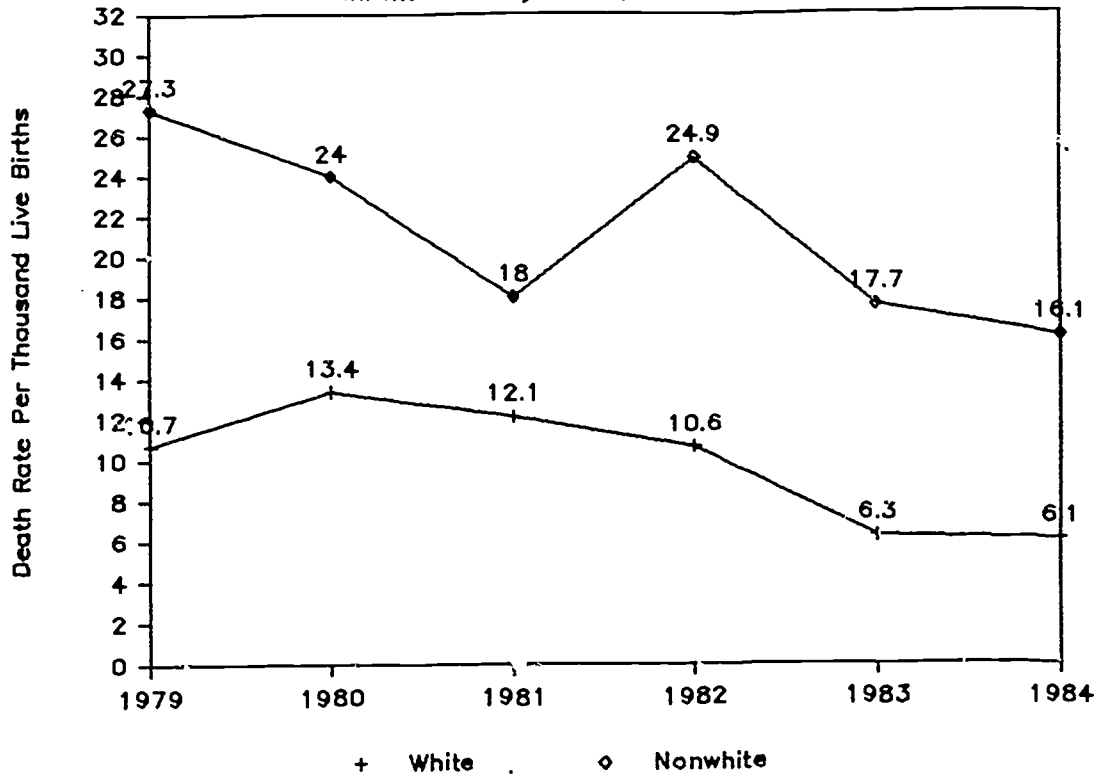
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.6	6.4	5.7	5.5	5.6	5.4	5.7	0.33
Nonwhite	13.8	13.4	13.0	12.5	13.2	11.2	13.0	-2.95
TOTAL	9.3	9.4	9.0	8.7	9.0	8.3	9.0	-2.17

Nonwhite to White ratio (1979): 2.46      (1984): 2.19      (Percent Change In Ratio 1979-1984): -11.33

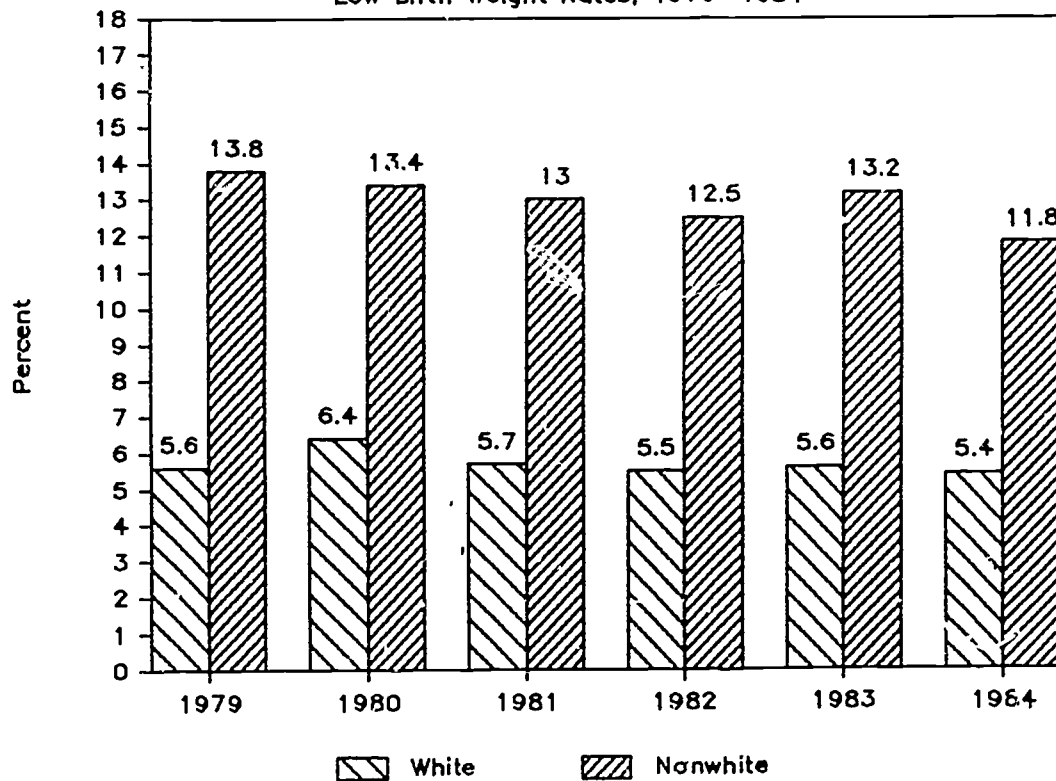
# Charlotte, North Carolina

## Infant Mortality Rates, 1979-1984



# Charlotte, North Carolina

## Low Birth Weight Rates, 1979-1984



111

CINCINNATI, OHIO

NUMBER OF LIVE BIRTHS (1984): 7,291

NUMBER OF INFANT DEATHS (1984): 93

TOTAL POPULATION (1980): 385,457

NUMBER (and percent) LIVING BELOW POVERTY (1980): 73,300 (19.7%)

RACIAL COMPOSITION (BY PERCENT)

White: 65.2

Nonwhite: 34.8 (The Nonwhite population is 97.3% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 17,253<sup>a</sup>      PERCENT WIC "ELIGIBLES" SERVED: 71<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.1	12.3	8.1	7.9	13.9	9.9	10.7	8.20
Nonwhite	16.9	18.2	18.8	12.9	22.9	16.5	17.9	4.35
TOTAL	14.2	14.8	12.6	10.6	17.8	12.8	13.8	2.66

-----  
 Nonwhite to White ratio (1979): 1.40      (1984): 1.67      (Percent Change In Ratio 1979-1984): 19.33

L O W   B I R T H   W E I G H T   P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.6	5.9	5.5	4.9	5.8	5.3	5.7	-1.99
Nonwhite	14.0	13.2	13.2	11.9	12.9	11.6	12.8	-3.45
TOTAL	7.8	9.0	8.8	8.0	8.9	8.0	8.8	-3.67

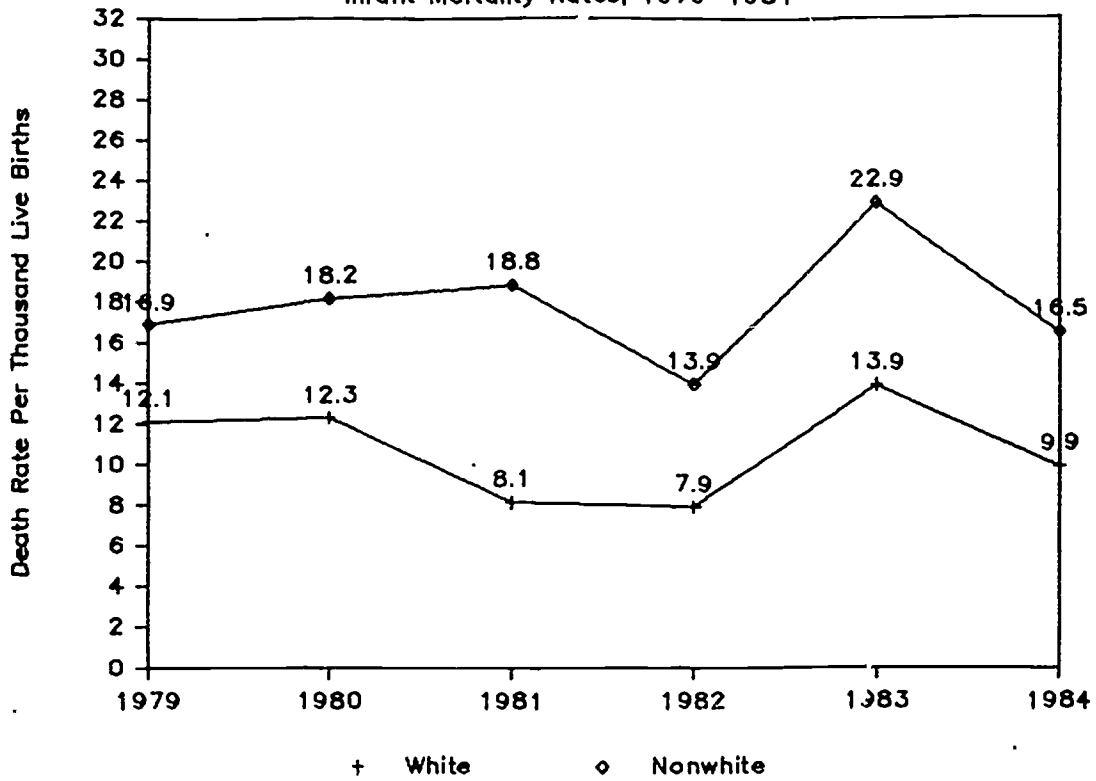
-----  
 Nonwhite to White ratio (1979): 2.12      (1984): 2.19      (Percent Change In Ratio 1979-1984): 3.18

Footnote:

<sup>a</sup> Figures represent WIC participation in Hamilton County.

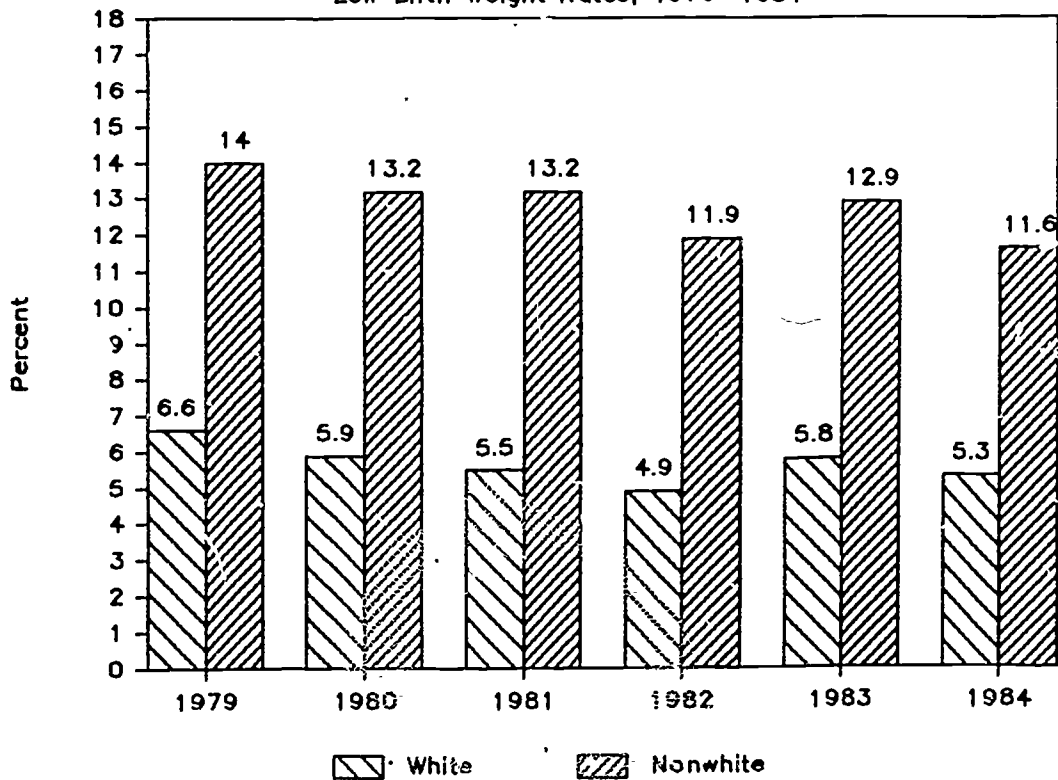
## Cincinnati, Ohio

### Infant Mortality Rates, 1979-1984



## Cincinnati, Ohio

### Low Birth Weight Rates, 1979-1984



CLEVELAND, OHIO

NUMBER OF LIVE BIRTHS (1984): 10,156

NUMBER OF INFANT DEATHS (1984): 172

TOTAL POPULATION (1980): 573,822

NUMBER (and percent) LIVING BELOW POVERTY (1980): 124,900 (22.1%)

RACIAL COMPOSITION (BY PERCENT)

White: 53.9

Nonwhite: 46.1 (The Nonwhite population is 94.9% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 19,362

PERCENT WIC "ELIGIBLES" SERVED: 53.4

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.0	16.5	11.6	14.7	14.3	10.4	13.3	6.36
Nonwhite	22.2	30.0	32.1	20.5	18.3	23.0	24.4	4.19
TOTAL	17.1	23.4	21.9	17.6	16.4	16.9	18.9	1.41

Nonwhite to White ratio (1979): 1.85      (1984): 2.21      (Percent Change In Ratio 1979-1984): 19.54

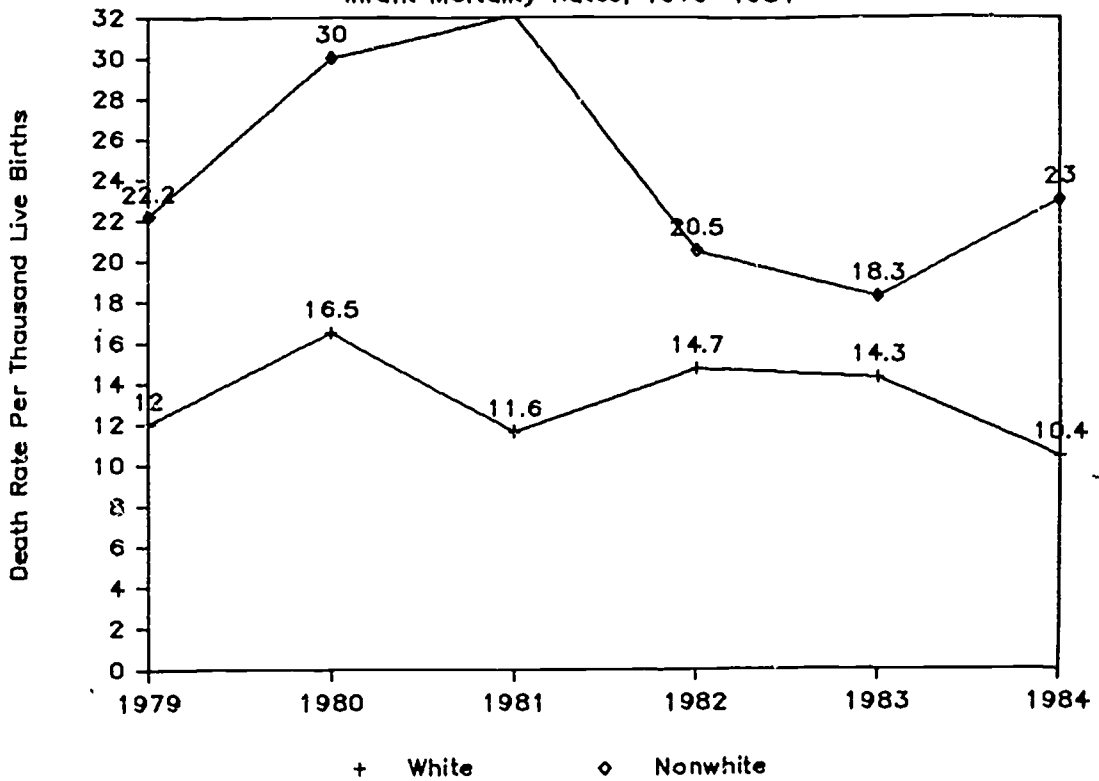
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.7	7.2	6.9	7.4	7.3	7.6	7.2	1.84
Nonwhite	13.7	13.9	14.4	13.5	14.8	12.8	13.9	-1.02
TOTAL	10.2	10.6	10.7	10.5	11.2	10.3	10.6	0.33

Nonwhite to White ratio (1979): 2.04      (1984): 1.68      (Percent Change In Ratio 1979-1984): -17.63

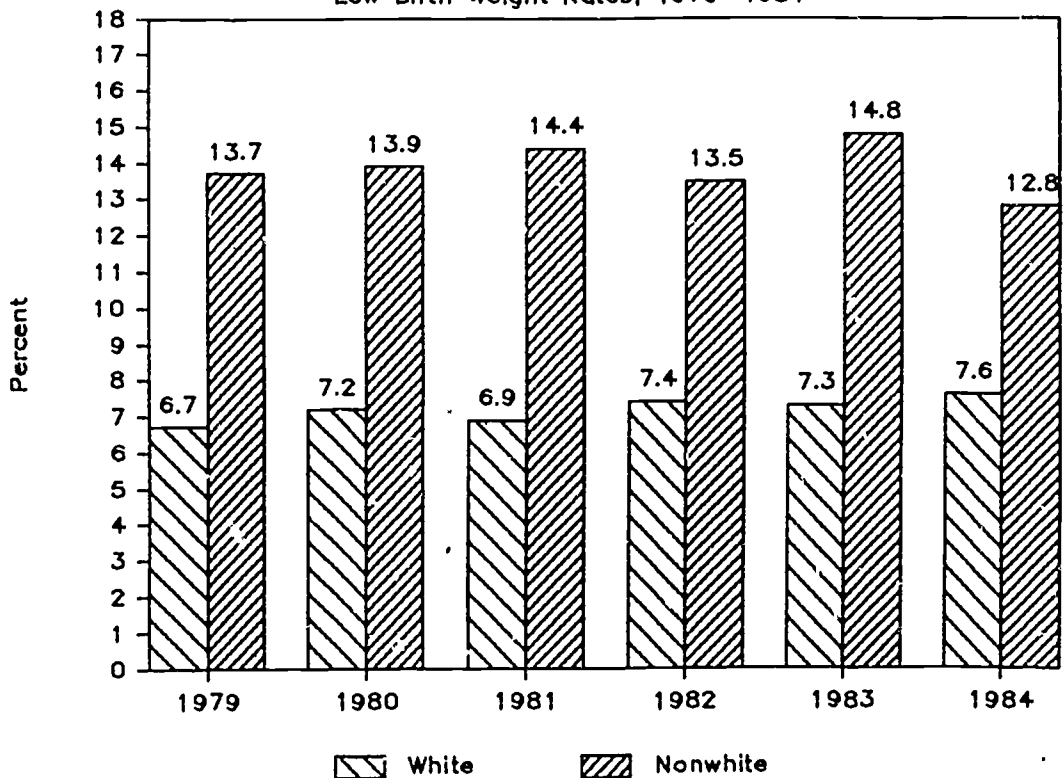
## Cleveland, Ohio

Infant Mortality Rates, 1979-1984



## Cleveland, Ohio

Low Birth Weight Rates, 1979-1984



COLUMBUS, OHIO

NUMBER OF LIVE BIRTHS (1984): 10,405

NUMBER OF INFANT DEATHS (1984): 99

TOTAL POPULATION (1980): 564,871

NUMBER (and percent) LIVING BELOW POVERTY (1980): 89,200 (16.5%)

RACIAL COMPOSITION (BY PERCENT)

White: 76.5

Nonwhite: 23.5 (The Nonwhite population is 93.8% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 18,556<sup>a</sup> PERCENT WIC "ELIGIBLES" SERVED: 70.3<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.5	10.1	11.8	13.0	11.3	8.2	11.2	-1.05
Nonwhite	20.1	16.6	16.5	22.6	16.1	12.8	17.5	-6.06
TOTAL	14.8	12.0	13.2	15.8	12.7	9.5	13.0	-6.81
-----								
Nonwhite to White ratio (1979): 1.61	(1984): 1.56		(Percent Change In Ratio 1979-1984): -2.92					

LOW BIRTH WEIGHT PERCENT

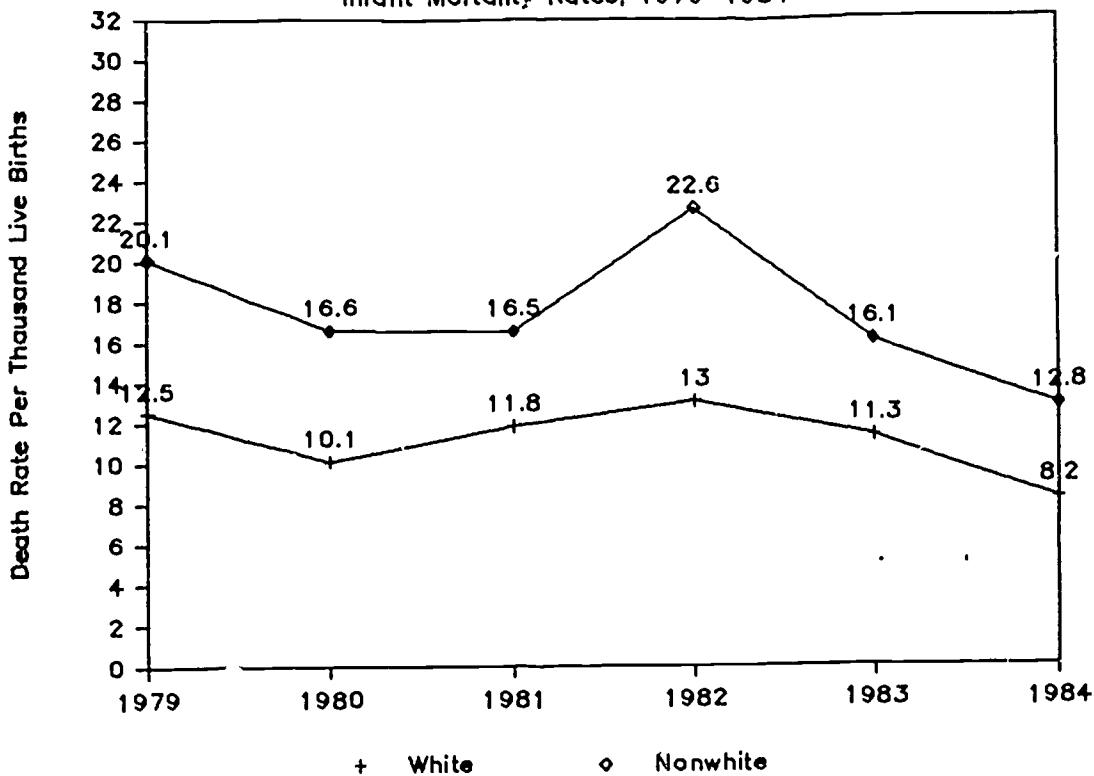
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.5	6.2	6.9	6.4	6.3	5.7	6.3	-0.43
Nonwhite	13.4	12.3	12.6	12.8	11.7	11.9	12.5	-2.21
TOTAL	8.6	8.0	8.6	8.3	7.9	7.5	8.2	-2.57
-----								
Nonwhite to White ratio (1979): 2.06	(1984): 2.09		(Percent Change In Ratio 1979-1984): 1.27					

Footnotes:

<sup>a</sup> Figures represent WIC participation in Franklin County.

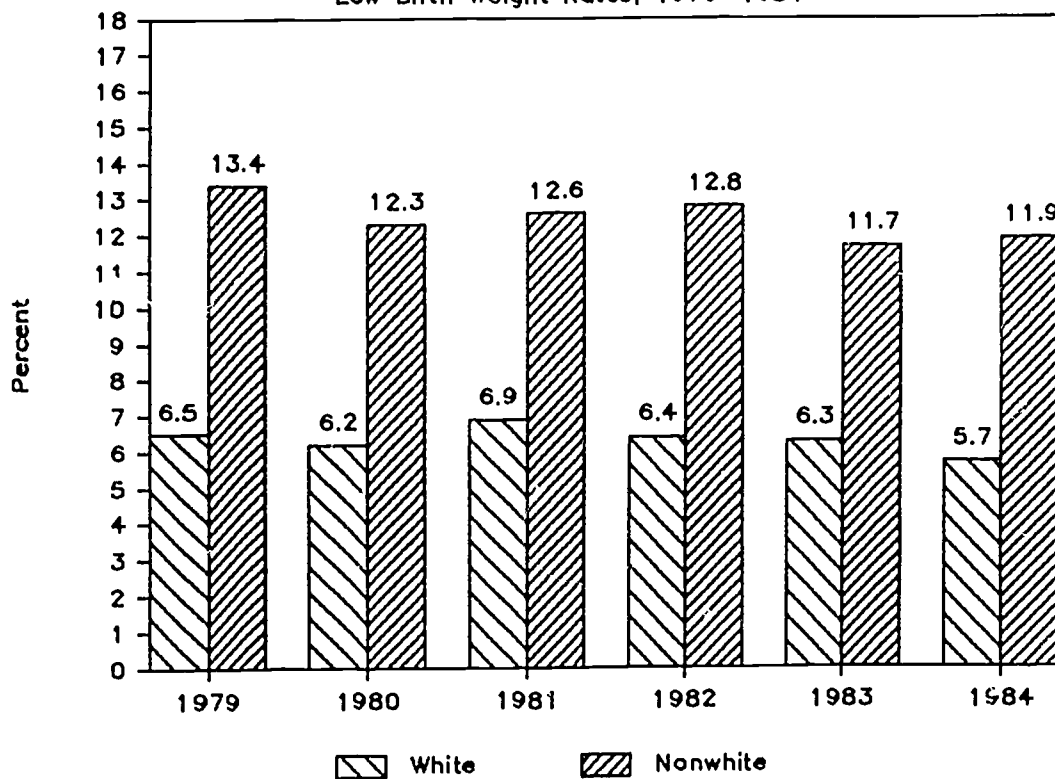
## Columbus, Ohio

### Infant Mortality Rates, 1979-1984



## Columbus, Ohio

### Low Birth Weight Rates, 1979-1984





TOLEDO, OHIO

NUMBER OF LIVE BIRTHS (1984): 5,591

INFANT DEATHS (1984): 52

TOTAL POPULATION (1980): 354,635

NUMBER

... LIVING BELOW POVERTY (1980): 47,500 (13.6%)

RACIAL COMPOSITION (BY PERCENT)

White: 80.1

Nonwhite: 19.9 (The Nonwhite population is 87.7% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 9,200<sup>a</sup>

PERCENT WIC "ELIGIBLES" SERVED: 65.5<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	13.1	10.9	11.8	8.0	10.6	8.2	10.4	-1.65
Nonwhite	15.0	21.8	14.7	16.9	15.9	12.3	16.1	-0.17
TOTAL	13.6	13.8	12.6	10.4	11.9	9.3	11.9	-6.42

Nonwhite to White ratio (1979): 1.15      (1984): 1.50      (Percent Change In Ratio 1979-1984): 31.00

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.9	6.1	6.3	5.7	6.6	5.7	6.2	-0.41
Nonwhite	15	12.7	13.1	12.9	14.5	11.1	13.0	-3.07
TOTAL	8.7	7.8	8.2	7.6	8.5	7.2	8.0	-3.20

Nonwhite to White ratio (1979): 1.96      (1984): 1.95      (Percent Change In Ratio 1979-1984): -0.47

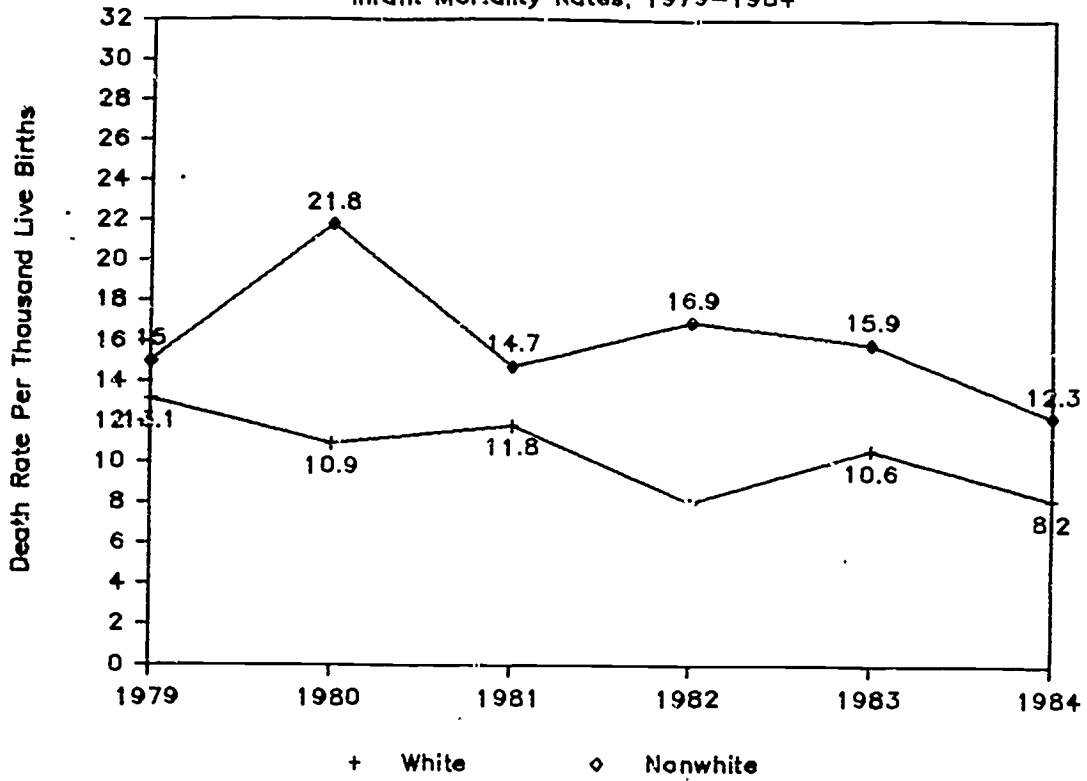
Footnotes:

<sup>a</sup> Figures represent WIC participation in Lucas County.

173

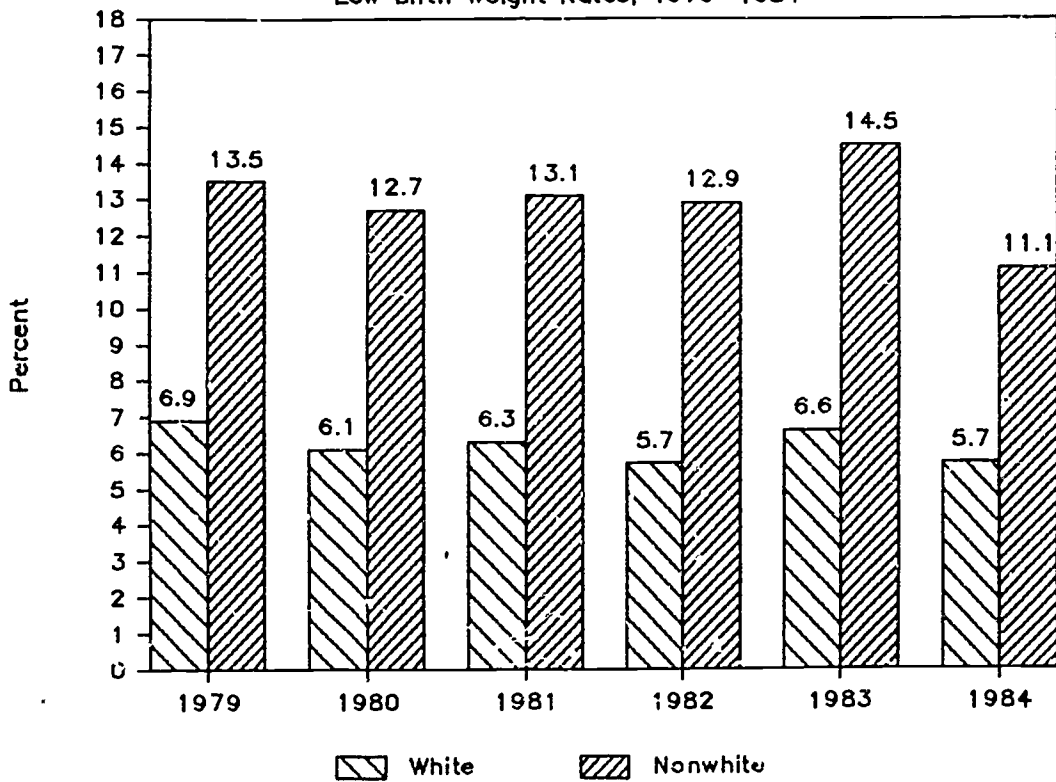
## Toledo, Ohio

### Infant Mortality Rates, 1979-1984



## Toledo, Ohio

### Low Birth Weight Rates, 1979-1984



**OKLAHOMA CITY (Oklahoma County), OKLAHOMA**

NUMBER OF LIVE BIRTHS (1984): 11,883

NUMBER OF INFANT DEATHS (1984): 67

TOTAL POPULATION (1980): 538,933

NUMBER (and percent) LIVING BELOW POVERTY (1980): 59,600 (10.7%)

**RACIAL COMPOSITION (BY PERCENT)**

White: 82.8

Nonwhite: 17.2 (The Nonwhite population is 71.5% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 3,435

PERCENT WIC "ELIGIBLES" SERVED: 19.7%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

**I N F A N T M O R T A L I T Y R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White <sup>a</sup>	10.8	13.7	12.3	13.2	9.7	5.5	10.9	-0.51
Nonwhite	25.0	20.8	20.7	18.1	---	---	21.15	9.95 <sup>b</sup>
TOTAL	12.9	15.0	13.8	13.9	11.1	5.6	12.1	-12.14

Nonwhite to White ratio (1979): 2.02 (1984): 1.37 (Percent Change In Ratio 1979-1984): -40.69

**L O W B I R T H W E I G H T P E R C E N T**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White <sup>a</sup>	6.3	6.6	6.4	6.2	6.5	5.7	6.3	0.69
Nonwhite	12.7	11.6	10.0	13.6	---	---	12.0	4.51 <sup>b</sup>
TOTAL	7.3	7.7	7.2	7.5	7.6	6.8	7.4	-1.21

Nonwhite to White ratio (1979): 2.02 (1984): 2.19 (Percent Change In Ratio 1979-1984): 8.42

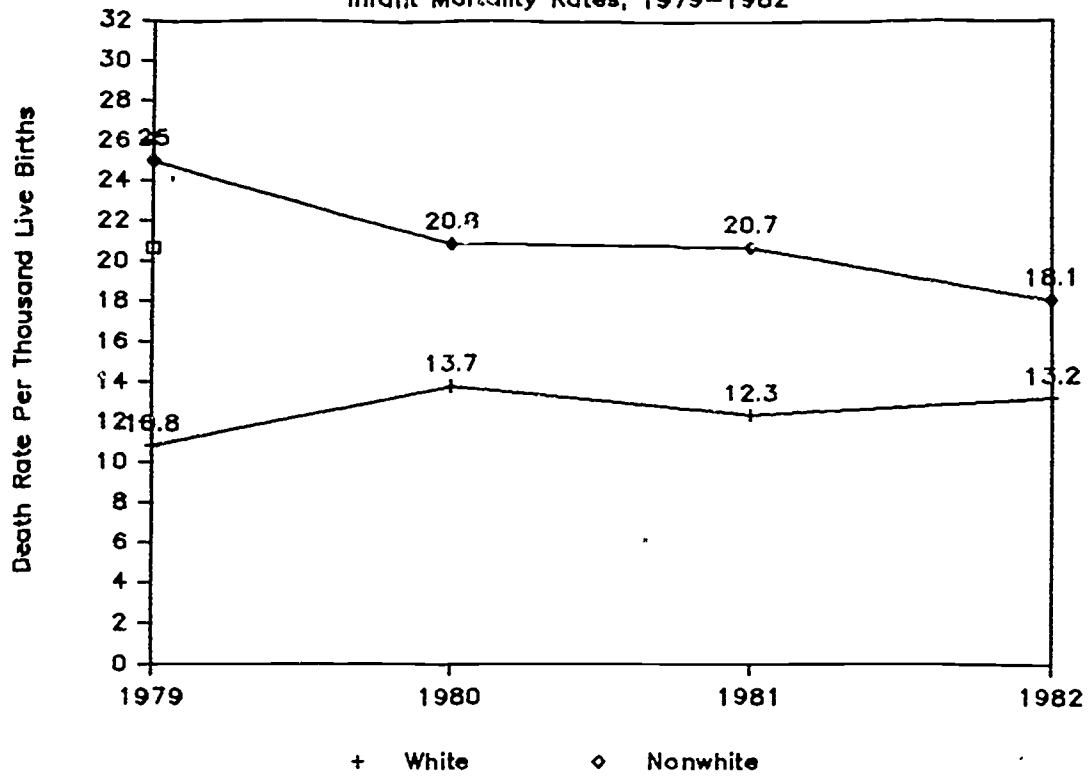
**Footnotes:**

a In Oklahoma, the White racial category includes Asians and Pacific Islanders.

b The Annual Average Percent Change for the Nonwhite category was calculated for 1979-1982 only.

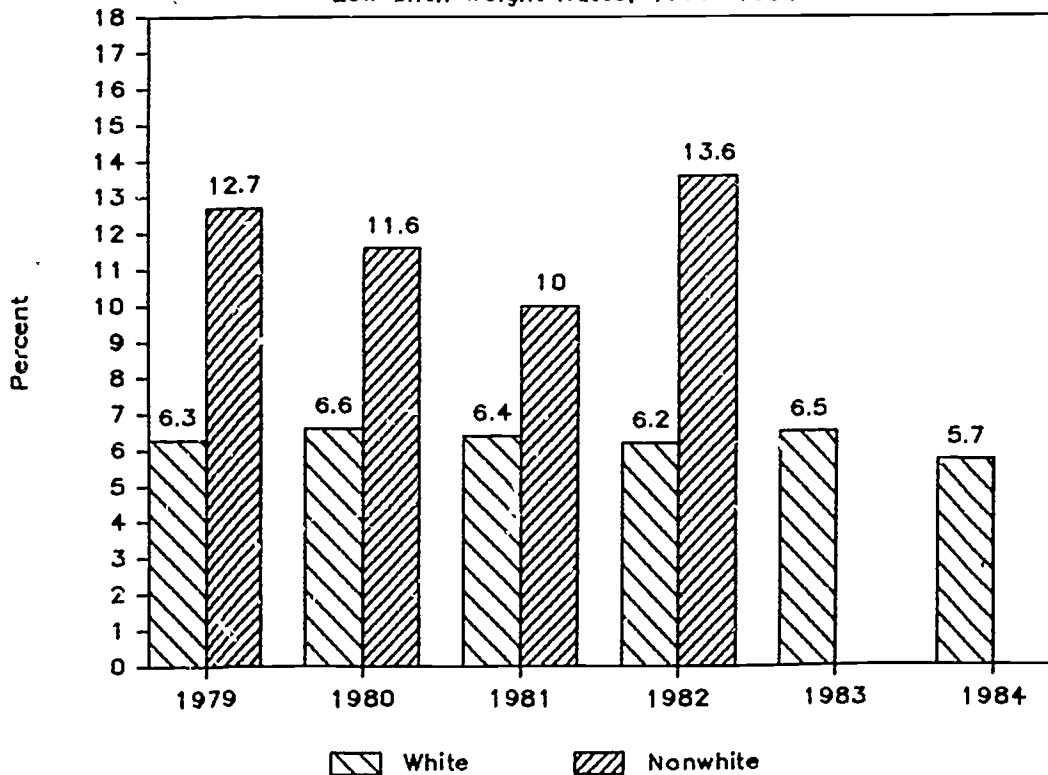
# Oklahoma County (Oklahoma City), OK

Infant Mortality Rates, 1979-1982



# Oklahoma City, Oklahoma

Low Birth Weight Rates, 1979-1984



**TULSA (Tulsa County), OKLAHOMA**

NUMBER OF LIVE BIRTHS (1984): 8,753

NUMBER OF INFANT DEATHS (1984): 55

TOTAL POPULATION (1980): 470,593

NUMBER (and percent) LIVING BELOW POVERTY (1980): 45,600 (9.9%)

**RACIAL COMPOSITION (BY PERCENT)**

White: 85.3

Nonwhite: 14.7 (The Nonwhite population is 63.3% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 3,378

PERCENT WIC "ELIGIBLES" SERVED: 26.8

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

**I N F A N T M O R T A L I T Y R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White <sup>a</sup>	9.9	9.3	11.5	10.6	10.1	6.2	9.6	1.01
Nonwhite <sup>b</sup>	16.3	16.4	17.2	7.9	---	---	14.5	16.19 <sup>c</sup>
TOTAL	10.9	10.5	12.3	10.0	10.8	6.3	10.1	-7.78

Nonwhite to White ratio (1979): 1.65      (1984): 0.75<sup>d</sup>      (Percent Change In Ratio 1979-1984): -54.65<sup>e</sup>

**L O W B I R T H W E I G H T P E R C E N T**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White <sup>a</sup>	5.9	5.8	6.1	6.0	5.8	5.5	5.9	-1.33
Nonwhite <sup>b</sup>	12.3	12.0	10.6	11.0	---	---	11.5	3.45
TOTAL	6.9	6.9	6.7	6.7	6.6	6.4	6.7	-1.48

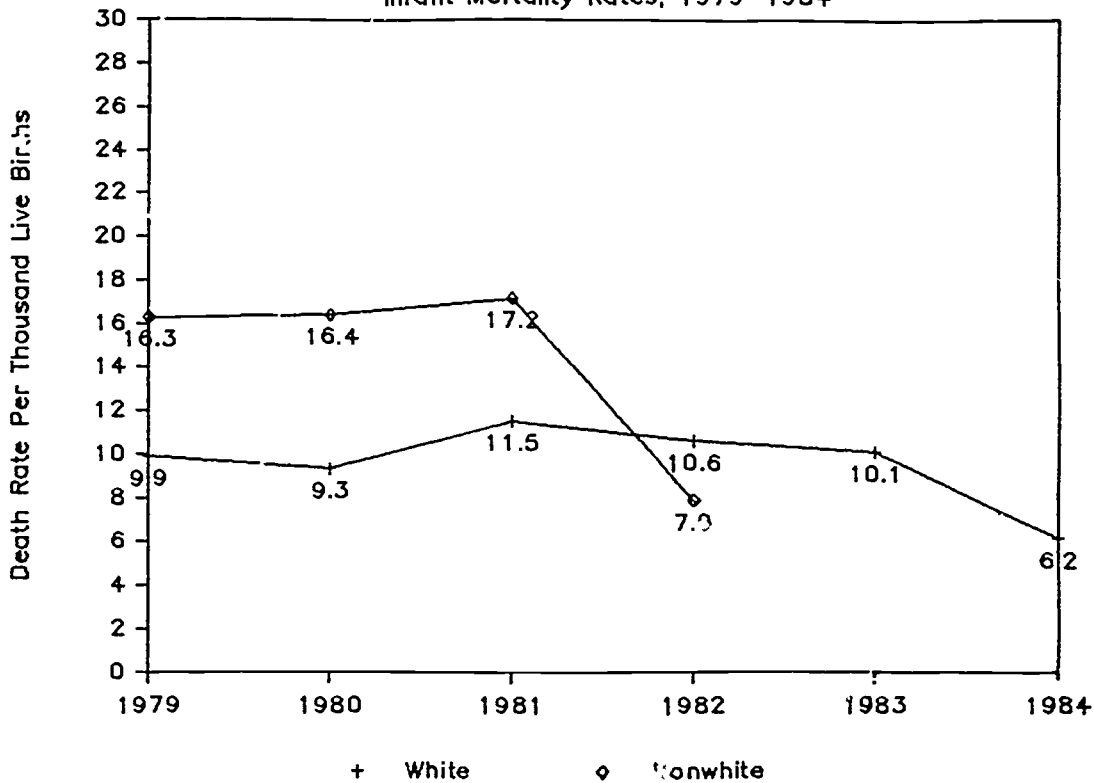
Nonwhite to White ratio (1979): 2.08      (1984): ---      (Percent Change In Ratio 1979-1984): ---

**Footnotes:**

- a In Oklahoma, the White racial category includes Asians and Pacific Islanders.
- b The Oklahoma State Department of Health was unable to generate data for NonWhites.
- c The annual average percent change figures are based on 1979-1982 data.
- d 1982 data.
- e 1979 and 1982 data.

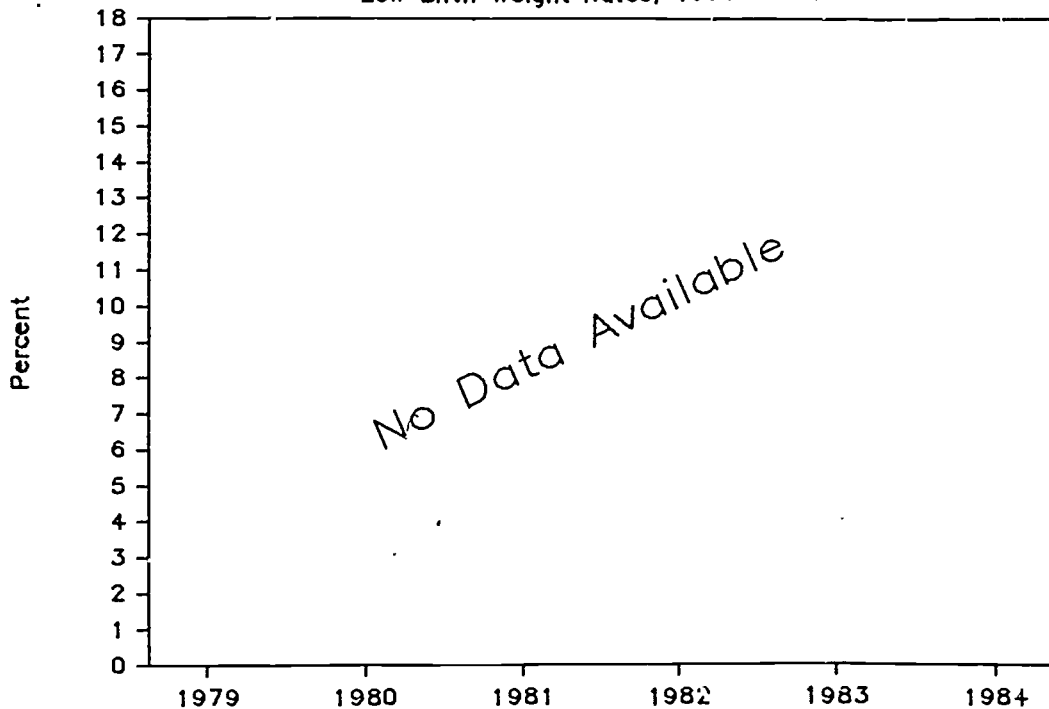
## Tulsa (Tulsa County), Oklahoma

Infant Mortality Rates, 1979-1984



## Tulsa County (Tulsa), OK

Low Birth Weight Rates, 1979-1984



PORTLAND (Multnomah County), OREGON

NUMBER OF LIVE BIRTHS (1984): 6,109

NUMBER OF INFANT DEATHS (1984): 73

TOTAL POPULATION (1980): 562,640

NUMBER (and percent) LIVING BELOW POVERTY (1980): 62,600 (11.4%)

RACIAL COMPOSITION (BY PERCENT)

White: 90.1

Nonwhite: 9.9 (The Nonwhite population is 53.5% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 7,218

PERCENT WIC "ELIGIBLES" SERVED: 57%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.5	13.0	11.1	11.0	11.6	12.3	11.8	0.60
Nonwhite	9.7	16.4	12.3	11.2	13.5	10.7	12.3	6.98
TOTAL	11.2	13.7	11.4	11.1	12.0	11.9	11.9	2.04

Nonwhite to White ratio (1979): 0.84 (1984): 0.87 (Percent Change In Ratio 1979-1984): 3.13

L O W B I R T H W E I G H T P E R C E N T <sup>a</sup>

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	--	--	---	---	---	---	---	---
Nonwhite	--	--	---	---	---	---	---	---
TOTAL	--	--	---	---	---	---	---	---

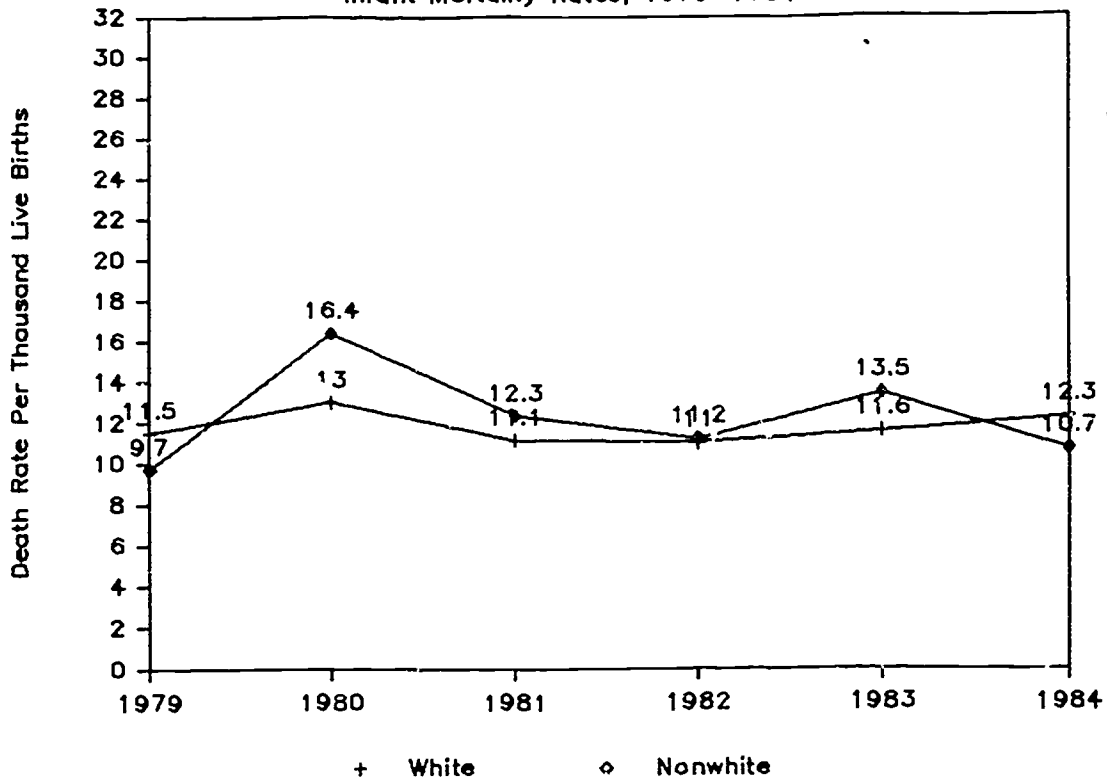
Nonwhite to White ratio (1979): --- (1984): --- (Percent Change In Ratio 1979-1984): ---

Footnotes:

<sup>a</sup> The Oregon Department of Human Resources, Health Division, was unable to provide low birth weight data for Multnomah County.

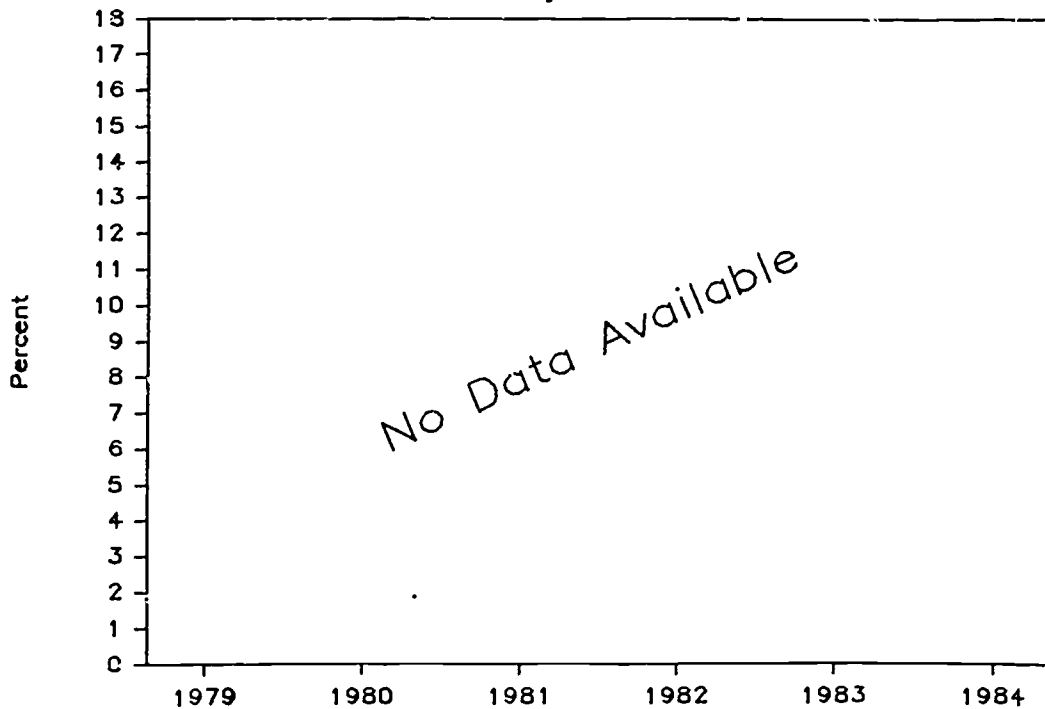
# Multnomah County (Portland), OR

## Infant Mortality Rates, 1979-1984



# Multnomah County (Portland), OR

## Low Birth Weight Rates, 1979-1984





PHILADELPHIA (co-equal with Philadelphia County), PENNSYLVANIA

NUMBER OF LIVE BIRTHS (1984): 24,979

NUMBER OF INFANT DEATHS (1984): 388

TOTAL POPULATION (1980): 1,688,210

NUMBER (and percent) LIVING BELOW POVERTY (1980): 340,500 (20.6%)

RACIAL COMPOSITION (BY PERCENT)

White: 58.5

Nonwhite: 41.5 (The Nonwhite population is 91.3% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 25,154

PERCENT WIC "ELIGIBLES" SERVED: 33.8

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	15.0	15.9	15.1	14.2	12.8	9.3	13.7	-2.97
Nonwhite	21.7	23.1	19.7	20.6	20.7	21.8	21.3	0.42
TOTAL	18.4	19.5	17.4	17.4	16.7	15.5	17.5	-3.20

Nonwhite to White ratio (1979): 1.45 (1984): 2.34 (Percent Change In Ratio 1979-1984): 62.03

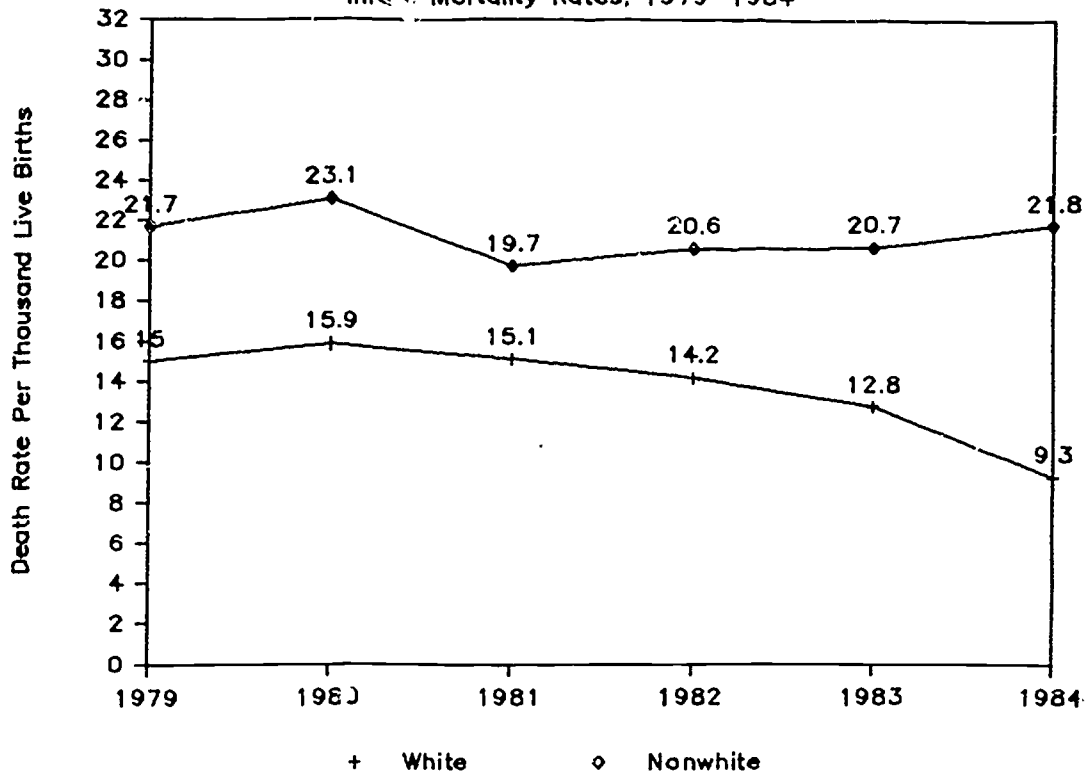
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	7.2	6.8	6.6	6.8	6.9	6.2	6.8	-0.80
Nonwhite	14.4	13.6	14.4	14.0	14.3	14.4	14.2	0.08
TOTAL	10.8	10.2	10.5	10.4	10.6	10.3	10.5	-0.89

Nonwhite to White ratio (1979): 2.00 (1984): 2.32 (Percent Change in Ratio 1979-1984): 16.13

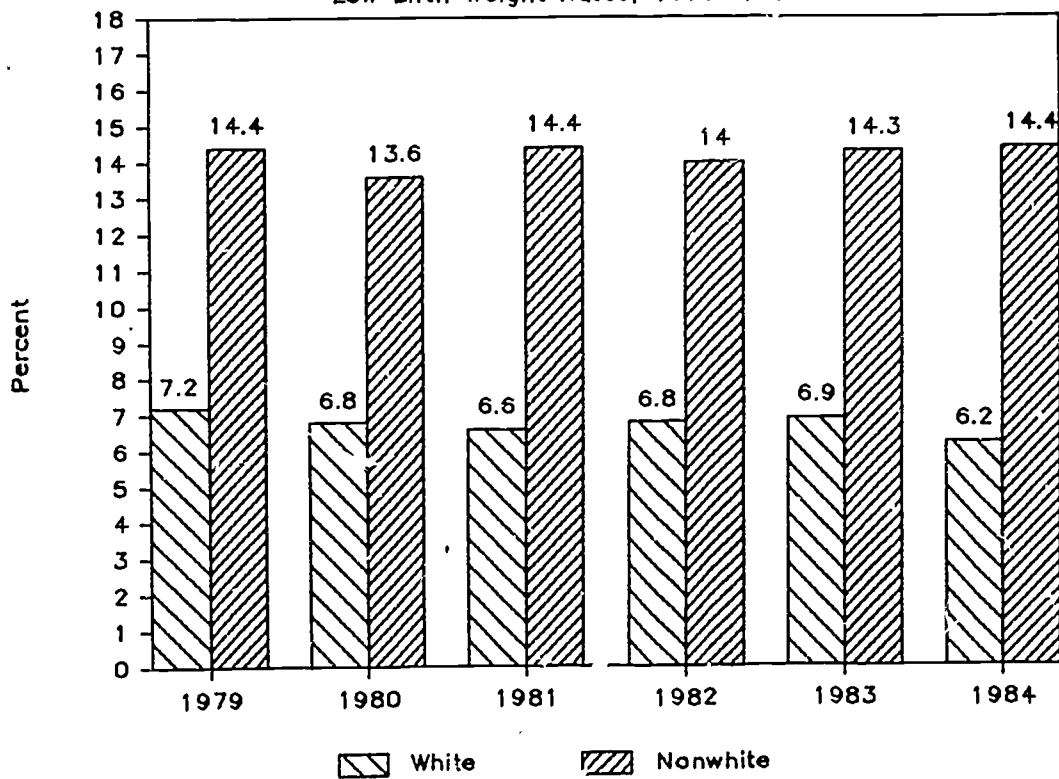
# Philadelphia, Pennsylvania

Infant Mortality Rates, 1979-1984



# Philadelphia, Pennsylvania

Low Birth Weight Rates, 1979-1984



PITTSBURGH, PENNSYLVANIA

NUMBER OF LIVE BIRTHS (1984): 5,493

NUMBER OF INFANT DEATHS (1984): 83

TOTAL POPULATION (1980): 423,938

NUMBER (and percent) LIVING BELOW POVERTY (1980): 67,300 (16.5%)

RACIAL COMPOSITION (BY PERCENT)

White: 75.1

Nonwhite: 24.9 (The Nonwhite population is 96.1% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 15,240<sup>a</sup> PERCENT WIC "ELIGIBLES" SERVED: 49.6<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	13.4	12.4	14.1	11.2	11.7	10.0	12.1	-1.97
Nonwhite	30.0	28.6	21.5	28.5	29.1	23.3	26.8	-2.95
TOTAL	19.1	18.2	16.7	17.5	18.1	15.1	17.5	-4.26

Nonwhite to White ratio (1979): 2.24 (1984): 2.33 (Percent Change In Ratio 1979-1984): 4.07

LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.6	6.4	6.2	5.5	6.6	5.9	6.2	0.51
Nonwhite	13.9	14.3	14.4	14.0	15.4	13.9	14.3	0.21
TOTAL	9.1	9.2	9.1	8.6	9.8	8.9	9.1	-0.14

Nonwhite to White ratio (1979): 2.11 (1984): 2.36 (Percent Change In Ratio 1979-1984): 11.86

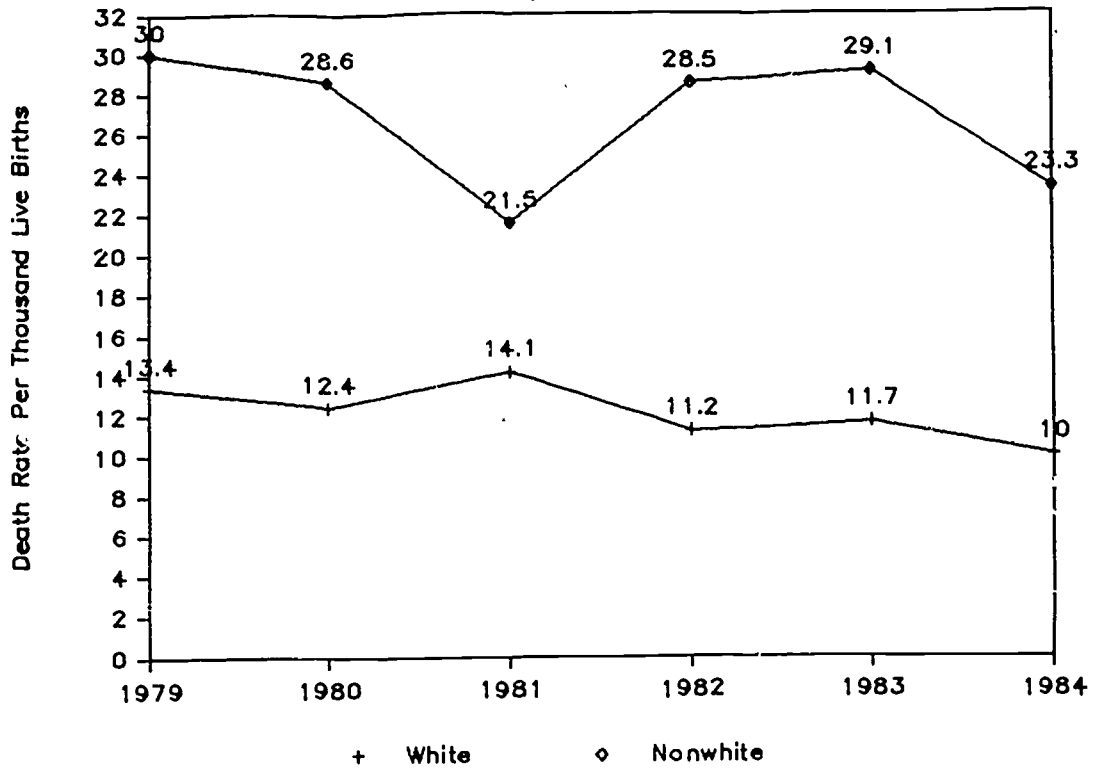
Footnotes:

<sup>a</sup> Figures for WIC population are for Alleghany County.

100

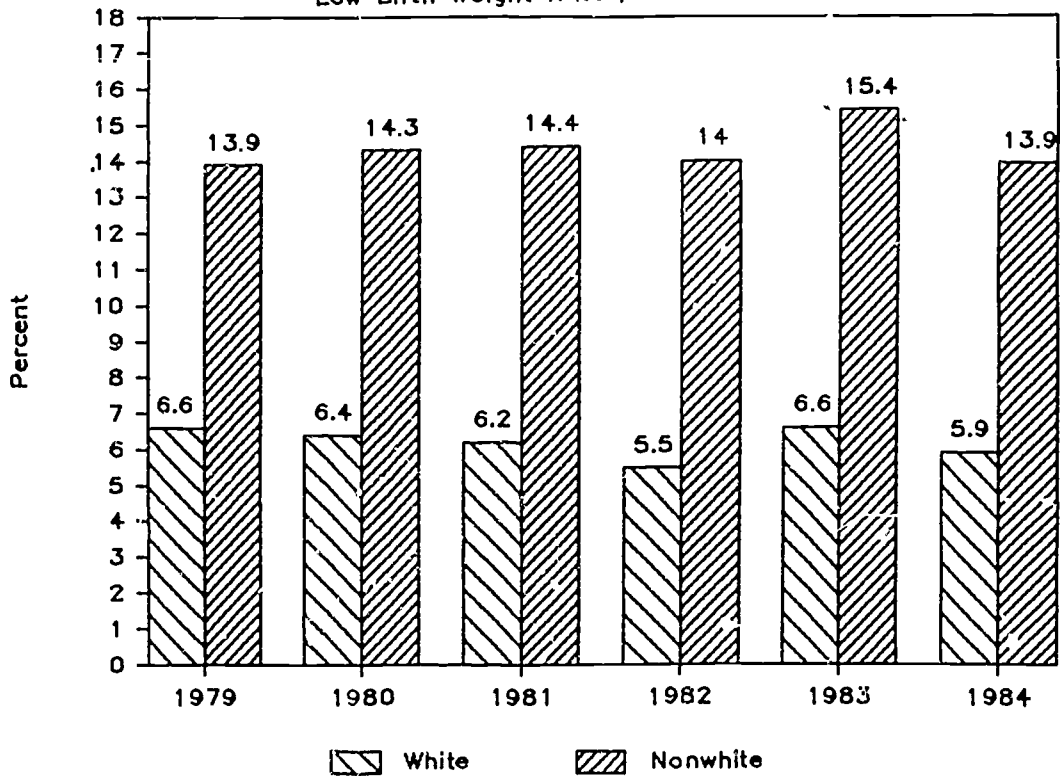
## Pittsburgh, Pennsylvania

Infant Mortality Rates, 1979-1984



## Pittsburgh, Pennsylvania

Low Birth Weight Rates, 1979-1984



**MEMPHIS, TENNESSEE**

NUMBER OF LIVE BIRTHS (1984): 11,404

NUMBER OF INFANT DEATHS (1984): 169

TOTAL POPULATION (1980): 646,356

NUMBER (and percent) LIVING BELOW POVERTY (1980): 138,700 (21.8%)

**RACIAL COMPOSITION (BY PERCENT)**

White: 51.7

Nonwhite: 48.3 (The Nonwhite population is 98.6% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 6,674<sup>a</sup>

PERCENT WIC "ELIGIBLES" SERVED: 21.7<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): <sup>b</sup>

**I N F A N T M O R T A L I T Y R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	9.9	12.5	8.9	10.0	8.9	7.8	9.7	-0.24
Nonwhite	21.2	20.9	24.1	19.8	22.8	19.2	21.3	-0.92
TOTAL	16.9	17.7	18.3	16.0	17.4	14.8	16.9	-2.13

Nonwhite to White ratio (1979): 2.14      (1984): 2.46      (Percent Change In Ratio 1979-1984): 14.95

**L O W B I R T H W E I G H T P E R C E N T**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.1	6.2	6.9	6.1	6.3	5.6	6.2	0.92
Nonwhite	13.5	14.0	14.2	13.6	13.6	13.5	13.7	0.03
TOTAL	10.7	11.1	11.4	10.7	10.8	10.5	10.9	-0.31

Nonwhite to White ratio (1979): 2.21      (1984): 2.41      (Percent Change In Ratio 1979-1984): 8.93

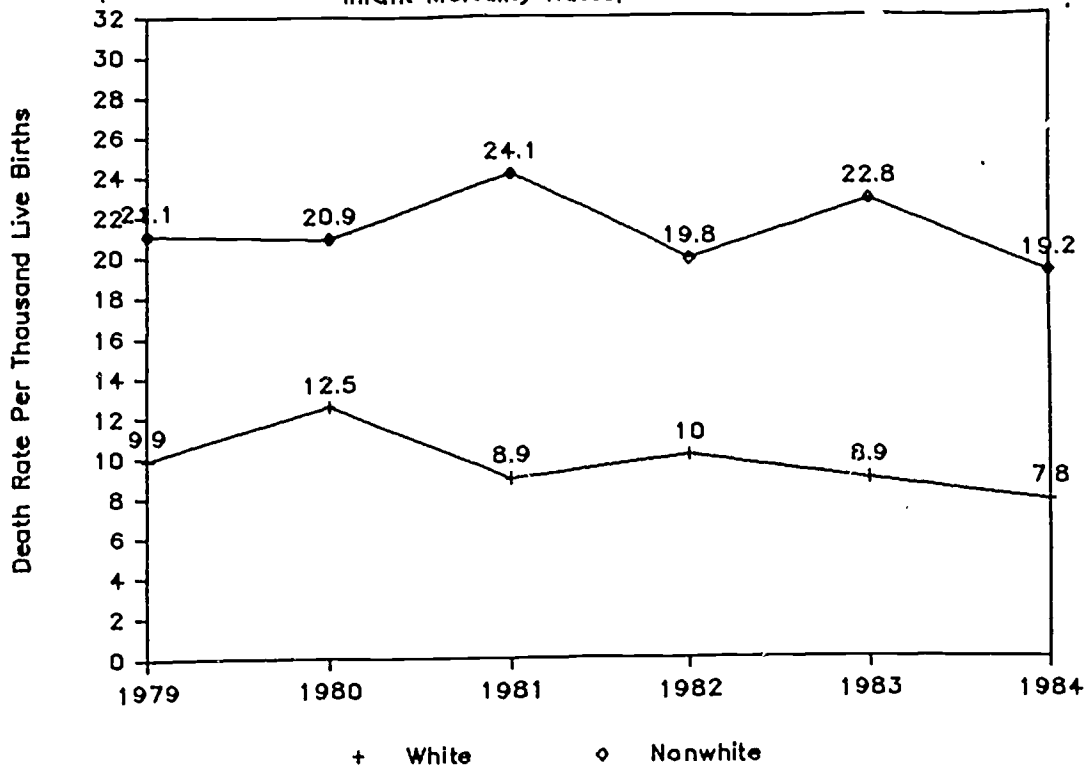
**Footnotes:**

a Figures for WIC participation are for Shelby County.

b The CSF Program was unable to provide average monthly figures for the two programs operated in the Memphis area.

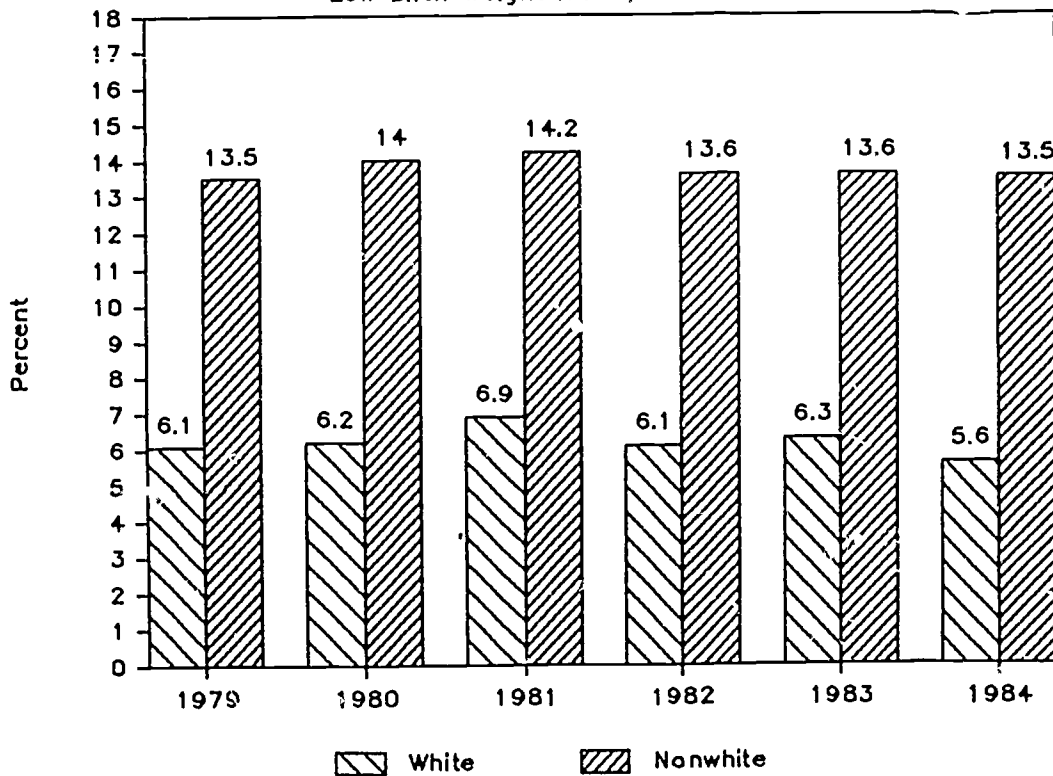
# Memphis, Tennessee

## Infant Mortality Rates, 1979-1984



# Memphis, Tennessee

## Low Birth Weight Rates, 1979-1984



NASHVILLE (Davidson County), TENNESSEE

NUMBER OF LIVE BIRTHS (1984): 7,331

NUMBER OF INFANT DEATHS (1984): 90

TOTAL POPULATION (1980): 455,651<sup>a</sup>

NUMBER (and percent) LIVING BELOW POVERTY (1980): 55,000<sup>a</sup> (12.6%)

RACIAL COMPOSITION (BY PERCENT)

White: 75.9

Nonwhite: 24.1 (The Nonwhite population is 96.3% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): No Program PERCENT WIC "ELIGIBLES" SERVED: No Progr

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): <sup>b</sup>

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	13.6	10.5	10.9	11.1	10.1	9.8	11.0	-5.23
Nonwhite	21.4	17.2	19.8	18.1	21.1	18.5	19.5	-1.77
TOTAL	15.9	12.5	13.6	13.1	13.3	11.8	13.4	-5.20

Nonwhite to White ratio (1979): 1.57 (1984): 1.89 (Percent Change In Rat'c 1979-1984): 19.97

LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	7.1	6.4	6.7	7.0	7.5	7.2	7.0	1.29
Nonwhite	12.9	13.8	12.7	13.1	14.1	14.3	13.5	2.24
TOTAL	8.8	8.6	8.5	8.8	9.4	9.3	8.9	1.17

Nonwhite to White ratio (1979): 1.82 (1984): 1.99 (Percent Change In Ratio 1979-1984): 9.31

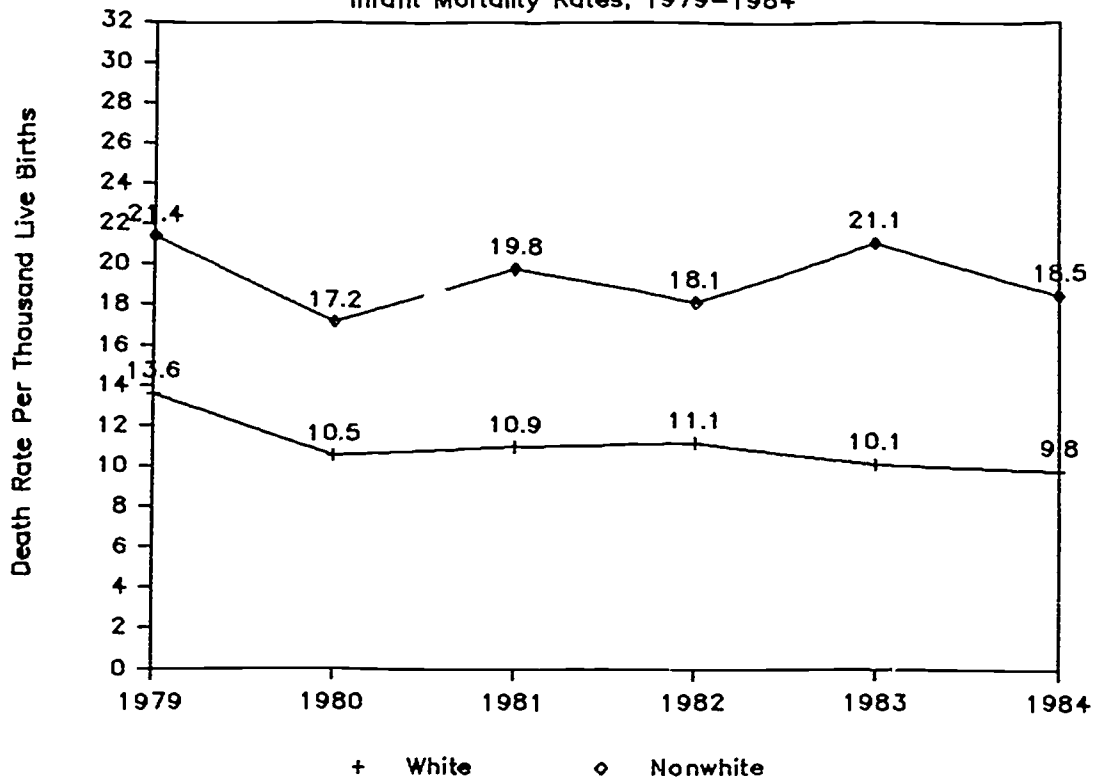
Footnotes:

<sup>a</sup> Data shown are for Nashville-Davidson.

<sup>b</sup> The CSF Program was unable to provide average monthly figures for the two programs operated in the area.

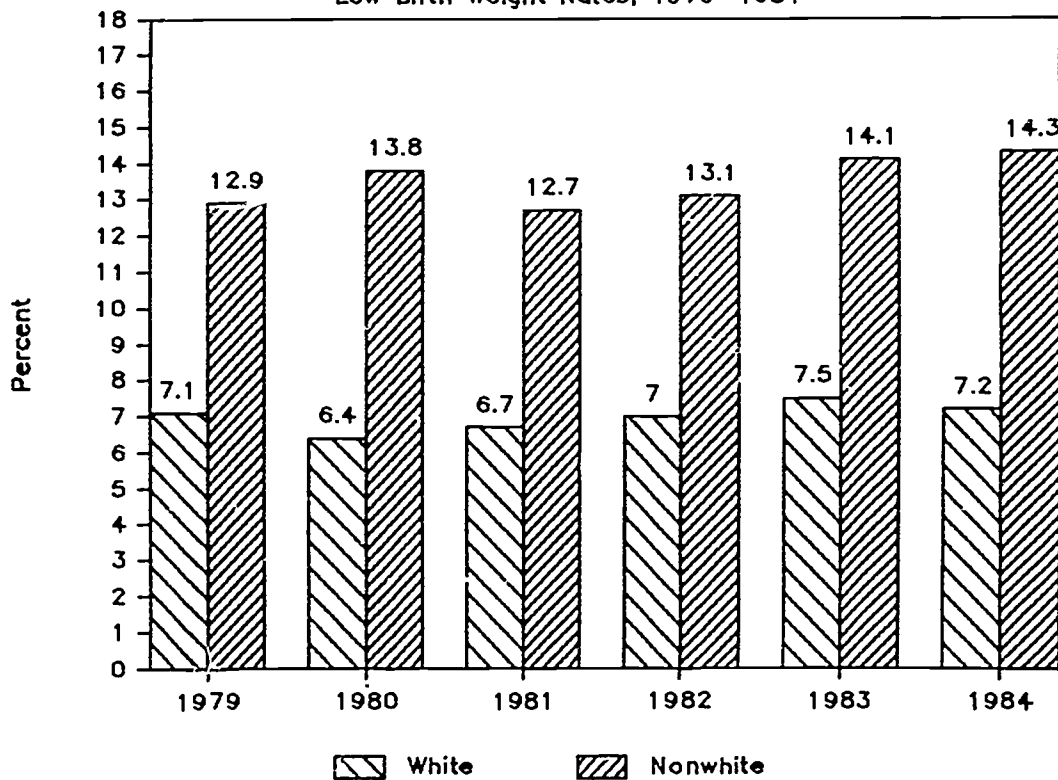
# Nashville, Tennessee

## Infant Mortality Rates, 1979-1984



# Nashville, Tennessee

## Low Birth Weight Rates, 1979-1984





AUSTIN (Travis County), TEXAS

NUMBER OF LIVE BIRTHS (1984): 9,768

NUMBER OF INFANT DEATHS (1984): 87

TOTAL POPULATION (1980): 419,573

NUMBER (and percent) LIVING BELOW POVERTY (1980): 57,500 (14.4%)

RACIAL COMPOSITION (BY PERCENT)

White: 78.7

Nonwhite: 21.3 (The Nonwhite population is Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 11,207

PERCENT WIC "ELIGIBLES" SERVED: 45

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	8.8	7.9	9.2	7.7	5.8	8.1	7.9	-6.95
Nonwhite	11.8	11.2	12.2	9.2	10.4	10.3	10.9	-1.73
TOTAL	10.0	9.2	10.4	8.3	7.5	8.9	9.1	-1.22

Nonwhite to White ratio (1979): 1.34      (1984): 1.27      (Percent Change In Ratio 1979-1984): -5.17

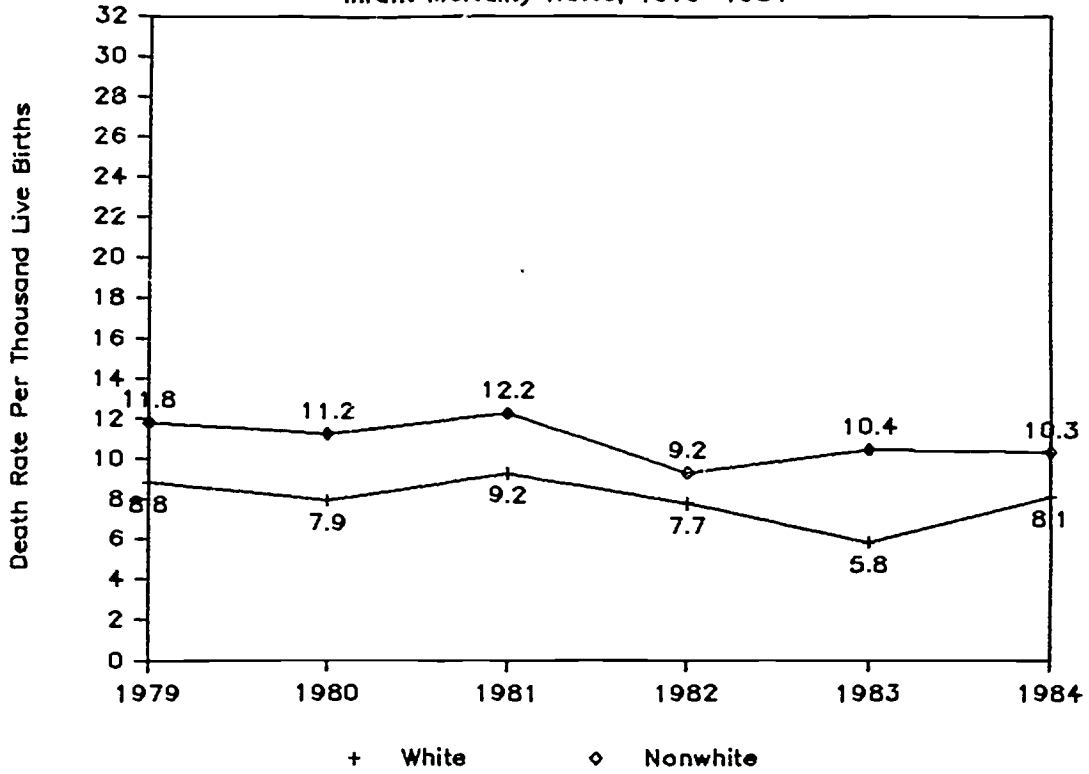
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.3	5.7	6.0	5.6	5.4	5.8	5.6	0.51
Nonwhite	8.1	8.7	8.0	8.1	8.5	8.7	8.4	1.58
TOTAL	6.4	6.9	6.8	6.5	6.5	6.8	6.7	1.31

Nonwhite to White ratio (1979): 1.53      (1984): 1.50      (Percent Change In Ratio 1979-1984): -1.85

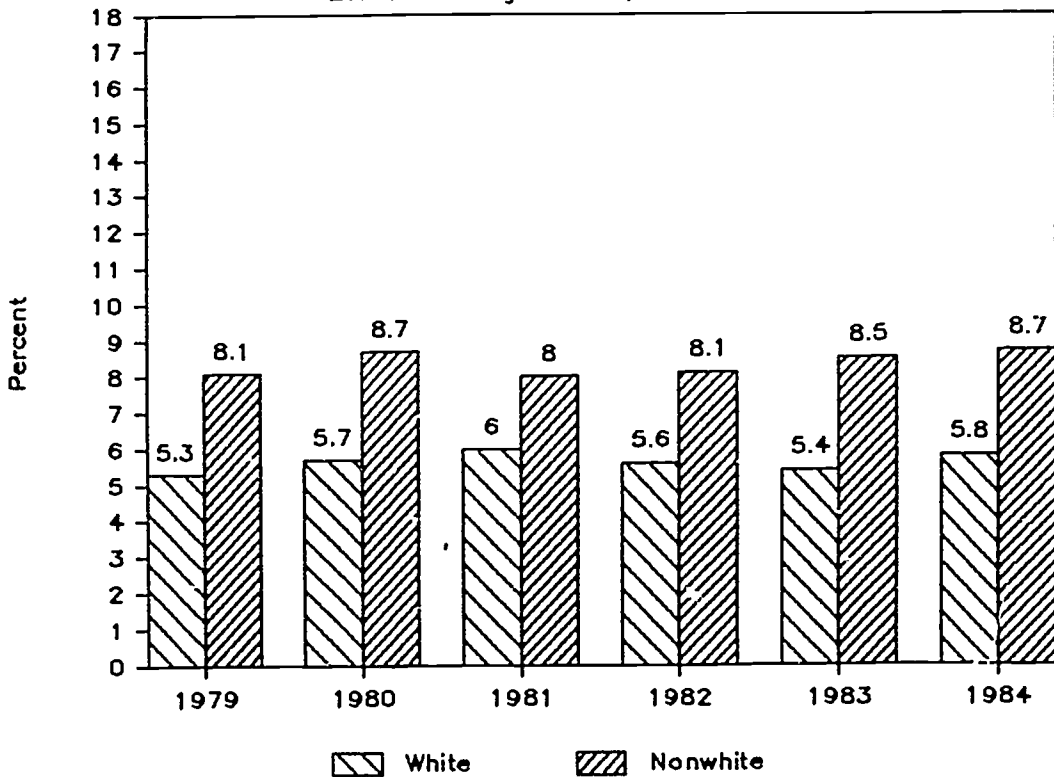
## Travis County (Austin), TX

Infant Mortality Rates, 1979-1984



## Travis County (Austin), TX

Low Birth Weight Rates, 1979-1984



DALLAS (Dallas County), TEXAS

NUMBER OF LIVE BIRTHS (1984): 33,042

NUMBER OF INFANT DEATHS (1984): 345

TOTAL POPULATION (1980): 1,556,390

NUMBER (and percent) LIVING BELOW POVERTY (1980): 162,000 (10.6%)

RACIAL COMPOSITION (BY PERCENT)

White: 74.5

Nonwhite: 25.5 (The Nonwhite population is 72.2% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 10,195

PERCENT WIC "ELIGIBLES" SERVED: 15

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.8	9.9	11.4	8.4	10.9	9.7	10.2	2.05
Nonwhite	17.0	15.4	17.3	12.5	13.4	11.5	14.5	-6.36
TOTAL	13.4	12.2	13.9	10.1	12.0	10.4	12.0	-3.38

Nonwhite to white ratio (1979): 1.57      (1984): 1.19      (Percent Change In Ratio 1979-1984): -24.68

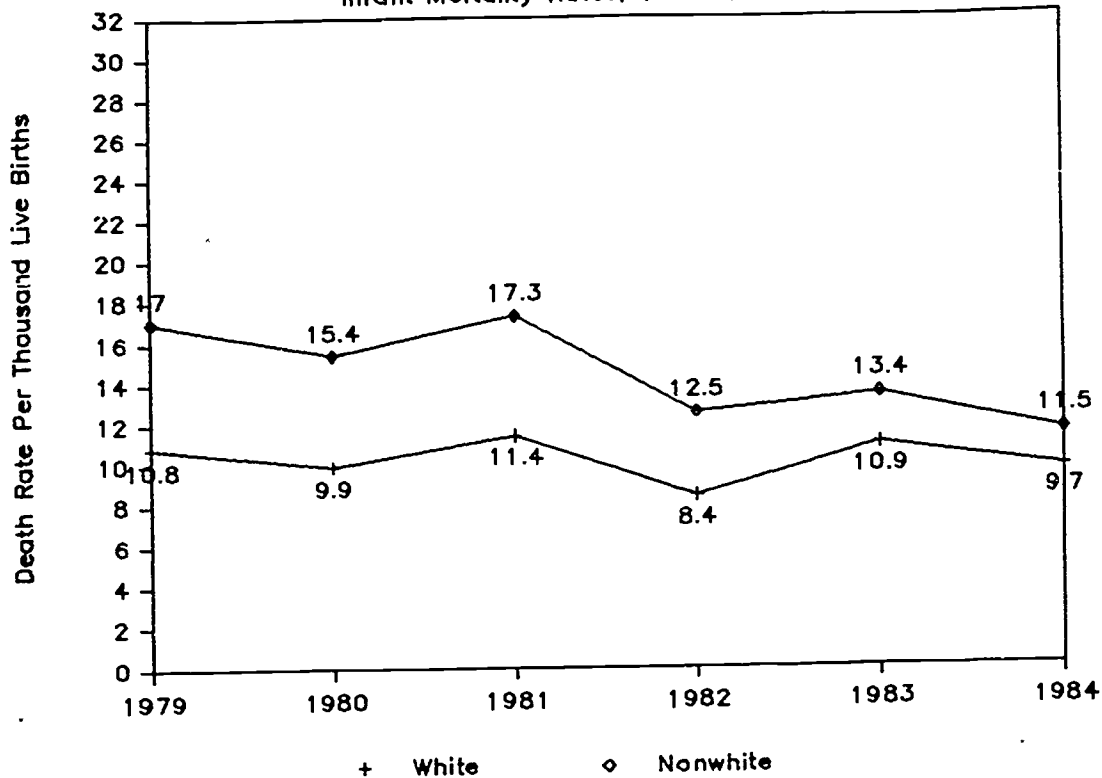
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.0	6.2	6.0	6.2	5.9	6.0	6.1	-0.28
Nonwhite	10.5	10.0	10.8	10.0	10.4	10.3	10.3	-0.23
TOTAL	7.9	7.8	8.0	7.7	7.8	7.8	7.8	-0.23

Nonwhite to white ratio (1979): 1.75      (1984): 1.72      (Percent Change In Ratio 1979-1984): -1.90

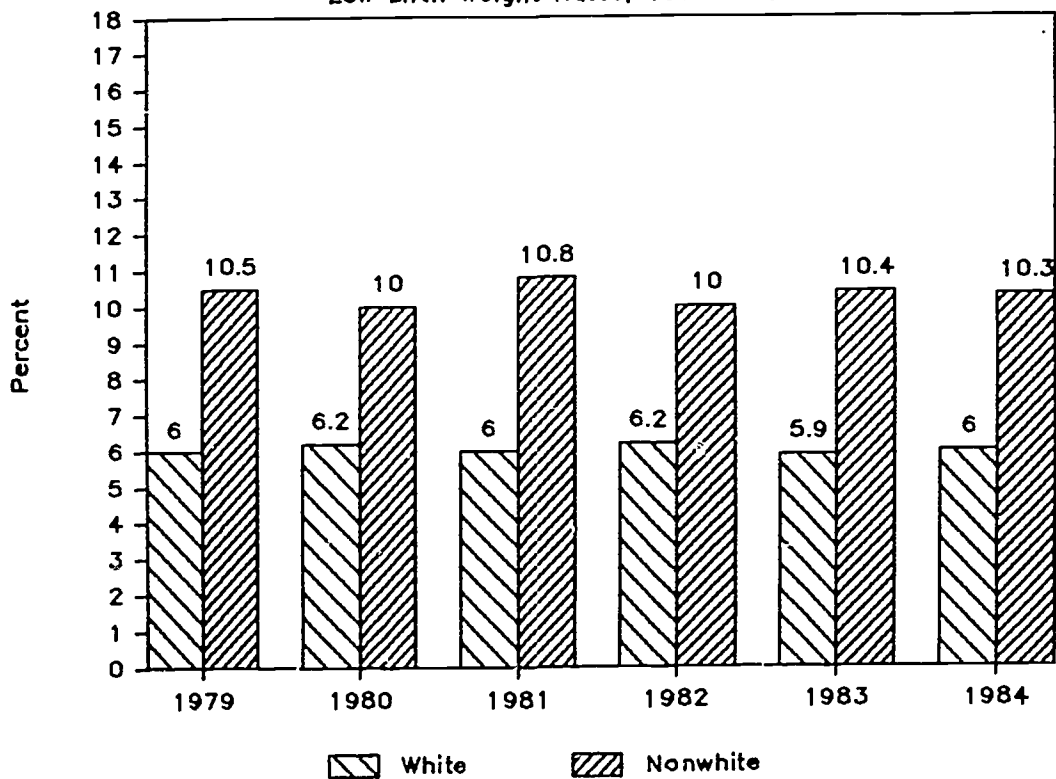
# Dallas County (Dallas), TX

Infant Mortality Rates, 1979-1984



# Dallas County (Dallas), TX

Low Birth Weight Rates, 1979-1984



EL PASO (El Paso County), TEXAS

NUMBER OF LIVE BIRTHS (1984): 11,465

NUMBER OF INFANT DEATHS (1984): 107

TOTAL POPULATION (1980): 408,899

NUMBER (and percent) LIVING BELOW POVERTY (1980): 101,700 (21.7%)

RACIAL COMPOSITION (BY PERCENT)

White: 71.5

Nonwhite: 28.5 (The Nonwhite population is 1.3% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 16,184

PERCENT WIC "ELIGIBLES" SERVED: 34

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.7	7.6	6.3	12.6	12.5	6.9	9.4	10.63
Nonwhite	9.8	11.5	11.4	9.7	8.1	10.3	10.1	2.45
TOTAL	10.1	10.3	9.9	10.6	9.4	9.3	9.9	-1.44

Nonwhite to White ratio (1979): 0.92 (1984): 1.49 (Percent Change In Ratio 1979-1984): 62.98

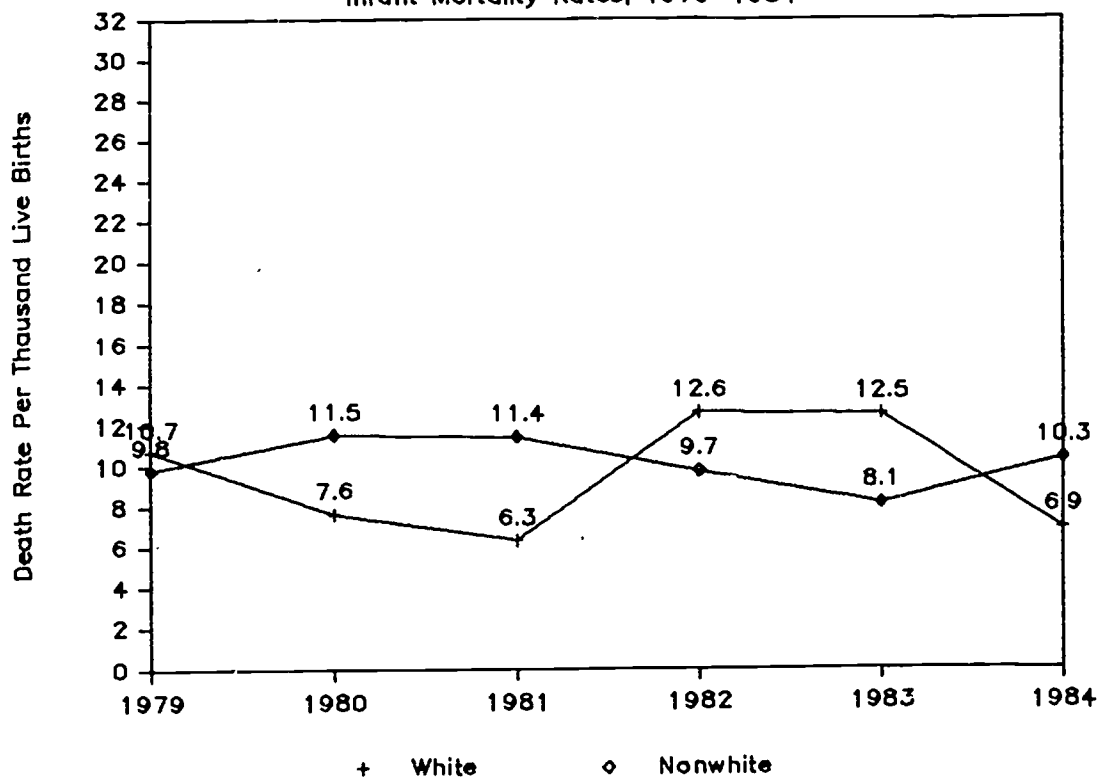
LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.8	6.0	6.3	6.3	6.3	6.3	6.3	-1.35
Nonwhite	6.0	6.4	6.5	6.5	6.2	6.9	6.4	2.98
TOTAL	6.2	6.3	6.4	6.5	6.3	6.7	6.4	1.61

Nonwhite to White ratio (1979): 0.88 (1984): 1.10 (Percent Change In Ratio 1979-1984): 24.13

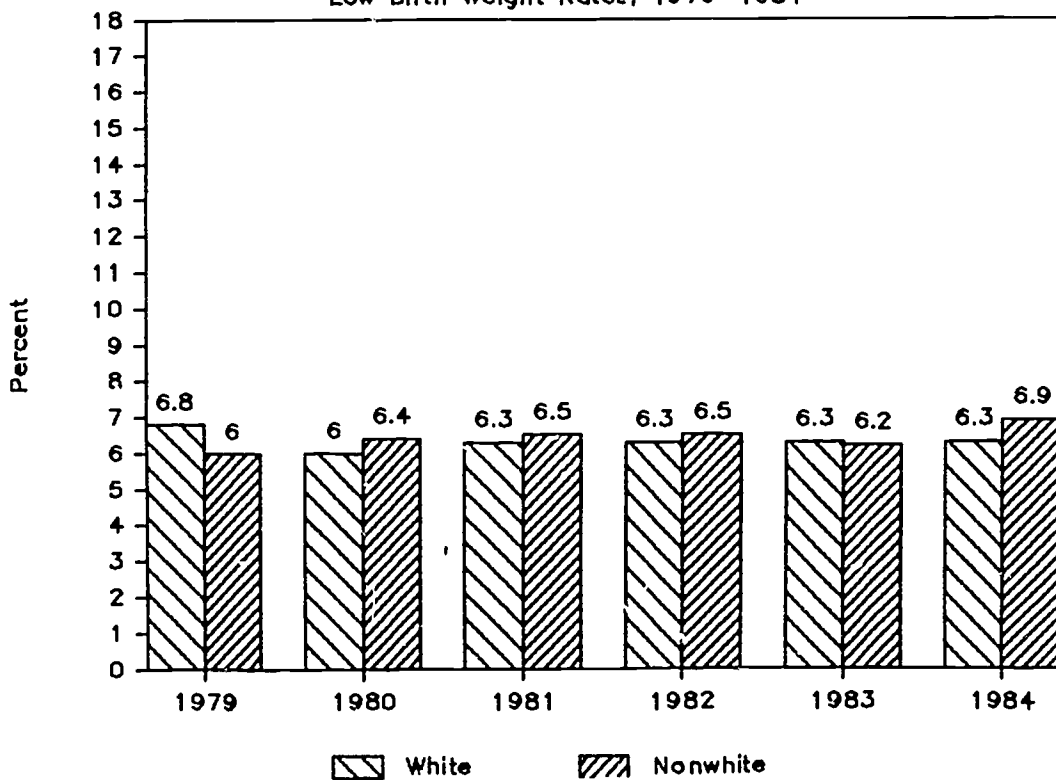
## El Paso County (El Paso), TX

Infant Mortality Rates, 1979-1984



## El Paso County (El Paso), TX

Low Birth Weight Rates, 1979-1984



FORT WORTH (Tarrant County), TEXAS

NUMBER OF LIVE BIRTHS (1984): 18,953

NUMBER OF INFANT DEATHS (1984): 226

TOTAL POPULATION (1980): 860,880

NUMBER (and percent) LIVING BELOW POVERTY (1980): 79,100 (9.4%)

RACIAL COMPOSITION (BY PERCENT)

White: 83.0

Nonwhite: 17.0 (The Nonwhite population is 68.8% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 5,658

PERCENT WIC "ELIGIBLES" SERVED: 17<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.1	10.6	10.7	10.7	10.0	10.8	10.2	-3.60
Nonwhite	19.6	15.5	16.9	16.4	16.3	14.8	16.6	-4.93
TOTAL	14.2	11.9	12.4	12.3	11.8	11.9	12.4	-3.20

Nonwhite to White ratio (1979): 1.62 (1984): 1.37 (Percent Change In Ratio 1979-1984): -15.40

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.0	5.8	6.0	5.9	5.9	5.8	5.9	-0.31
Nonwhite	10.0	8.9	9.6	9.4	10.0	9.3	9.5	-1.17
TOTAL	7.2	6.7	7.0	6.9	7.1	6.8	7.0	-1.04

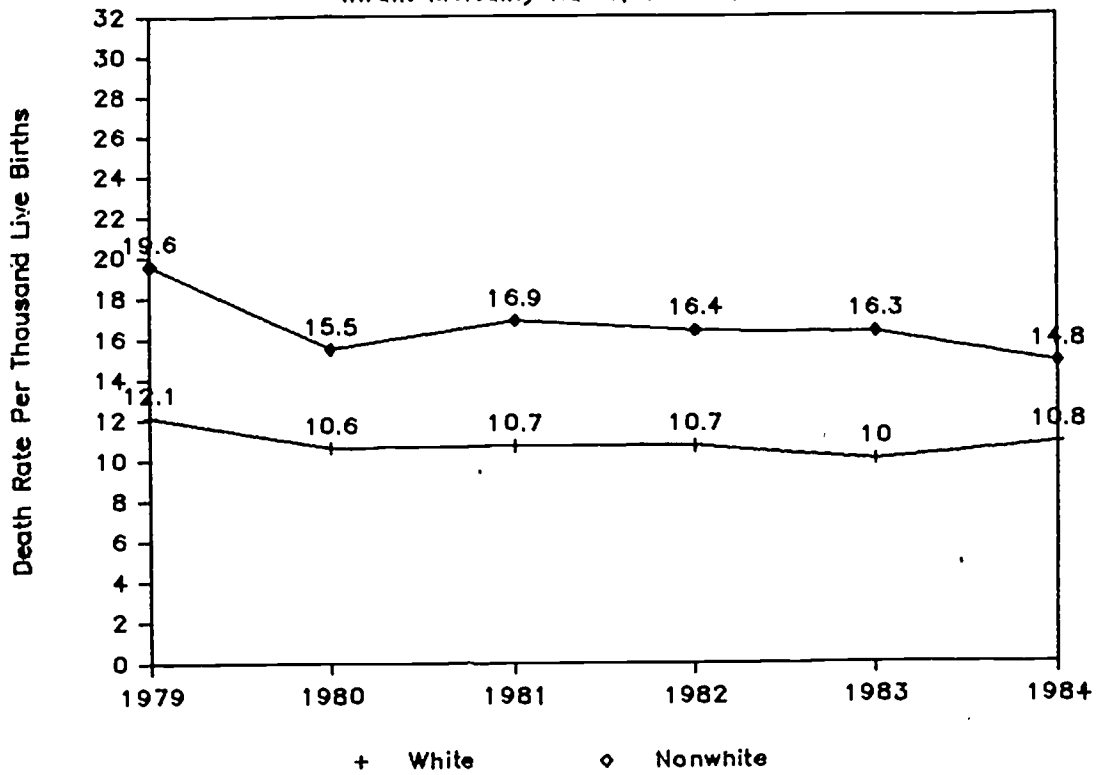
Nonwhite to White ratio (1979): 1.67 (1984): 1.60 (Percent Change In Ratio 1979-1984): -3.79

Footnotes:

<sup>a</sup> WIC figures are for Fort Worth only.

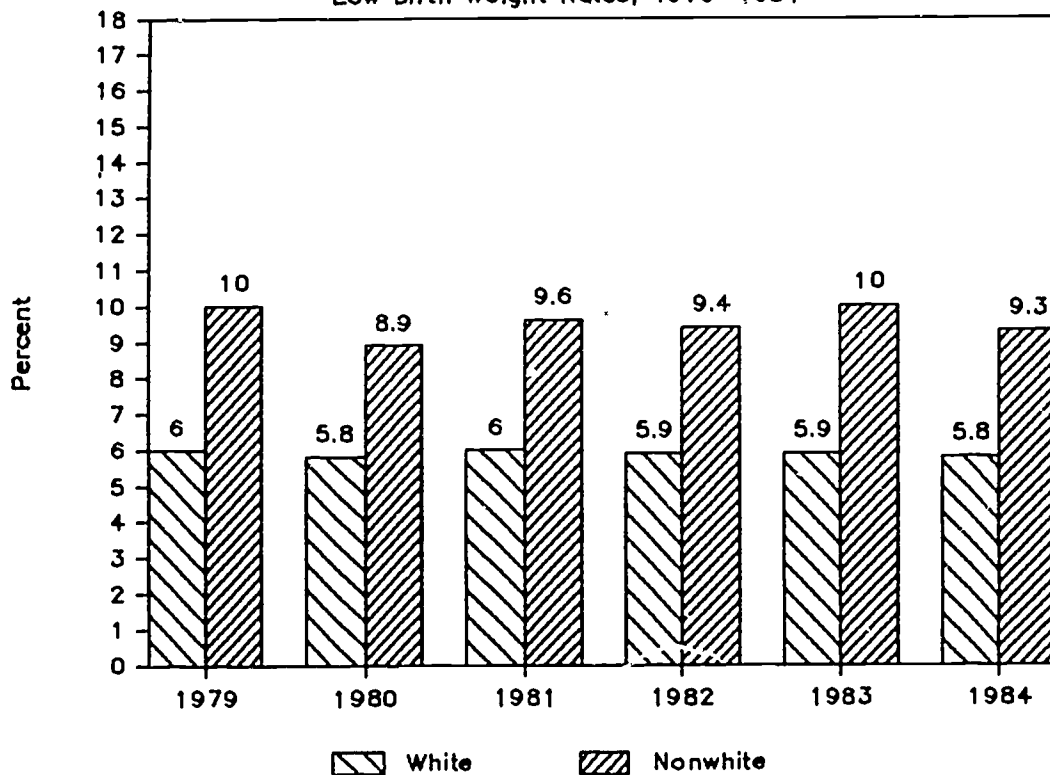
# Tarrant County (Fort Worth), TX

## Infant Mortality Rates, 1979-1984



# Tarrant County (Fort Worth), TX

## Low Birth Weight Rates, 1979-1984



201



---

HOUSTON (Harris County), TEXAS

---

NUMBER OF LIVE BIRTHS (1984): 53,994

NUMBER OF INFANT DEATHS (1984): 587

TOTAL POPULATION (1980): 2,409,547

NUMBER (and percent) LIVING BELOW POVERTY (1980): 247,800 (10.4%)

RACIAL COMPOSITION (BY PERCENT)

White: 70.9

Nonwhite: 29.1 (The Nonwhite population is 67.4% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 11,950<sup>a</sup>

PERCENT WIC "ELIGIBLES" SERVED: 11<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

---

I N F A N T M O R T A L I T Y R A T E

---

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.2	10.2	10.8	8.6	9.7	9.0	9.8	-0.34
Nonwhite	15.3	14.8	15.0	12.7	13.3	12.9	14.0	-3.11
TOTAL	12.6	12.3	12.8	10.5	11.4	10.9	11.8	-2.42

-----

Nonwhite to White ratio (1979): 1.50      (1984): 1.43      (Percent Change In Ratio 1979-1984): -4.44

---

L O W B I R T H W E I G H T P E R C E N T

---

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.9	6.0	5.9	6.0	5.9	5.5	5.9	0.01
Nonwhite	9.5	8.9	8.8	8.5	8.8	8.4	8.8	-2.37
TOTAL	7.6	7.4	7.2	7.2	7.2	6.9	7.3	-1.90

-----

Nonwhite to White ratio (1979): 1.61      (1984): 1.53      (Percent Change In Ratio 1979-1984): -5.15

---

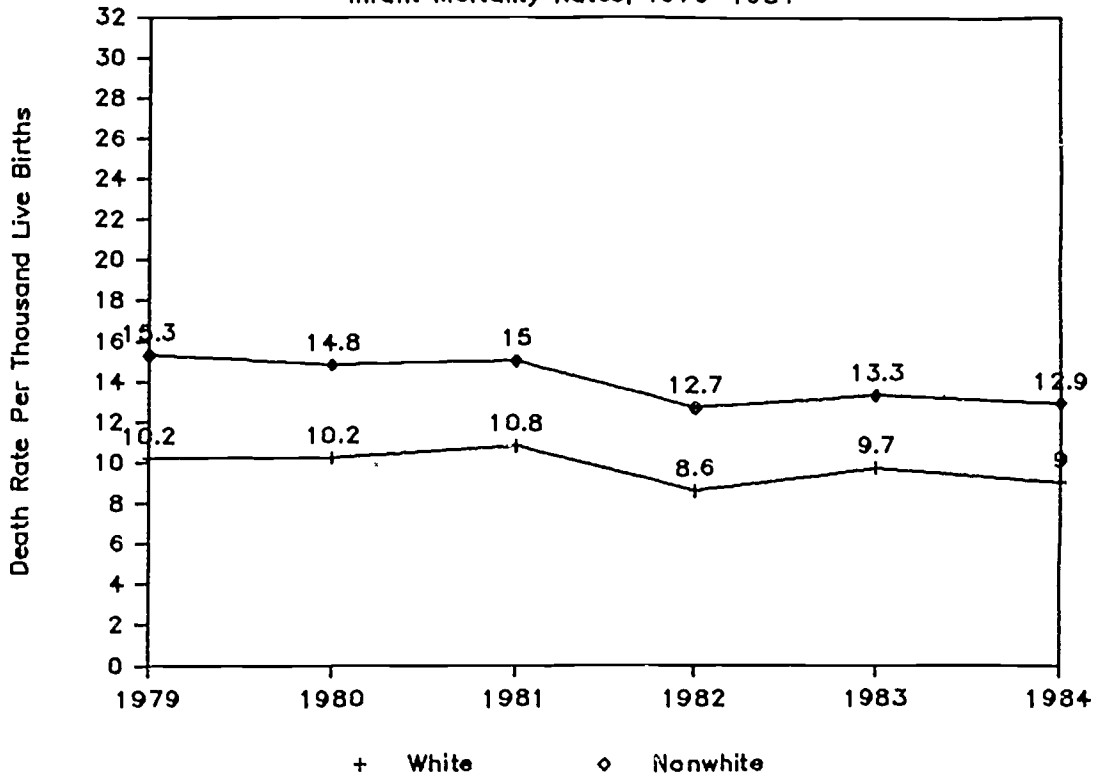
Footnotes:

<sup>a</sup> WIC figures are for Houston only.

202

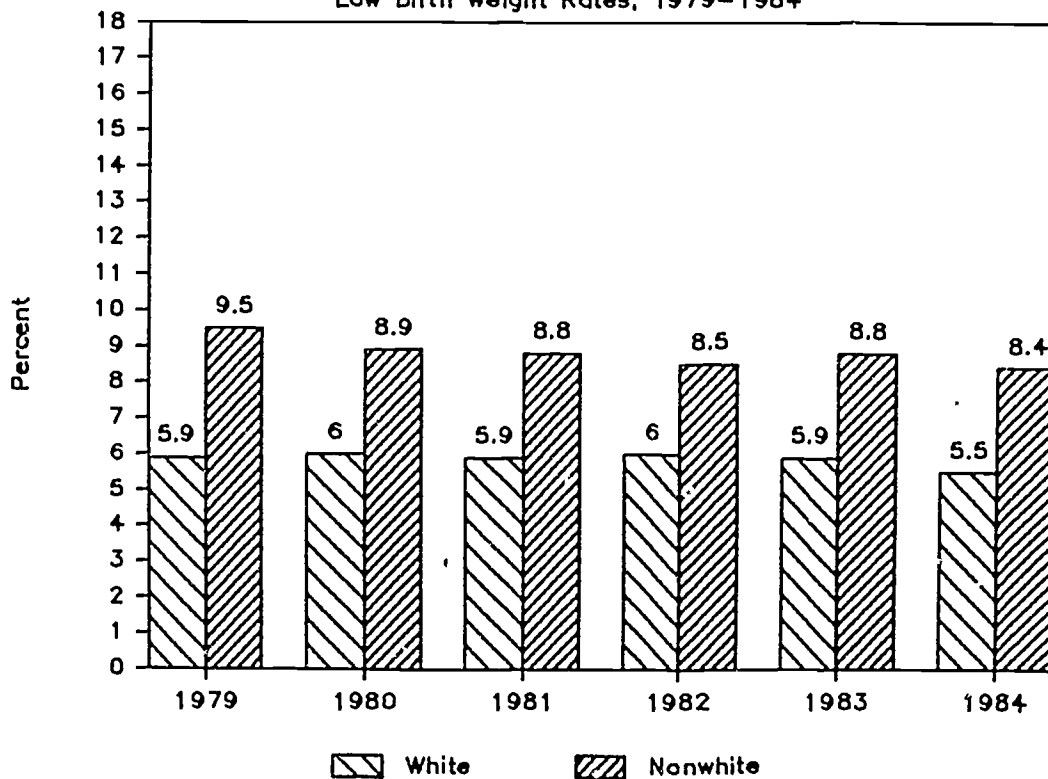
## Harris County (Houston), TX

Infant Mortality Rates, 1979-1984



## Harris County (Houston), TX

Low Birth Weight Rates, 1979-1984



San Antonio (Bexar County), TEXAS

NUMBER OF LIVE BIRTHS (1984): 21,483

NUMBER OF INFANT DEATHS (1984): 254

TOTAL POPULATION (1980): 988,800

NUMBER (and percent) LIVING BELOW POVERTY (1980): 177,000 (18.5%)

RACIAL COMPOSITION (BY PERCENT)

White: 81.0

Nonwhite: 19.0 (The Nonwhite population is 36.8% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 7,965

PERCENT WIC "ELIGIBLES" SERVED: 11

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.8	8.6	9.9	10.2	8.3	9.5	9.9	-6.66
Nonwhite	15.6	13.5	13.0	14.2	11.9	13.3	13.6	-2.47
TOTAL	14.6	11.7	11.8	12.6	10.5	11.8	12.2	-3.30

Nonwhite to White ratio (1979): 1.22 (1984): 1.40 (Percent Change In Ratio 1979-1984): 14.75

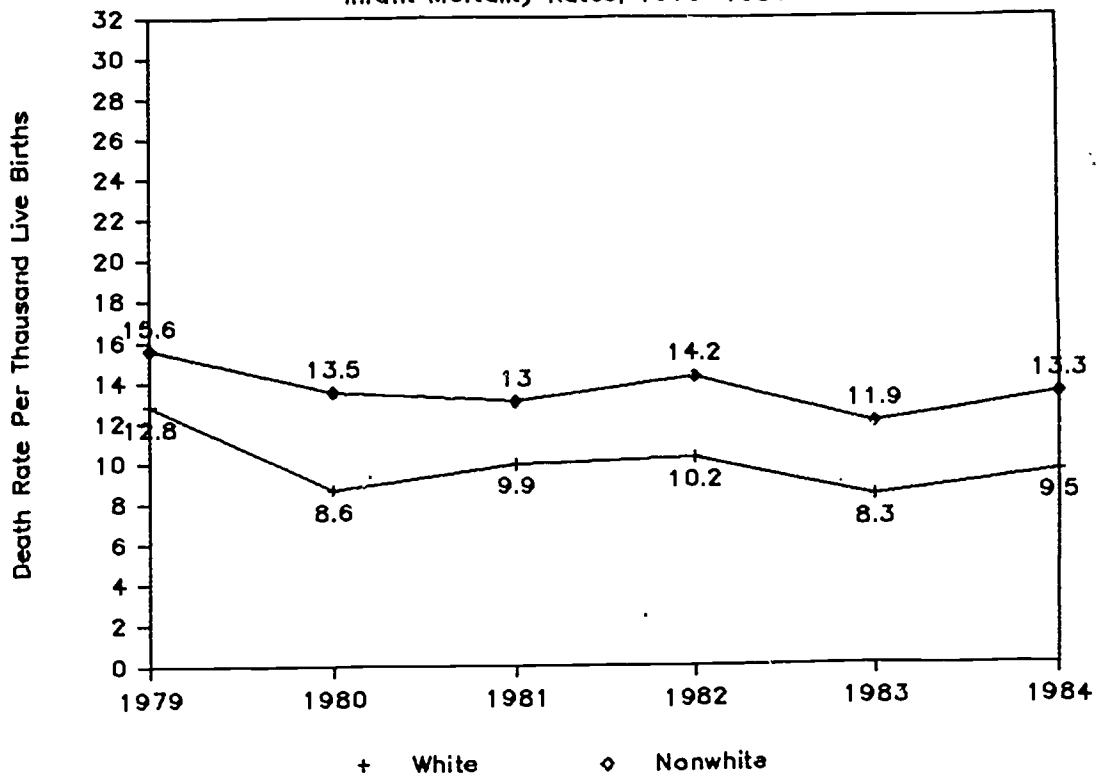
LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.2	5.7	5.3	5.8	5.7	6.2	5.8	-1.47
Nonwhite	7.6	7.0	7.0	7.6	7.1	7.4	7.3	-0.34
TOTAL	7.0	6.5	6.4	6.9	6.5	6.9	6.7	-0.10

Nonwhite to White ratio (1979): 1.23 (1984): 1.19 (Percent Change In Ratio 1979-1984): -3.25

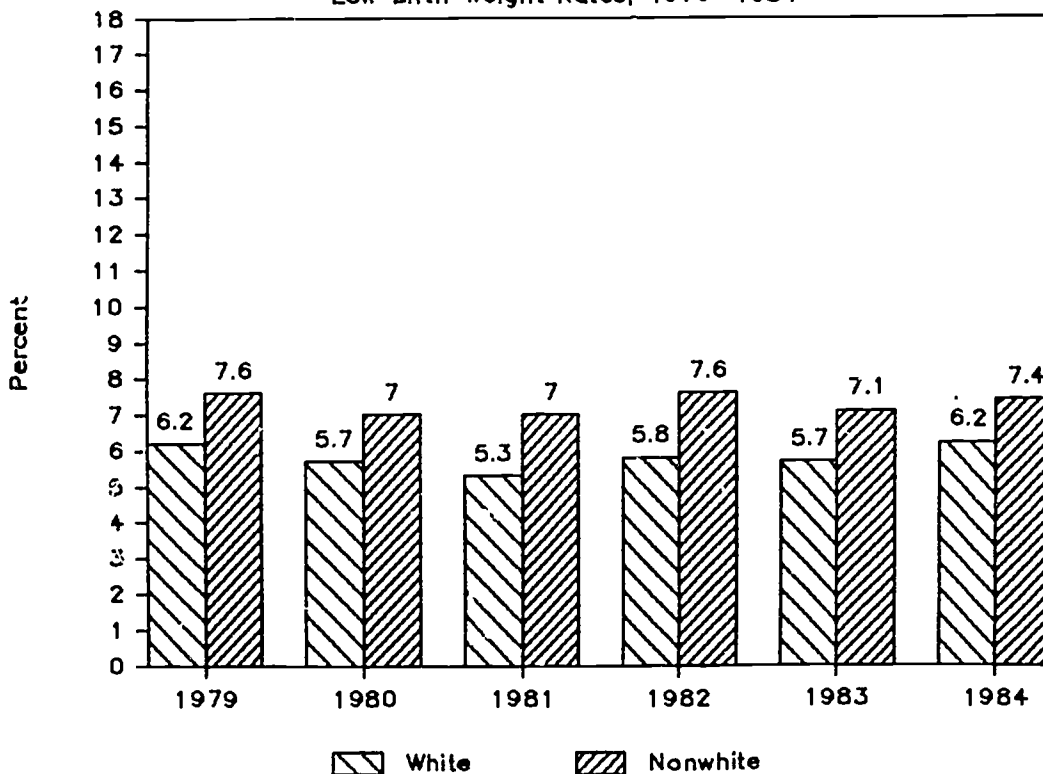
# Bexar County (San Antonio), TX

Infant Mortality Rates, 1979-1984



# Bexar County (San Antonio), TX

Low Birth Weight Rates, 1979-1984



NORFOLK, VIRGINIA

NUMBER OF LIVE BIRTHS (1984): 5,449

NUMBER OF INFANT DEATHS (1984): 91

TOTAL POPULATION (1980): 266,979

NUMBER (and percent) LIVING BELOW POVERTY (1980): 48,100 (20.7%)

RACIAL COMPOSITION (BY PERCENT)

White: 61.1

Nonwhite: 38.9 (The Nonwhite population is 90.4% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 4,811

PERCENT WIC "ELIGIBLES" SERVED: N/A

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	9.1	15.9	13.0	12.5	13.7	10.8	12.5	12.45
Nonwhite	20.3	14.2	21.6	21.3	19.8	24.8	20.3	7.78
TOTAL	14.0	15.1	16.7	16.2	16.3	16.7	15.8	3.71

Nonwhite to White ratio (1979): 2.23

(1984): 2.30

(Percent Change In Ratio 1979-1984): 3.14

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	7.7	7.0	7.4	6.8	6.2	5.8	6.8	-4.06
Nonwhite	12.3	14.7	13.1	13.4	13.2	14.3	13.5	3.55
TOTAL	9.7	10.5	9.9	9.6	9.7	9.9	9.9	-0.48

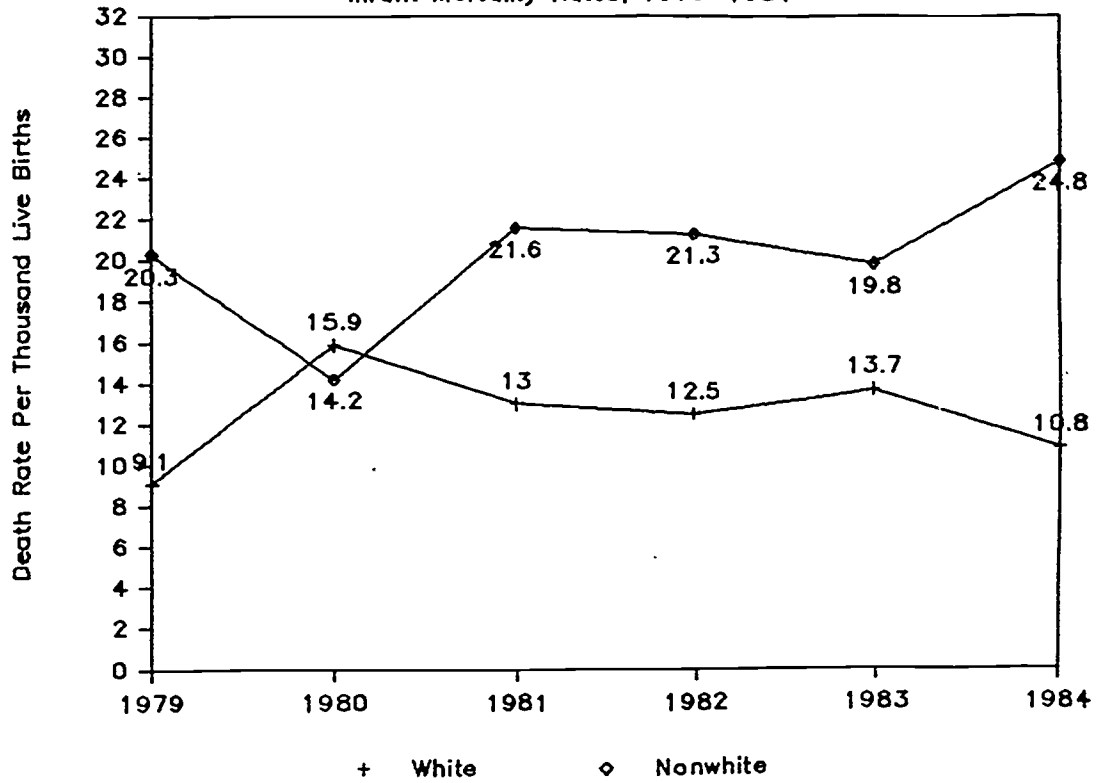
Nonwhite to White ratio (1979): 2.47

(1984): 1.60

(Percent Change In Ratio 1979-1984): -35.22

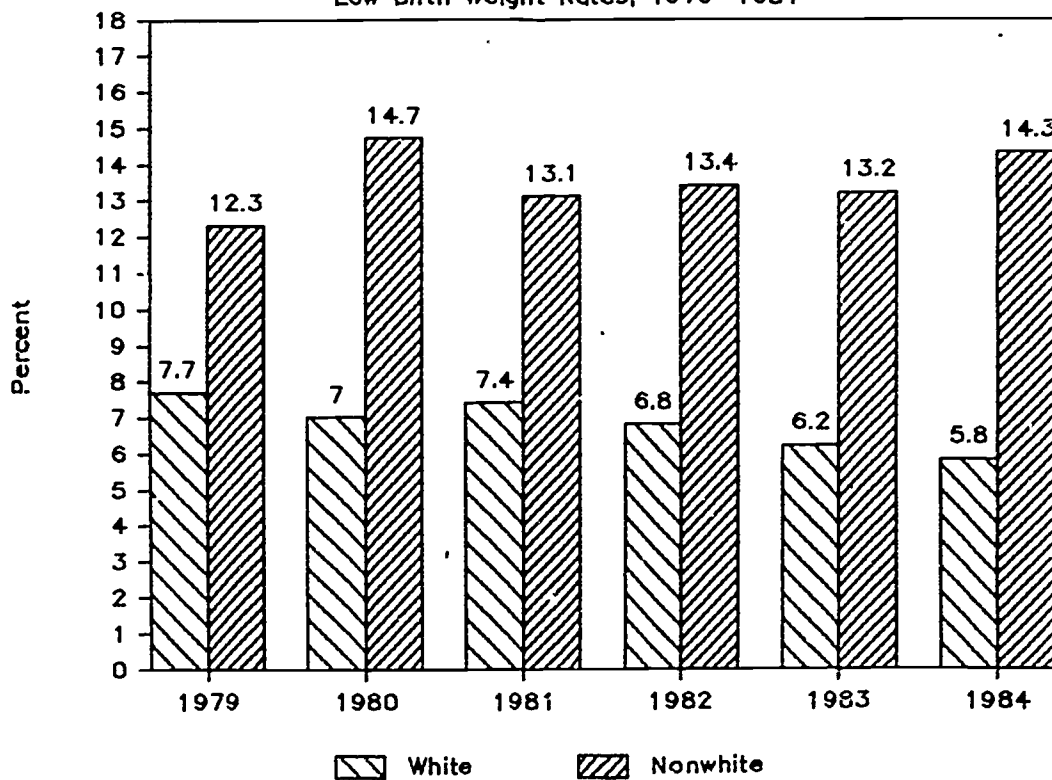
## Norfolk, Virginia

### Infant Mortality Rates, 1979-1984



## Norfolk, Virginia

### Low Birth Weight Rates, 1979-1984



VIRGINIA BEACH, VIRGINIA

NUMBER OF LIVE BIRTHS (1984): 5,617

NUMBER OF INFANT DEATHS (1984): 76

TOTAL POPULATION (1980): 262,199

NUMBER (and percent) LIVING BELOW POVERTY (1980): 22,300 (8.9%)

RACIAL COMPOSITION (BY PERCENT)

White: 86.8

Nonwhite: 13.3 (The Nonwhite population is 75.6% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 1,377

PERCENT WIC "ELIGIBLES" SERVED: N/A

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.0	11.1	10.4	10.2	12.9	12.4	11.3	3.83
Nonwhite	16.5	12.2	16.6	18.3	21.6	19.5	17.5	5.71
TOTAL	11.9	11.3	11.4	11.4	14.3	13.5	12.3	3.14

Nonwhite to white ratio (1979): 1.50 (1984): 1.57 (Percent Change In Ratio 1979-1984): 4.67

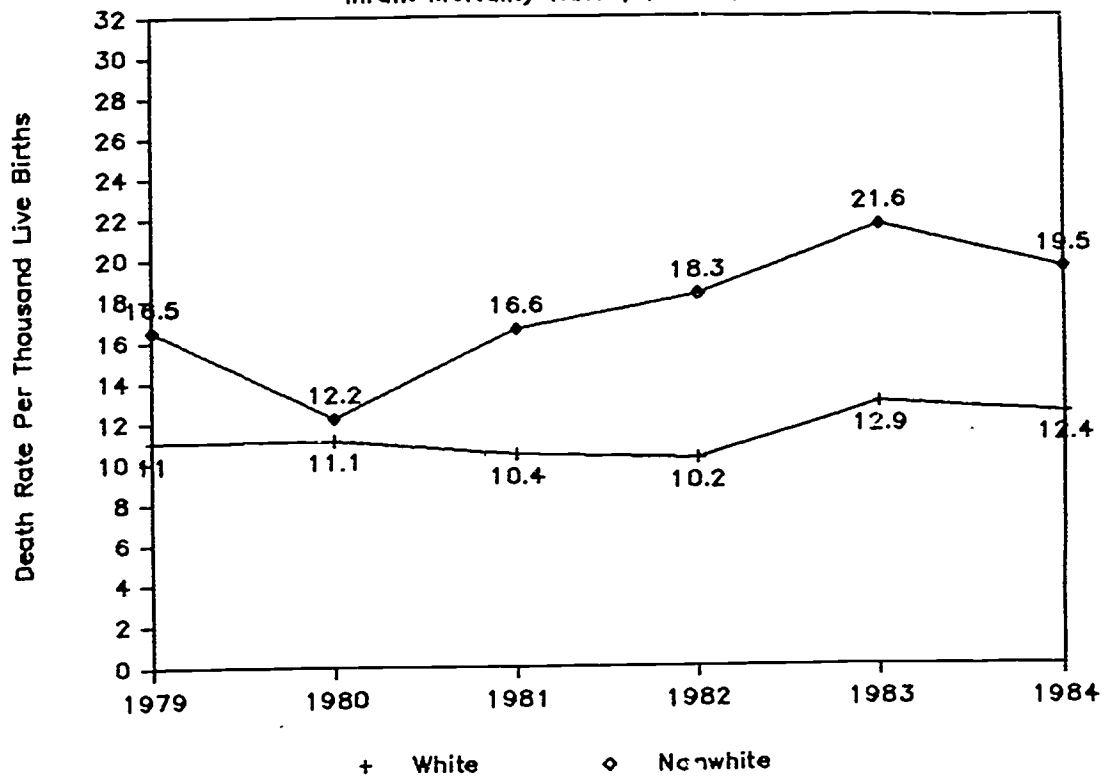
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.9	5.5	5.6	5.9	5.6	5.9	5.7	-0.94
Nonwhite	11.2	9.4	10.5	10.3	11.2	9.9	10.4	-1.83
TOTAL	6.8	6.2	6.5	6.6	6.5	6.6	6.5	-0.48

Nonwhite to white ratio (1979): 1.90 (1984): 1.68 (Percent Change In Ratio 1979-1984): -11.58

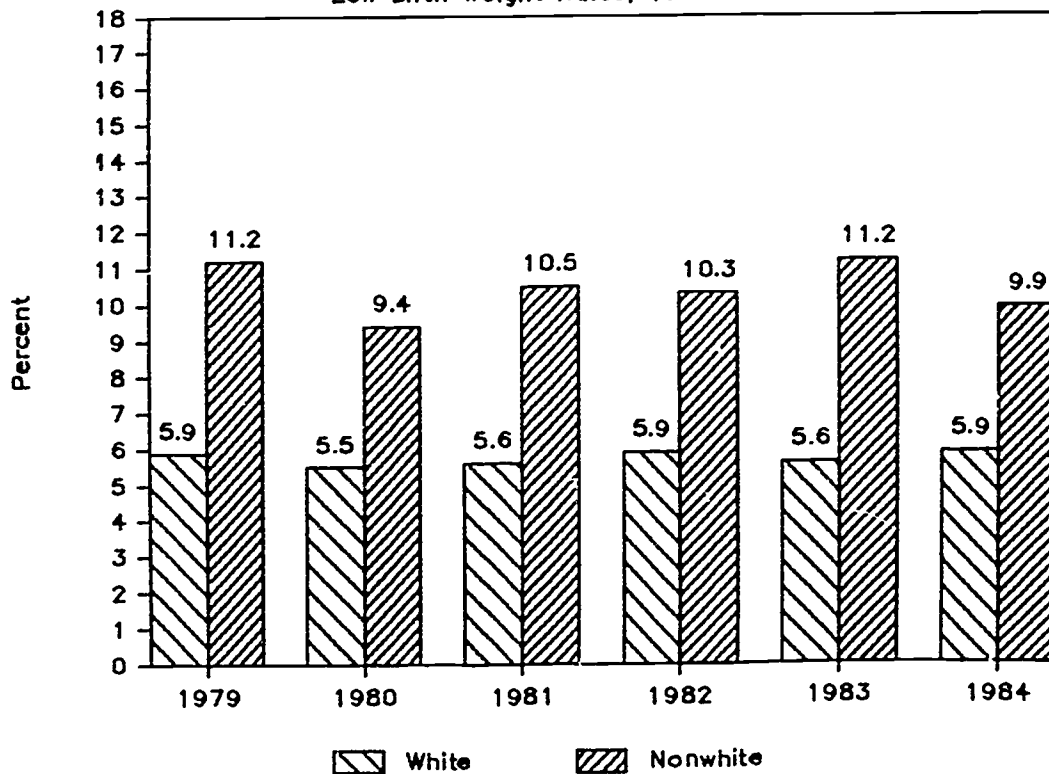
## Virginia Beach, Virginia

Infant Mortality Rates, 1979-1984



## Virginia Beach, Virginia

Low Birth Weight Rates, 1979-1984





SEATTLE, WASHINGTON

NUMBER OF LIVE BIRTHS (1984): 6,679

NUMBER OF INFANT DEATHS (1984): 81

TOTAL POPULATION (1980): 493,846

NUMBER (and percent) LIVING BELOW POVERTY (1980): 53,000 (11.2%)

RACIAL COMPOSITION (BY PERCENT)

White: 80.2

Nonwhite: 9.4 (The Nonwhite population is 47.7% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 8,343<sup>a</sup>

PERCENT WIC "ELIGIBLES" SERVED: 33<sup>a</sup>

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.9	13.0	13.9	9.3	9.8	10.2	11.5	-4.00
Nonwhite	15.5	15.2	12.1	14.2	12.2	16.1	14.2	2.58
TOTAL	13.6	13.7	13.3	10.9	10.6	12.1	12.4	-1.77

Nonwhite to White ratio (1979): 1.20 (1984): 1.58 (Percent Change In Ratio 1979-1984): 31.67

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	---	---	---	---	5.5	5.2	5.4 <sup>b</sup>	-5.45 <sup>b</sup>
Nonwhite	---	---	---	---	9.1	9.5	9.3 <sup>b</sup>	4.40 <sup>b</sup>
TOTAL	6.1	6.1	6.0	6.2	6.6	6.6	6.3	1.63

Nonwhite to White ratio (1979): N/A (1984): N/A (Percent Change In Ratio 1979-1984): N/A

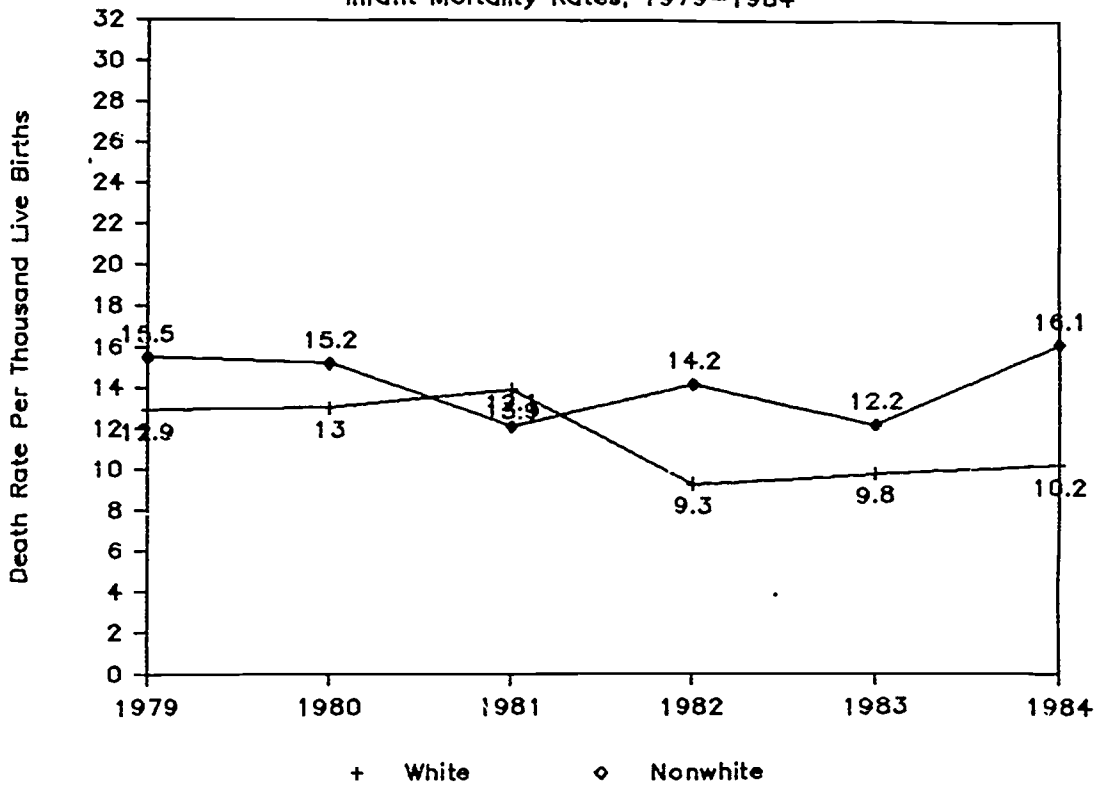
Footnotes:

<sup>a</sup> WIC figures are for King County.

<sup>b</sup> Figures calculated using 1983 and 1984 data only.

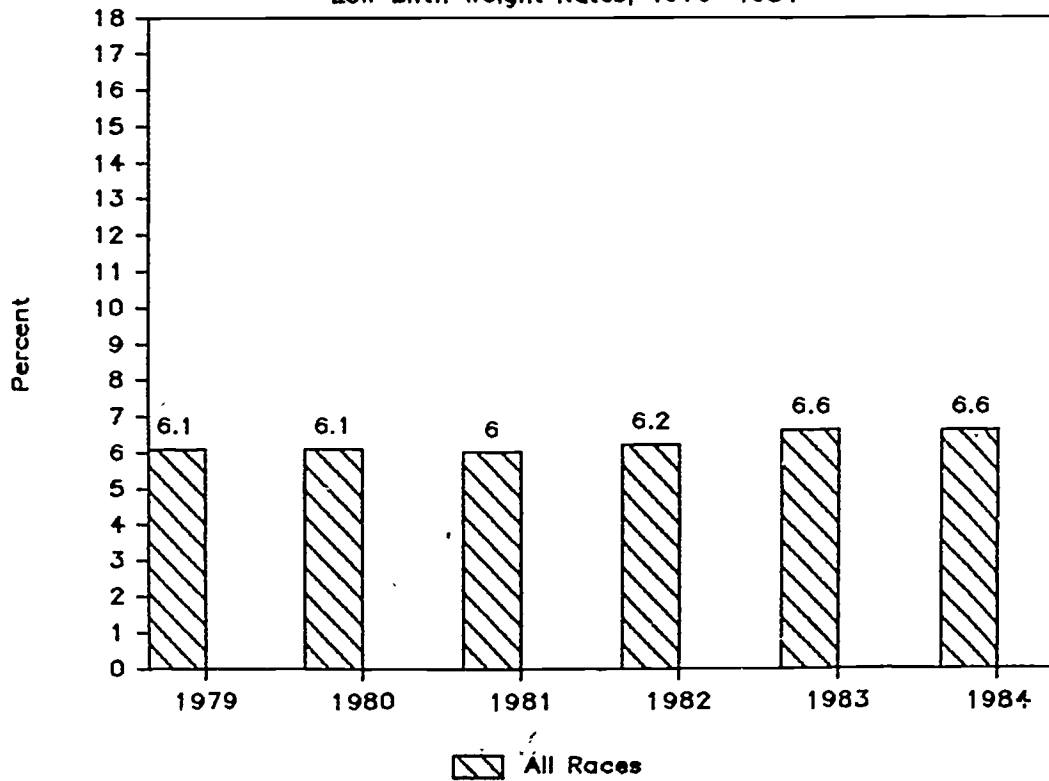
# Seattle, Washington

## Infant Mortality Rates, 1979-1984



# Seattle, Washington

## Low Birth Weight Rates, 1979-1984



211

MILWAUKEE, WISCONSIN

NUMBER OF LIVE BIRTHS (1984): 11,799

NUMBER OF INFANT DEATHS (1984): 169

TOTAL POPULATION (1980): 493,846

NUMBER (and percent) LIVING BELOW POVERTY (1980): 85,300 (13.8%)

RACIAL COMPOSITION (BY PERCENT)

White: 80.2

Nonwhite: 19.8 (The Nonwhite population is 47.5% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 14,307<sup>a</sup>

PERCENT WIC "ELIGIBLES" SERVED: 35.5

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984):

INFANT MORTALITY RATE

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.0	11.7	11.7	8.4	10.0	11.7	10.6	1.57
Nonwhite	17.6	18.4	14.9	19.1	16.7	18.5	17.5	2.38
TOTAL	12.7	14.0	12.9	12.1	12.5	14.3	13.1	2.78

Nonwhite to White ratio (1979): 1.84 (1984): 1.58 (Percent Change In Ratio 1979-1984): -14.13

LOW BIRTH WEIGHT PERCENT

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.3	5.6	5.7	5.2	5.5	5.3	5.4	0.89
Nonwhite	12.3	12.6	12.4	12.0	12.9	11.7	12.3	-0.84
TOTAL	7.8	8.0	8.1	7.6	8.2	7.8	7.9	0.13

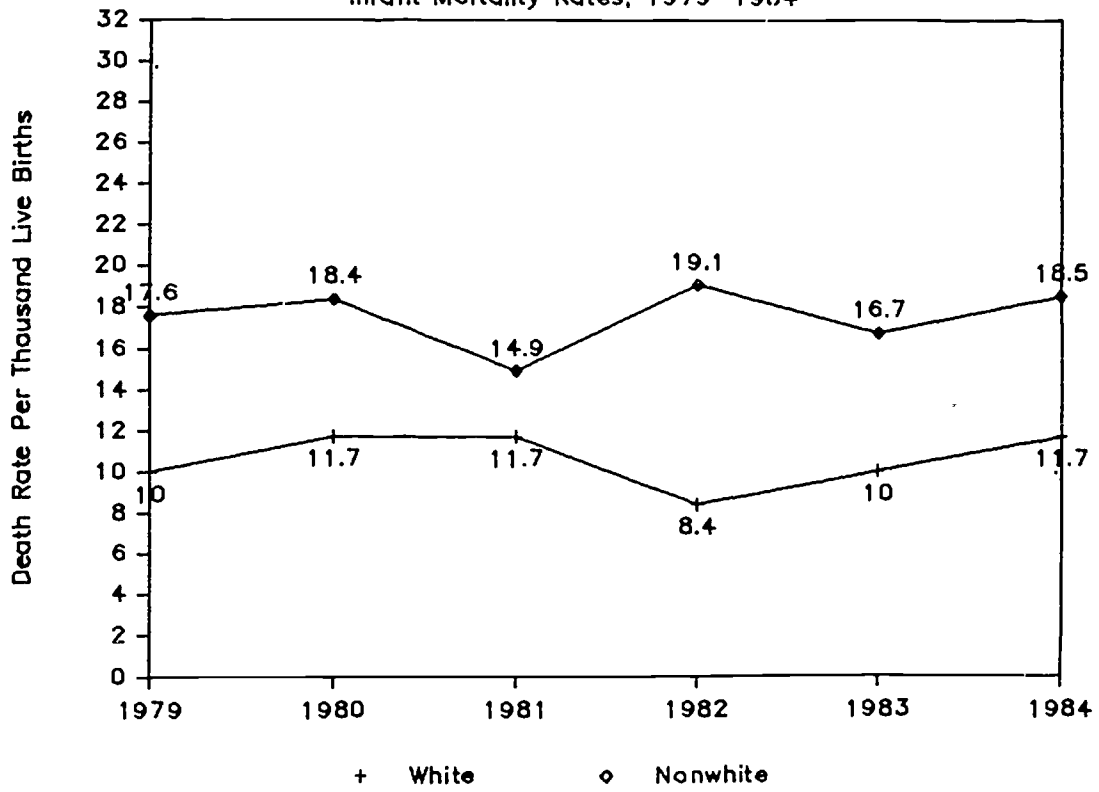
Nonwhite to White ratio (1979): 2.32 (1984): 2.21 (Percent Change In Ratio 1979-1984): -4.74

Footnote:

<sup>a</sup> Data reflects 10 month average (Dec. 83 and May 84 data not available.)

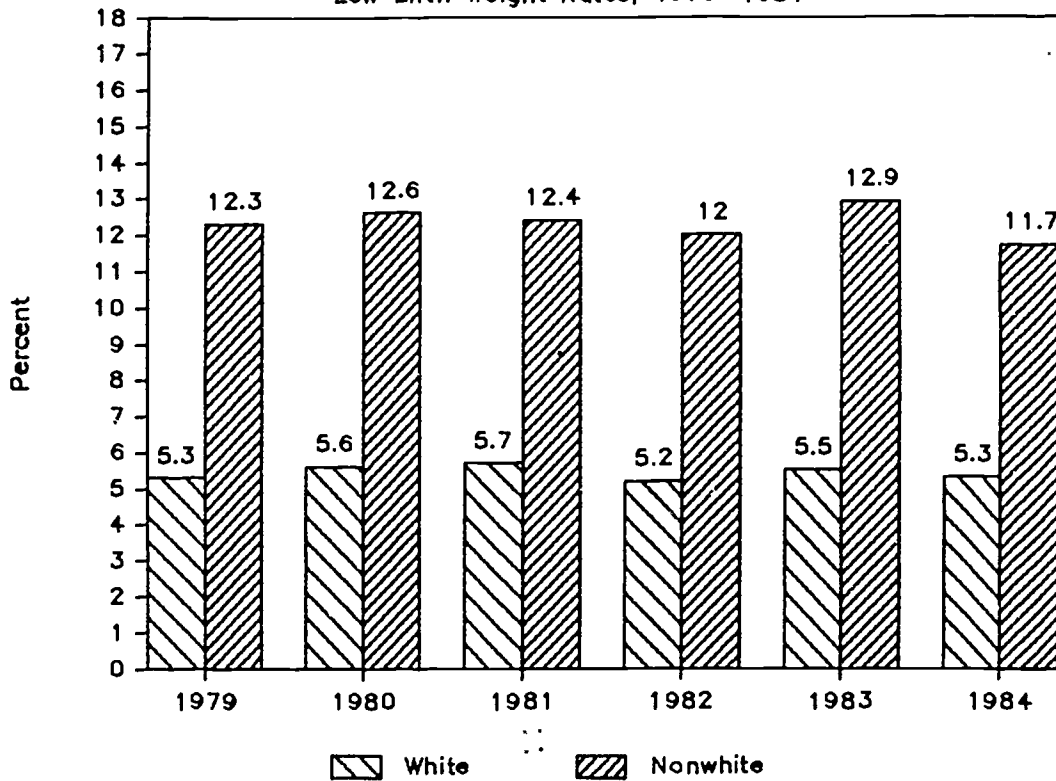
# Milwaukee, Wisconsin

Infant Mortality Rates, 1979-1984



# Milwaukee, Wisconsin

Low Birth Weight Rates, 1979-1984



STATE OF ALABAMA

NUMBER OF LIVE BIRTHS (1984): 59,057<sup>a</sup>

NUMBER OF INFANT DEATHS (1984): 774<sup>a</sup>

TOTAL POPULATION (1980): 3,894,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 720,000 (18.9%)

RACIAL COMPOSITION (BY PERCENT)

White: 73.8

Nonwhite: 26.2 (The Nonwhite population is 97.6% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 71,374

PERCENT WIC "ELIGIBLES" SERVED: 38.8%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.3	11.6	10.2	10.3	10.3	N/A	10.7 <sup>b</sup>	-2.11
Nonwhite	19.5	21.4	18.0	20.1	18.3	N/A	19.5 <sup>b</sup>	-0.86
TOTAL	14.3	15.1	12.9	13.8	13.1	N/A	13.8 <sup>b</sup>	-1.77 <sup>b</sup>

Nonwhite to White ratio (1979): 1.73 (1984): 1.78<sup>c</sup> (Percent Change In Ratio 1979-1984): 2.89<sup>b</sup>

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.8	5.6	5.9	5.7	6.0	N/A	5.8 <sup>b</sup>	0.95 <sup>b</sup>
Nonwhite	11.8	11.9	11.7	11.8	11.6	N/A	11.8 <sup>b</sup>	-0.42 <sup>b</sup>
TOTAL	7.9	7.9	7.9	7.9	7.9	N/A	7.9 <sup>b</sup>	-0.00 <sup>b</sup>

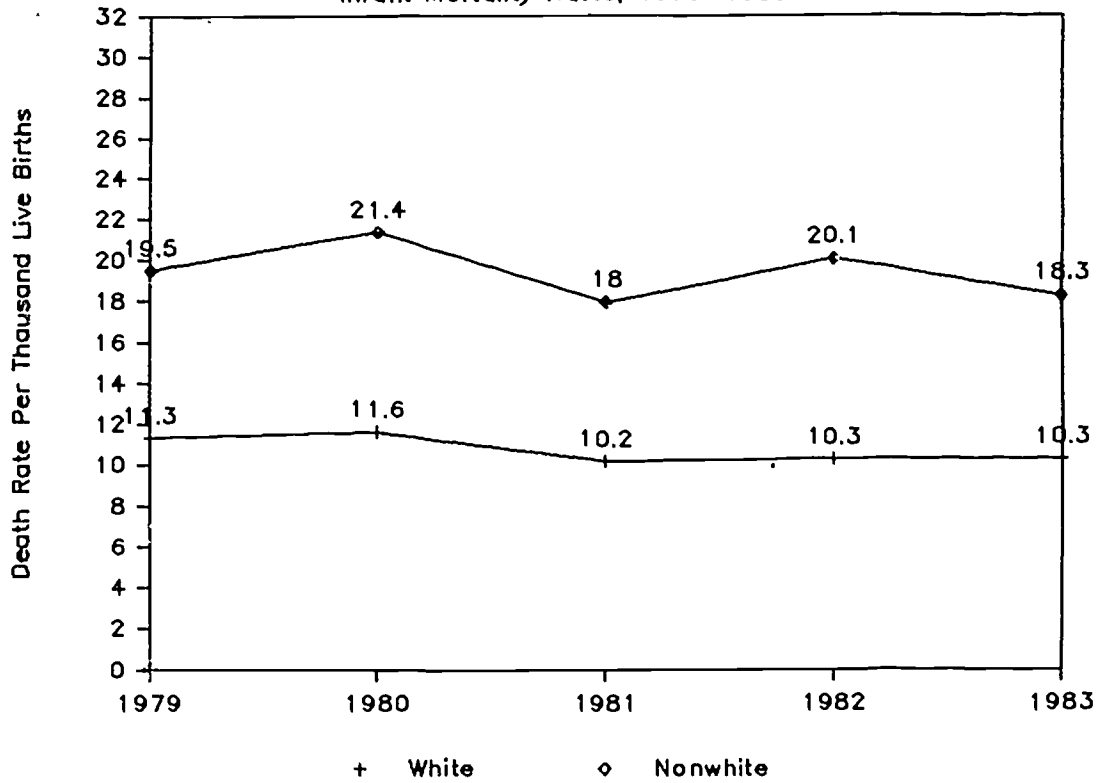
Nonwhite to White ratio (1979): 2.03 (1984): 1.93<sup>c</sup> (Percent Change In Ratio 1979-1984): -4.93<sup>b</sup>

Footnotes:

- a The 1983 data are shown due to unavailability of 1984 data.
- b Figures calculated using 1979-1983 data only.
- c Figures calculated using 1983 data.

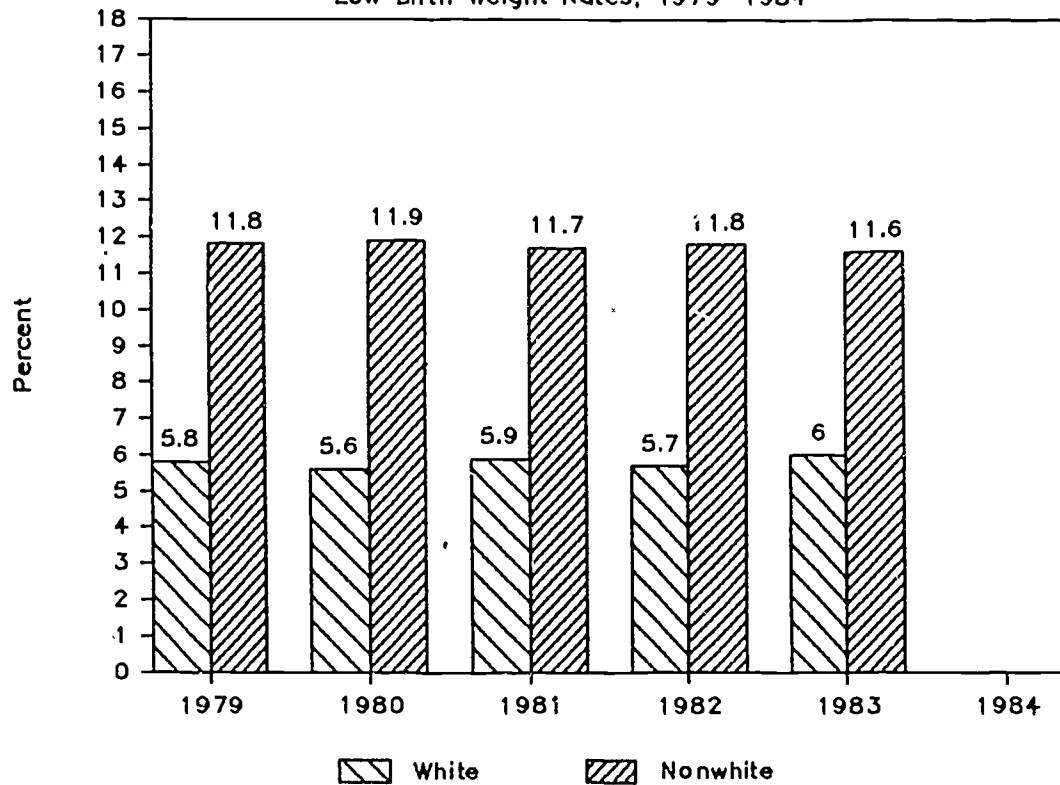
## State of Alabama

### Infant Mortality Rates, 1979-1983



## State of Alabama

### Low Birth Weight Rates, 1979-1984



STATE OF ALASKA

NUMBER OF LIVE BIRTHS (1984): 12,465

NUMBER OF INFANT DEATHS (1984): 141

TOTAL POPULATION (1980): 402,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 42,000 (10.7%)

RACIAL COMPOSITION (BY PERCENT)

White: 77.1

Nonwhite: 22.9 (The Nonwhite population is 15.2% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 4,175

PERCENT WIC "ELIGIBLES" SERVED: 27.4%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	13.5	9.4	10.8	9.6	10.6	9.2	10.5	-5.88
Nonwhite	22.3	18.7	17.5	14.5	16.5	16.5	17.7	-5.18
TOTAL	16.0	12.2	12.7	11.0	12.3	11.3	12.6	-5.87

Nonwhite to White ratio (1979): 1.65      (1984): 1.79      (Percent Change In Ratio 1979-1984): 8.57

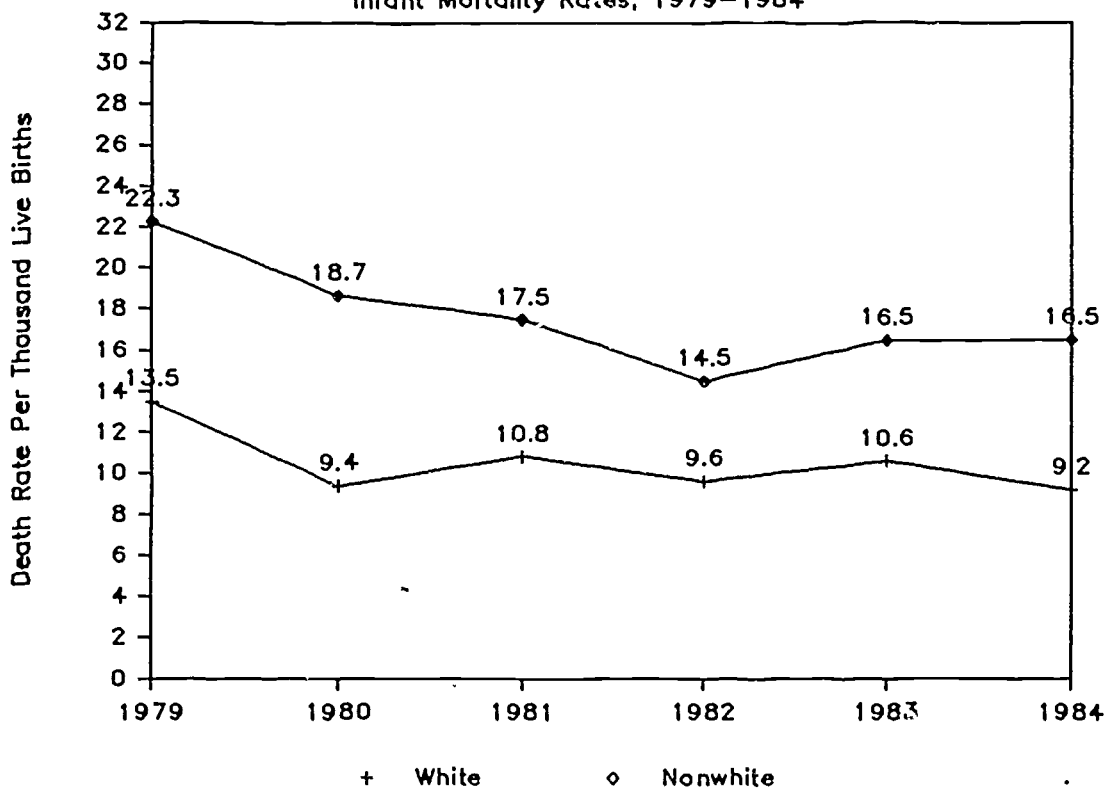
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.1	5.1	4.5	4.1	4.5	4.4	4.6	-2.62
Nonwhite	7.2	6.4	6.1	8.2	6.7	6.2	6.8	-1.43
TOTAL	5.8	5.5	5.0	5.3	5.2	4.9	5.3	-3.18

Nonwhite to White ratio (1979): 1.41      (1984): 1.41      (Percent Change In Ratio 1979-1984): -0.19

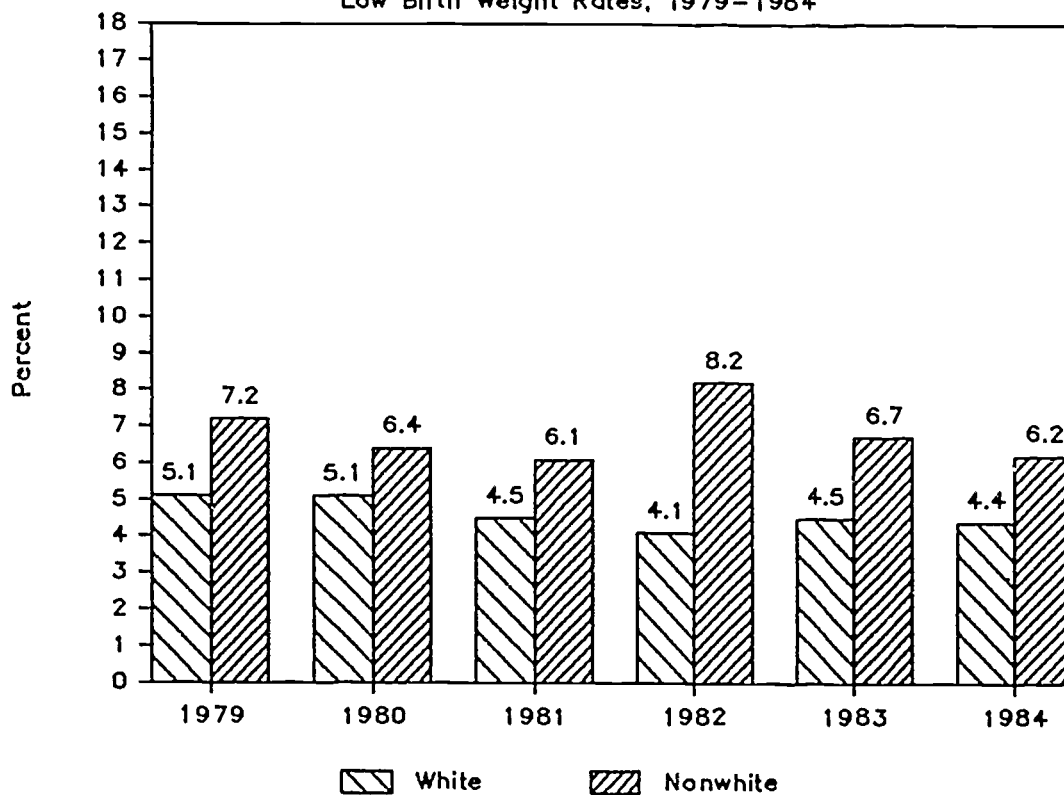
## State of Alaska

### Infant Mortality Rates, 1979-1984



## State of Alaska

### Low Birth Weight Rates, 1979-1984





STATE OF ARIZONA

NUMBER OF LIVE BIRTHS (1984): 55,109

NUMBER OF INFANT DEATHS (1984): 525

TOTAL POPULATION (1980): 2,718,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 351,000 (13.2%)

RACIAL COMPOSITION (BY PERCENT)

White: 82.5

Nonwhite: 17.5 (The Nonwhite population is 32% Black and 15.7% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 28,403

PERCENT WIC "ELIGIBLES" SERVED: 27.5%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.5	11.7	10.7	9.0	9.0	8.7	10.3	-6.83
Nonwhite	21.8	17.1	17.8	10.8	18.1	14.0	16.6	-2.37
TOTAL	13.0	12.4	11.6	9.3	9.6	9.5	10.9	-5.74

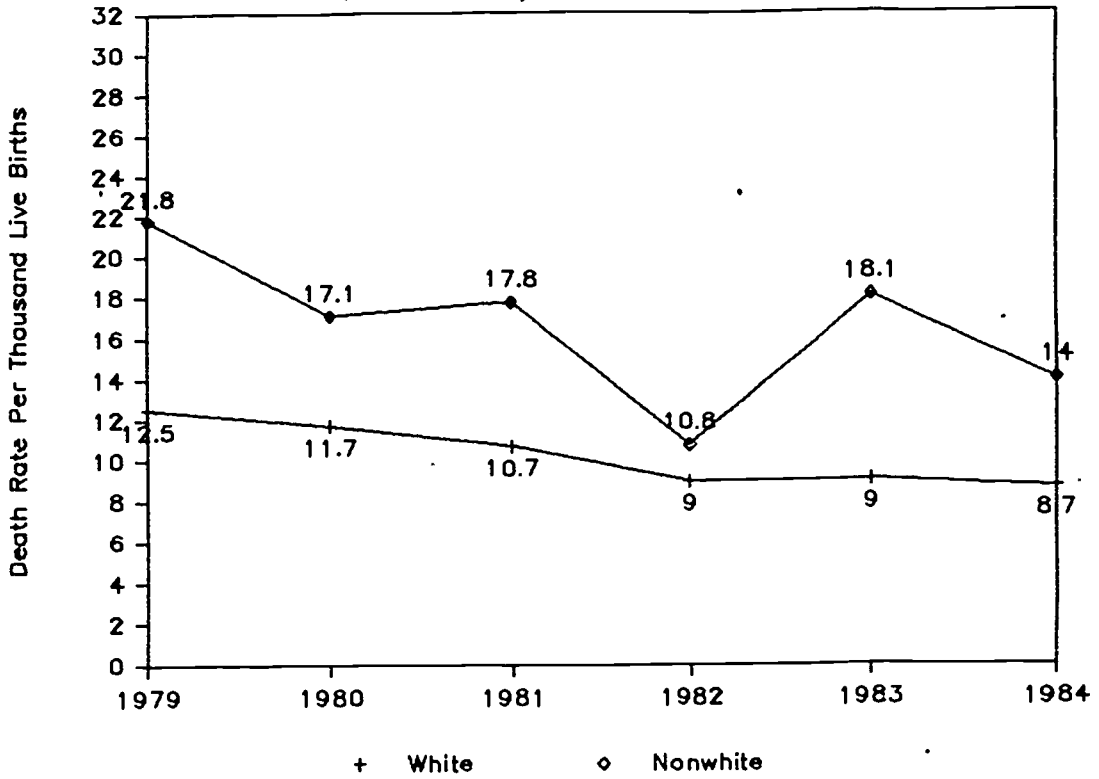
Nonwhite to White ratio (1979): 1.74      (1984): 1.61      (Percent Change In Ratio 1979-1984): -7.73

L O W B I R T H W E I G H T P E R C E N T

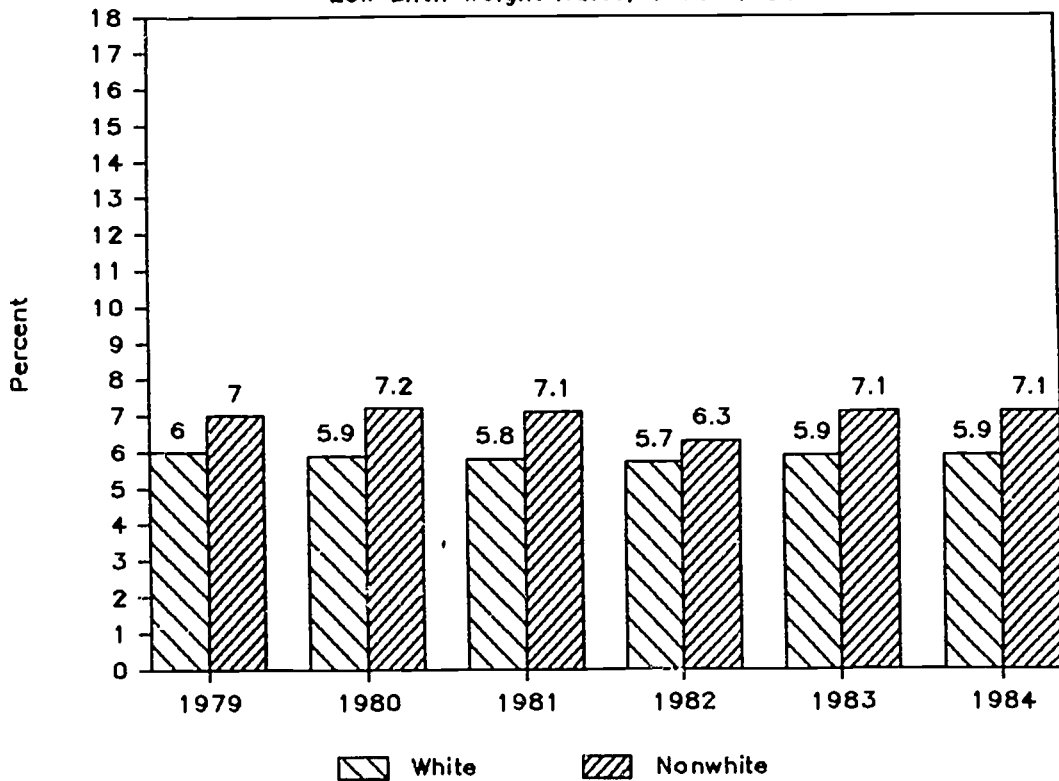
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.0	5.9	5.8	5.7	5.9	5.9	5.9	-0.32
Nonwhite	7.0	7.2	7.1	6.3	7.1	7.1	7.0	0.58
TOTAL	6.1	6.2	6.0	5.8	6.0	6.1	6.0	0.04

Nonwhite to White ratio (1979): 1.17      (1984): 1.2      (Percent Change In Ratio 1979-1984): 3.15

## State of Arizona Infant Mortality Rates, 1979-1984



## State of Arizona Low Birth Weight Rates, 1979-1984



219

STATE OF ARKANSAS

NUMBER OF LIVE BIRTHS (1984): 34,789

NUMBER OF INFANT DEATHS (1984): 375

TOTAL POPULATION (1980): 2,286,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 424,000 (19%)

RACIAL COMPOSITION (BY PERCENT)

White: 82.7

Nonwhite: 17.3 (The Nonwhite population is 94.4% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 29,473

PERCENT WIC "ELIGIBLES" SERVED: 25.4%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.9	9.9	9.5	7.9	9.1	9.1	9.4	-2.97
Nonwhite	18.0	18.4	17.1	16.3	14.8	16.0	16.8	-2.12
TOTAL	13.2	12.6	11.7	10.1	10.7	10.8	11.5	-3.70

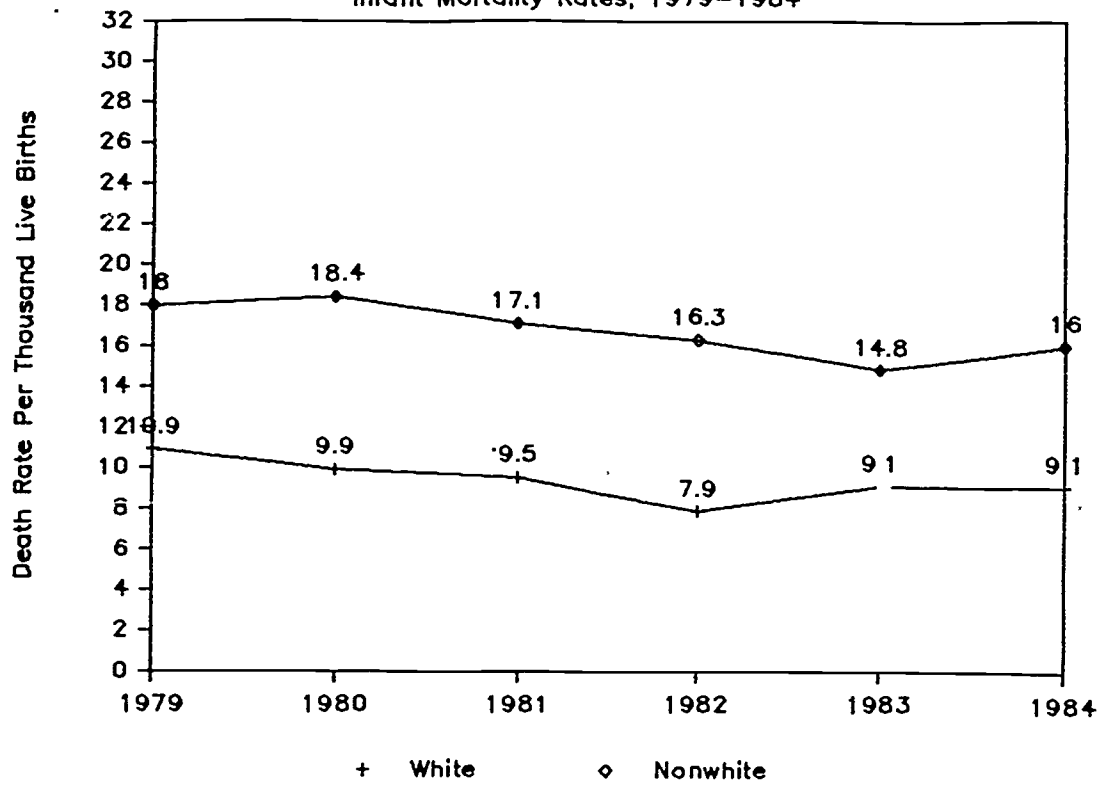
Nonwhite to white ratio (1979): 1.65      (1984): 1.76      (Percent Change In Ratio 1979-1984): 6.47

L O W B I R T H W E I G H T P E R C E N T

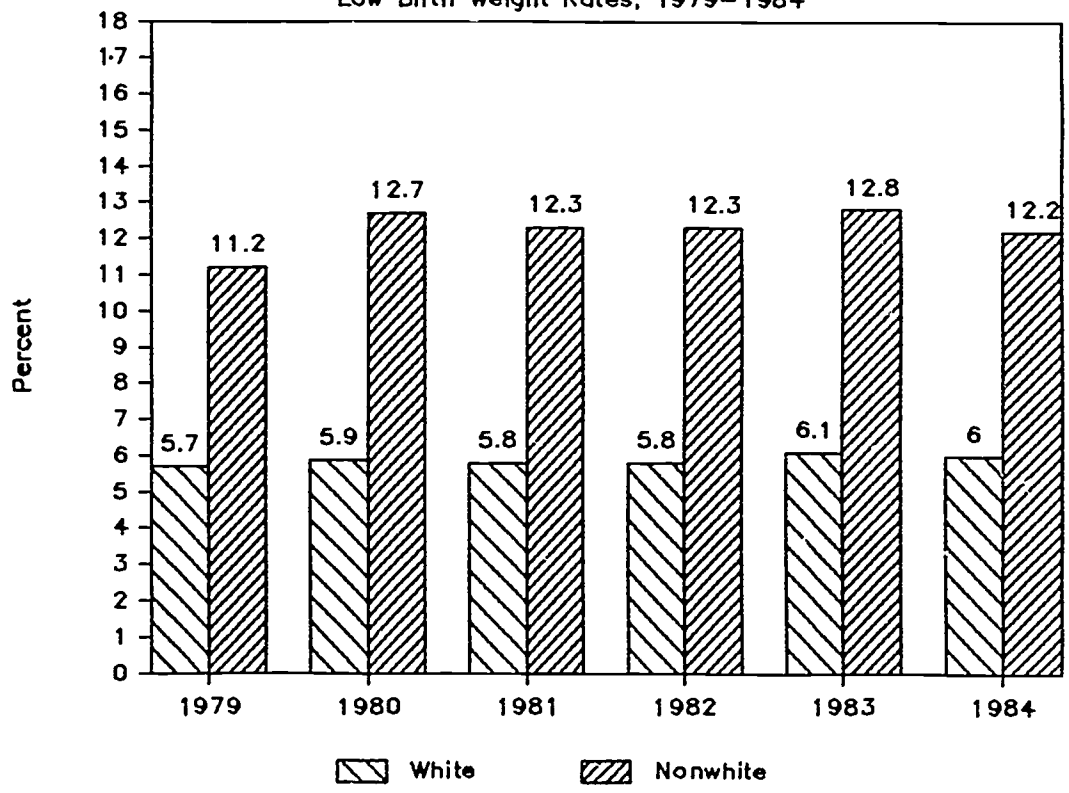
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.7	5.9	5.8	5.8	6.1	6.0	5.9	1.07
Nonwhite	11.2	12.7	12.3	12.3	12.8	12.2	12.3	1.92
TOTAL	7.1	7.6	7.4	7.4	7.8	7.6	7.5	1.45

Nonwhite to White ratio (1979): 1.96      (1984): 2.03      (Percent Change In Ratio 1979-1984): 3.48

## State of Arkansas Infant Mortality Rates, 1979-1984



## State of Arkansas Low Birth Weight Rates, 1979-1984



**STATE OF CALIFORNIA**

NUMBER OF LIVE BIRTHS (1984): 447,394

NUMBER OF INFANT DEATHS (1984): 4,212

TOTAL POPULATION (1980): 23,668,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 2,627,000

**RACIAL COMPOSITION (BY PERCENT)**

White: 76.2

Nonwhite: 23.8 (The Nonwhite population is 32.3% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 255,835      PERCENT WIC "ELIGIBLES" SERVED: 25.4%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 5,355

**I N F A N T   M O R T A L I T Y   R A T E**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	16.9	16.8	15.7	9.7	9.4	9.0	12.9	-10.54
Nonwhite	5.0	4.9	4.4	10.2	10.9	10.8	7.7	25.11
TOTAL	11.3	11.1	10.2	9.8	9.7	9.4	10.3	-3.58

Nonwhite to White ratio (1979): 0.30      (1984): 1.20      (Percent Change In Ratio 1979-1984): 305.60

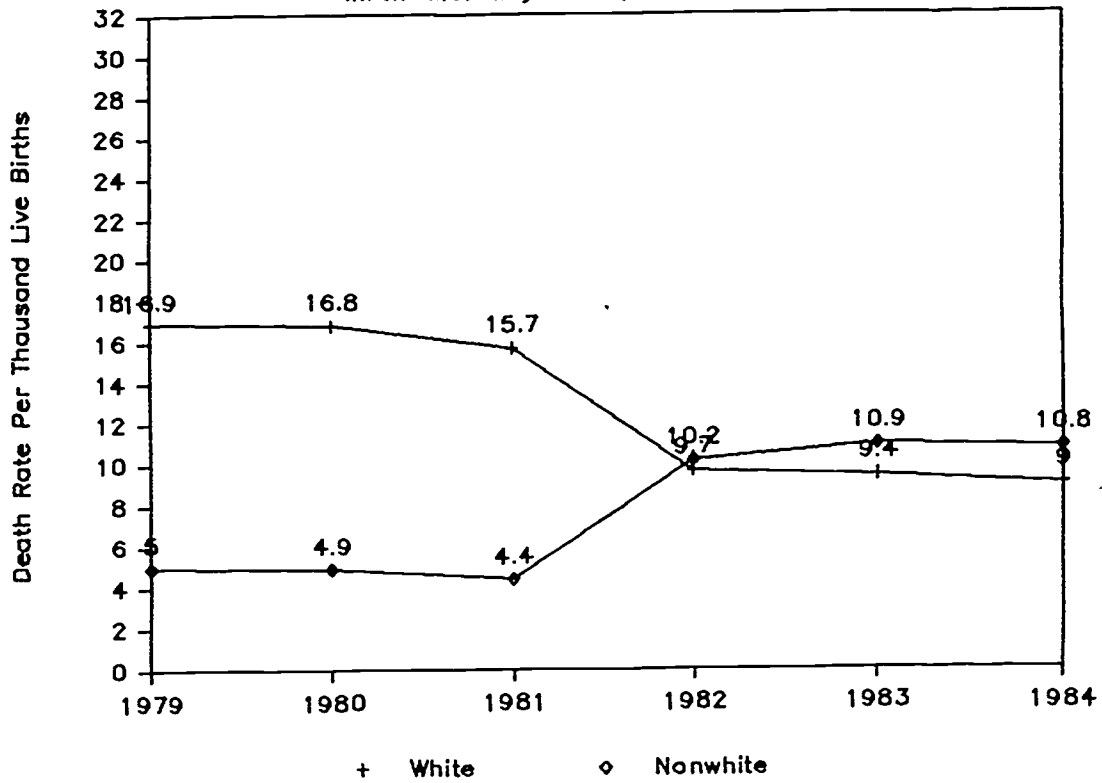
**L O W   B I R T H   W E I G H T   P E R C E N T**

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.3	5.3	5.1	5.1	5.2	5.2	5.2	-0.36
Nonwhite	6.8	6.5	6.6	8.6	8.6	8.7	7.6	5.72
TOTAL	6.0	5.9	5.8	5.9	5.9	5.9	5.9	-0.33

Nonwhite to White ratio (1979): 1.28      (1984): 1.67      (Percent Change In Ratio 1979-1984): 30.40

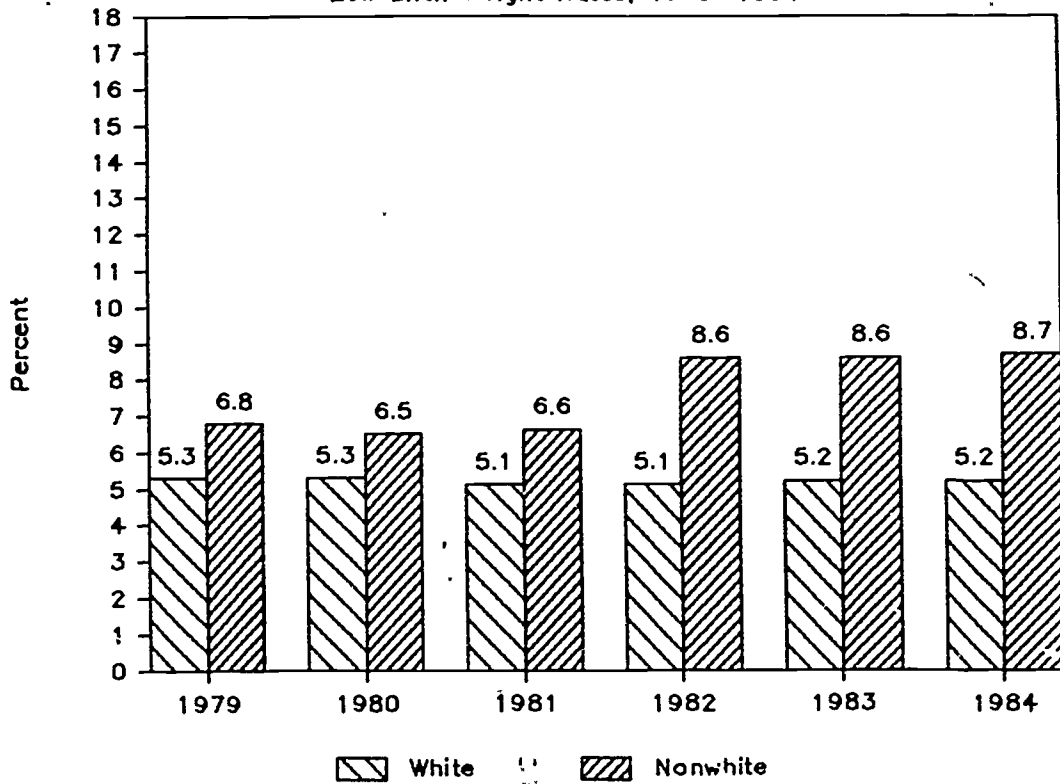
# State of California

## Infant Mortality Rates, 1979-1984



# State of California

## Low Birth Weight Rates, 1979-1984



S T A T E   O F   C O L O R A D O

NUMBER OF LIVE BIRTHS (1984): 54,339

NUMBER OF INFANT DEATHS (1984): 552

TOTAL POPULATION (1980): 2,890,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 285,000 (17.6%)

RACIAL COMPOSITION (BY PERCENT)

White: 88.9

Nonwhite: 11.1 (The Nonwhite population is 32% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 29,378

PERCENT WIC "ELIGIBLES" SERVED: 32.2%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 12,703

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.4	9.7	10.0	9.1	10.0	10.0	9.9	-0.55
Nonwhite	11.7	13.8	8.9	9.0	10.6	12.2	11.0	-3.29
TOTAL	10.5	10.1	9.9	9.1	10.0	10.2	10.0	-0.40

Nonwhite to White ratio (1979): 1.13      (1984): 1.22      (Percent Change In Ratio 1979-1984): 8.44

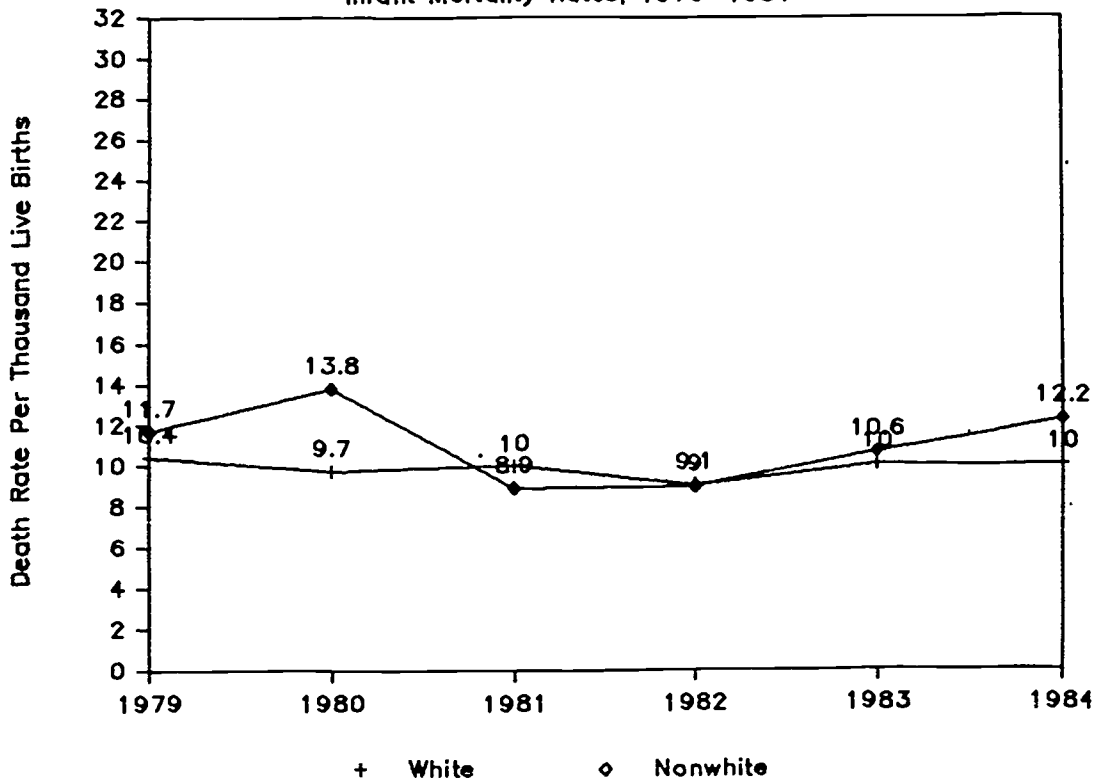
L O W   B I R T H   W E I G H T   P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	7.8	7.8	7.8	7.4	7.6	7.3	7.6	-1.27
Nonwhite	12.3	12.4	10.5	11.2	11.5	10.8	11.5	-2.25
TOTAL	8.2	8.2	8.0	7.7	7.9	7.6	7.9	-1.48

Nonwhite to White ratio (1979): 1.58      (1984): 1.48      (Percent Change In Ratio 1979-1984): -6.18

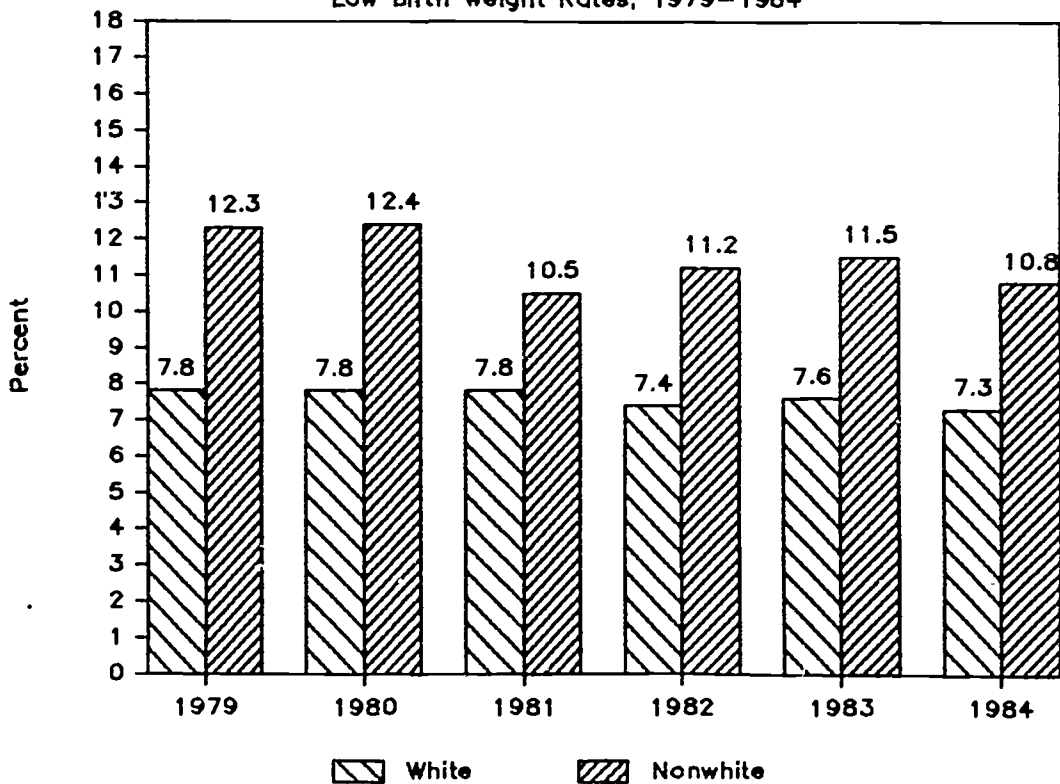
# State of Colorado

Infant Mortality Rates, 1979-1984



# State of Colorado

Low Birth Weight Rates, 1979-1984





S T A T E   O F   C O N N E C T I C U T

NUMBER OF LIVE BIRTHS (1984): 42,184

NUMBER OF INFANT DEATHS (1584): 435

TOTAL POPULATION (1980): 3,108,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 243,000 (8%)

RACIAL COMPOSITION (BY PERCENT)

White: 90.1

Nonwhite: 9.9 (The Nonwhite population is 70.2% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 48,000

PERCENT WIC "ELIGIBLES" SERVED: 66.4%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.8	10.1	10.4	9.7	8.8	9.2	9.8	-2.99
Nonwhite	20.1	17.5	21.5	18.4	17.5	17.1	18.7	-2.33
TOTAL	12.1	11.1	12.0	10.9	10.0	10.3	11.1	-2.92

Nonwhite to White ratio (1979): 1.86      (1984): 1.86      (Percent Change In Ratio 1979-1984): -0.13<sup>a</sup>

L O W   B I R T H   W E I G H T   P E R C E N T

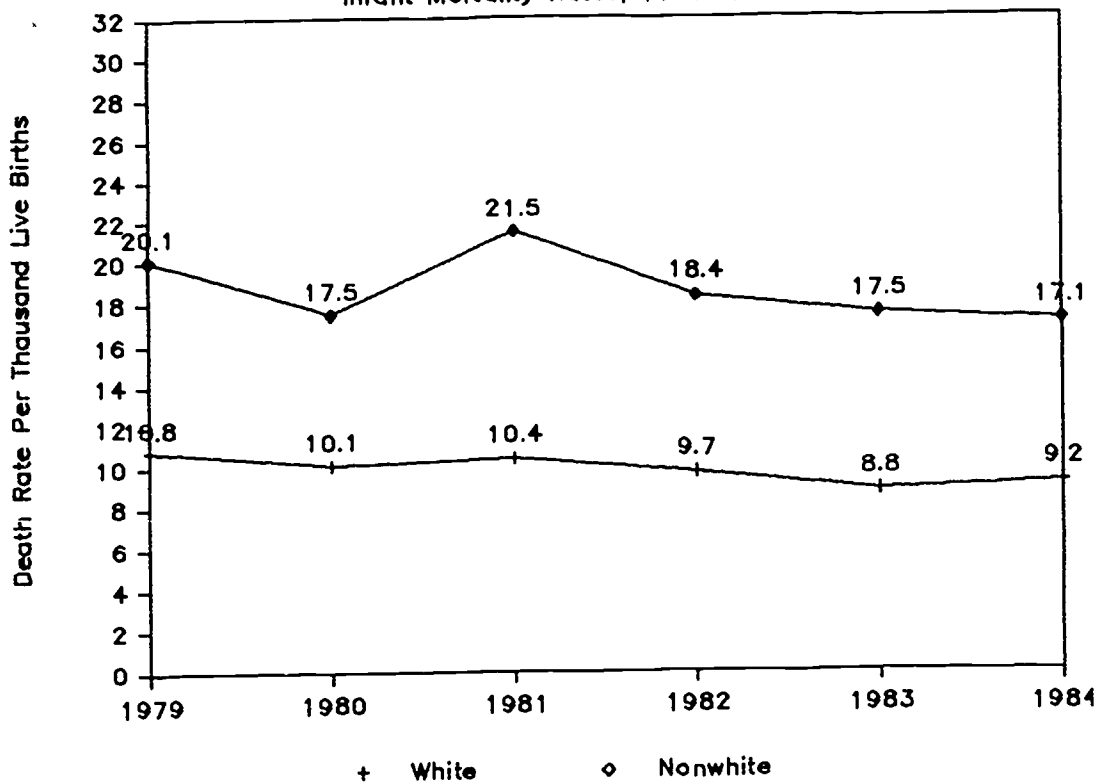
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.3	6.1	5.8	5.8	5.5	5.6	5.9	-2.29
Nonwhite	12.9	11.0	13.2	12.7	11.7	12.1	12.3	-0.59
TOTAL	7.2	6.7	6.9	6.7	6.4	6.6	6.8	-1.64

Nonwhite to White ratio (1979): 2.05      (1984): 2.16      (Percent Change In Ratio 1979-1984): 5.52

<sup>a</sup> The ratios for 1979 and 1984 differed at the third decimal place.

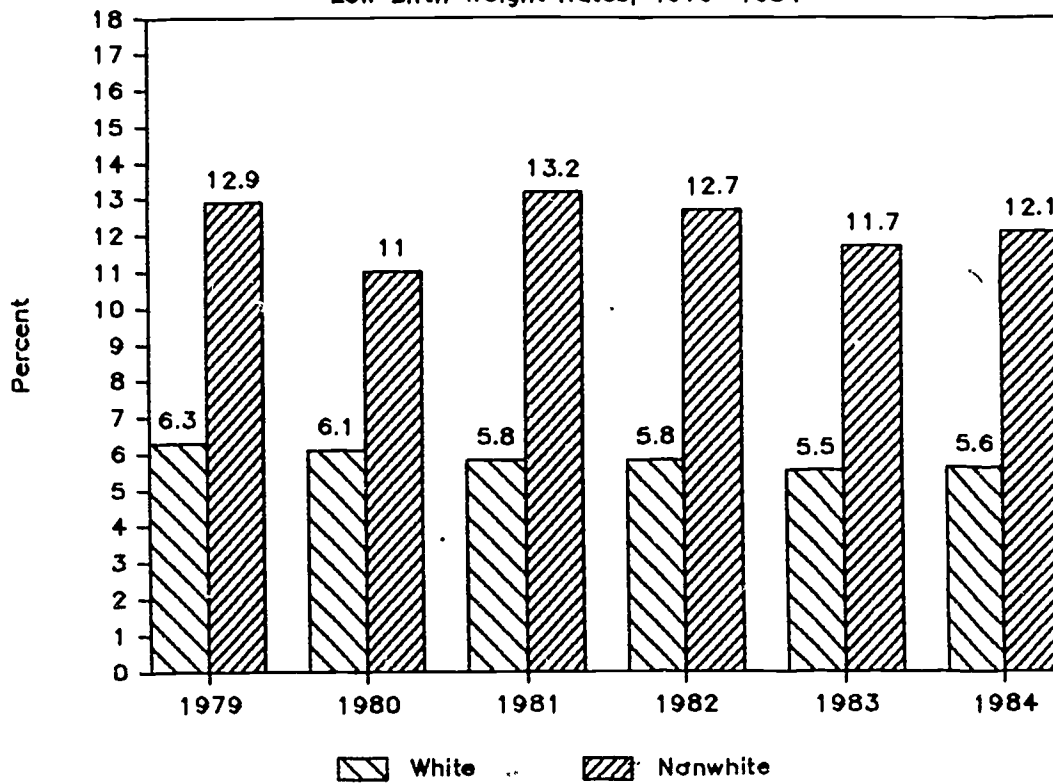
# State of Connecticut

## Infant Mortality Rates, 1979-1984



# State of Connecticut

## Low Birth Weight Rates, 1979-1984



227

S T A T E   O F   D E L A W A R E

NUMBER OF LIVE BIRTHS (1984): 8,736<sup>a</sup>

NUMBER OF INFANT DEATHS (1984): 78<sup>a</sup>

TOTAL POPULATION (1980): 594,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 68,000 (11.9%)

RACIAL COMPOSITION (BY PERCENT)

White: 82.2

Nonwhite: 17.8 (The Nonwhite population is 90.6% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 6,530

PERCENT WIC "ELIGIBLES" SERVED: 30.3%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No program.

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.5	9.4	8.5	9.2	6.2	NA	9.2 <sup>b</sup>	-14.69
Nonwhite	27.8	27.0	22.5	20.6	16.7	NA	22.9 <sup>b</sup>	-11.73
TOTAL	16.4	13.9	12.5	12.2	8.9	NA	12.8 <sup>b</sup>	-13.69

Nonwhite to White ratio (1979): 2.22      (1984): 2.69<sup>a</sup>      (Percent Change In Ratio 1979-1984): 21.17<sup>c</sup>

L O W   B I R T H   W E I G H T   P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.0	5.9	5.2	5.6	5.6	NA	5.7 <sup>b</sup>	-1.46
Nonwhite	12.5	14.5	13.7	11.9	12.4	NA	13.0 <sup>b</sup>	0.39
TOTAL	7.7	8.1	7.5	7.2	7.3	NA	7.6 <sup>b</sup>	-1.21

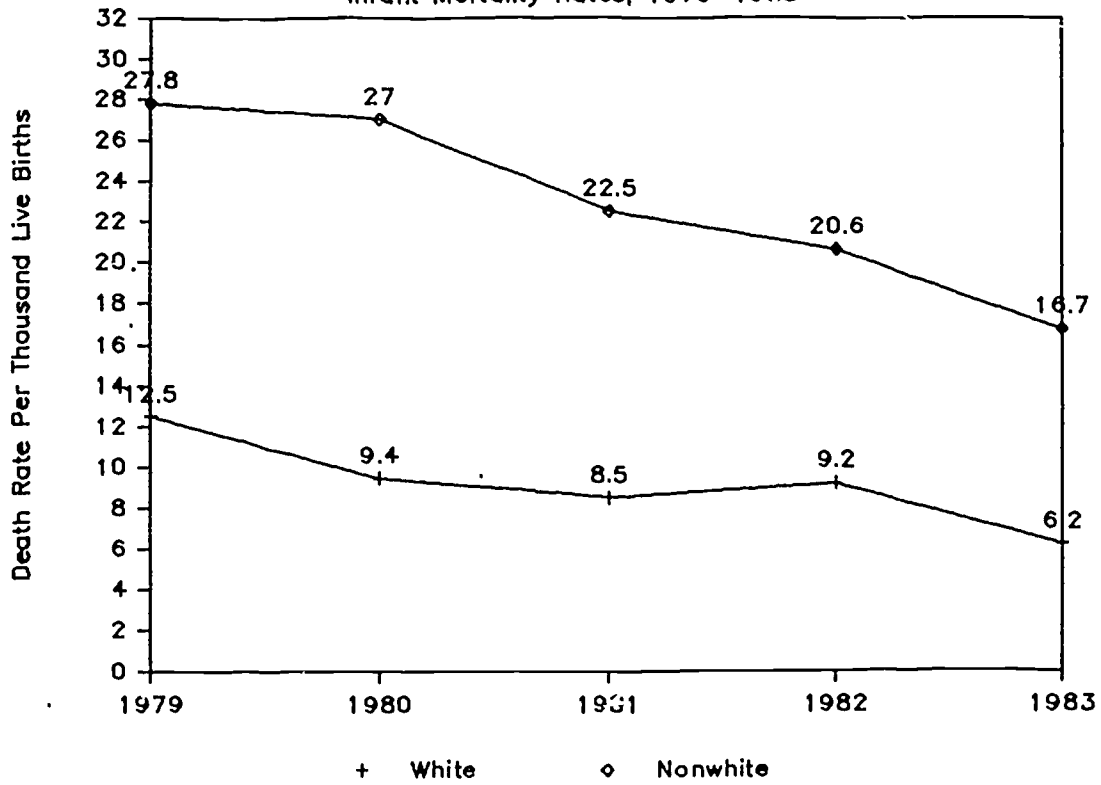
Nonwhite to White ratio (1979): 2.08      (1984): 2.21<sup>a</sup>      (Percent Change In Ratio 1979-1984): 6.25<sup>c</sup>

Footnotes:

- a    Figures represent 1983 data.
- b    Figures calculated using 1979-1983 data only.
- c    Figure calculated using 1983 data.

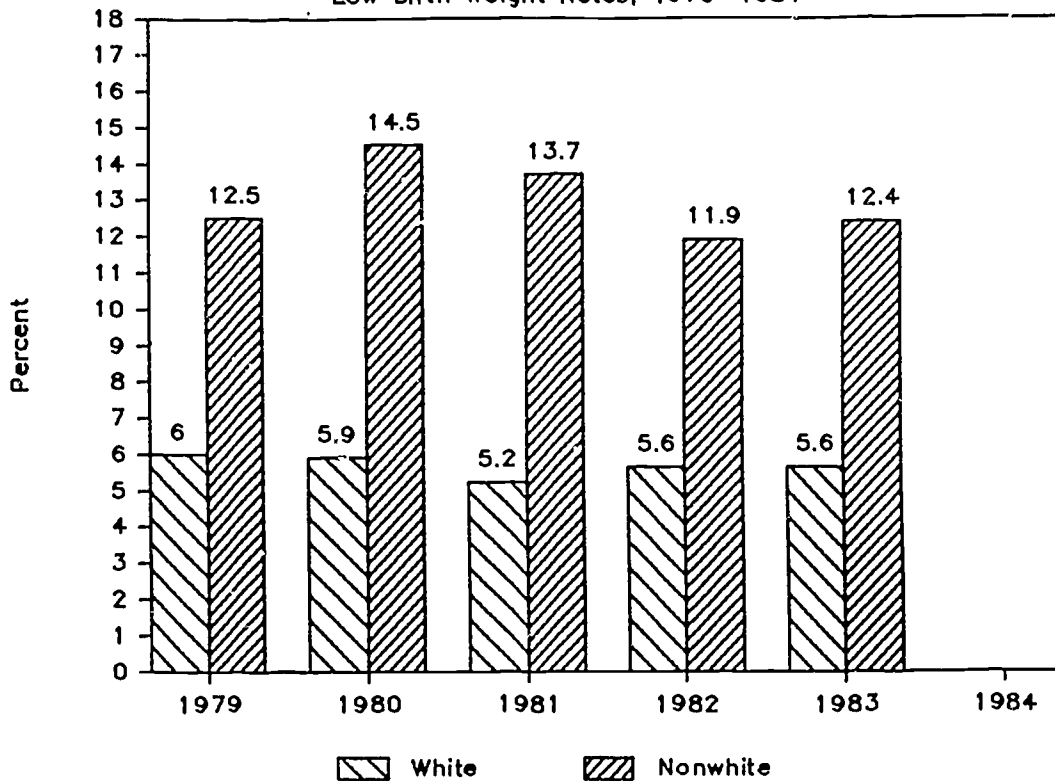
## State of Delaware

### Infant Mortality Rates, 1979-1983



## State of Delaware

### Low Birth Weight Rates, 1979-1984



STATE OF FLORIDA

NUMBER OF LIVE BIRTHS (1984): 155,344

NUMBER OF INFANT DEATHS (1984): 1,681

TOTAL POPULATION (1980): 9,746,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 1,287,00 (13.5%)

\*RACIAL COMPOSITION (BY PERCENT)

White: 84.0

Nonwhite: 16.0 (The Nonwhite population is 86% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 85,876

PERCENT WIC "ELIGIBLES" SERVED: 26.4%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.3	11.8	10.4	10.1	9.9	8.5	10.5	-6.99
Nonwhite	21.1	22.1	21.1	20.4	18.6	17.7	20.2	-4.30
TOTAL	14.9	14.5	13.3	12.8	12.2	10.8	13.1	-6.18

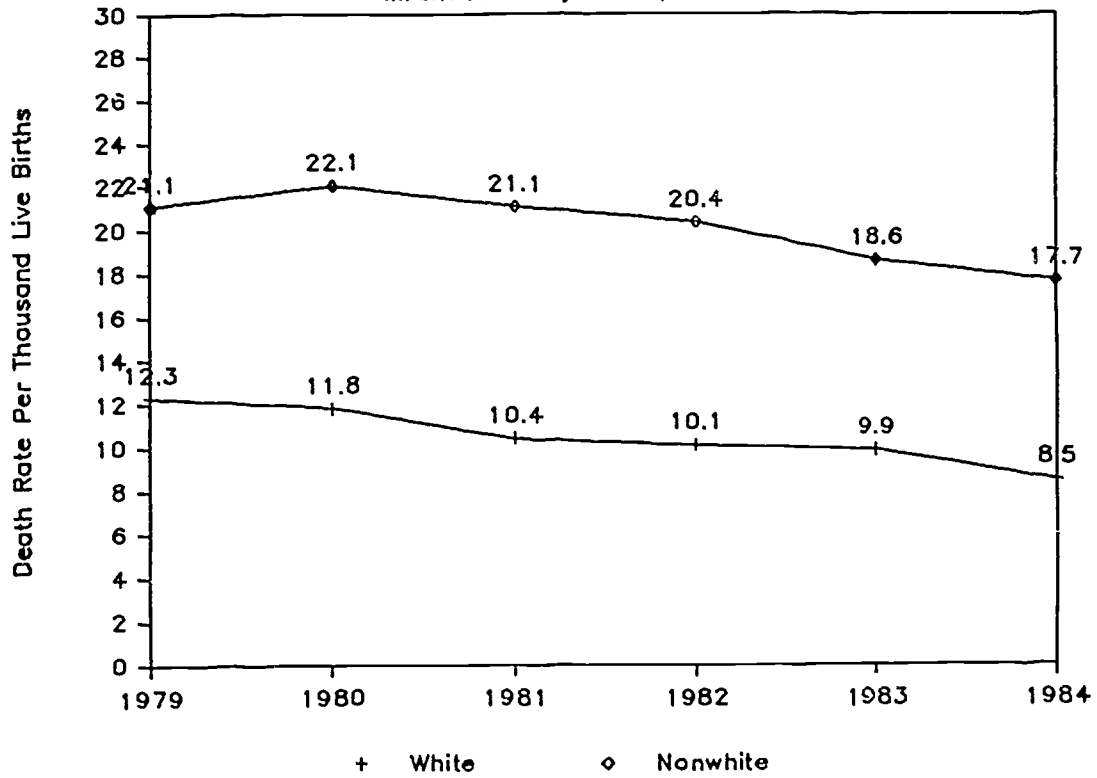
Nonwhite to White ratio (1979): 1.80      (1984): 2.08      (Percent Change In Ratio 1979-1984): 15.90

L O W B I R T H W E I G H T P E R C E N T

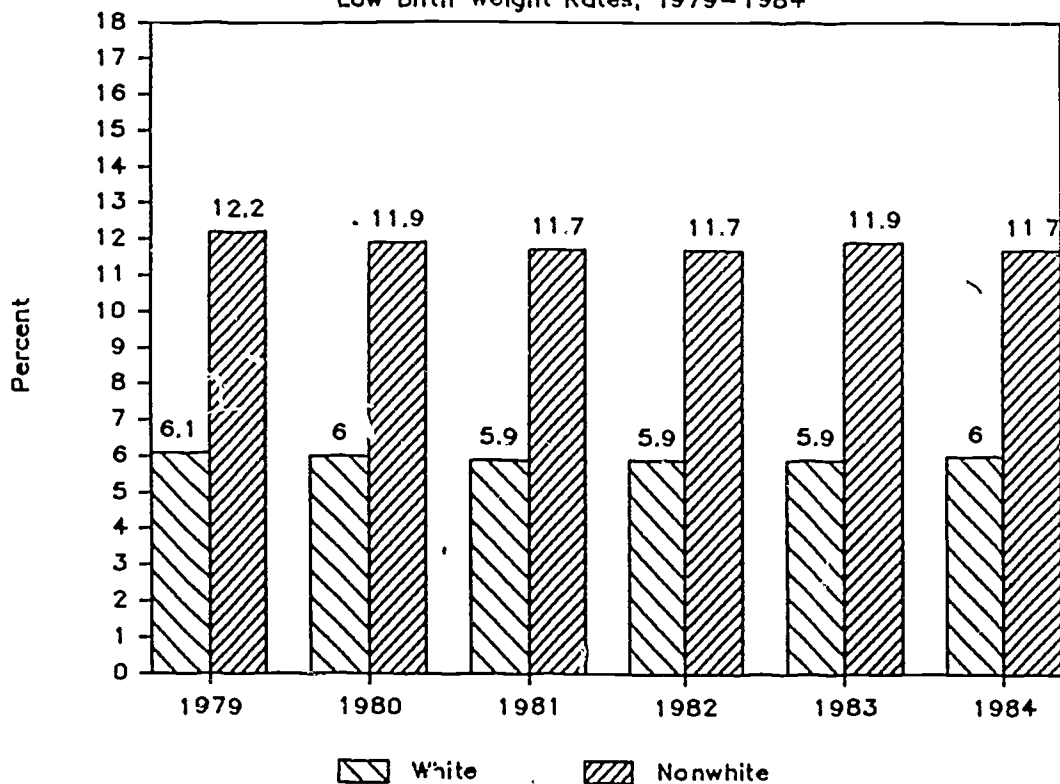
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.1	6.0	5.9	5.9	5.9	6.0	6.0	-0.32
Nonwhite	12.2	11.9	11.7	11.7	11.9	11.7	11.9	-0.82
TOTAL	7.8	7.5	7.4	7.5	7.5	7.4	7.5	-1.03

Nonwhite to White ratio (1979): 2.0      (1984): 1.95      (Percent Change In Ratio 1979-1984): -2.50

## State of Florida Infant Mortality Rates, 1979-1984



## State of Florida Low Birth Weight Rates, 1979-1984



STATE OF GEORGIA

NUMBER OF LIVE BIRTHS (1984): 92,258

NUMBER OF INFANT DEATHS (1984): 1,240

TOTAL POPULATION (1980): 5,463,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 884,000 (16.6%)

RACIAL COMPOSITION (BY PERCENT)

White: 72.2

Nonwhite: 27.8 (The Nonwhite population is 96.6% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 102,274 PERCENT WIC "ELIGIBLES" SERVED: 41.7%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.7	10.9	10.7	9.5	10.0	10.1	10.5	-2.72
Nonwhite	20.6	21.0	22.0	19.6	20.4	19.5	20.5	-0.91
TOTAL	15.0	14.6	14.9	13.2	13.7	13.4	14.1	-2.08

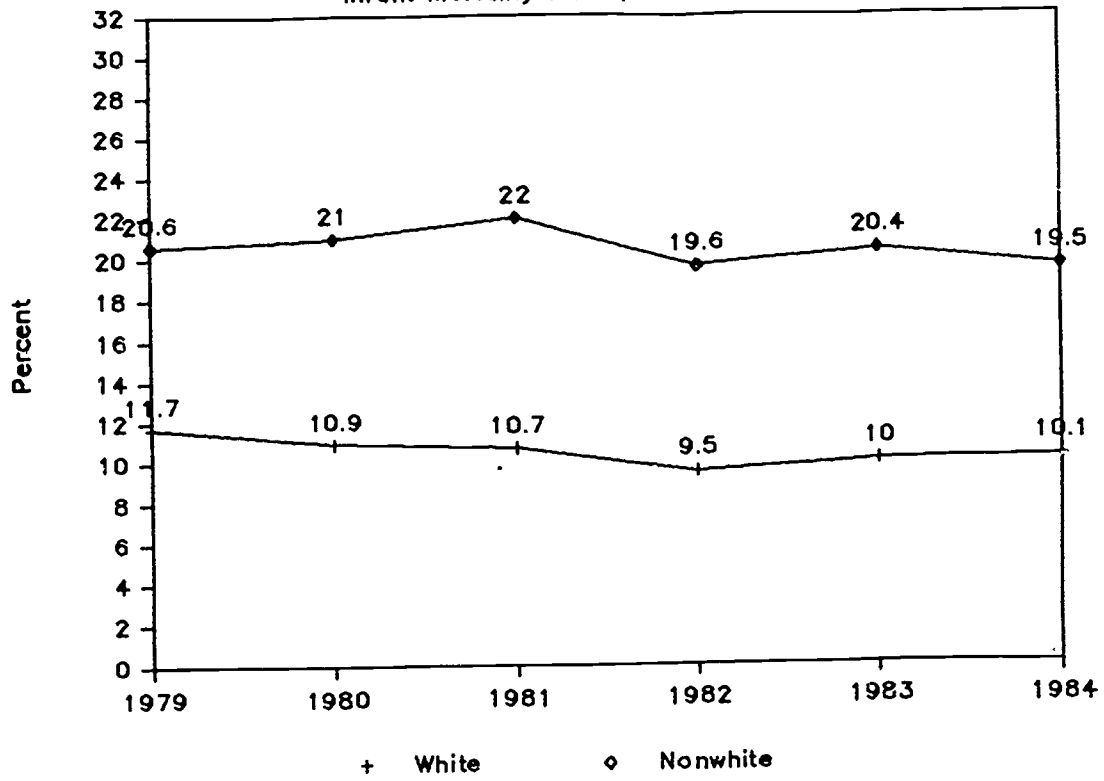
Nonwhite to White ratio (1979): 1.76 (1984): 1.93 (Percent Change In Ratio 1979-1984): 9.66

L O W B I R T H W E I G H T P E R C E N T

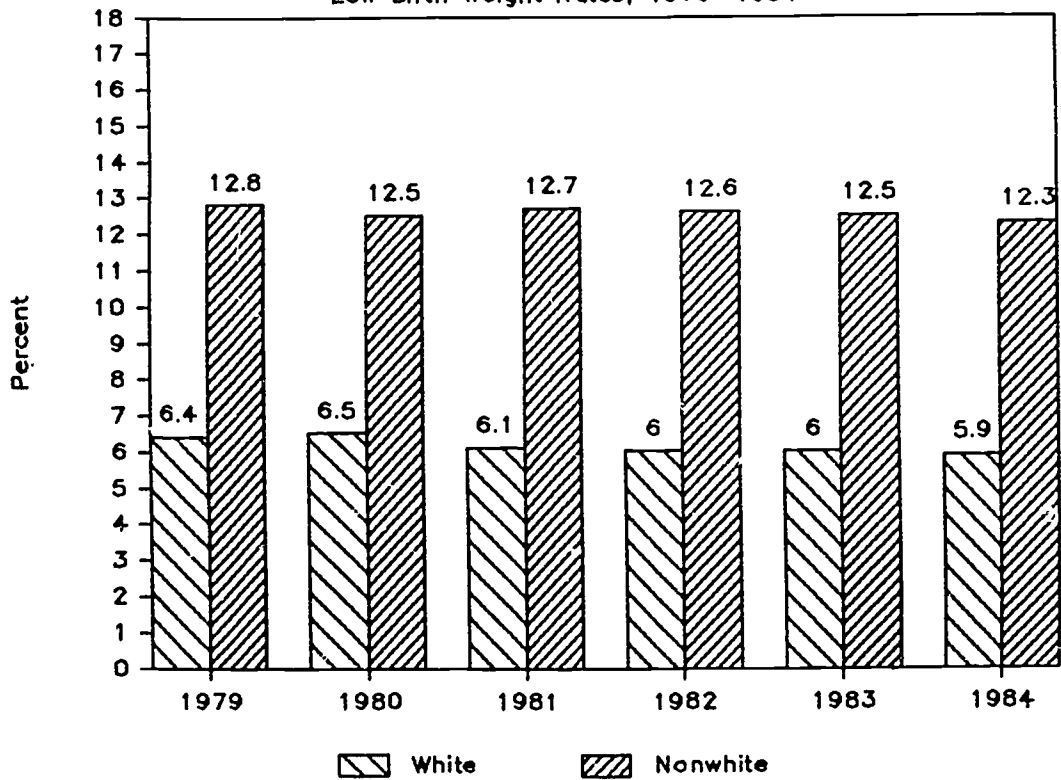
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.4	6.5	6.1	6.0	6.0	5.9	6.15	-1.58
Nonwhite	12.8	12.5	12.7	12.6	12.5	12.3	12.6	-0.78
TOTAL	8.8	8.7	8.5	8.4	8.3	8.2	8.5	-1.40

Nonwhite to White ratio (1979): 2.0 (1984): 2.08 (Percent Change In Ratio 1979-1984): 4.24

## State of Georgia Infant Mortality Rates, 1979-1984



## State of Georgia Low Birth Weight Rates, 1979-1984





S T A T E   O F   H A W A I I

NUMBER OF LIVE BIRTHS (1984): 18,667                      NUMBER OF INFANT DEATHS (1984): 186  
 TOTAL POPULATION (1980): 965,000                      NUMBER (and percent) LIVING BELOW POVERTY (1980): 92,000 (9.9%)

R A C I A L   C O M P O S I T I O N   ( B Y   P E R C E N T )

White: 33.1  
 Nonwhite: 66.9 (The Nonwhite population is 2.6% Black, 20% (Filipino and 37.1% Japanese.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 5,987                      PERCENT WIC "ELIGIBLES" SERVED: 13.8%  
 AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T   M O R T A L I T Y   R A T E <sup>b</sup>

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	9.0	6.9	8.8	5.7	9.8	8.0	8.0	4.51
Nonwhite	10.8	11.5	10.2	9.6	9.0	N/A <sup>c</sup>	10.2	-4.24
TOTAL	10.2	10.1	9.8	8.5	9.2	10.0	11.6	-0.06

Nonwhite to White ratio (1979): 1.20    (1984): 0.92<sup>a</sup>                      (Percent Change In Ratio 1979-1984): -23.3<sup>a</sup>

L O W   B I R T H   W E I G H T   P E R C E N T <sup>b</sup>

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.1	4.7	4.7	4.2	5.9	N/A <sup>c</sup>	4.9	9.13
Nonwhite	6.9	7.0	6.6	7.0	7.5	N/A <sup>c</sup>	7.0	2.23
TOTAL	6.5	6.4	6.1	6.6	7.1	7.3	6.7	2.47

Nonwhite to White ratio (1979): 1.35    (1984): 1.27<sup>a</sup>                      (Percent Change In Ratio 1979-1984): -5.93<sup>a</sup>

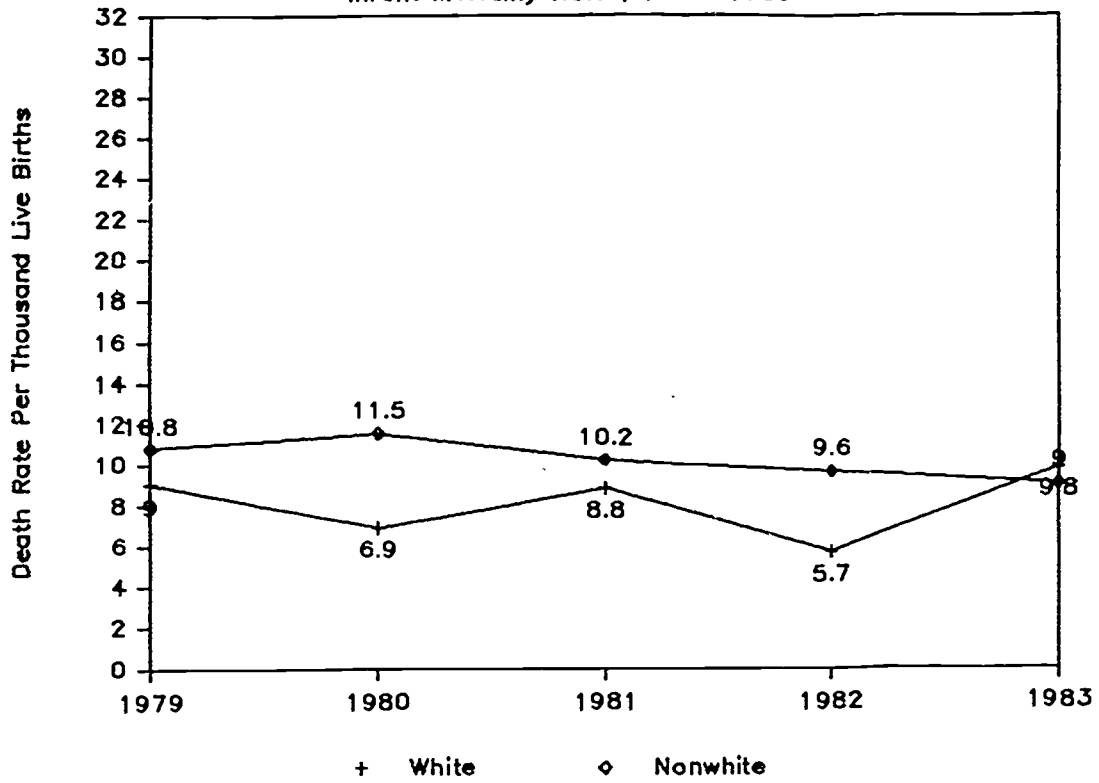
<sup>a</sup> Figure based on 1983 data.

<sup>b</sup> The 1979-1983 data presented in these tables were obtained by a previous survey.

<sup>c</sup> The State Registrar's office was unable to provide us with these state figures.

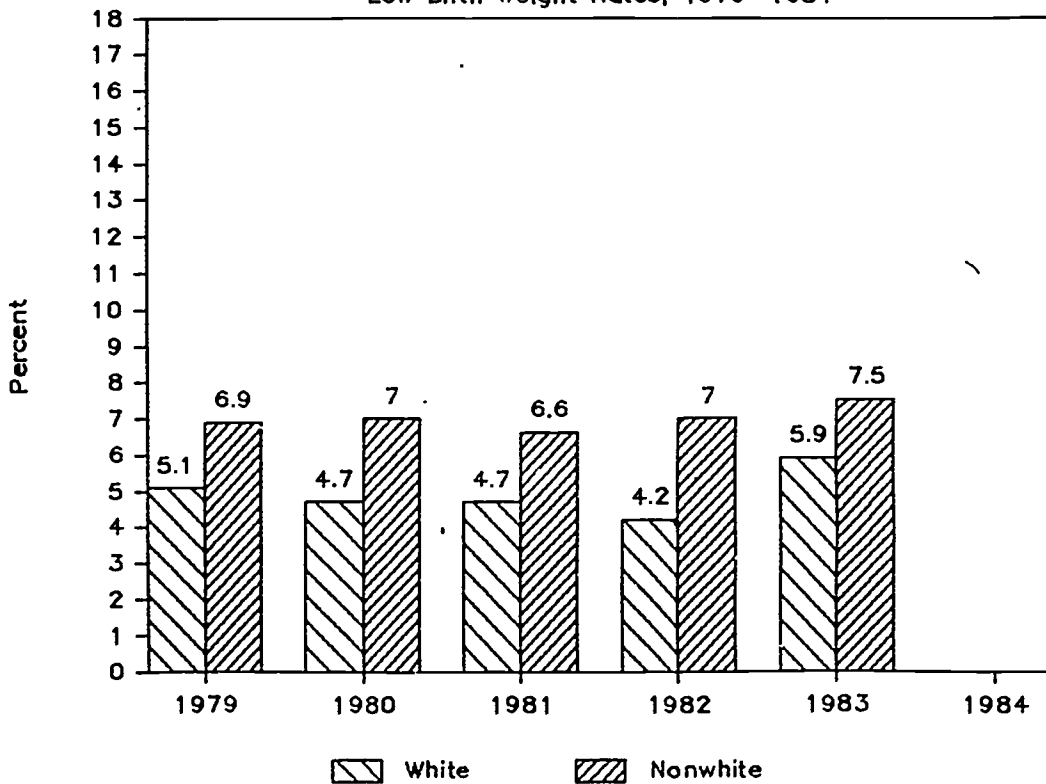
## State of Hawaii

### Infant Mortality Rates, 1979-1983



## State of Hawaii

### Low Birth Weight Rates, 1979-1984



S T A T E   O F   I D A H O

NUMBER OF LIVE BIRTHS (1984): 17,996

NUMBER OF INFANT DEATHS (1984): 174

TOTAL POPULATION (1980): 944,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 117,000 (12.6%)

RACIAL COMPOSITION (BY PERCENT)

White: 95.6

Nonwhite: 4.4 (The Nonwhite population is 7.1% Black and 25% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 12,214      PERCENT WIC "ELIGIBLES" SERVED: 22.1%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.1	10.7	9.3	10.1	10.4	9.7	10.1	-0.46
Nonwhite	11.1	20.2	6.7	3.9	17.9	10.1	11.7	-58.08
TOTAL	10.1	10.9	9.2	10.0	10.6	9.7	10.1	-0.29

Nonwhite to White ratio (1979): 1.09      (1984): 1.04      (Percent Change In Ratio 1979-1984): -4.40

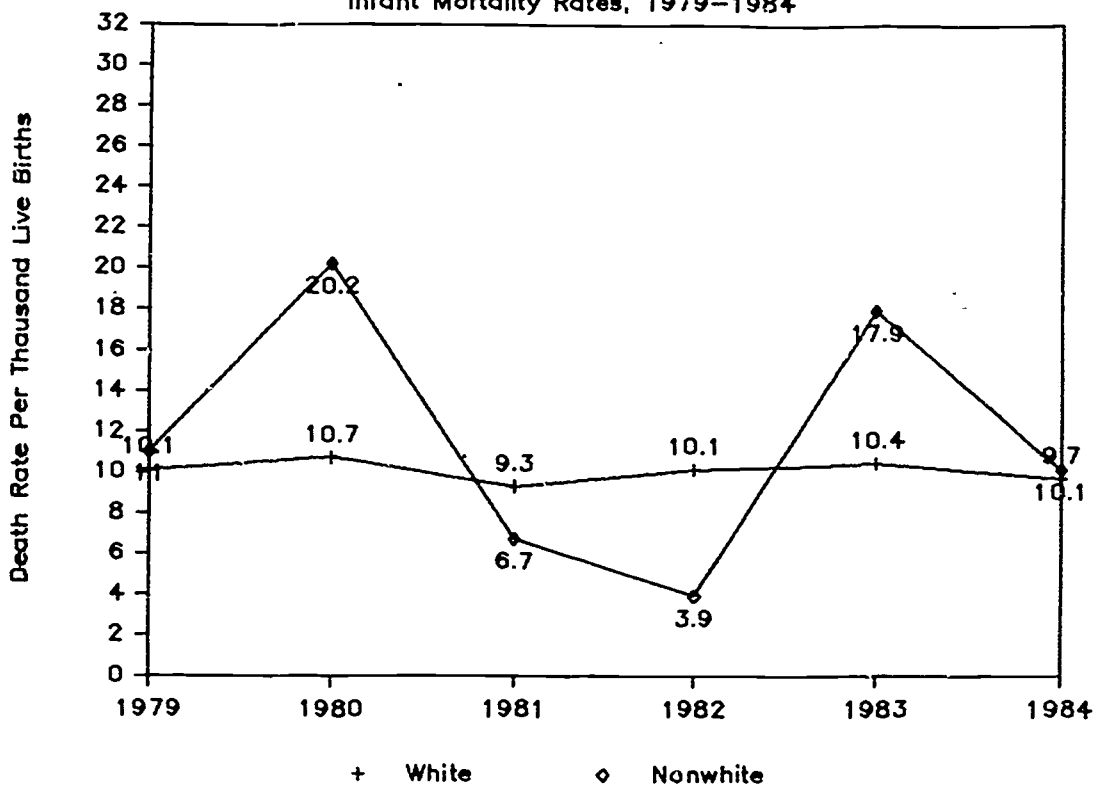
L O W   B I R T H   W E I G H T   P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.3	5.4	5.2	5.5	5.7	5.2	5.4	-0.24
Nonwhite	8.1	5.4	7.8	6.5	7.8	8.2	7.3	-3.91
TOTAL	5.2	5.3	5.1	5.3	5.6	5.1	5.3	-0.24

Nonwhite to White ratio (1979): 1.53      (1984): 1.58      (Percent Change In Ratio 1979-1984): 3.18

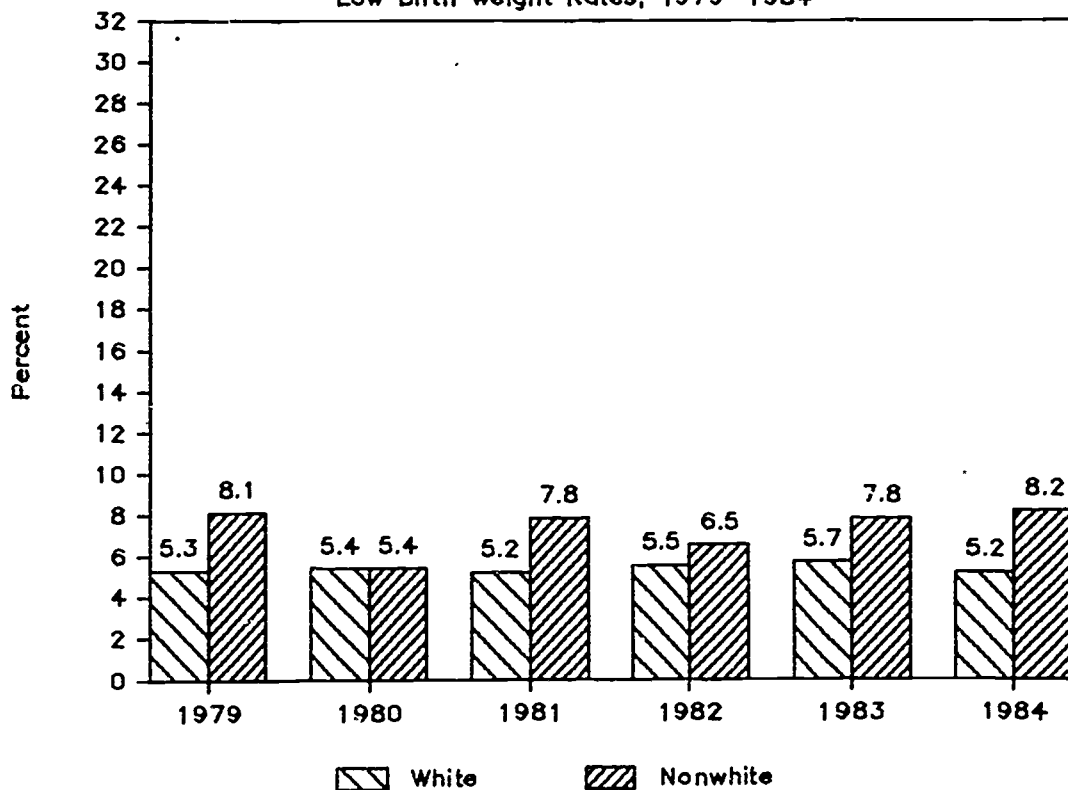
## State of Idaho

### Infant Mortality Rates, 1979-1984



## State of Idaho

### Low Birth Weight Rates, 1979-1984



STATE OF ILLINOIS

NUMBER OF LIVE BIRTHS (1984): 179,216

NUMBER OF INFANT DEATHS (1984): 2,148

TOTAL POPULATION (1980): 11,427,000 NUMBER (and percent) LIVING BELOW POVERTY (1980): 1,231,000 (11.0%)

RACIAL COMPOSITION (BY PERCENT)

White: 80.8

Nonwhite: 19.2 (Nonwhite population is 76.3% Black)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 123,814 PERCENT WIC "ELIGIBLES" SERVED: 35.7%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 4,762<sup>a</sup>

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.0	11.6	11.2	10.7	9.6	9.4	10.8	-4.72
Nonwhite	25.1	24.6	22.5	22.9	21.4	20.4	22.8	-3.99
TOTAL	15.1	14.7	13.9	13.6	12.3	12.0	13.6	-4.45

Nonwhite to White ratio (1979): 2.09 (1984): 2.17 (Percent Change In Ratio 1979-1984): 3.76

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.6	5.4	5.5	5.5	5.3	5.3	5.4	-1.07
Nonwhite	13.3	13.0	13.5	12.9	13.3	13.1	13.2	-0.25
TOTAL	7.4	7.2	7.4	7.2	7.2	7.1	7.3	-0.80

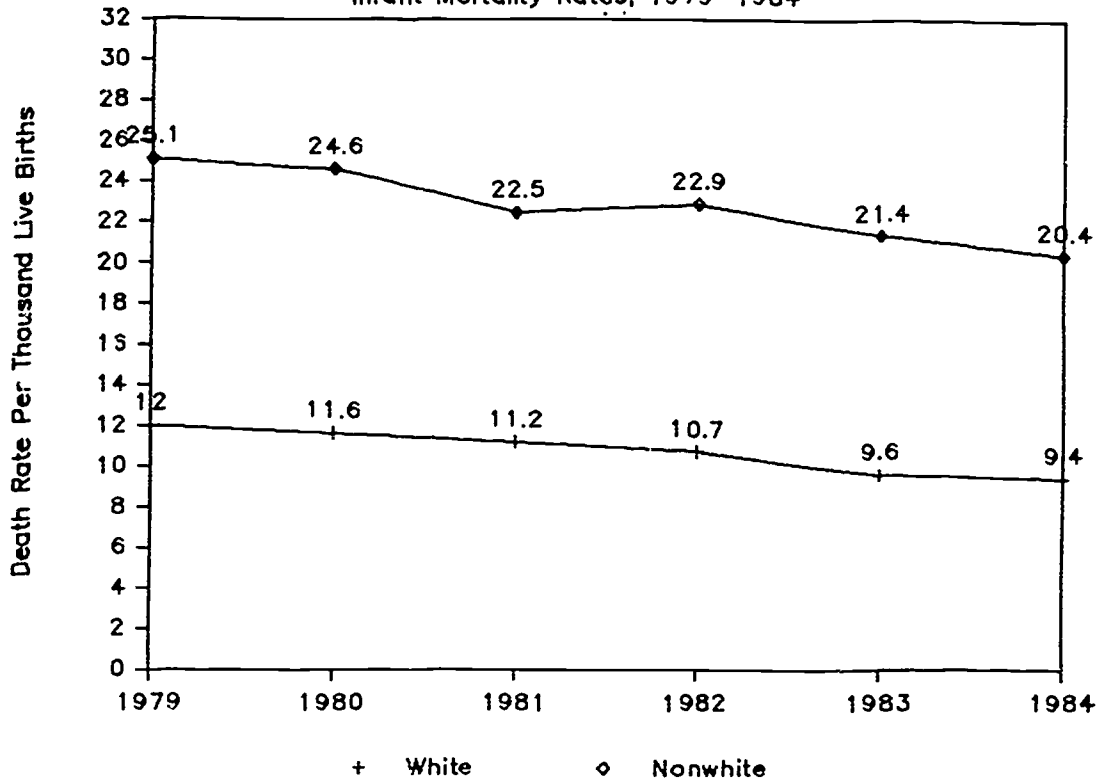
Nonwhite to White ratio (1979): 2.30 (1984): 2.47 (Percent Change In Ratio 1979-1984): 4.07

Footnotes:

<sup>a</sup> Represents year-end figure from Chicago Program which began operating in March, 1984.

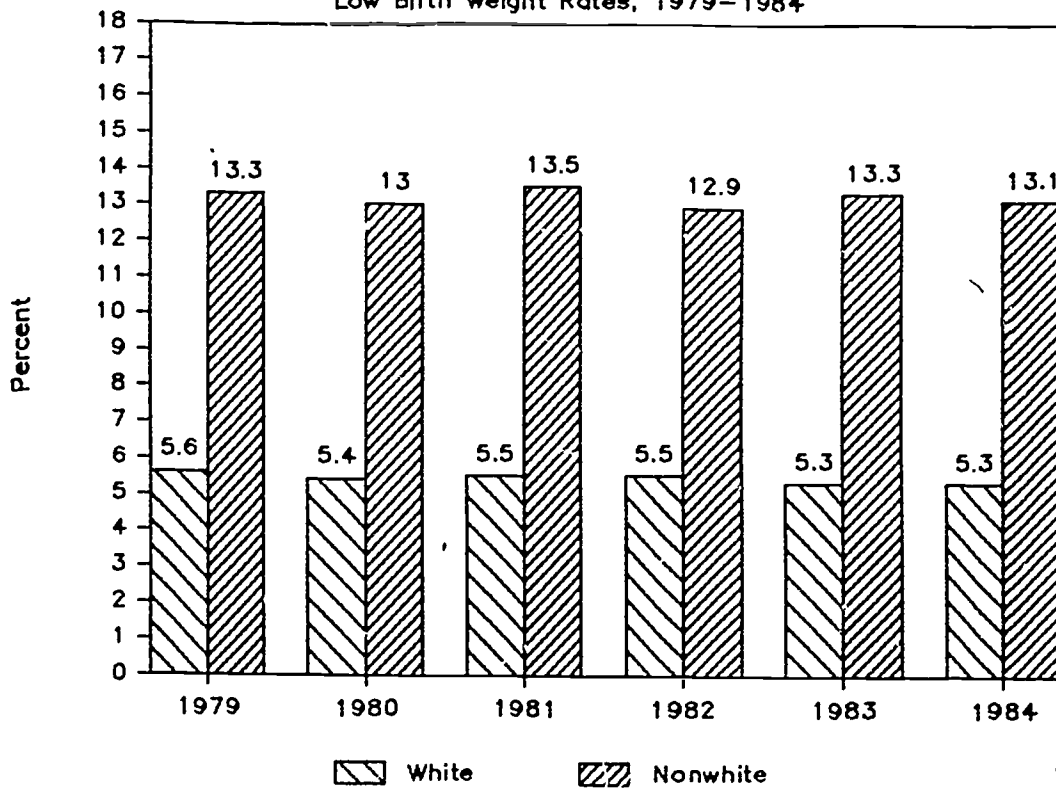
## State of Illinois

### Infant Mortality Rates, 1979-1984



## State of Illinois

### Low Birth Weight Rates, 1979-1984



239

STATE OF INDIANA

NUMBER OF LIVE BIRTHS (1984): 79,883

NUMBER OF INFANT DEATHS (1984): 838

TOTAL POPULATION (1980): 5,490,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 516,000 (9.7)

RACIAL COMPOSITION (BY PERCENT)

White: 91.1

Nonwhite: 8.9 (The Nonwhite population is 85.4% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 53,585

PERCENT WIC "ELIGIBLES" SERVED: 29.8%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.8	10.5	10.7	10.3	10.5	9.6	10.6	-3.90
Nonwhite	21.2	23.0	19.5	19.7	18.7	17.8	20.0	-3.12
TOTAL	12.8	11.9	11.7	11.3	11.4	10.5	11.6	-3.83

Nonwhite to White ratio (1979): 1.80 (1984): 1.85 (Percent Change In Ratio 1979-1984): 3.20

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.8	5.6	5.6	5.7	NA	NA	5.7 <sup>a</sup>	-0.55
Nonwhite	12.2	11.7	11.4	11.6	NA	NA	11.7 <sup>a</sup>	-1.64
TOTAL	6.1	6.3	6.3	6.4	6.3	6.3	6.3	0.66

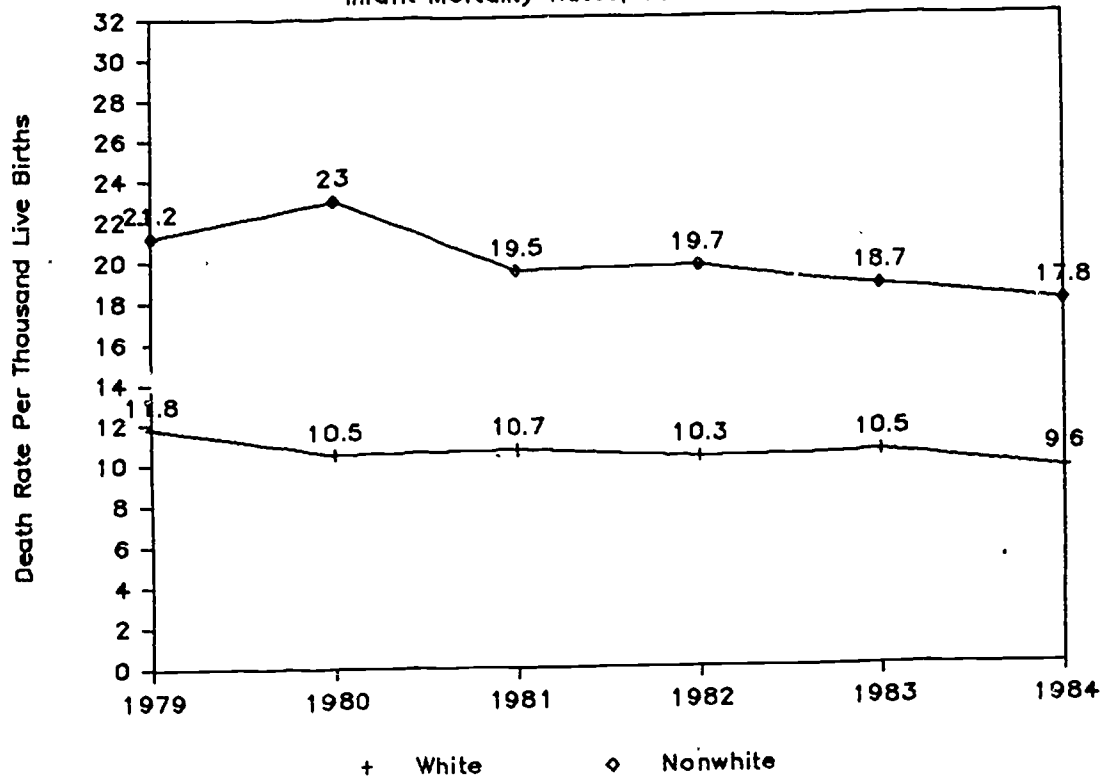
Nonwhite to White ratio (1979): 2.10 (1984): 2.04<sup>b</sup> (Percent Change In Ratio 1979-1984): 2.86<sup>b</sup>

Footnotes:

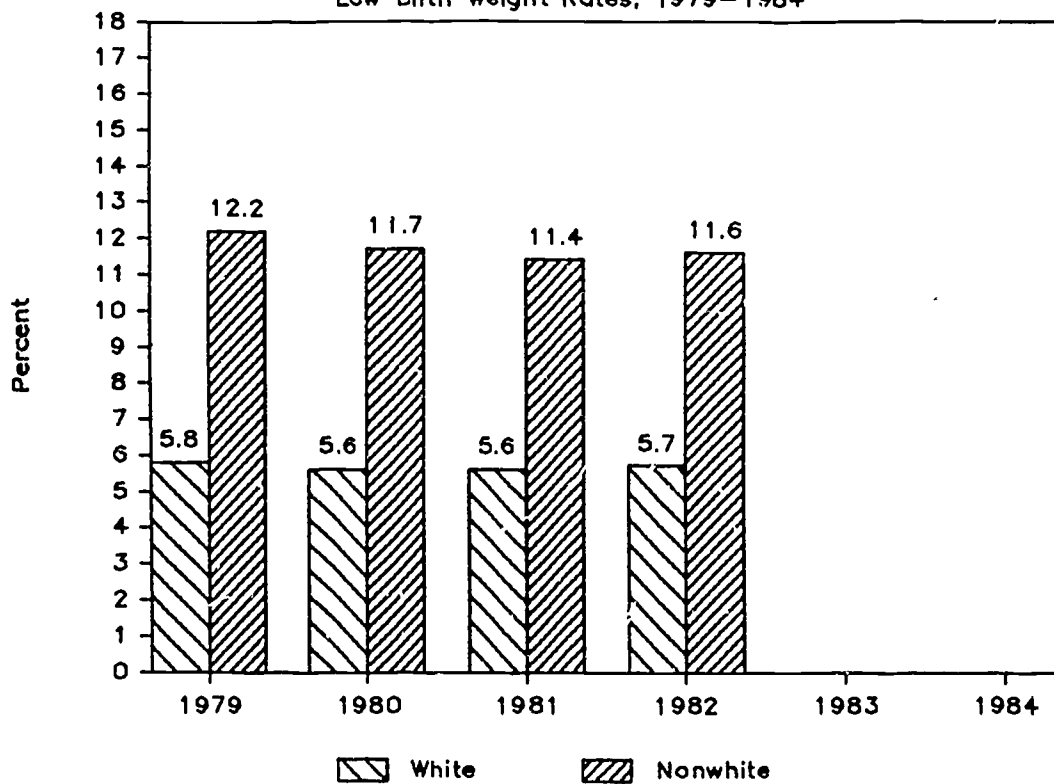
a Figure based on 1979-1982 data.

b Figure calculated using 1982 rather than 1984 data.

## State of Indiana Infant Mortality Rates, 1979-1984



## State of Indiana Low Birth Weight Rates, 1979-1984



241



STATE OF IOWA

NUMBER OF LIVE BIRTHS (1984): 42,360

NUMBER OF INFANT DEATHS (1984): 376

TOTAL POPULATION (1980): 2,914,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 286,000 (10.1%)

RACIAL COMPOSITION (BY PERCENT)

White: 97.4

Nonwhite: 2.6 (The Nonwhite population is 56% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 30,842

PERCENT WIC "ELIGIBLES" SERVED: 33.9%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 2,849

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.3	11.5	9.8	9.9	8.6	8.8	9.8	-2.58
Nonwhite	18.4	20.8	14.1	15.2	16.2	10.0	15.9	-8.56
TOTAL	10.6	11.8	9.9	10.1	8.9	8.9	10.0	-2.93

Nonwhite to White ratio (1979): 1.79      (1984): 1.14      (Percent Change In Ratio 1979-1984): -36.39

L O W B I R T H W E I G H T P E R C E N T

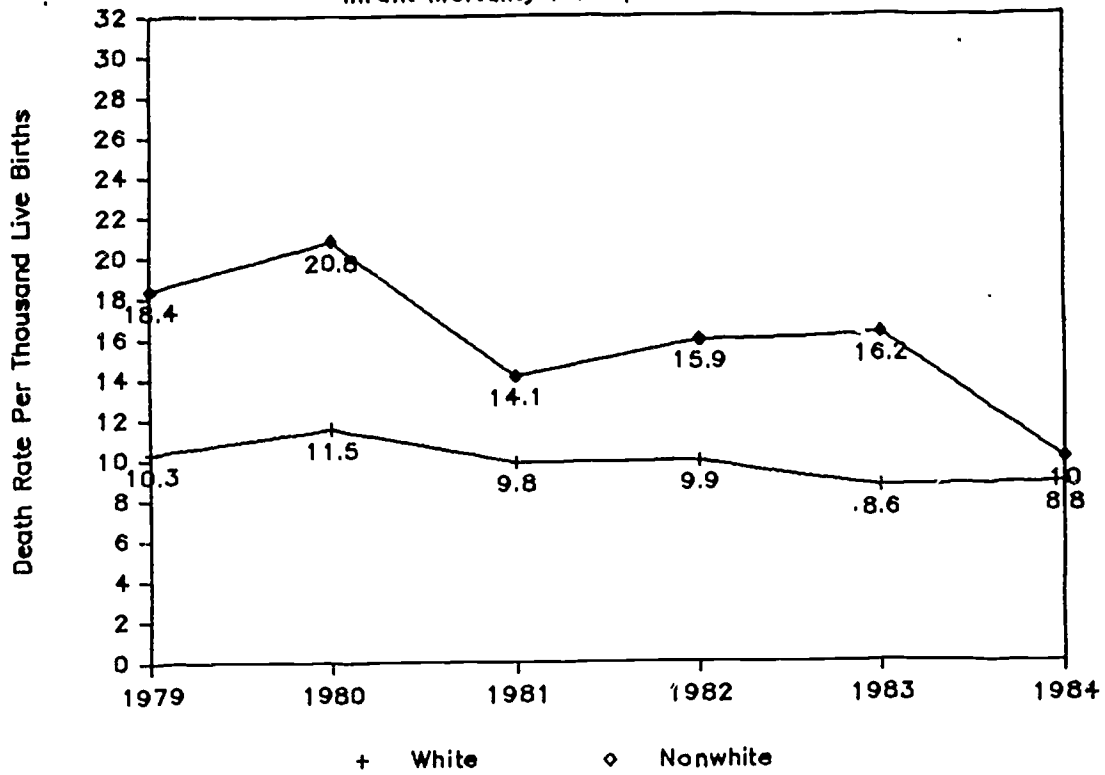
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	4.8	4.9	NA	4.7	NA	4.8	4.8 <sup>a</sup>	-0.01 <sup>a</sup>
Nonwhite	9.9	10.9	NA	9.6	NA	3.5	10.0 <sup>a</sup>	-0.96 <sup>a</sup>
TOTAL	5.0	5.1	5.0	4.8	5.1	4.9	5.0	-0.33 <sup>a</sup>

Nonwhite to White ratio (1979): 2.06      (1984): 1.98      (Percent Change In Ratio 1979-1984): -4.04

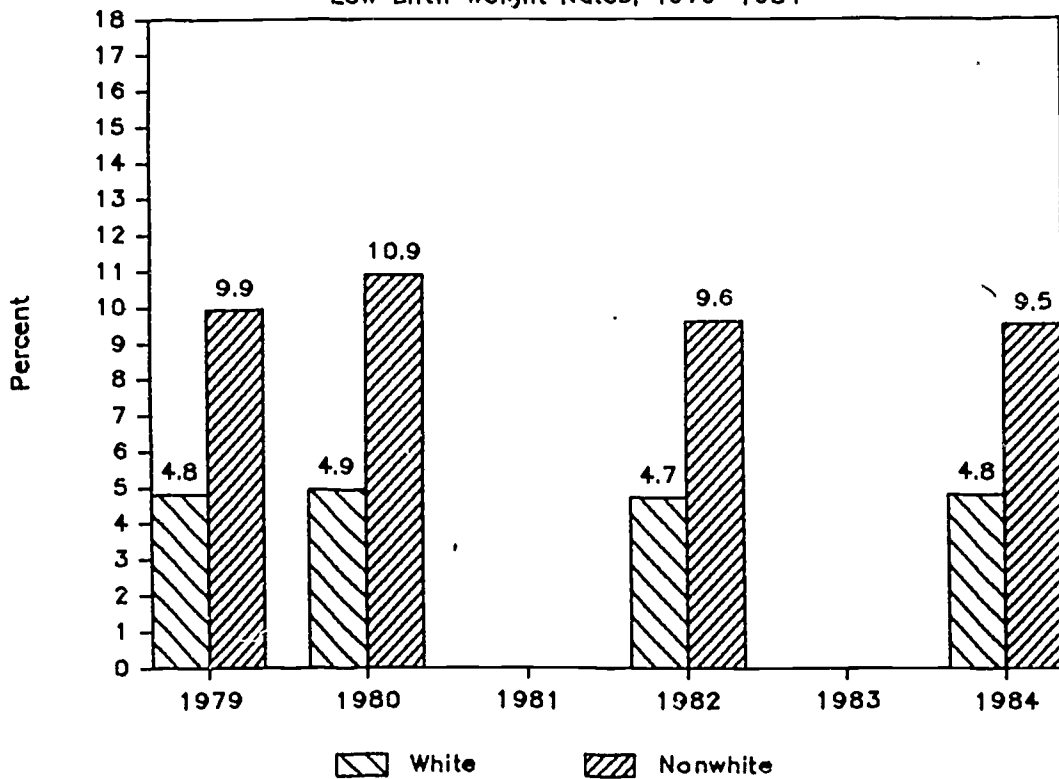
Footnotes:

<sup>a</sup> Figures calculated using 1979, 1980, 1982 and 1984 data.

## State of Iowa Infant Mortality Rates, 1979-1984



## State of Iowa Low Birth Weight Rates, 1979-1984



243

STATE OF KANSAS

NUMBER OF LIVE BIRTHS (1984): 39,954

NUMBER OF INFANT DEATHS (1984): 392

TOTAL POPULATION (1980): 2,364,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 232,00 (10.1%)

RACIAL COMPOSITION (BY PERCENT)

White: 91.7

Nonwhite: 8.3 (The Nonwhite population is 64.3% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 22,652 PERCENT WIC "ELIGIBLES" SERVED: 26.9%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.2	9.1	10.0	9.5	9.6	8.9	9.6	-2.43
Nonwhite	18.7	19.4	19.5	16.3	14.5	17.6	17.7	-0.36
TOTAL	11.0	10.1	11.0	10.2	10.1	9.8	10.4	-2.10

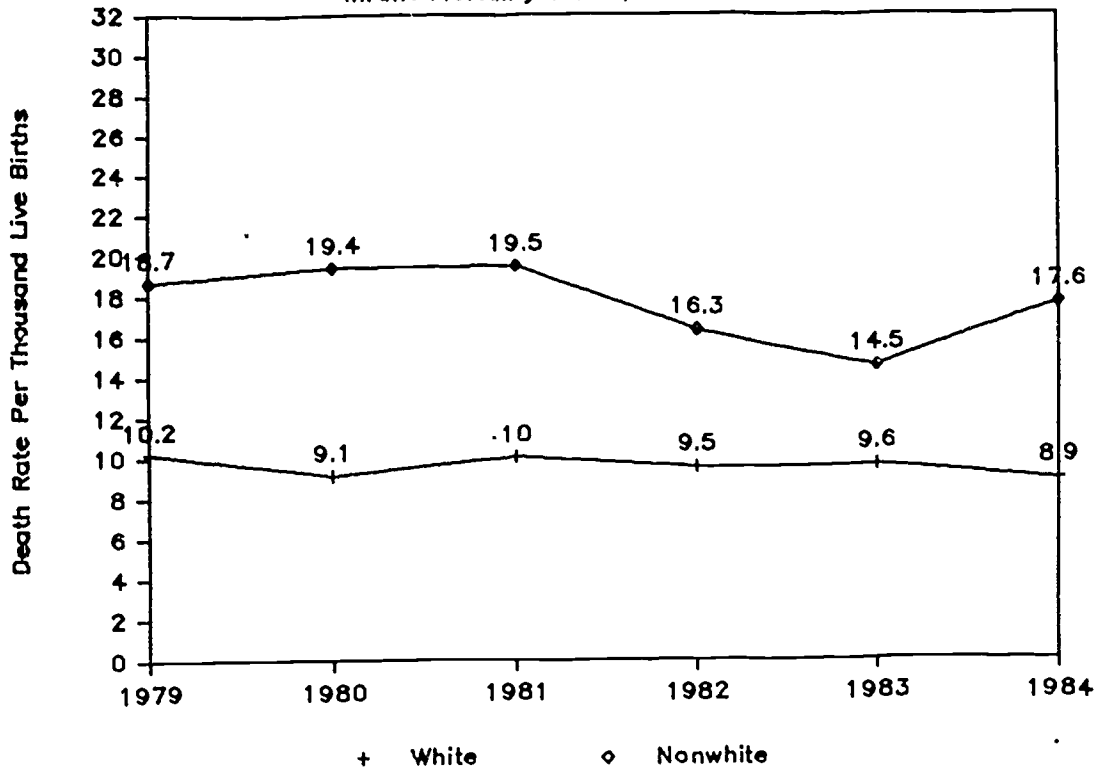
Nonwhite to White ratio (1979): 1.83 (1984): 1.98 (Percent Change In Ratio 1979-1984): 7.87

L O W B I R T H W E I G H T P E R C E N T

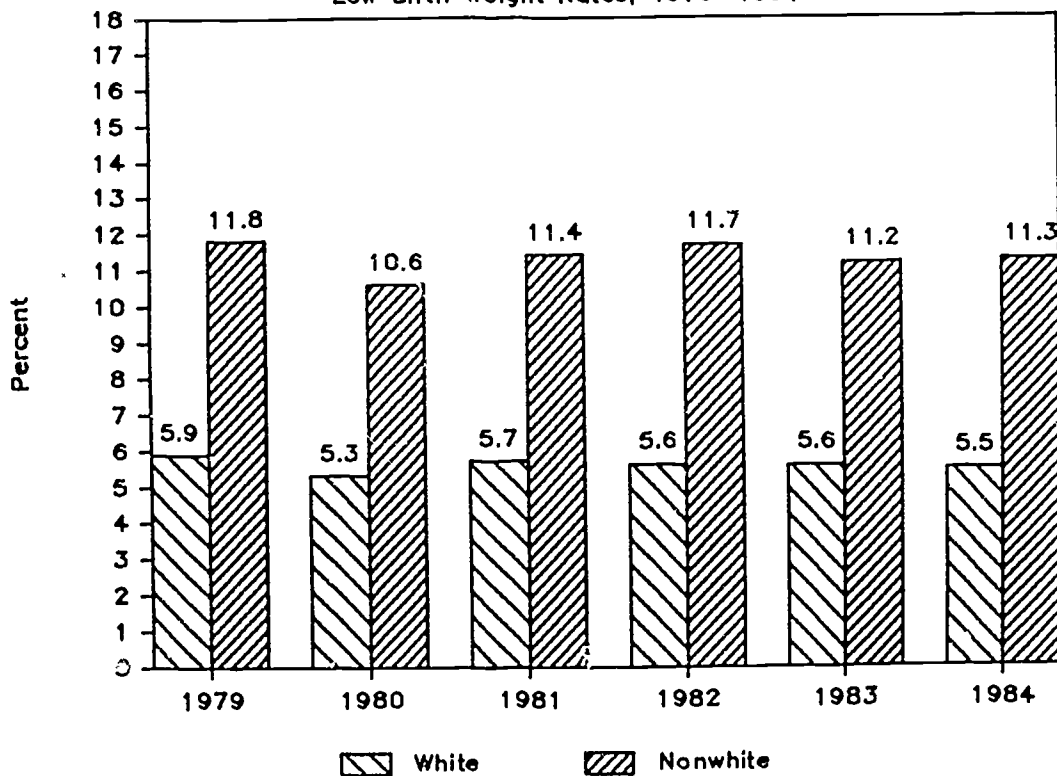
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.9	5.3	5.7	5.6	5.6	5.5	5.6	-1.23
Nonwhite	11.8	10.6	11.4	11.7	11.2	11.3	11.3	-0.67
TOTAL	6.4	5.8	6.3	6.2	6.1	6.1	6.2	-0.79

Nonwhite to White ratio (1979): 2.0 (1984): 2.05 (Percent Change In Ratio 1979-1984): 2.73

## State of Kansas Infant Mortality Rates, 1979-1984



## State of Kansas Low Birth Weight Rates, 1979-1984



STATE OF KENTUCKY

NUMBER OF LIVE BIRTHS (1984): 53,294

NUMBER OF INFANT DEATHS (1984): 616

TOTAL POPULATION (1980): 3,661,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 626,000 (17.6%)

RACIAL COMPOSITION (BY PERCENT)

White: 92.3

Nonwhite: 7.7 (The Nonwhite population is 91.8% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 61,406

PERCENT WIC "ELIGIBLES" SERVED: 38%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 6,800

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.7	12.0	11.8	11.4	11.0	11.0	11.3	0.72
Nonwhite	18.9	20.4	16.0	17.1	16.7	17.1	17.7	-1.34
TOTAL	11.5	12.8	12.2	12.0	11.6	11.6	12.0	0.33

Nonwhite to white ratio (1979): 1.77      (1984): 1.55      (Percent Change In Ratio 1979-1984): -11.99

L O W B I R T H W E I G H T P E R C E N T

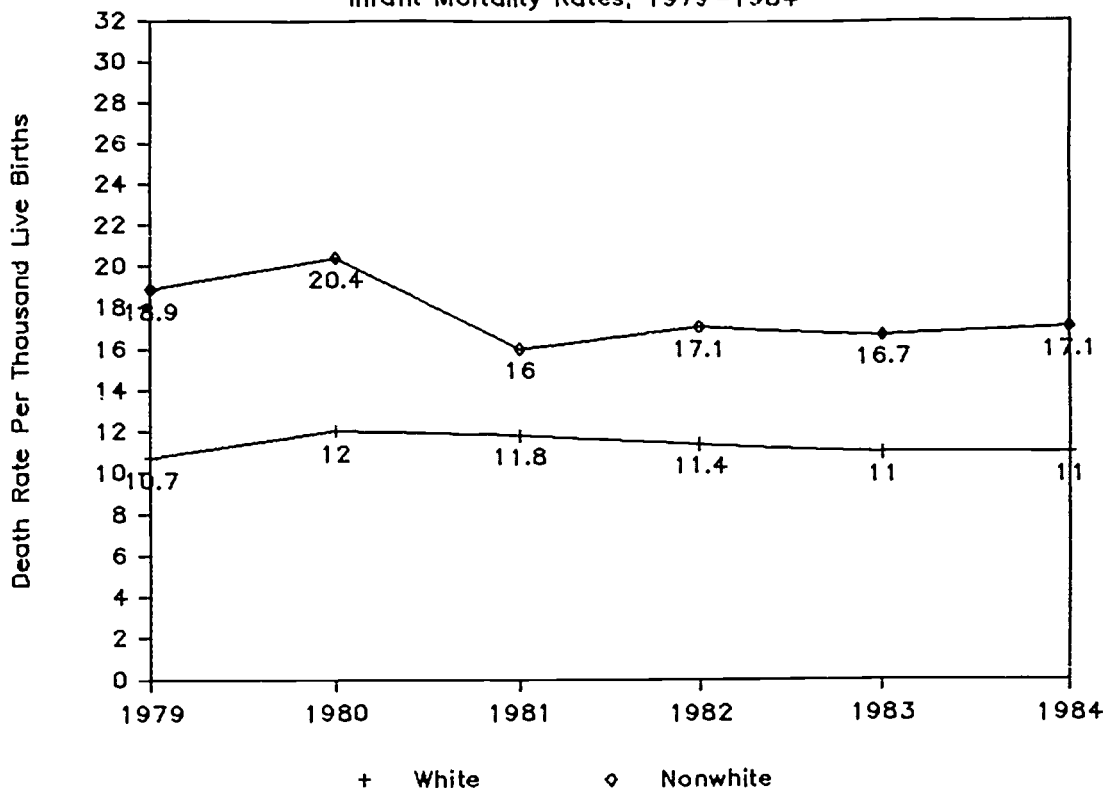
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.5	6.3	6.6	6.5	6.4	6.4	6.5	-0.27
Nonwhite	11.8	11.5	11.3	10.8	11.6	12.0	11.5	-0.43
TOTAL	7.0	6.8	7.1	7.0	6.9	7.0	7.0	0.03

Nonwhite to white ratio (1979): 1.82      (1984): 1.88      (Percent Change In Ratio 1979-1984): 3.28

246

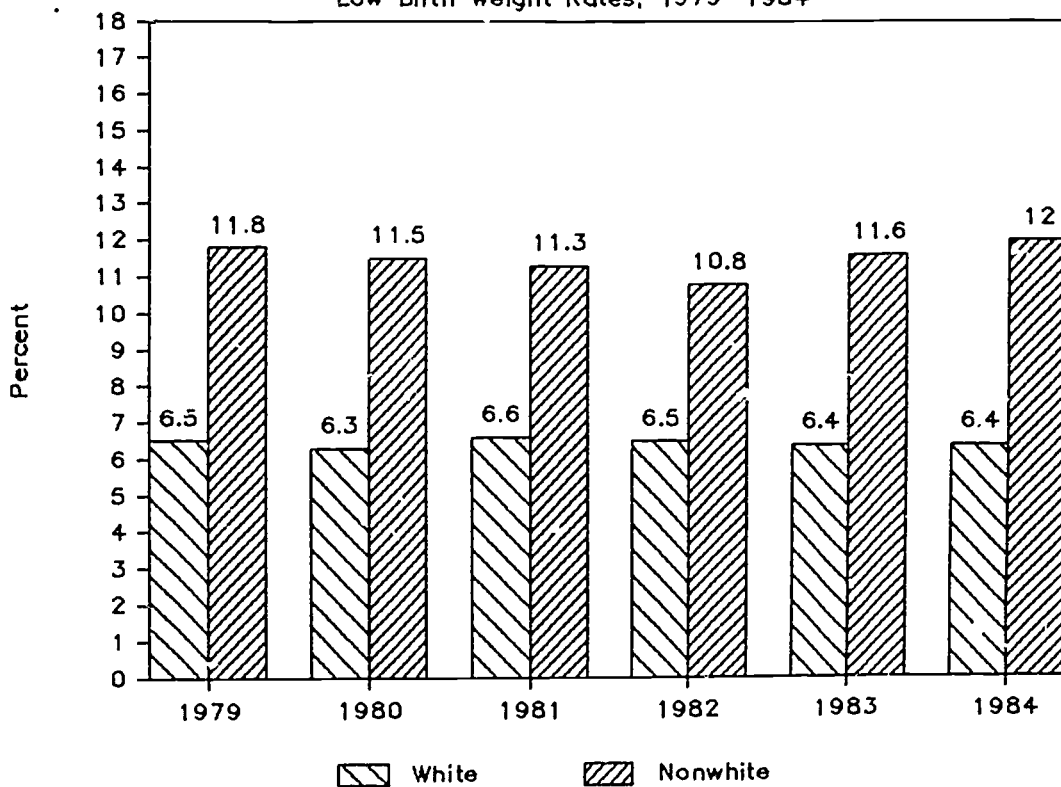
# Commonwealth of Kentucky

## Infant Mortality Rates, 1979-1984



# Commonwealth of Kentucky

## Low Birth Weight Rates, 1979-1984



247

STATE OF LOUISIANA

NUMBER OF LIVE BIRTHS (1984): 81,428

NUMBER OF INFANT DEATHS (1984): 984

TOTAL POPULATION (1980): 4,206,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 765,000 (18.6%)

RACIAL COMPOSITION (BY PERCENT)

White: 69.2

Nonwhite: 30.8 (The Nonwhite population is 95.7% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 87,293

PERCENT WIC "ELIGIBLES" SERVED: 42.8%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 19,722

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.0	10.5	10.2	9.3	9.7	8.9	10.1	-5.63
Nonwhite	20.7	20.4	19.3	18.6	19.3	16.9	19.2	-3.83
TOTAL	15.5	14.3	13.7	12.9	13.5	12.1	13.7	-4.70

Nonwhite to White ratio (1979): 1.72 (1984): 1.90 (Percent Change In Ratio 1979-1984): 10.08

L O W B I R T H W E I G H T P E R C E N T

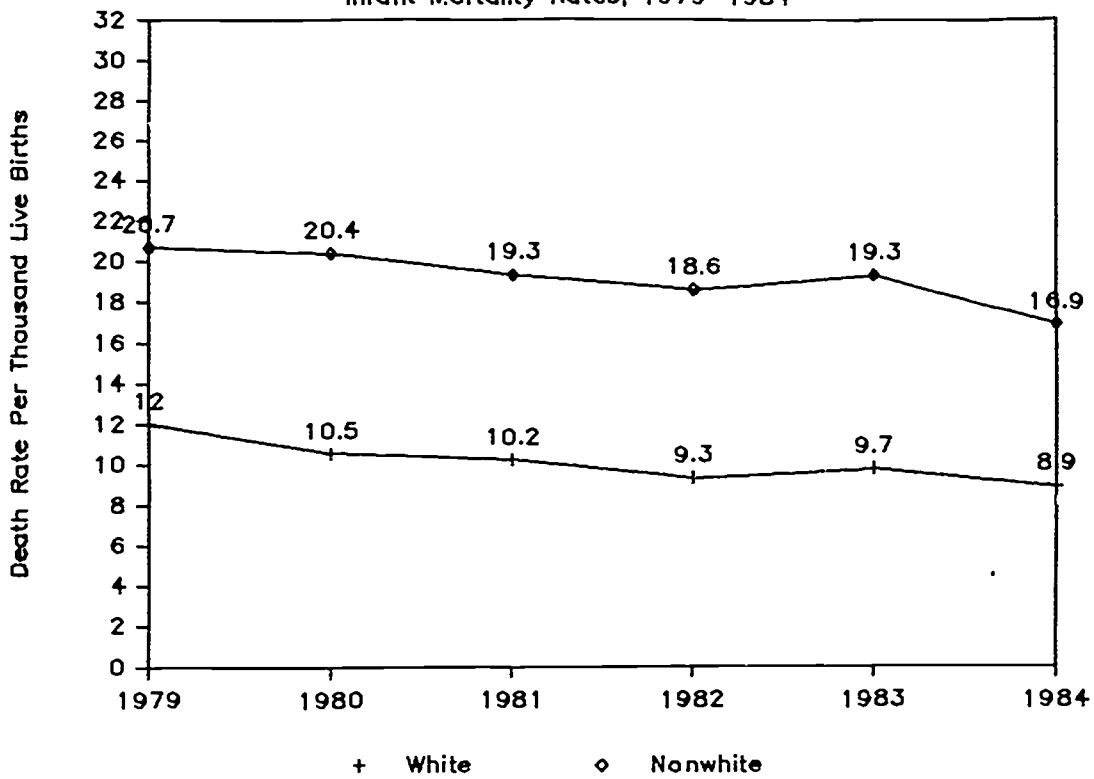
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.0	6.0	5.9	5.8	5.8	5.7	5.9	-1.02
Nonwhite	12.4	12.6	12.6	12.6	13.2	12.9	12.7	-0.82
TOTAL	8.6	8.6	8.5	8.4	8.7	8.6	8.6	0.02

Nonwhite to White ratio (1979): 2.07 (1984): 2.26 (Percent Change In Ratio 1979-1984): 9.51

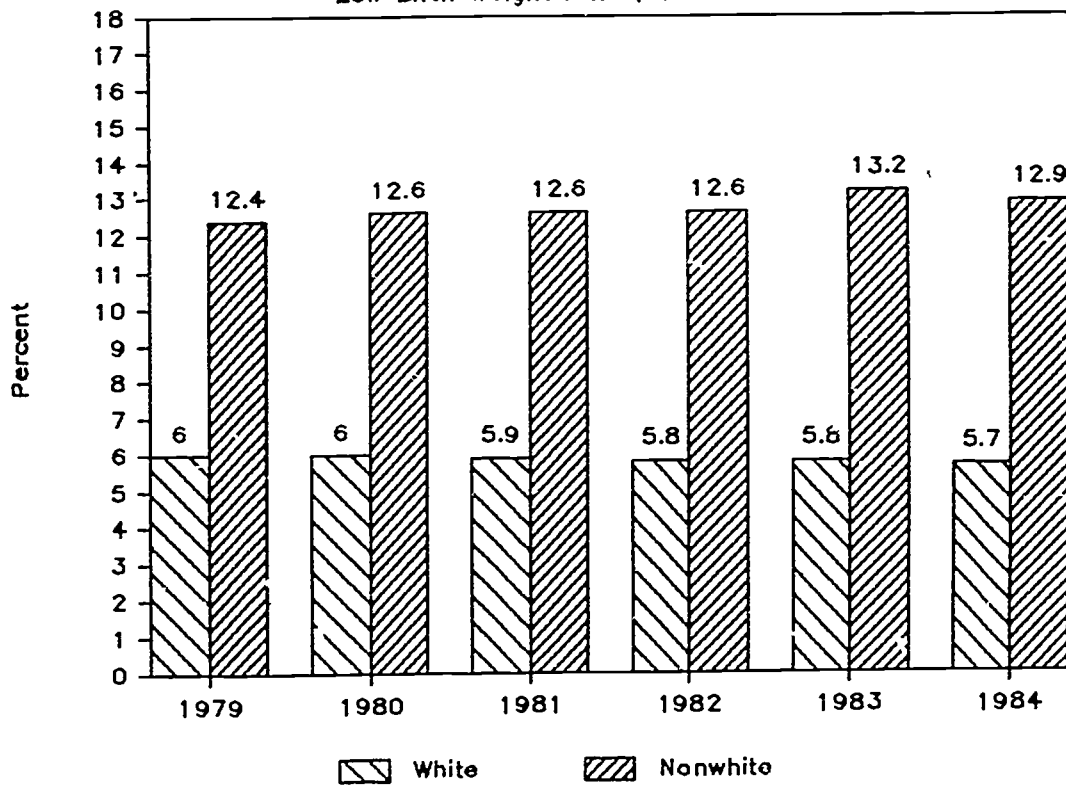
Footnotes:

a Data represent Orleans parish program.

## State of Louisiana Infant Mortality Rates, 1979-1984



## State of Louisiana Low Birth Weight Rates, 1979-1984





S T A T E   O F   M A I N E

NUMBER OF LIVE BIRTHS (1984): 16,631

NUMBER OF INFANT DEATHS (1984): 134

TOTAL POPULATION (1980): 1,125,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 141,000 (13.0)

RACIAL COMPOSITION (BY PERCENT)

White: 98.7

Nonwhite: 1.3 (The Nonwhite population is 20% Black, and 27.3% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 17,172    PERCENT WIC "ELIGIBLES" SERVED: 36.7%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	9.7	9.3	10.6	8.7	8.7	NA	9.4 <sup>a</sup>	-2.02
Nonwhite <sup>b</sup>	--	--	--	--	--	--	--	--
TOTAL	9.7	9.3	10.6	8.7	8.7	8.1	9.2	-2.99

Nonwhite to White ratio (1979): --    (1984): --    (Percent Change In Ratio 1979-1984): --

L O W   B I R T H   W E I G H T   P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White <sup>c</sup>	--	--	--	--	--	--	--	--
Nonwhite <sup>b</sup>	--	--	--	--	--	--	--	--
TOTAL	5.2	5.1	5.4	5.1	5.6	5.3	5.3	-0.57

Nonwhite to White ratio (1979): --    (1984): --    (Percent Change In Ratio 1979-1984): --

Footnotes:

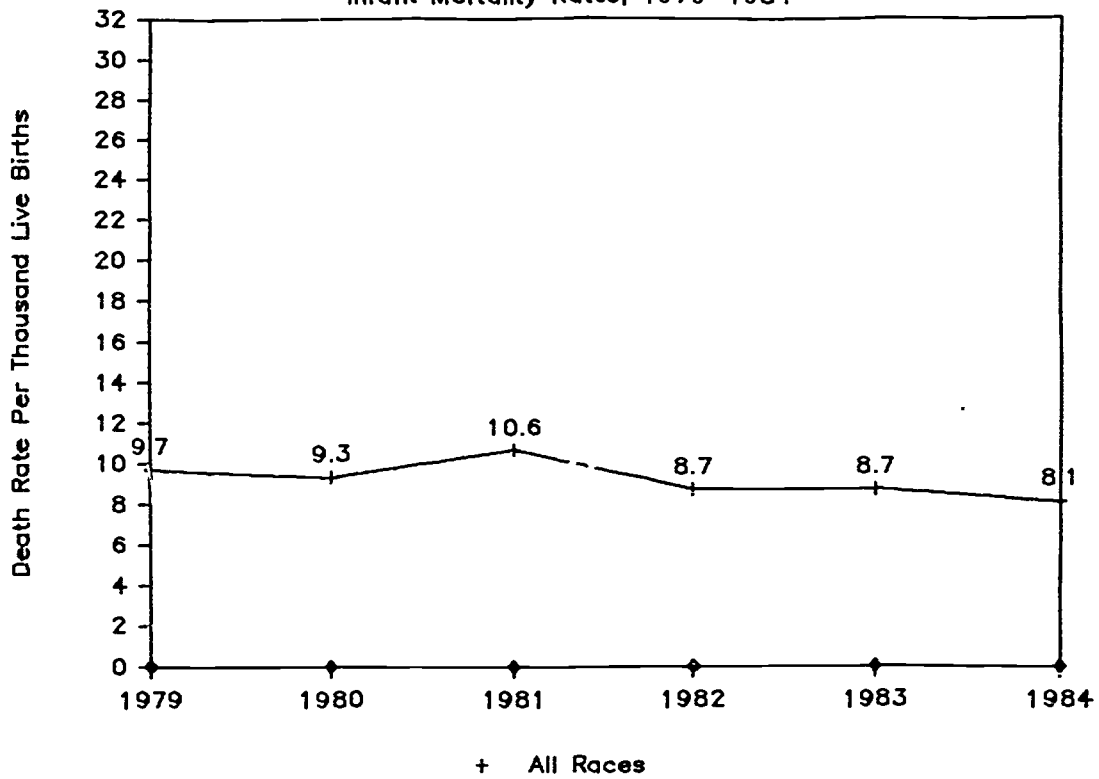
a    Figure calculated using 1979-1983 data only.

b    Because the Nonwhite population is so small in Maine, the State does not routinely calculate nonwh. vital statistics.

c    Maine Registrar was unable to provide white LBW figures without a special computer run.

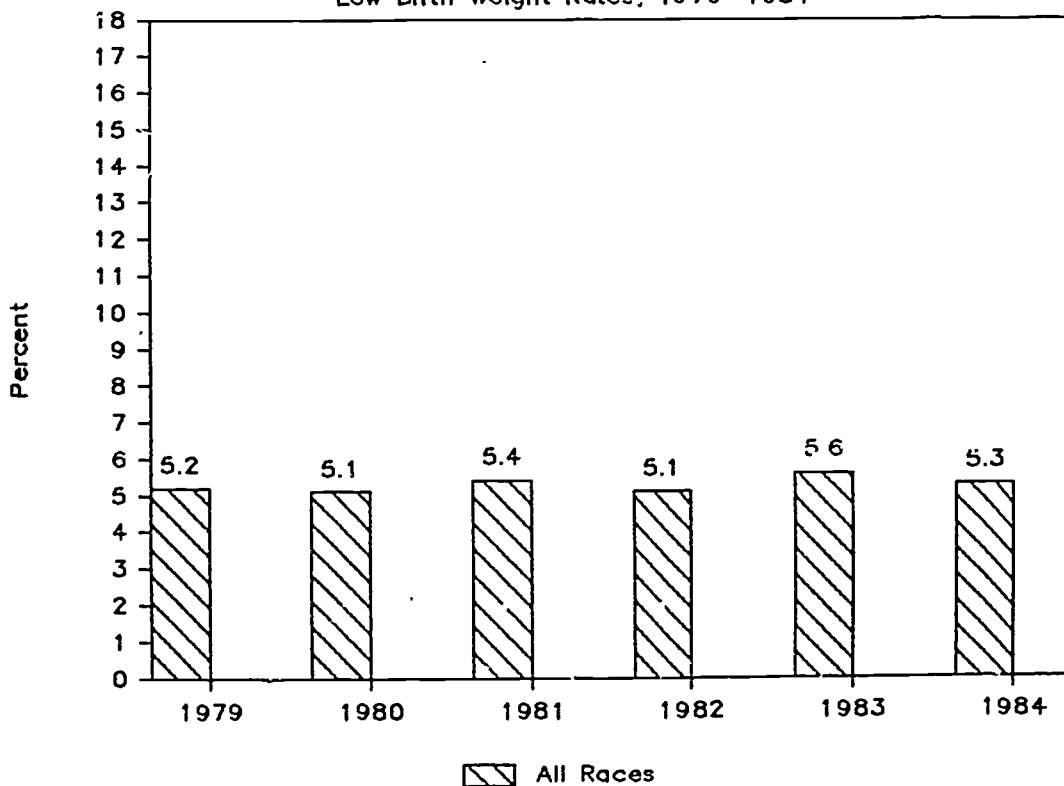
## State of Maine

### Infant Mortality Rates, 1979-1984



## State of Maine

### Low Birth Weight Rates, 1979-1984



S T A T E   O F   M A R Y L A N D

NUMBER OF LIVE BIRTHS (1984): 65,264

NUMBER OF INFANT DEATHS (1984): 723

TOTAL POPULATION (1980): 4,217,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 405,000 (9.8%)

RACIAL COMPOSITION (BY PERCENT)

White: 74.9

Nonwhite: 25.1 (The Nonwhite population is 90.5% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 53,920

PERCENT WIC "ELIGIBLES" SERVED: 46.7%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.4	11.4	10.6	9.0	8.9	9.0	10.5	-4.42
Nonwhite	21.1	19.7	17.3	18.2	17.3	15.4	18.2	-5.91
TOTAL	14.6	14.1	12.8	12.0	11.7	11.1	12.7	-5.30

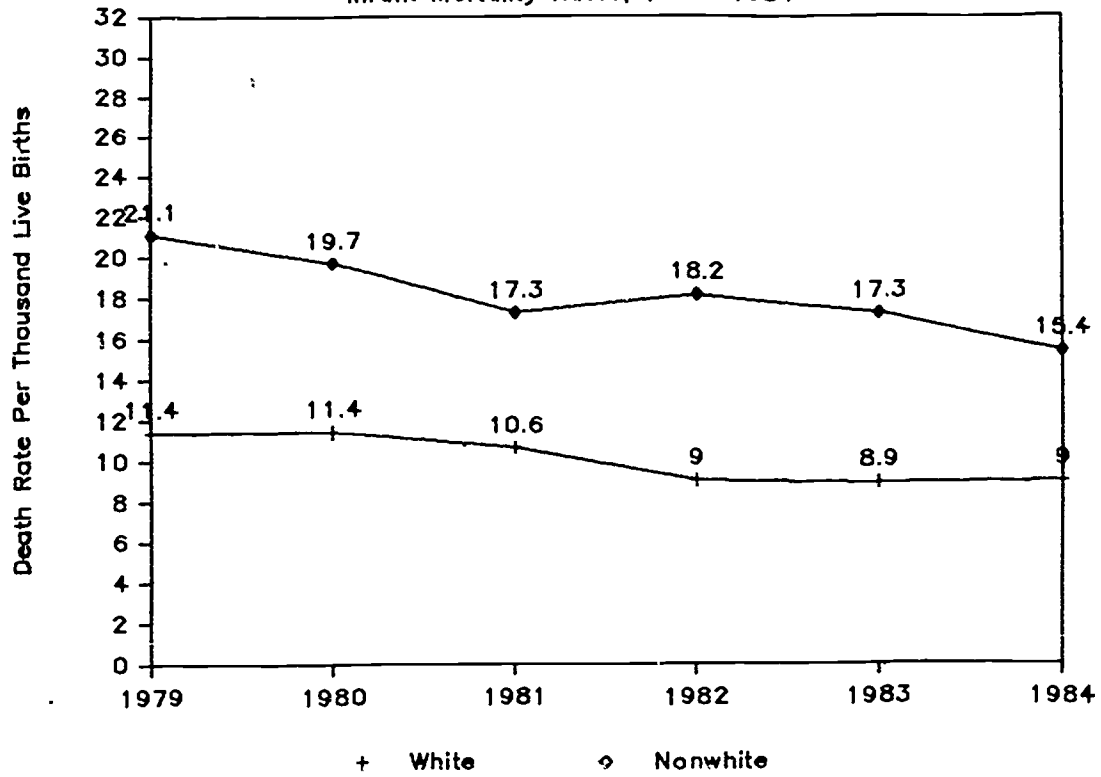
Nonwhite to white ratio (1979): 1.85      (1984): 1.71      (Percent Change In Ratio 1979-1984): -7.55

L O W   B I R T H   W E I G H T   P E R C E N T

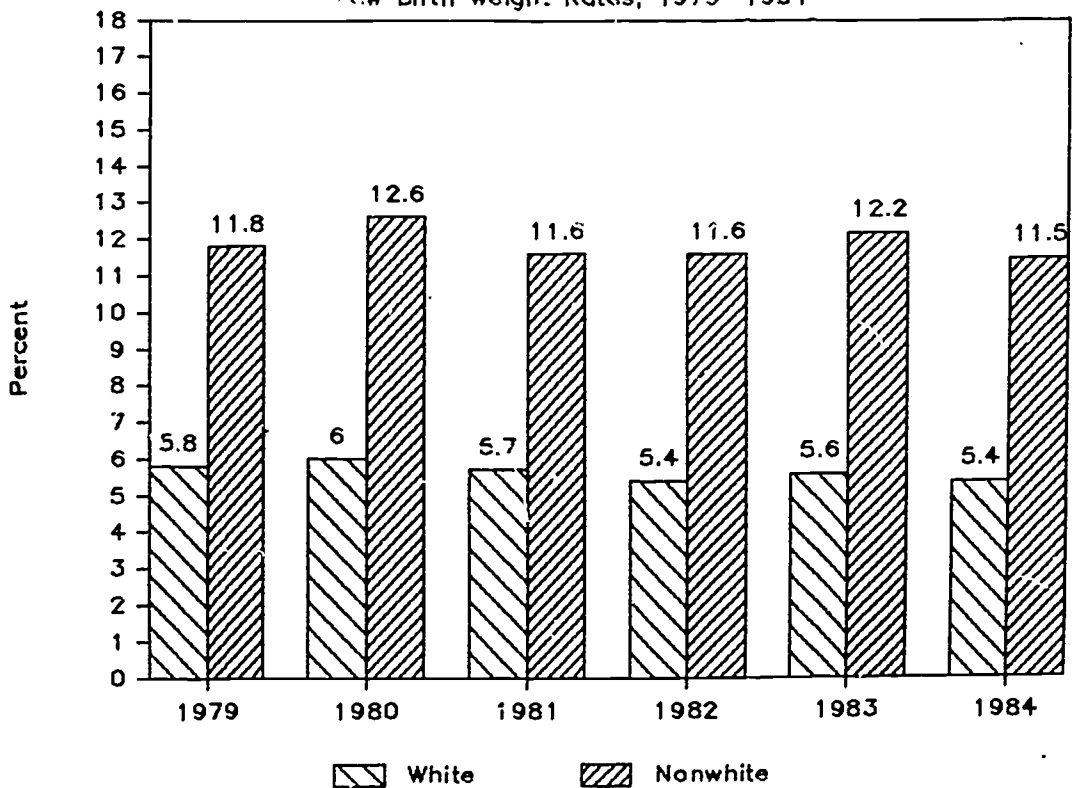
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.8	6.0	5.7	5.4	5.6	5.4	5.7	-1.34
Nonwhite	11.8	12.6	11.6	11.6	12.2	11.5	11.9	-0.34
TOTAL	7.8	8.1	7.7	7.4	7.8	7.4	7.7	-0.94

Nonwhite to white ratio (1979): 2.03      (1984): 2.13      (Percent Change In Ratio 1979-1984): 4.68

## State of Maryland Infant Mortality Rates, 1979-1984



## State of Maryland Low Birth Weight Rates, 1979-1984



COMMONWEALTH OF MASSACHUSETTS

NUMBER OF LIVE BIRTHS (1984): 78,198

NUMBER OF INFANT DEATHS (1984): 699

TOTAL POPULATION (1980): 5,737,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 532,000 (9.6%)

RACIAL COMPOSITION (BY PERCENT)

White: 93.5

Nonwhite: 6.5 (The Nonwhite population is 59.1% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 56,980

PERCENT WIC "ELIGIBLES" SERVED: 34.4%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.4	9.9	9.2	9.7	8.5	8.7	9.4	-3.29
Nonwhite	16.0	16.2	15.6	17.4	16.4	N/A	16.3 <sup>a</sup>	0.83 <sup>a</sup>
TOTAL	10.8	10.3	9.6	10.1	9.0	8.9	9.8	-3.64

Nonwhite to White ratio (1979): 1.54 (1984): 1.93<sup>b</sup> (Percent Change In Ratio 1979-1984): 25.32<sup>b</sup>

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.7	5.7	5.6	5.4	5.3	5.4	5.5	-1.06
Nonwhite	10.6	10.4	10.1	11.6	10.9	NA	10.7 <sup>a</sup>	1.01
TOTAL	6.1	6.13	6.0	5.9	5.9	5.9	6.0	-0.66

Nonwhite to White ratio (1979): 1.86 (1984): 2.06<sup>b</sup> (Percent Change In Ratio 1979-1984): 10.75<sup>b</sup>

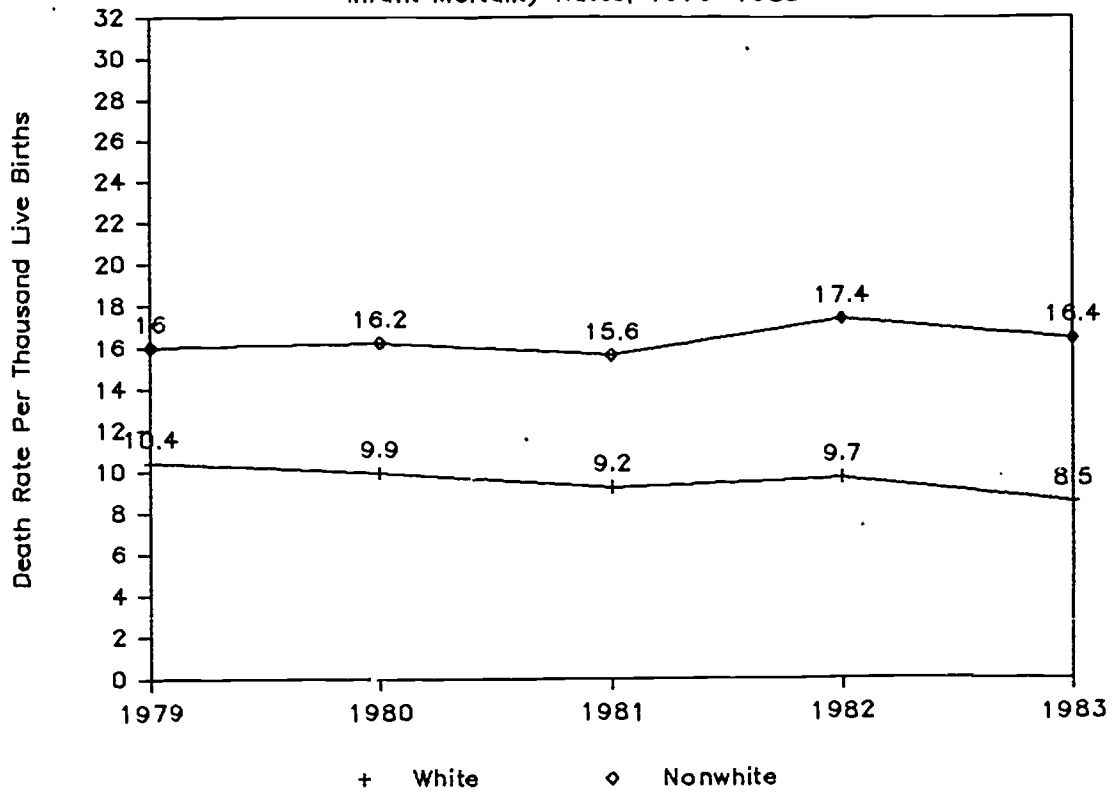
Footnotes:

<sup>a</sup> Figure calculated using 1979-1983 data only.

<sup>b</sup> Figure calculated using 1983 data.

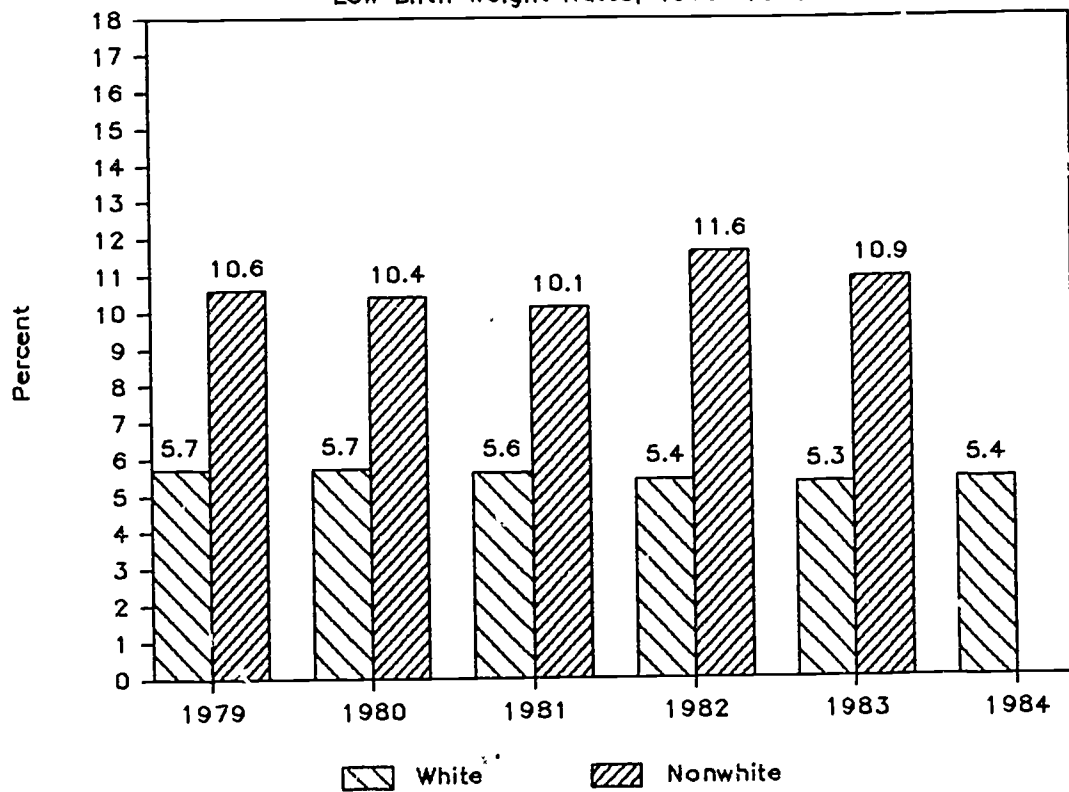
# Commonwealth of Massachusetts

## Infant Mortality Rates, 1979-1983



# Commonwealth of Massachusetts

## Low Birth Weight Rates, 1979-1984



255

S T A T E   O F   M I C H I G A N

NUMBER OF LIVE BIRTHS (1984): 135,782                      NUMBER OF INFANT DEATHS (1984): 1,595  
 TOTAL POPULATION (1980): 9,262,00                      NUMBER (and percent) LIVING BELOW POVERTY (1980): 946,000 (10.4%)

RACIAL COMPOSITION (BY PERCENT)

White: 85  
 Nonwhite: 15 (The Nonwhite population is 86.3% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 128,134      PERCENT WIC "ELIGIBLES" SERVED: 46.0%  
 AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 47,076<sup>a</sup>

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.4	10.5	10.9	9.7	9.6	9.5	10.3	-3.43
Nonwhite	22.1	23.2	24.0	23.3	22.2	20.7	22.6	-1.19
TOTAL	13.3	12.8	13.2	12.1	11.8	11.7	12.5	-2.46

Nonwhite to White ratio (1979): 1.94      (1984): 2.18      (Percent Change In Ratio 1979-1984): 12.40

L O W   B I R T H   W E I G H T   P E R C E N T

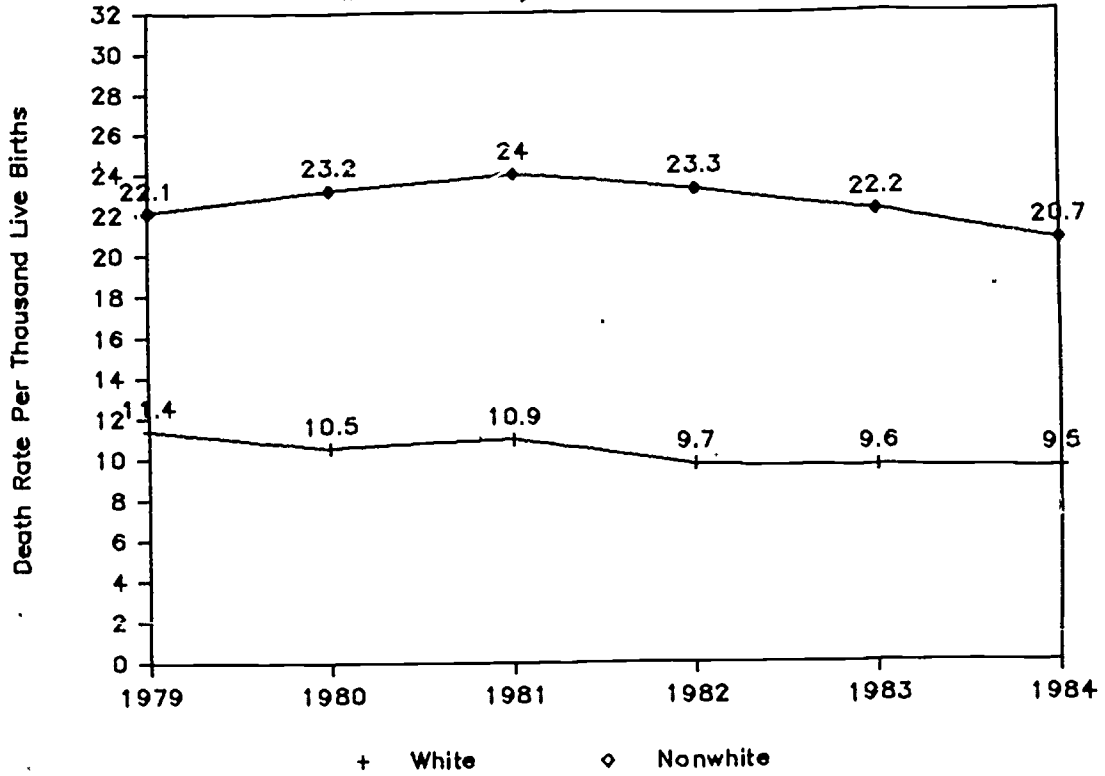
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.8	5.7	5.7	5.6	5.6	5.4	5.6	-1.41
Nonwhite	13.0	12.5	12.7	13.4	13.9	13.4	13.2	-0.68
TOTAL	7.1	6.9	6.9	7.0	7.1	7.0	7.0	-0.27

Nonwhite to white ratio (1979): 2.24      (1984): 2.48      (Percent Change In Ratio 1979-1984): 10.71

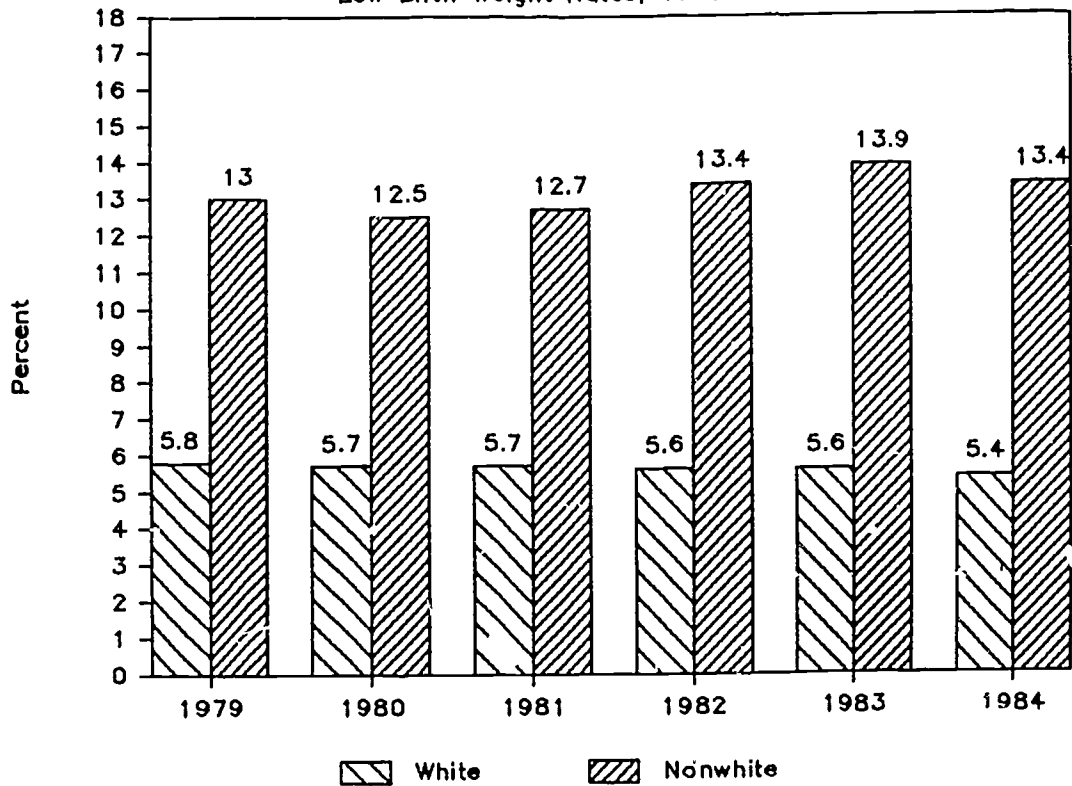
Footnotes:

<sup>a</sup> Figures obtained from, the Commodity Supplement Food Program: A Successful Program held in check", Center on Budget and Policy Priorities, 1985.

## State of Michigan Infant Mortality Rates, 1979-1984



## State of Michigan Low Birth Weight Rates, 1979-1984





STATE OF MINNESOTA

NUMBER OF LIVE BIRTHS (1984): 66,715

NUMBER OF INFANT DEATHS (1984): 590

TOTAL POPULATION (1980): 4,076,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 375,000 (9.5%)

RACIAL COMPOSITION (BY PERCENT)

White: 89.3

Nonwhite: 10.7 (The Nonwhite population is 37.9% Black and 25% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 54,425      PERCENT WIC "ELIGIBLES" SERVED: 47.2%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 426<sup>a</sup>

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.5	9.7	10.0	9.3	9.8	9.0	9.7	-2.86
Nonwhite	14.0	13.6	12.8	11.2	10.4	8.6	11.8	-9.14
TOTAL	10.7	10.0	10.2	9.4	9.8	8.8	9.8	-3.67

Nonwhite to White ratio (1979): 1.33      (1984): 0.96      (Percent Change In Ratio 1979-1984): 28.33

L O W   B I R T H   W E I G H T   P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	4.9	4.9	5.0	4.7	4.9	4.7	4.9	-0.76
Nonwhite	7.1	7.1	7.5	6.8	6.8	6.4	7.0	-1.92
TOTAL	5.1	5.1	5.2	4.9	5.0	4.9	5.0	-0.75

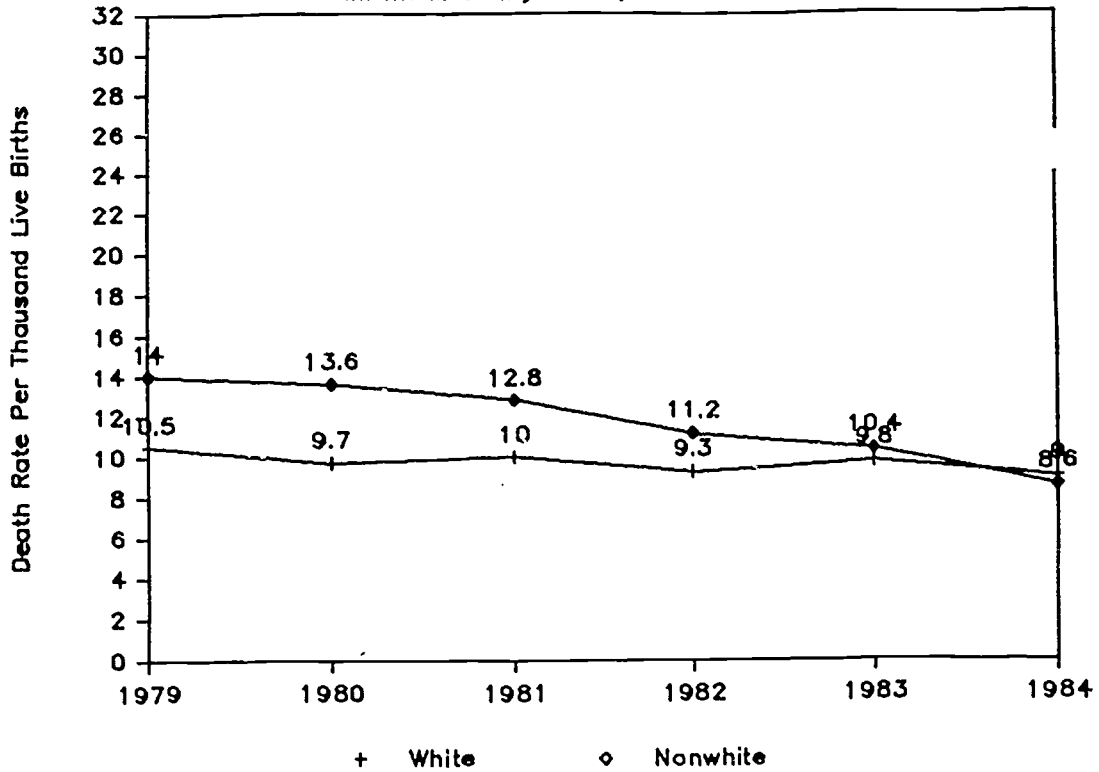
Nonwhite to White ratio (1979): 1.45      (1984): 1.36      (Percent Change In Ratio 1979-1984): -6.02

Footnotes:

<sup>a</sup> Olmstead (Rochester) and Ramsey (St. Paul) Counties applied for a CSF Program in 1986, but, at the time of this report, have not yet received approval.

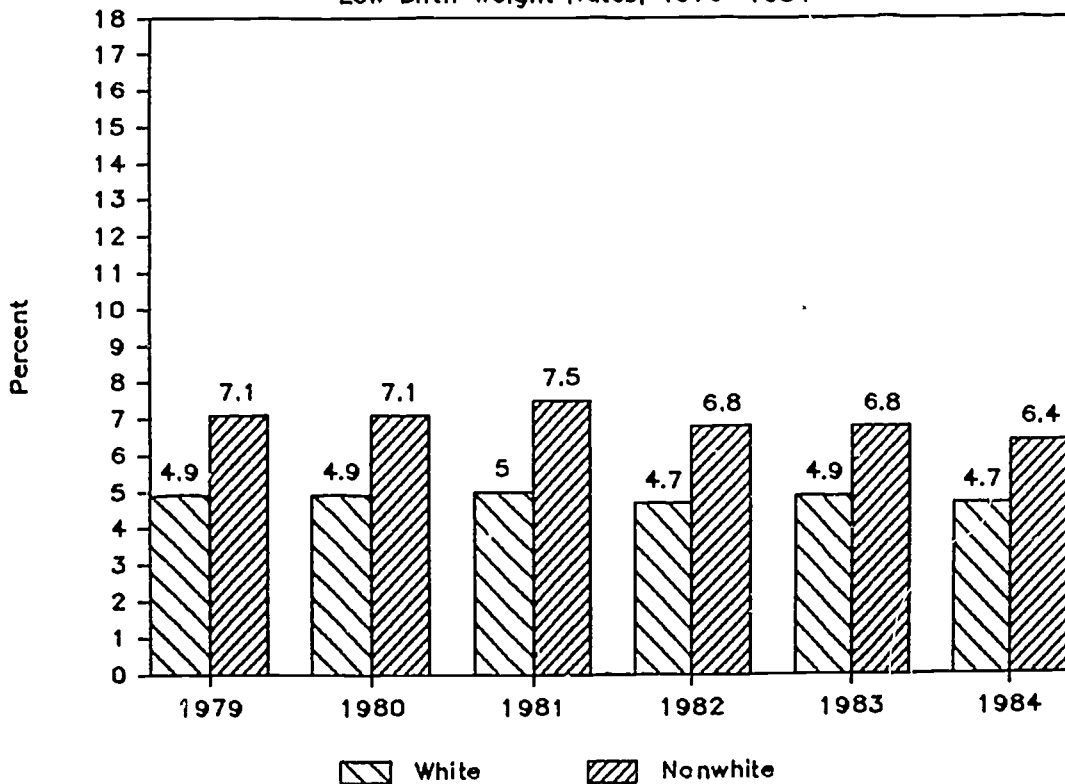
# State of Minnesota

## Infant Mortality Rates, 1979-1984



# State of Minnesota

## Low Birth Weight Rates, 1979-1984



STATE OF MISSISSIPPI

NUMBER OF LIVE BIRTHS (1984): 43,742

NUMBER OF INFANT DEATHS (1984): 629

TOTAL POPULATION (1980): 2,521,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 587,900 (23.9%)

RACIAL COMPOSITION (BY PERCENT)

White: 64.1

Nonwhite: 35.9 (The Nonwhite population is 97.9% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 85,074      PERCENT WIC "ELIGIBLES" SERVED: 55.6%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.9	11.0	10.4	10.4	10.6	9.9	10.7	-2.86
Nonwhite	23.6	23.3	20.6	20.9	19.9	19.2	21.3	-9.14
TOTAL	17.6	17.0	15.4	15.4	15.1	14.4	15.8	-3.67

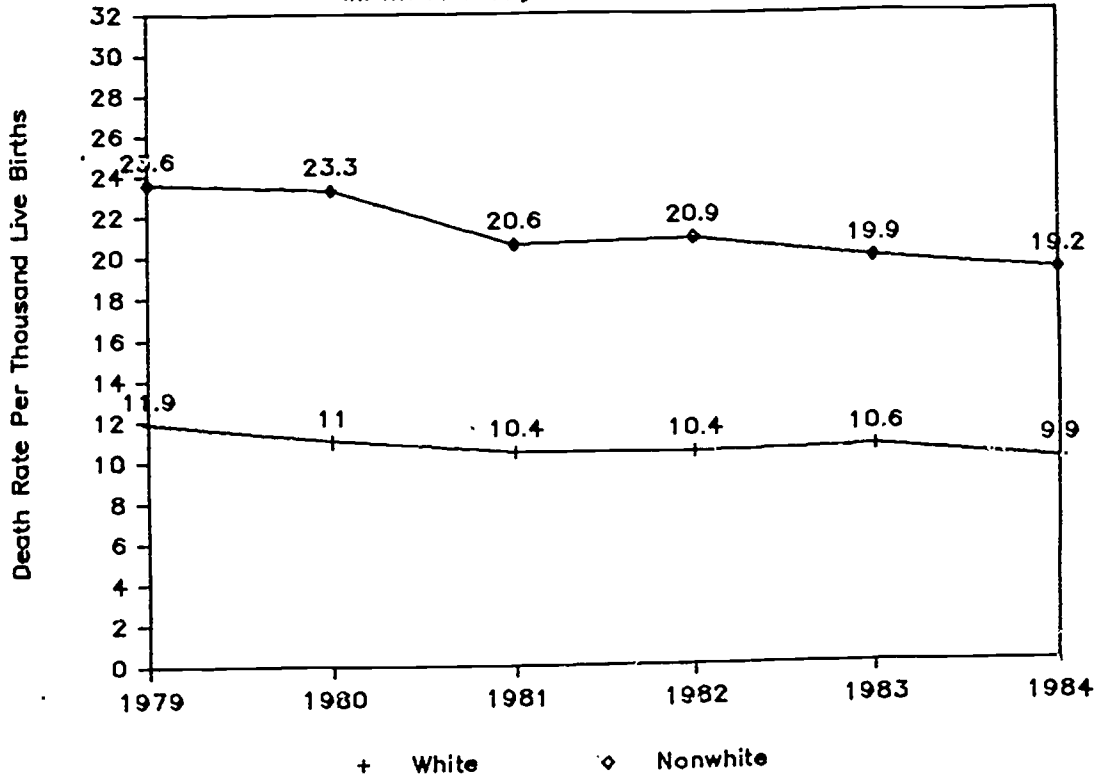
Nonwhite to White ratio (1979): 1.98      (1984): 1.94      (Percent Change In Ratio 1979-1984): -2.21

L O W   B I R T H   W E I G H T   P E R C E N T

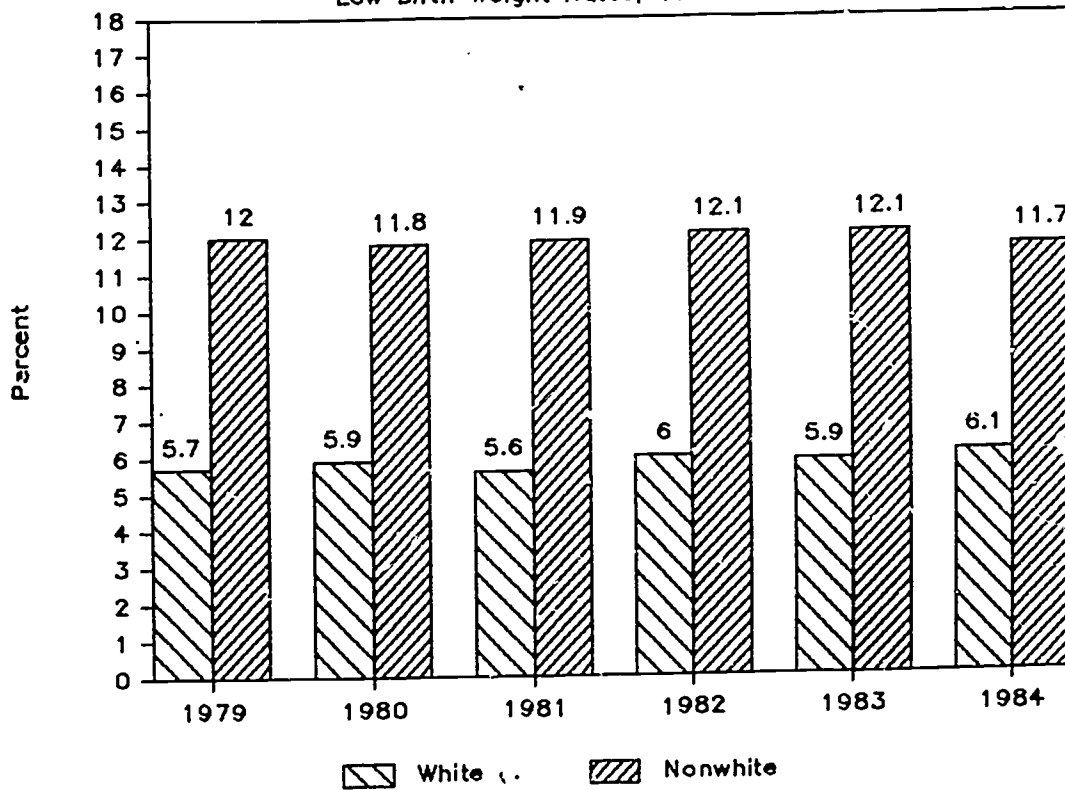
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.7	5.9	5.6	6.0	5.9	6.1	5.9	1.46
Nonwhite	12.0	11.8	11.9	12.1	12.1	11.7	11.9	-0.49
TOTAL	8.8	8.8	8.7	8.9	8.9	8.8	8.8	0.01

Nonwhite to White ratio (1979): 2.11      (1984): 1.92      (Percent Change In Ratio 1979-1984): -8.89

## State of Mississippi Infant Mortality Rates, 1979-1984



## State of Mississippi Low Birth Weight Rates, 1979-1984



STATE OF MISSOURI

NUMBER OF LIVE BIRTHS (1984): 74,422

NUMBER OF INFANT DEATHS (1984): 769

TOTAL POPULATION (1980): 4,917,009

NUMBER (and percent) LIVING BELOW POVERTY (1980): 582,000 (12.2%)

RACIAL COMPOSITION (BY PERCENT)

White: 88.4

Nonwhite: 11.6 (The Nonwhite population is 90% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 62,842

PERCENT WIC "ELIGIBLES" SERVED: 37%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.1	11.0	11.7	10.1	9.2	9.0	10.5	-5.50
Nonwhite	22.0	19.4	17.7	19.6	18.1	17.0	19.0	-4.72
TOTAL	13.7	12.3	12.7	11.7	10.7	10.3	11.9	-5.43

Nonwhite to White ratio (1979): 1.82 (1984): 1.89 (Percent Change In Ratio 1979-1984): 3.89

L O W B I R T H W E I G H T P E R C E N T

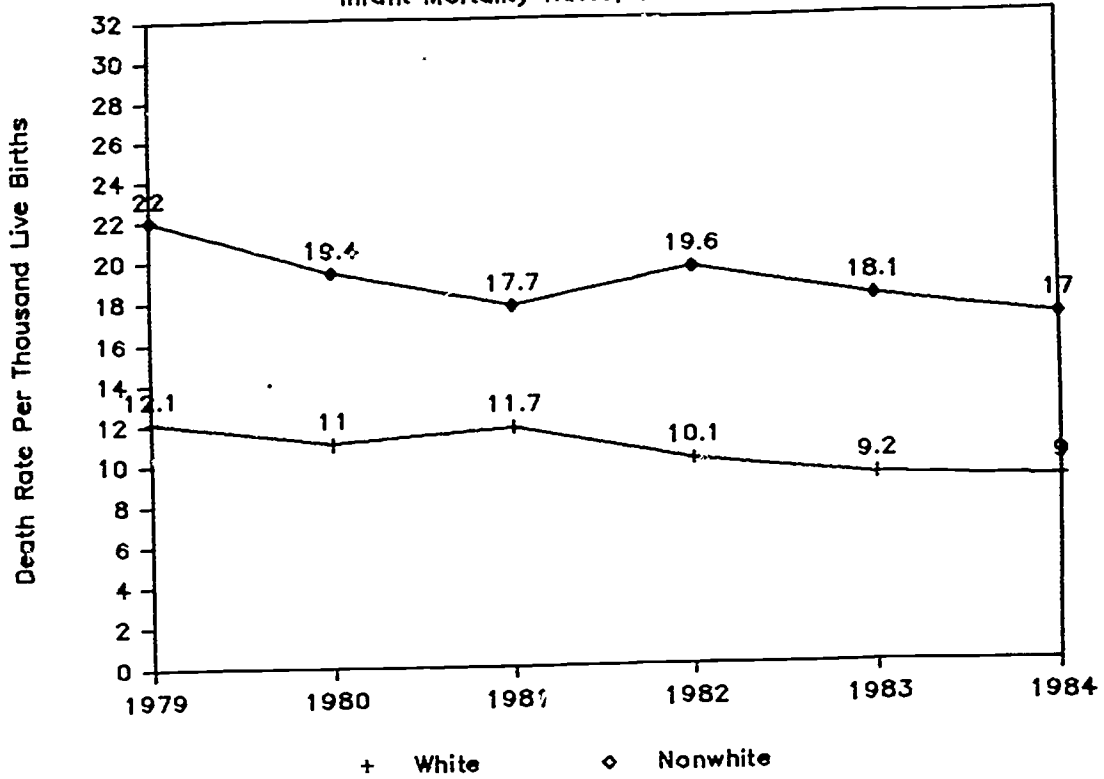
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.6	5.5	5.7	5.5	5.5	5.5	5.6	-0.33
Nonwhite	12.3	12.3	12.1	12.1	12.7	12.2	12.3	-0.12
TOTAL	6.7	6.6	6.7	6.6	6.7	6.6	6.7	-0.29

Nonwhite to White ratio (1979): 2.20 (1984): 2.22 (Percent Change In Ratio 1979-1984): 0.99

202

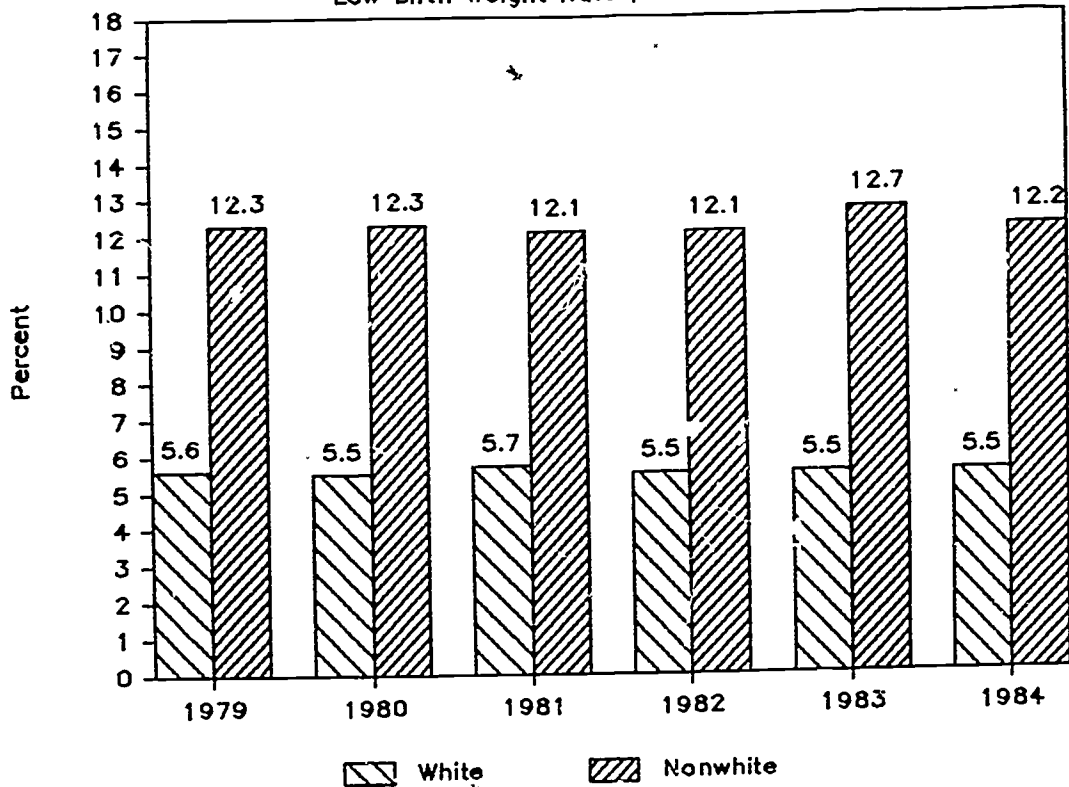
## State of Missouri

### Infant Mortality Rates, 1979-1984



## State of Missouri

### Low Birth Weight Rates, 1979-1984



S T A T E   O F   M O N T A N A

NUMBER OF LIVE BIRTHS (1984): 14,141

NUMBER OF INFANT DEATHS (1984): 125

TOTAL POPULATION (1980): 787,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 94,000 (12.3%)

RACIAL COMPOSITION (BY PERCENT)

White: 94

Nonwhite: 6.0 (The Nonwhite population is 4.3% Black and 79.4% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 11,916

PERCENT WIC "ELIGIBLES" SERVED: 35.6%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.6	11.8	10.0	10.0	8.6	8.9	10.0	-2.89
Nonwhite	12.3	17.6	15.9	10.6	11.7	8.2	12.7	-3.89
TOTAL	10.7	12.4	10.7	10.1	9.0	8.8	10.3	-3.31

Nonwhite to White ratio (1979): 1.16      (1984): 0.92      (Percent Change In Ratio 1979-1984): -20.60

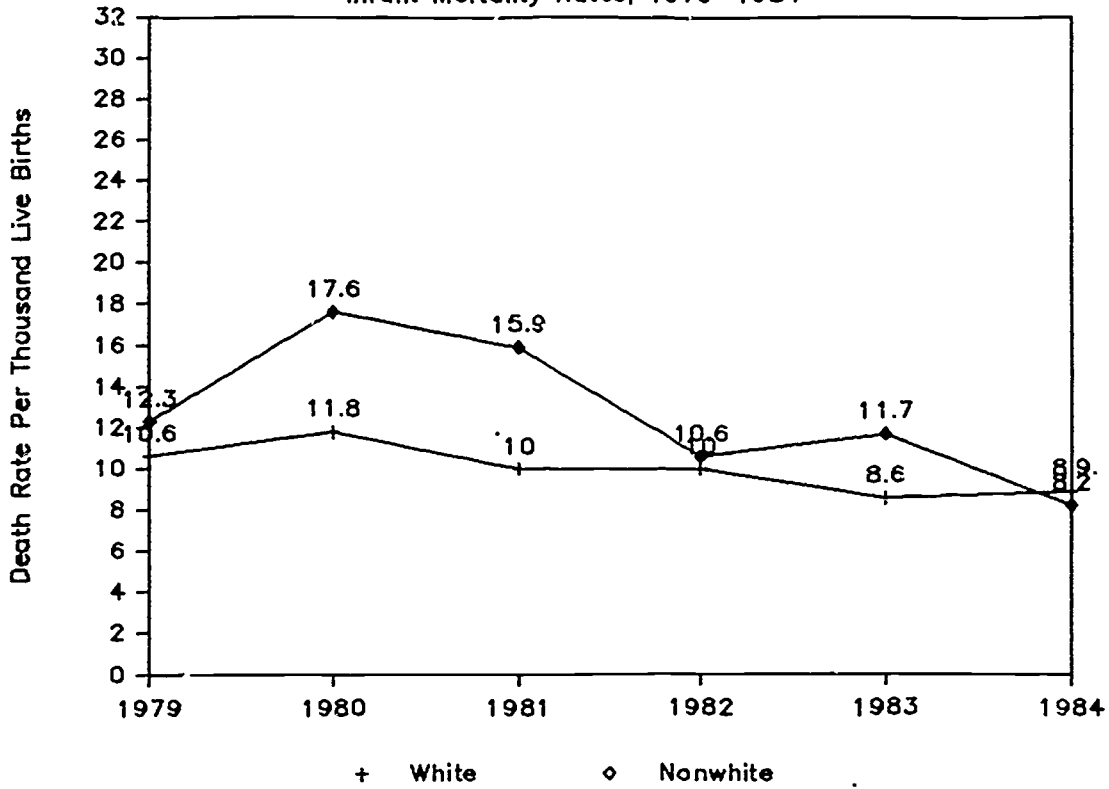
L O W   B I R T H   W E I G H T   P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.5	5.5	5.5	5.6	5.5	5.7	5.6	0.73
Nonwhite	6.0	6.8	6.0	5.8	6.6	6.9	6.4	2.31
TOTAL	5.6	5.6	5.5	5.6	5.6	5.9	5.6	1.08

Nonwhite to White ratio (1979): 1.09      (1984): 1.21      (Percent Change In Ratio 1979-1984): 10.96

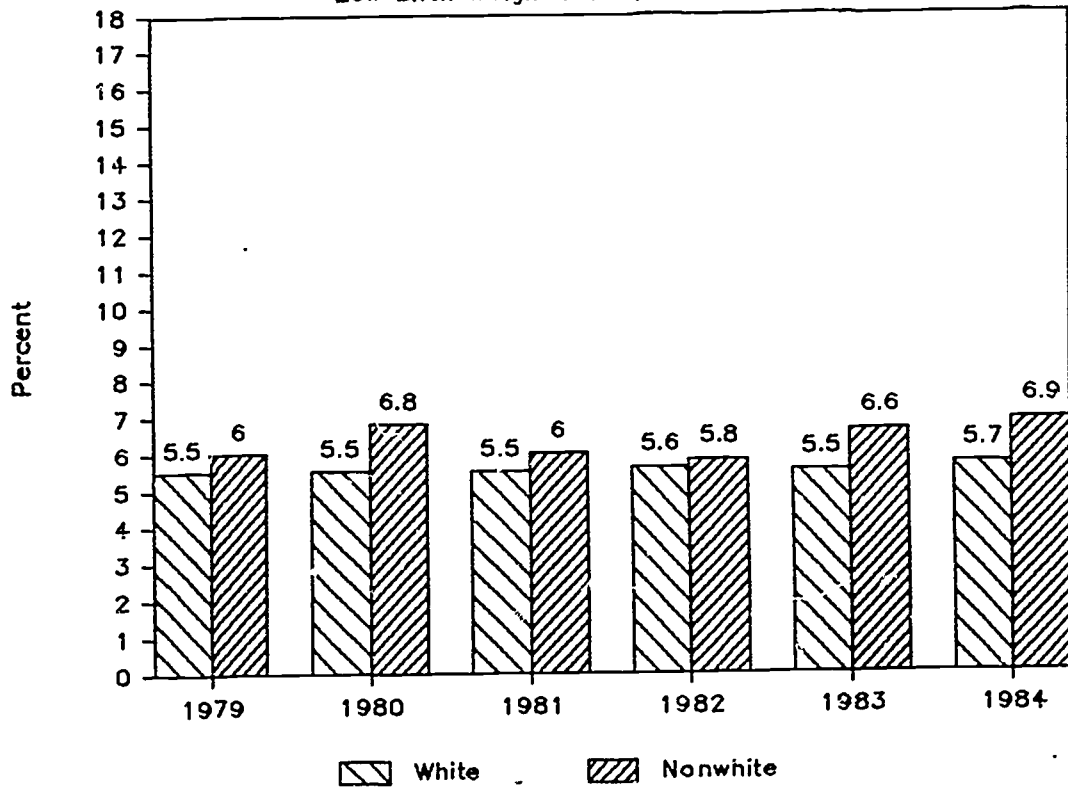
## State of Montana

Infant Mortality Rates, 1979-1984



## State of Montana

Low Birth Weight Rates, 1979-1984





S T A T E   O F   N E B R A S K A

NUMBER OF LIVE BIRTHS (1984): 26,099

NUMBER OF INFANT DEATHS (1984): 251

TOTAL POPULATION (1980): 1,570,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 163,000 (10.7%)

RACIAL COMPOSITION (BY PERCENT)

White: 94.9

Nonwhite: 5.1 (The Nonwhite population is 60% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1994): 15,530

PERCENT WIC "ELIGIBLES" SERVED: 30.4%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 4,468

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.1	10.9	9.2	9.6	9.8	9.2	10.0	-3.42
Nonwhite	16.7	17.2	15.5	13.7	10.3	N/A	14.7	-10.83
TOTAL	11.6	11.5	9.9	10.0	9.8	9.6	10.4	-3.56

Nonwhite to White ratio (1979): 1.50      (1984): 1.12<sup>a</sup>      (Percent Change In Ratio 1979-1984): -25.33%

L O W   B I R T H   W E I G H T   P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.2	5.2	5.0	5.0	5.0	5.0	5.1	-0.77
Nonwhite	8.8	9.2	10.0	9.5	8.2	N/A	9.1	-0.72
TOTAL	5.6	5.6	5.5	5.5	5.4	5.4	5.5	-0.72

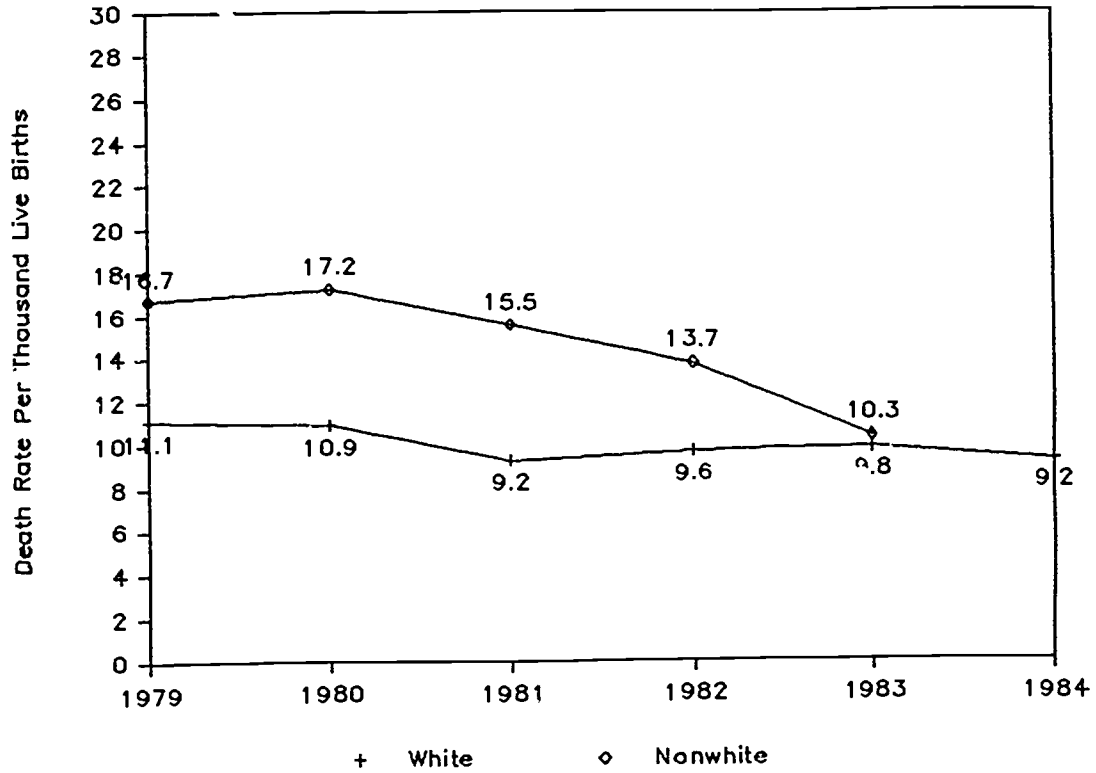
Nonwhite to White ratio (1979): 1.69      (1984): 1.64<sup>a</sup>      (Percent Change In Ratio 1979-1984): -2.96%

Footnotes:

<sup>a</sup> Based on 1983 data.

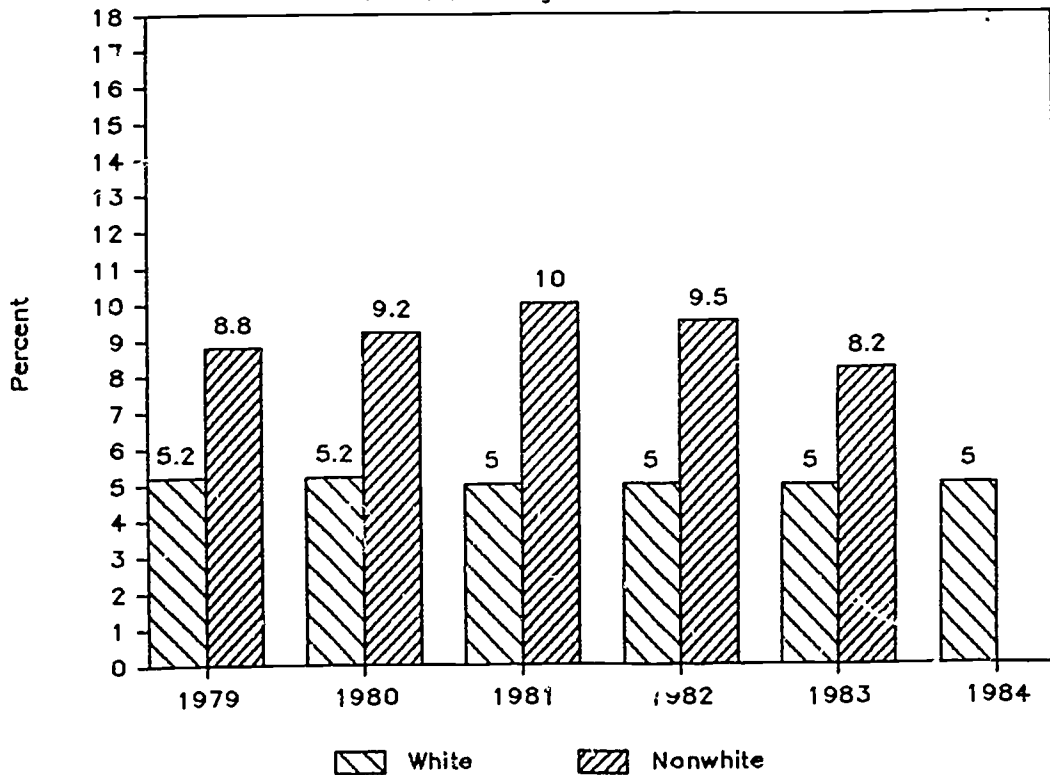
# State of Nebraska

## Infant Mortality Rates, 1979-1984



# State of Nebraska

## Low Birth Weight Rates, 1979-1984



S T A T E   O F   N E V A D A

NUMBER OF LIVE BIRTHS (1984): 15,263

NUMBER OF INFANT DEATHS (1984): 172

TOTAL POPULATION (1980): 800,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 69,000 (8.7%)

RACIAL COMPOSITION (BY PERCENT)

White: 87.5

Nonwhite: 12.5 (The NonWhite population is 51% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 11,112

PERCENT WIC "ELIGIBLES" SERVED: 50.2%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.1	10.7	11.4	9.9	10.3	11.1	10.9	-1.28
Nonwhite	22.5	18.3	17.1	15.3	13.6	12.1	16.5	-11.58
TOTAL	13.5	11.7	12.3	10.7	10.8	11.3	11.7	-3.13

Nonwhite to White ratio (1979): 1.86      (1984): 1.09      (Percent Change In Ratio 1979-1984): -41.38

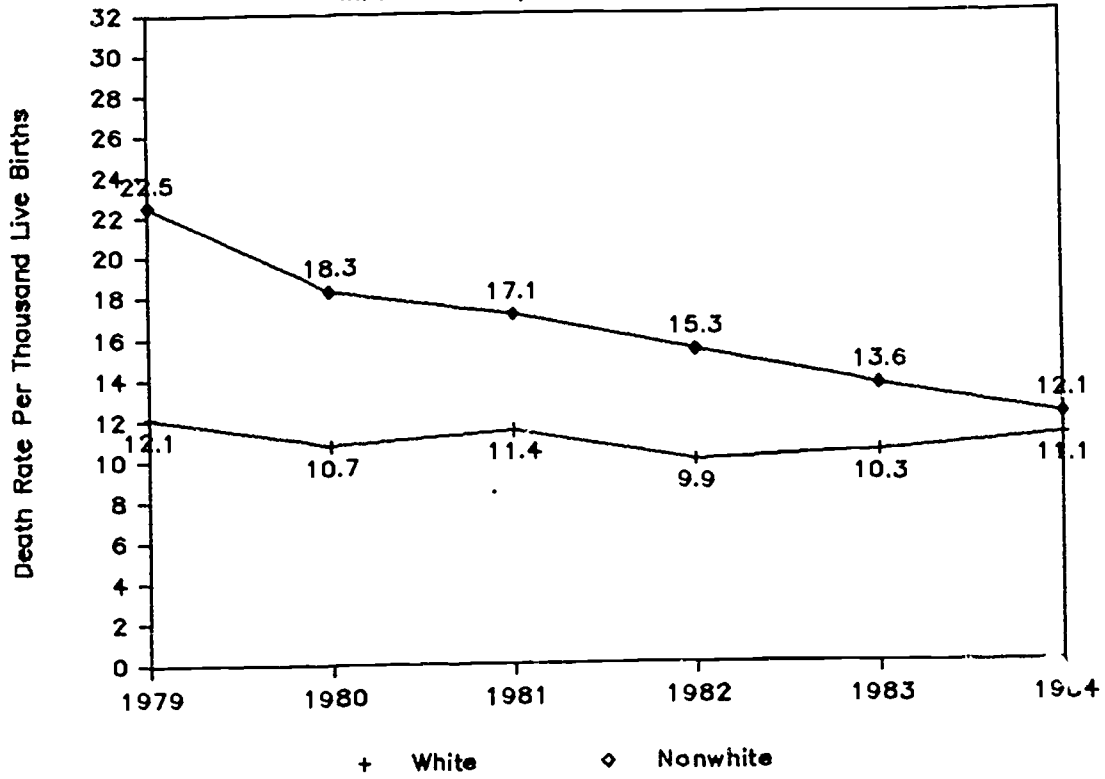
L O W   B I R T H   W E I G H T   P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.0	6.4	6.7	6.2	7.3	6.7	6.6	2.68
Nonwhite	17.6	10.1	10.2	9.9	10.1	10.6	11.4	-7.52
TOTAL	7.5	6.9	7.2	6.7	7.7	7.3	7.2	-0.17

Nonwhite to White ratio (1979): 2.93      (1984): 1.58      (Percent Change In Ratio 1979-1984): -46.07

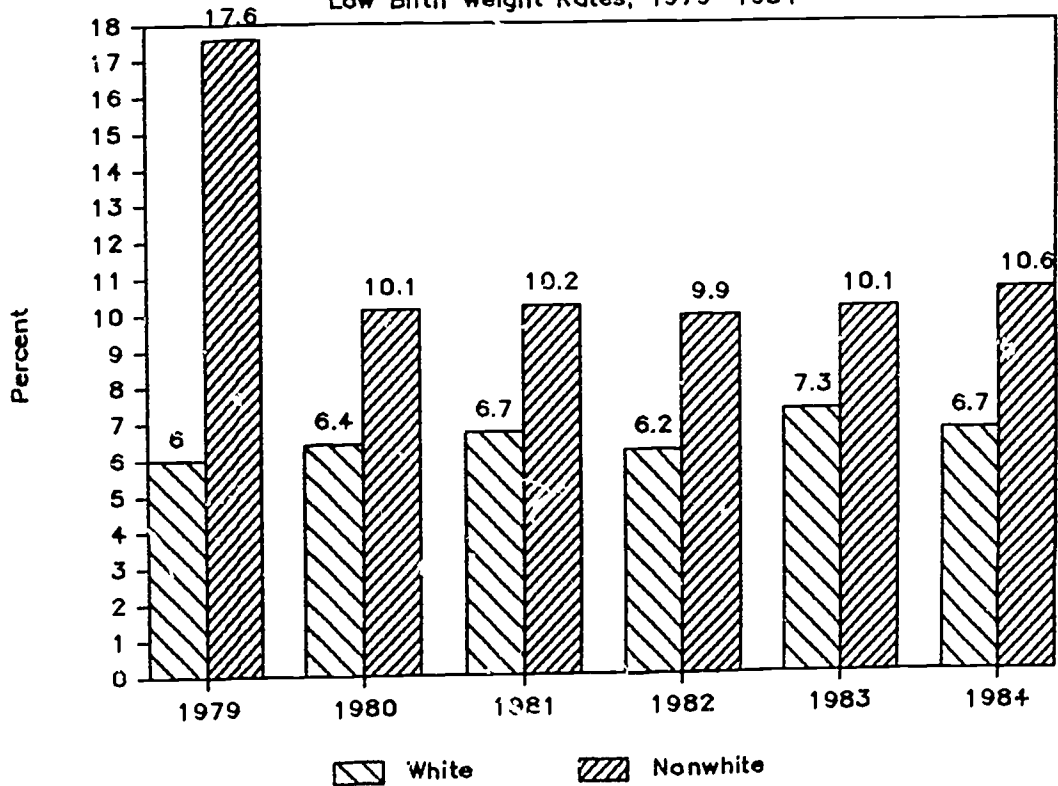
## State of Nevada

### Infant Mortality Rates, 1979-1984



## State of Nevada

### Low Birth Weight Rates, 1979-1984



289

STATE OF NEW HAMPSHIRE

NUMBER OF LIVE BIRTHS (1984): 14,211

NUMBER OF INFANT DEATHS (1984): 145

TOTAL POPULATION (1980): 921,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 75,000 (8.5%)

RACIAL COMPOSITION (BY PERCENT)

White: 98.8

Nonwhite: 1.2 (The NonWhite population is 36.4% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 12,852

PERCENT WIC "ELIGIBLES" SERVED: 49.4%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White <sup>a</sup>	N/A	N/A	N/A	N/A	N/A	N/A	---	---
Nonwhite <sup>a</sup>	N/A	N/A	N/A	N/A	N/A	N/A	---	---
TOTAL	10.3	9.8	9.7	11.0	8.4	10.2	9.9	1.06

Nonwhite to White ratio (1979): -- (1984): -- (Percent Change In Ratio 1979-1984): ---

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White <sup>a</sup>	N/A	N/A	N/A	N/A	N/A	N/A	---	---
Nonwhite <sup>a</sup>	N/A	N/A	N/A	N/A	N/A	N/A	---	---
TOTAL	5.9	5.3	5.0	5.2	5.0	5.0	5.2	-3 14

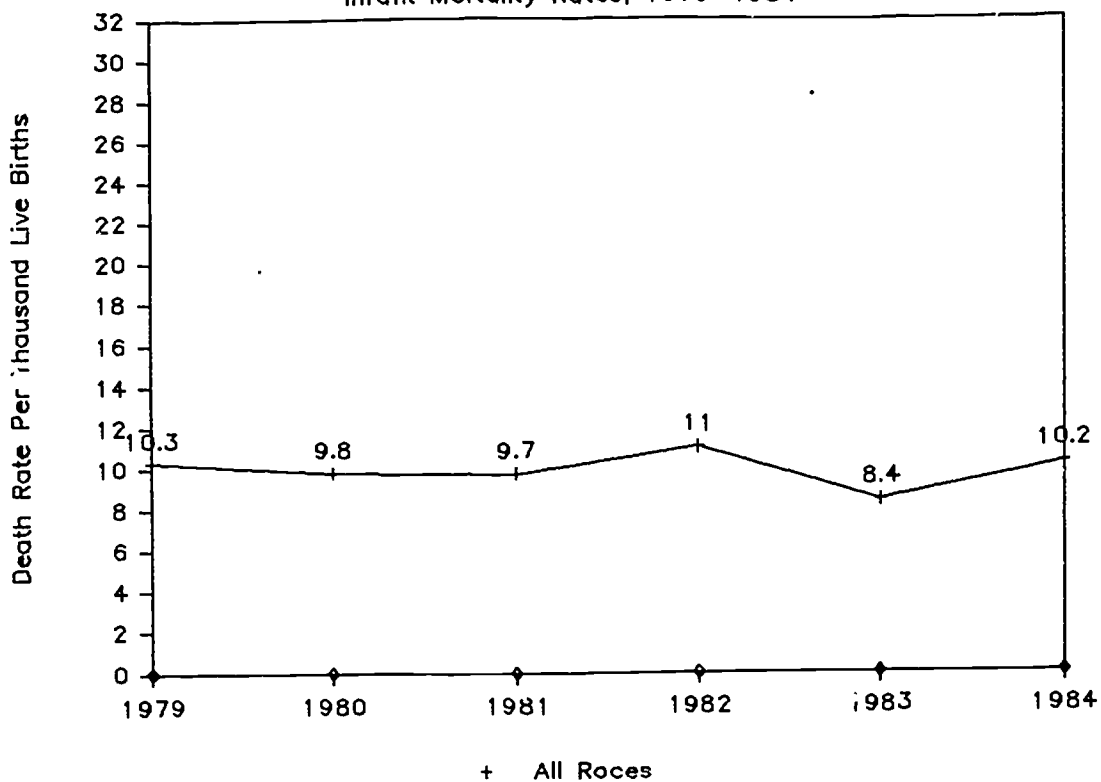
Nonwhite to White ratio (1979): -- (1984): -- (Percent Change In Ratio 1979-1984): ---

Footnotes:

<sup>a</sup> Because New Hampshire has such a small nonwhite population, the state-released vital statistics are for the total population only.

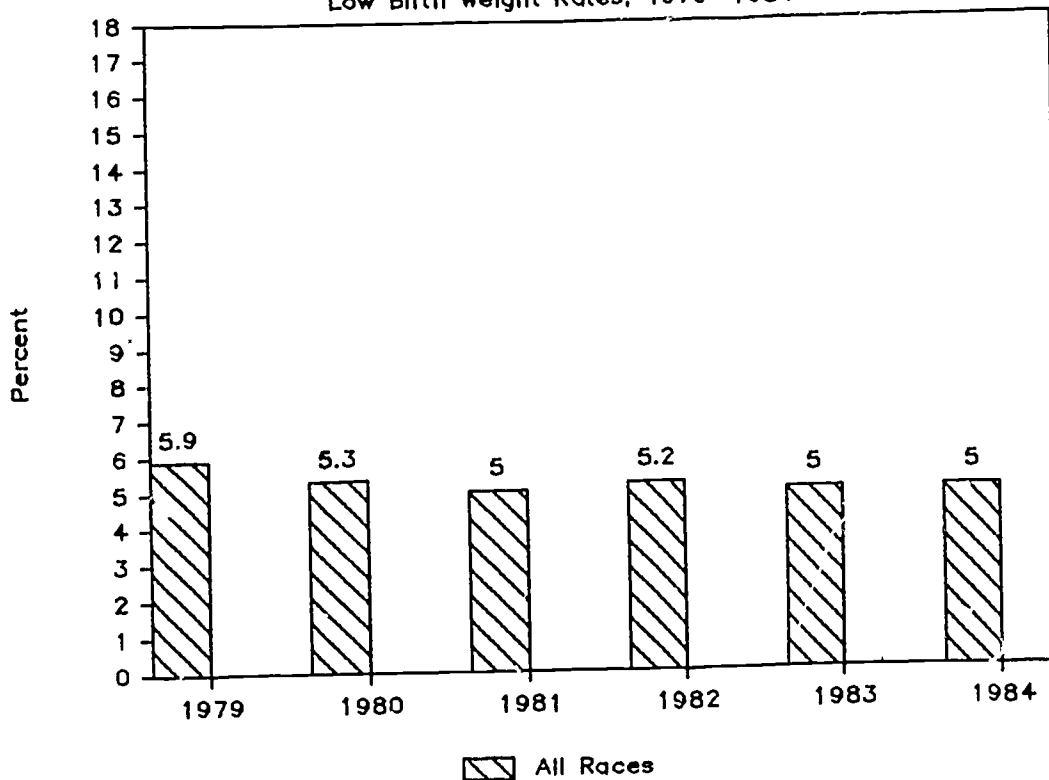
## State of New Hampshire

Infant Mortality Rates, 1979-1984



## State of New Hampshire

Low Birth Weight Rates, 1979-1984



STATE OF NEW JERSEY

NUMBER OF LIVE BIRTHS (1984): 100,950                      NUMBER OF INFANT DEATHS (1984): 1,090  
 TOTAL POPULATION (1980): 7,365,000                      NUMBER (and percent) LIVING BELOW POVERTY (1980): 689,000 (9.5%)

RACIAL COMPOSITION (BY PERCENT)

White: 83.2  
 Nonwhite: 16.8 (The Nonwhite population is 74.7% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 63,990                      PERCENT WIC "ELIGIBLES" SERVED: 32.8%  
 AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.4	10.3	8.9	9.6	9.3	9.0	9.6	-2.61
Nonwhite	20.7	19.6	16.3	18.9	18.0	16.7	18.4	-3.64
TOTAL	12.8	12.5	10.6	11.7	11.3	10.8	11.6	-3.00

Nonwhite to White ratio (1979): 1.99                      (1984): 1.86                      (Percent Change In Ratio 1979-1984): -6.77

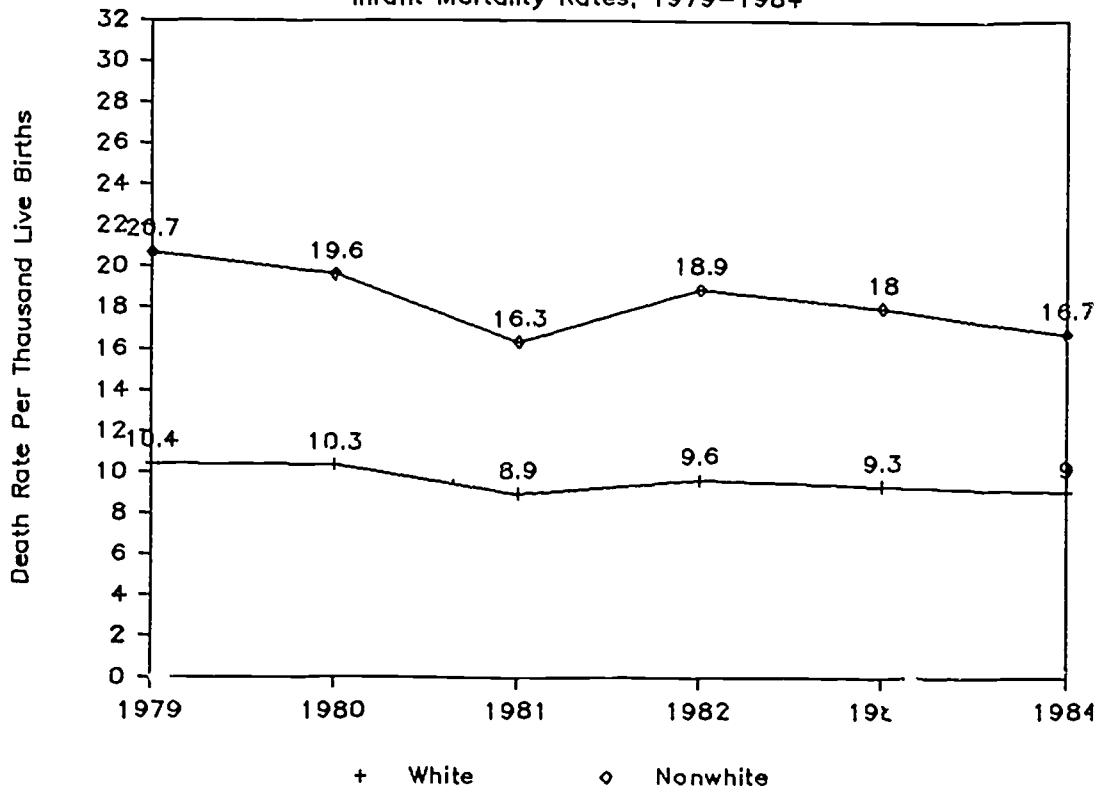
L O W   B I R T H   W E I G H T   P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	N/A	N/A	N/A	N/A	N/A	N/A	--	--
Nonwhite	N/A	N/A	N/A	N/A	N/A	N/A	--	--
TOTAL	7.2	7.1	7.0	6.8	7.1	6.9	7.0	-0.81

Nonwhite to White ratio (1979): --                      (1984): --                      (Percent Change In Ratio 1979-1984): --

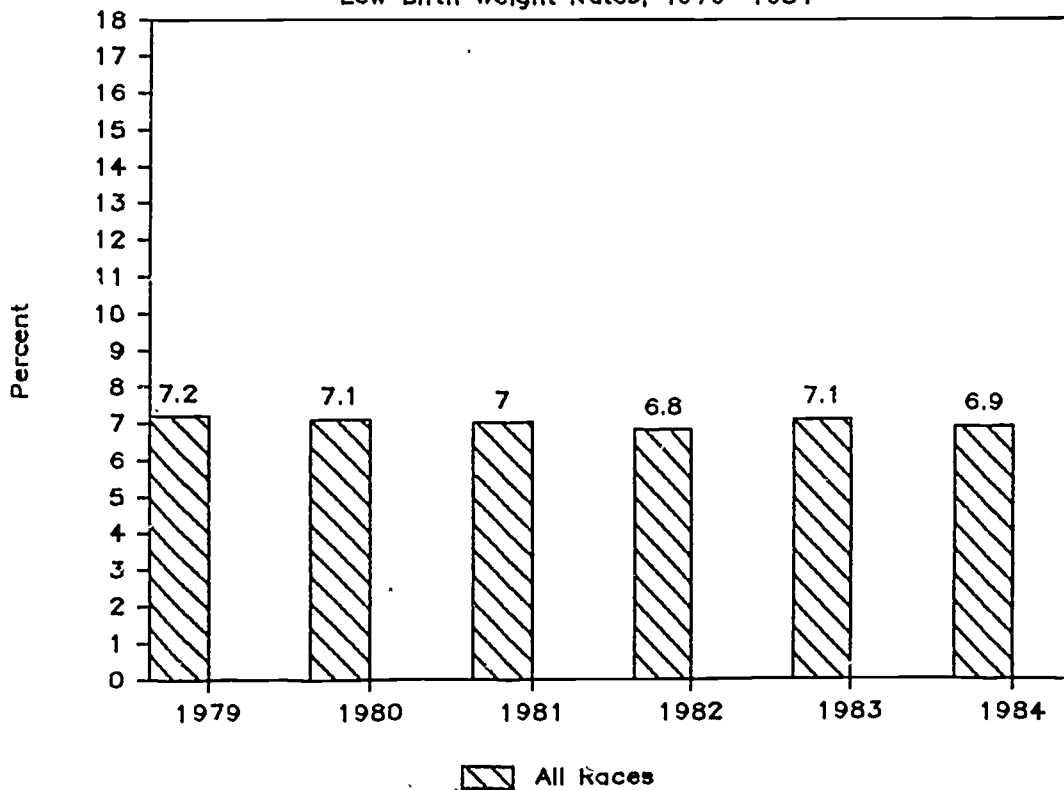
# State of New Jersey

Infant Mortality Rates, 1979-1984



# State of New Jersey

Low Birth Weight Rates, 1979-1984





STATE OF NEW MEXICO

NUMBER OF LIVE BIRTHS (1984): 27,350

NUMBER OF INFANT DEATHS (1984): 263

TOTAL POPULATION (1980): 1,303,000

PERCENT (and percent) LIVING BELOW POVERTY (1980): 226,000 (17.6)

RACIAL COMPOSITION (BY PERCENT)

White: 75.1

Nonwhite: 24.9 (The Nonwhite population is 7.4% Black and 32.6% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 17,689

PERCENT WIC "ELIGIBLES" SERVED: 25.8

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	13.1	10.6	9.4	11.4	9.8	9.6	10.7	-5.04
Nonwhite	20.9	13.0	10.8	11.6	10.7	9.9	12.8	-12.51
TOTAL	14.2	11.9	9.6	11.4	10.0	9.6	11.0	-6.56

-----  
 Nonwhite to White ratio (1979): 1.60      (1984): 1.03      (Percent Change In Ratio 1979-1984): -35.36

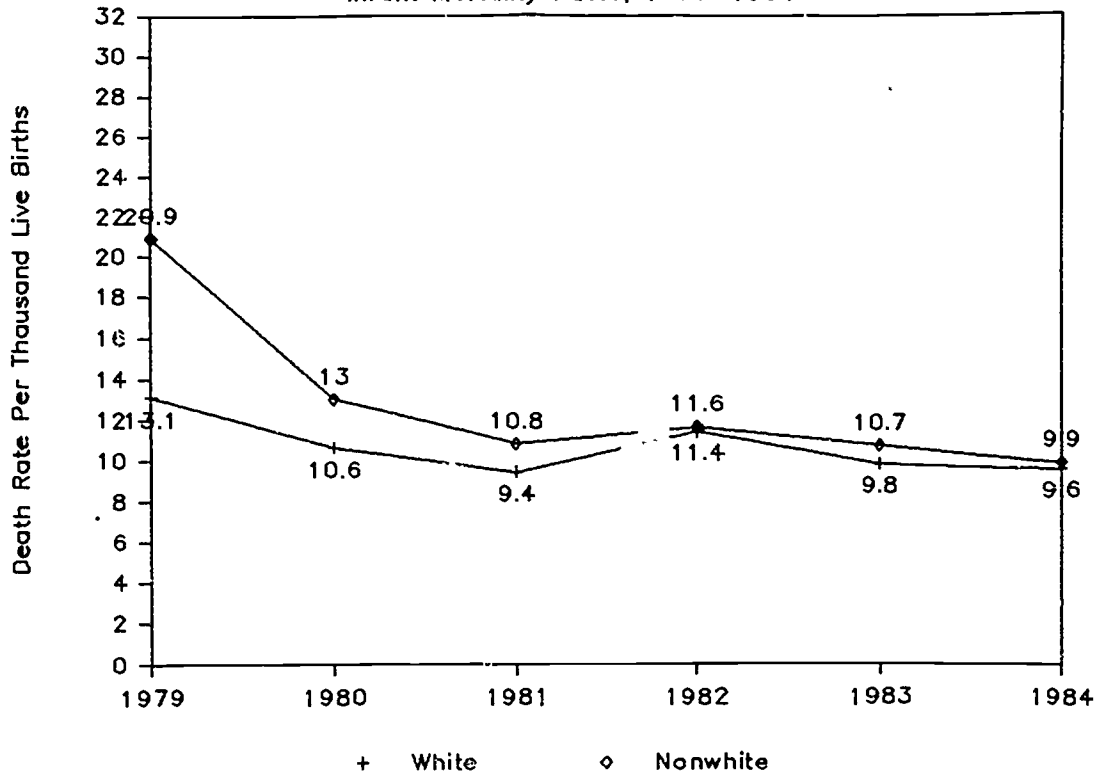
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	8.1	7.6	7.4	7.8	7.6	7.7	7.7	-0.93
Nonwhite	8.4	7.8	7.5	7.2	7.4	6.6	7.5	-4.60
TOTAL	8.1	7.6	7.5	7.7	7.5	7.5	7.7	-1.48

-----  
 Nonwhite to White ratio (1979): 1.04      (1984): 0.86      (Percent Change In Ratio 1979-1984): -17.35

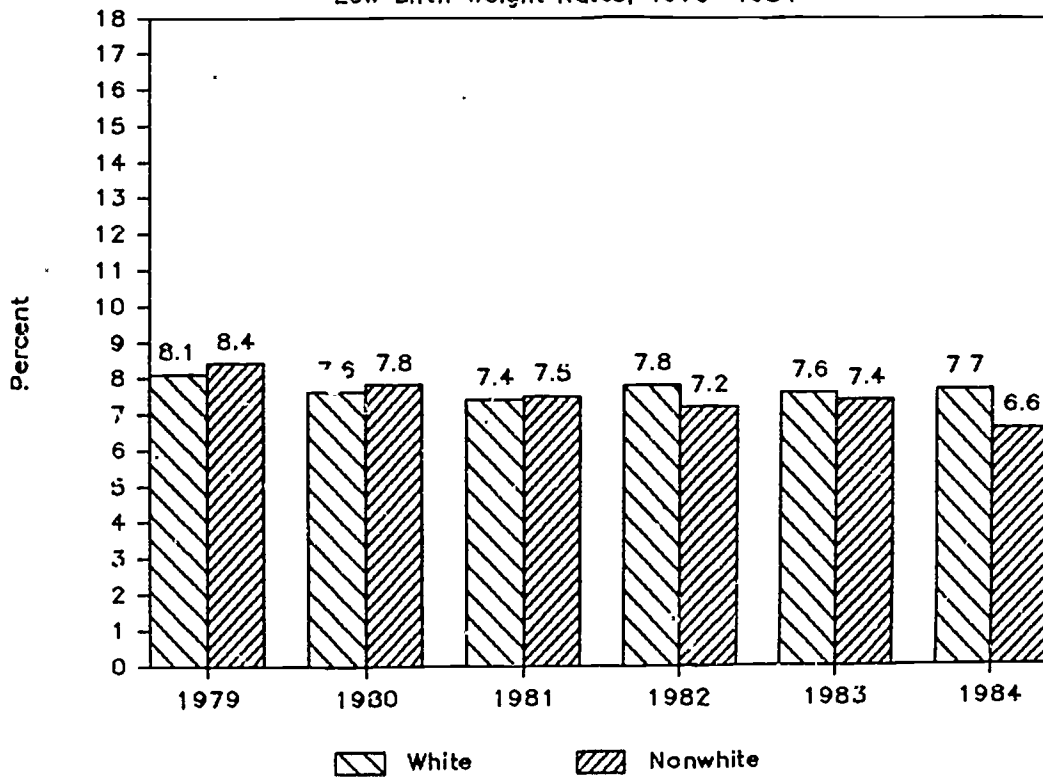
## State of New Mexico

Infant Mortality Rates, 1979-1984



## State of New Mexico

Low Birth Weight Rates, 1979-1984



STATE OF NEW YORK

NUMBER OF LIVE BIRTHS (1984): 250,436                      NUMBER OF INFANT DEATHS (1984): 2,729  
 TOTAL POPULATION (1980): 17,558,000              NUMBER (and percent) LIVING BELOW POVERTY (1980): 2,299,00 (13.4%)

RACIAL COMPOSITION (BY PERCENT)

White: 79.5

Nonwhite: 20.5 (The Nonwhite population is 66.7% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 59,594              PERCENT WIC "ELIGIBLES" SERVED: 34.6%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No program.<sup>a</sup>

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.7	10.7	10.3	10.3	9.4	9.0	10.2	-5.06
Nonwhite	18.9	17.8	17.8	16.7	16.0	14.3	16.9	-5.36
TOTAL	13.5	12.5	12.3	12.2	11.5	10.9	12.2	-4.12

Nonwhite to White ratio (1979): 1.62              (1984): 1.59              (Percent Change In Ratio 1979-1984): -1.64

L O W   B I R T H   W E I G H T   P E R C E N T

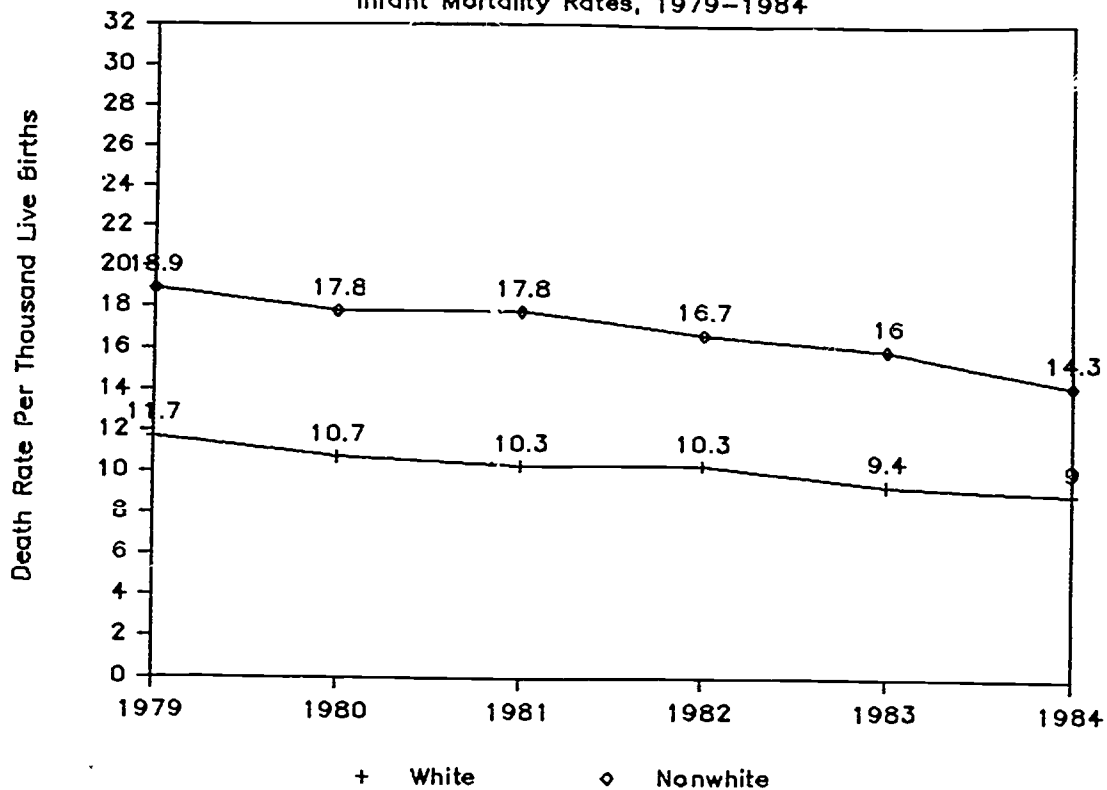
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.3	6.1	6.0	5.9	5.9	5.7	6.0	-1.97
Nonwhite	12.2	11.5	11.5	11.4	11.3	10.9	11.5	-2.20
TOTAL	7.7	7.4	7.4	7.3	7.2	7.0	7.3	-1.88

Nonwhite to White ratio (1979): 1.94              (1984): 1.91              (Percent Change In Ratio 1979-1984): -1.25

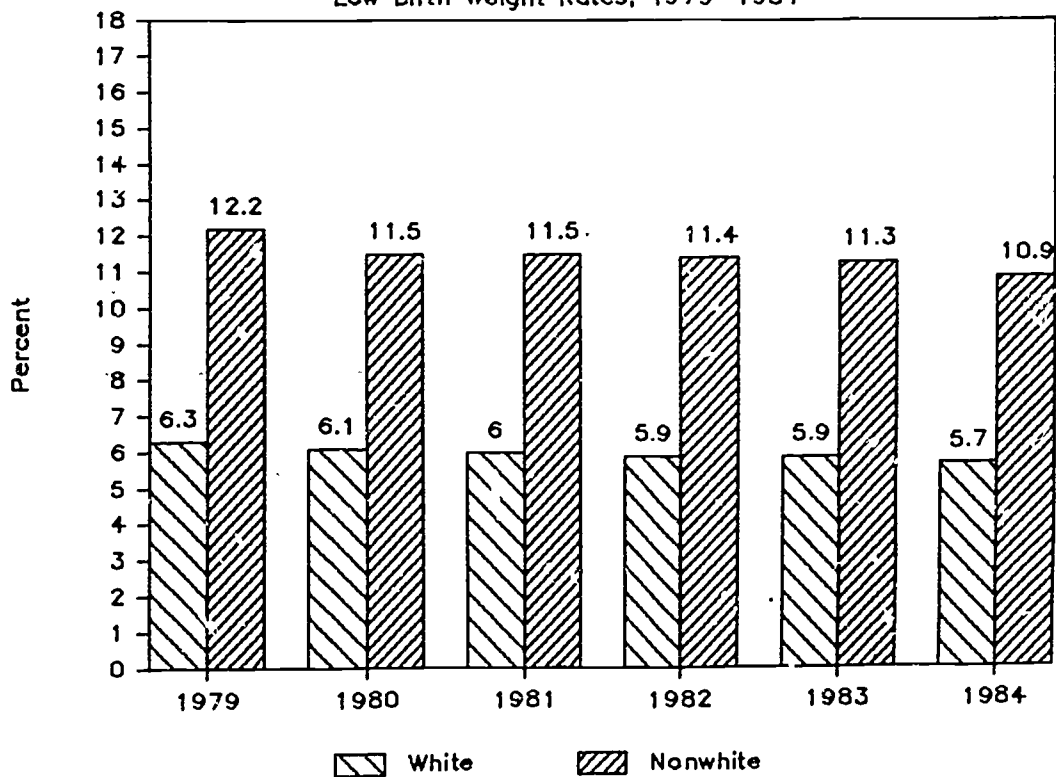
Footnote:

<sup>a</sup> New York submitted an application for a Commodity Supplemental Program, which has not been approved.

## State of New York Infant Mortality Rates, 1979-1984



## State of New York Low Birth Weight Rates, 1979-1984



STATE OF NORTH CAROLINA

NUMBER OF LIVE BIRTHS (1984): 85,986

NUMBER OF INFANT DEATHS (1984): 1,077

TOTAL POPULATION (1980): 5,882,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 840,000 (14.8%

RACIAL COMPOSITION (BY PERCENT)

White: 71.8

Nonwhite: 24.2 (The Nonwhite population is 92.6% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 94,248

PERCENT WIC "ELIGIBLES" SERVED: 40.4%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 1,814<sup>a</sup>

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.2	12.1	10.7	10.9	10.5	10.0	10.9	-2.02
Nonwhite	23.3	19.4	18.3	19.6	19.2	18.2	19.1	-4.51
TOTAL	15.2	14.4	13.2	13.7	13.2	12.5	13.7	-3.75

-----  
 Nonwhite to white ratio (1979): 2.08      (1984): 1.82      (Percent Change in Ratio 1979-1984): -12.52

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.3	6.1	6.0	6.0	5.9	6.1	6.1	-0.62
Nonwhite	12.1	11.8	11.8	12.1	12.1	11.7	11.9	-0.65
TOTAL	8.1	7.9	7.9	8.0	7.9	7.8	7.9	-0.74

-----  
 Nonwhite to white ratio (1979): 1.92      (1984): 1.92      (Percent Change in Ratio 1979-1984): -0.14<sup>b</sup>

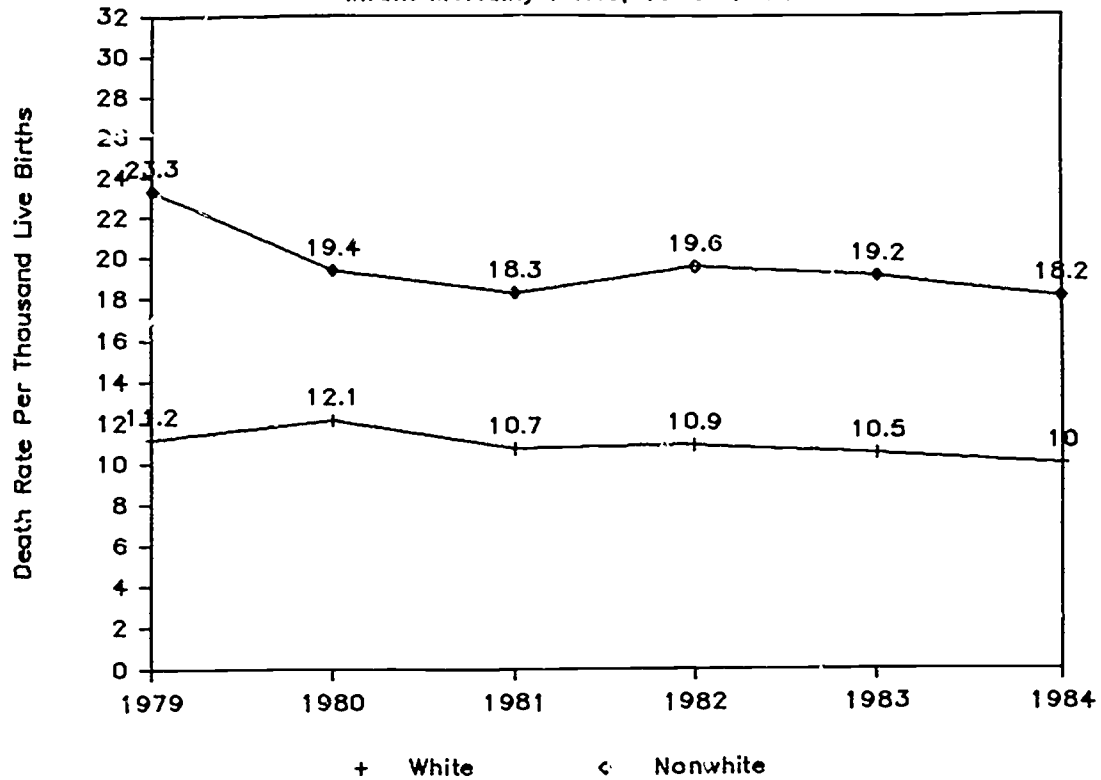
Footnotes:

<sup>a</sup> Figure from, "The Commodity Supplemental Food Program: A Successful Program Held in Check", 1985, The Center on Budget and Policy Priorities, Washington, D.C.

<sup>b</sup> The Nonwhite: white ratios appear identical due to rounding; they actually differed by - 0.14%.

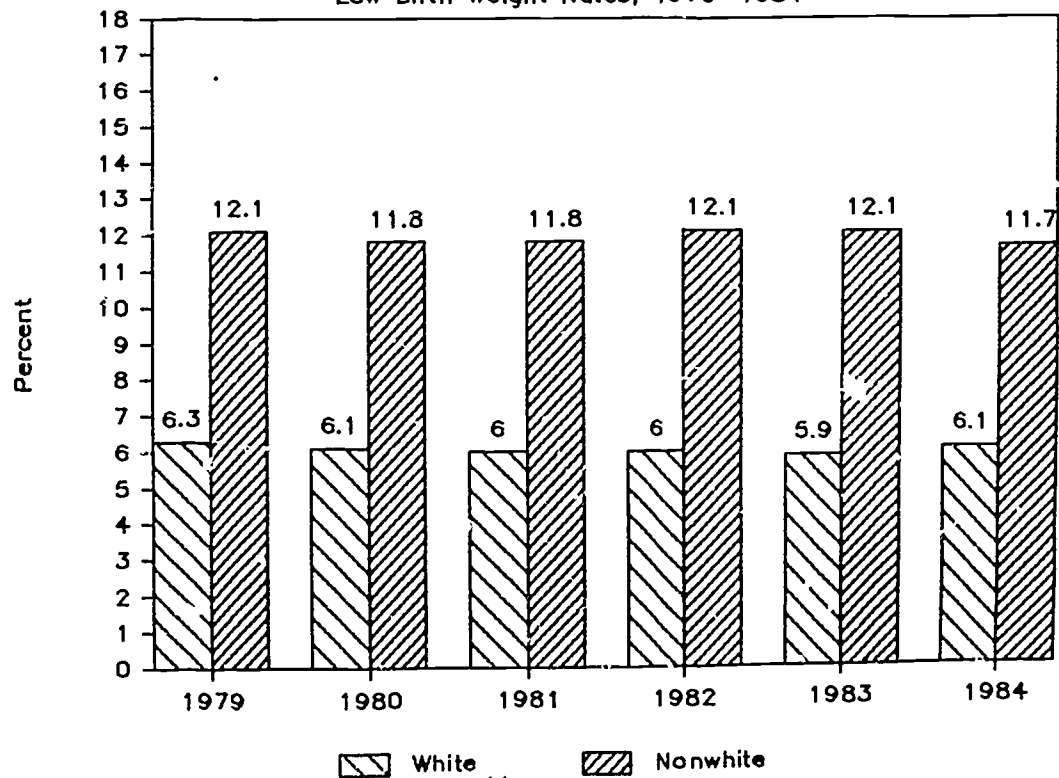
## State of North Carolina

Infant Mortality Rates, 1979-1984



## State of North Carolina

Low Birth Weight Rates, 1979-1984



STATE OF NORTH DAKOTA

NUMBER OF LIVE BIRTHS (1984): 11,833

NUMBER OF INFANT DEATHS (1984): 97

TOTAL POPULATION (1980): 653,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 79,000 (12.6%)

RACIAL COMPOSITION (BY PERCENT)

White: 95.9

Nonwhite: 4.1 (The Nonwhite population is 11.1% Black and 74.8% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 10,581

PERCENT WIC "ELIGIBLES" SERVED: 41.4%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.0	11.6	10.8	10.0	8.4	7.9	10.0	-6.16
Nonwhite	22.2	17.0	16.1	15.9	12.8	10.9	15.8	-12.86
TOTAL	11.9	12.1	11.3	10.6	8.9	8.2	10.5	-7.01

Nonwhite to white ratio (1979): 2.02 (1984): 1.38 (Percent Change In Ratio 1979-1984): -31.63

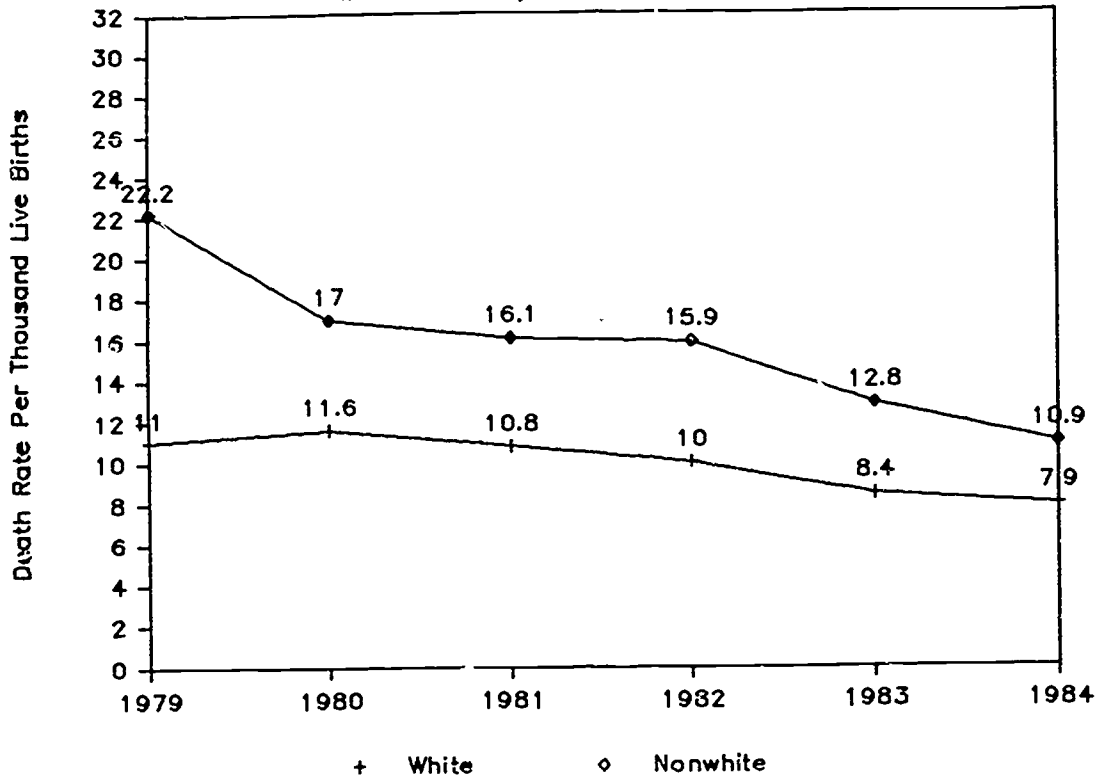
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	4.9	4.6	4.3	4.7	4.7	4.5	4.6	-1.52
Nonwhite	7.3	6.7	6.8	5.6	5.9	7.2	6.6	0.62
TOTAL	5.1	4.8	4.6	4.8	4.8	4.8	4.8	-1.14

Nonwhite to white ratio (1979): 1.49 (1984): 1.60 (Percent Change In Ratio 1979-1984): 7.40

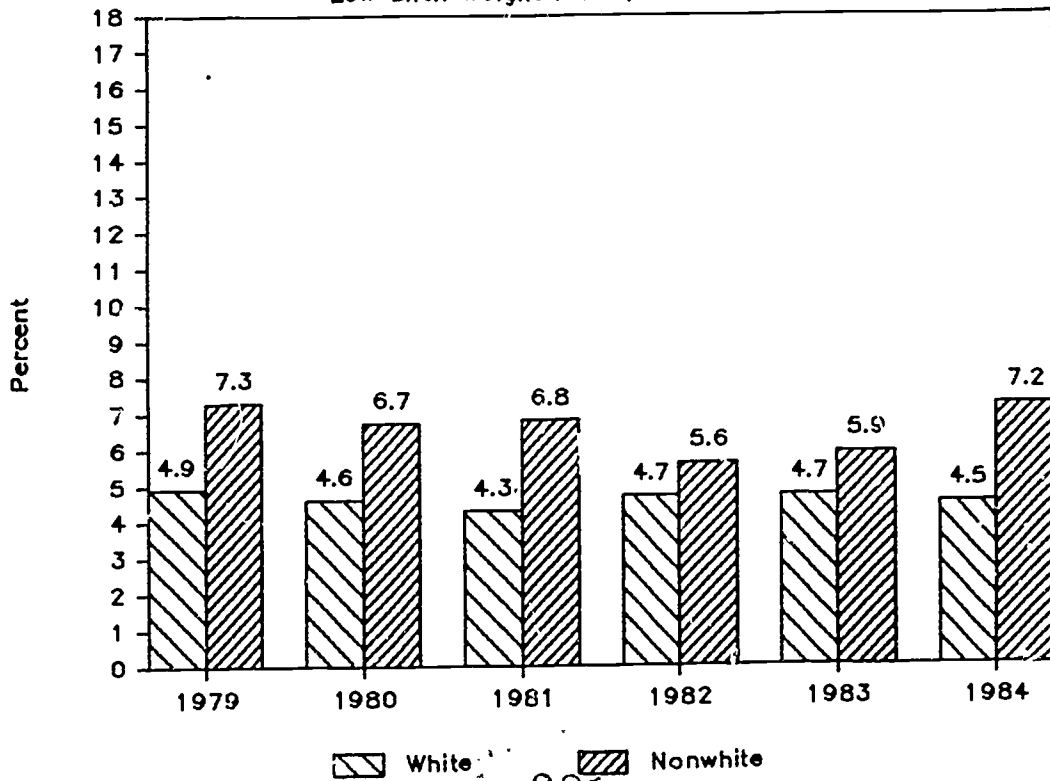
## State of North Dakota

### Infant Mortality Rates, 1979-1984



## State of North Dakota

### Low Birth Weight Rates, 1979-1984



281



STATE OF OHIO

NUMBER OF LIVE BIRTHS (1984): 158,343

NUMBER OF INFANT DEATHS (1984): 1,644

TOTAL POPULATION (1980): 10,798,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 1,089,000 (10.3)

RACIAL COMPOSITION (BY PERCENT)

White: 88.9

Nonwhite: 11.1 (The Nonwhite population is 10.3% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 172,206      PERCENT WIC "ELIGIBLES" SERVED: 51.3%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.6	11.2	10.8	10.3	9.8	9.2	10.5	-4.53
Nonwhite	19.8	21.9	20.8	18.5	18.7	16.8	19.4	-2.91
TOTAL	12.8	12.8	12.3	11.5	11.2	10.4	11.8	-4.03

Nonwhite to White ratio (1979): 1.71      (1984): 1.83      (Percent Change In Ratio 1979-1984): 6.98

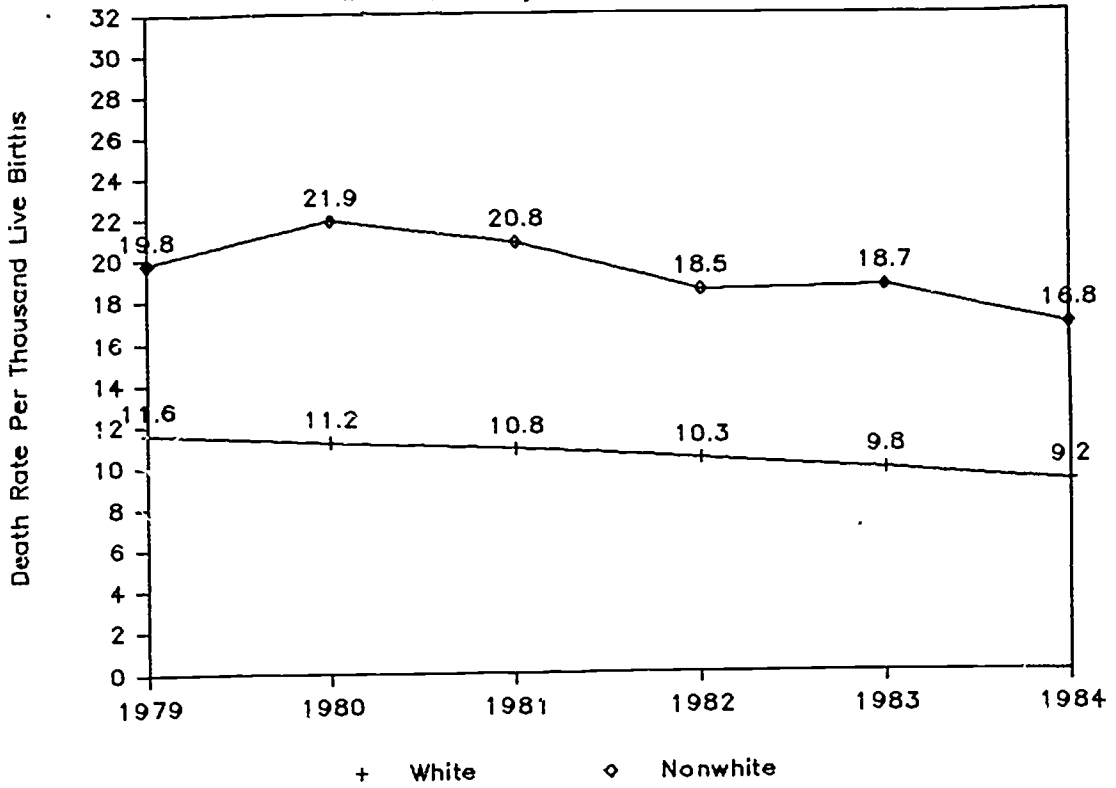
L O W   B I R T H   W E I G H T   P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.7	5.8	5.8	5.7	5.7	5.5	5.7	-0.70
Nonwhite	12.8	12.7	12.8	12.3	12.8	12.0	12.6	-1.22
TOTAL	6.8	6.8	6.8	6.7	6.8	6.5	6.7	-0.88

Nonwhite to White ratio (1979): 2.25      (1984): 2.18      (Percent Change In Ratio 1979-1984): -2.84

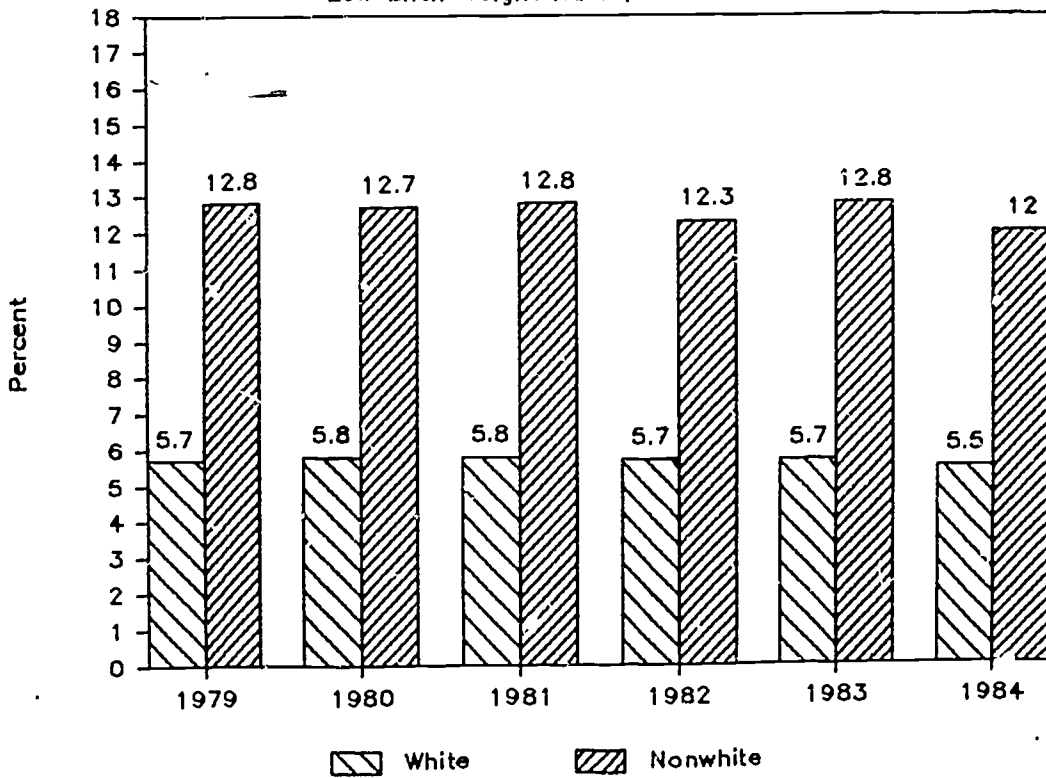
## State of Ohio

### Infant Mortality Rates, 1979-1984



## State of Ohio

### Low Birth Weight Rates, 1979-1984



STATE OF OKLAHOMA

NUMBER OF LIVE BIRTHS (1984): 54,323

NUMBER OF INFANT DEATHS (1984): 568

TOTAL POPULATION (1980): 3,020,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 394,000 (13.4%)

RACIAL COMPOSITION (BY PERCENT)

White: 85.9

Nonwhite: 14.1 (The Nonwhite population is 48% Black and 39.7% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 34,696

PERCENT WIC "ELIGIBLES" SERVED: 32.8%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.3	11.5	11.4	12.2	10.6	10.5	11.3	-1.23
Nonwhite	18.4	15.8	13.5	12.7	11.6	N/A	14.4 <sup>a</sup>	-10.82
TOTAL	12.5	12.7	11.8	12.3	10.3	10.5	11.8	-3.24

Nonwhite to White ratio (1979): 1.63 (1983): 1.09<sup>b</sup> (Percent Change In Ratio 1979-1984): -33.13<sup>b</sup>

L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.0	6.3	6.2	6.3	6.1	5.8	6.1	-0.61
Nonwhite	9.7	7.8	8.6	9.3	9.1	N/A	8.9 <sup>a</sup>	0.40
TOTAL	6.5	6.8	6.6	6.8	6.7	6.3	6.6	-0.55

Nonwhite to White ratio (1979): 1.62 (1983): 1.49<sup>b</sup> (Percent Change In Ratio 1979-1984): 8.02<sup>b</sup>

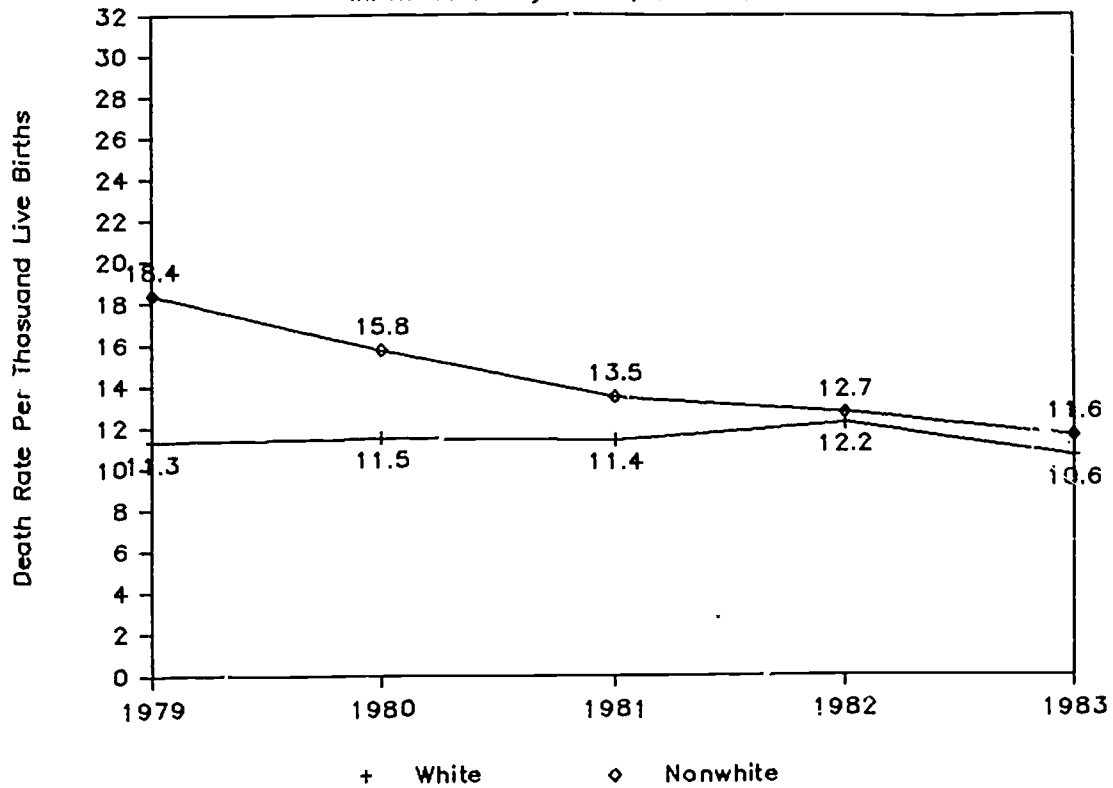
Footnotes:

a Figure based on 1979-1983 data.

b Figure based on 1983 data.

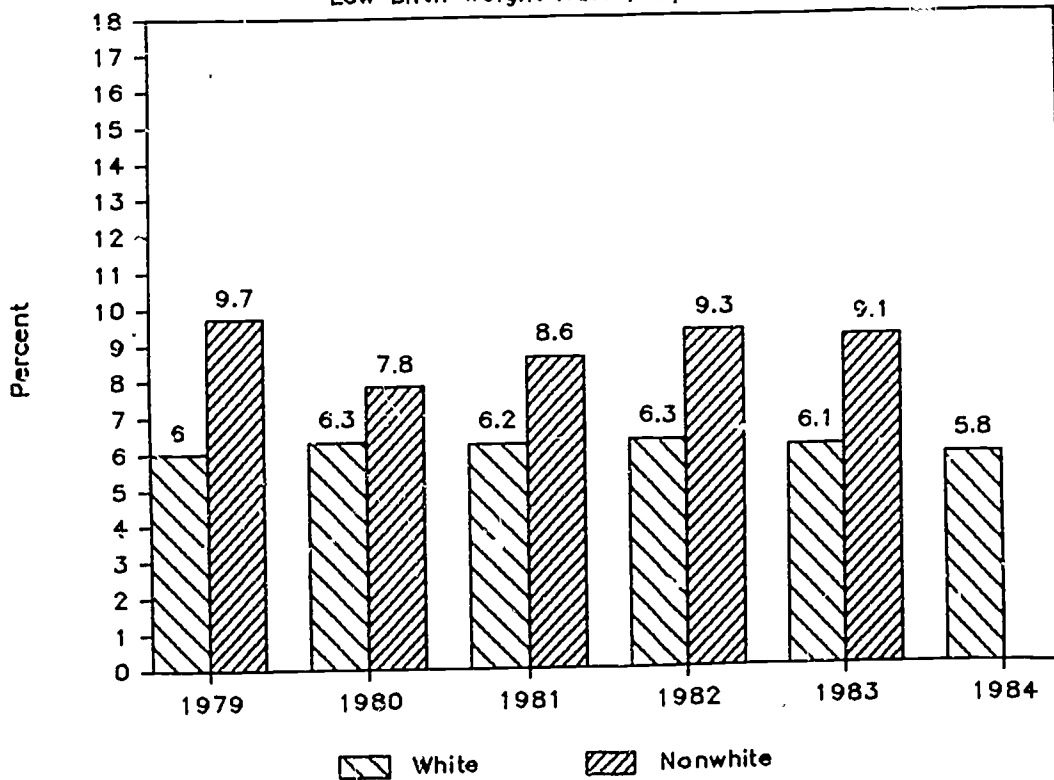
# State of Oklahoma

## Infant Mortality Rates, 1979-1983



# State of Oklahoma

## Low Birth Weight Rates, 1979-1984



STATE OF OREGON

NUMBER OF LIVE BIRTHS (1984): 39,536

NUMBER OF INFANT DEATHS (1984): 388

TOTAL POPULATION (1980): 2,633,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 274,000 (10.7%)

RACIAL COMPOSITION (BY PERCENT)

White: 94.6

Nonwhite: 5.4 (The Nonwhite population is 26.1% Black and 19.2 Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 29,928

PERCENT WIC "ELIGIBLES" SERVED: 34.5%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program<sup>a</sup>.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.8	12.1	10.8	10.4	9.6	9.9	10.6	-1.40
Nonwhite	11.6	12.2	11.3	12.1	10.1	8.4	11.0	-5.70
TOTAL	10.8	12.1	10.8	10.6	9.6	9.8	10.6	-1.58

Nonwhite to White ratio (1979): 1.07 (1984): 0.85 (Percent Change In Ratio 1979-1984): -21.00

L O W B I R T H W E I G H T P E R C E N T

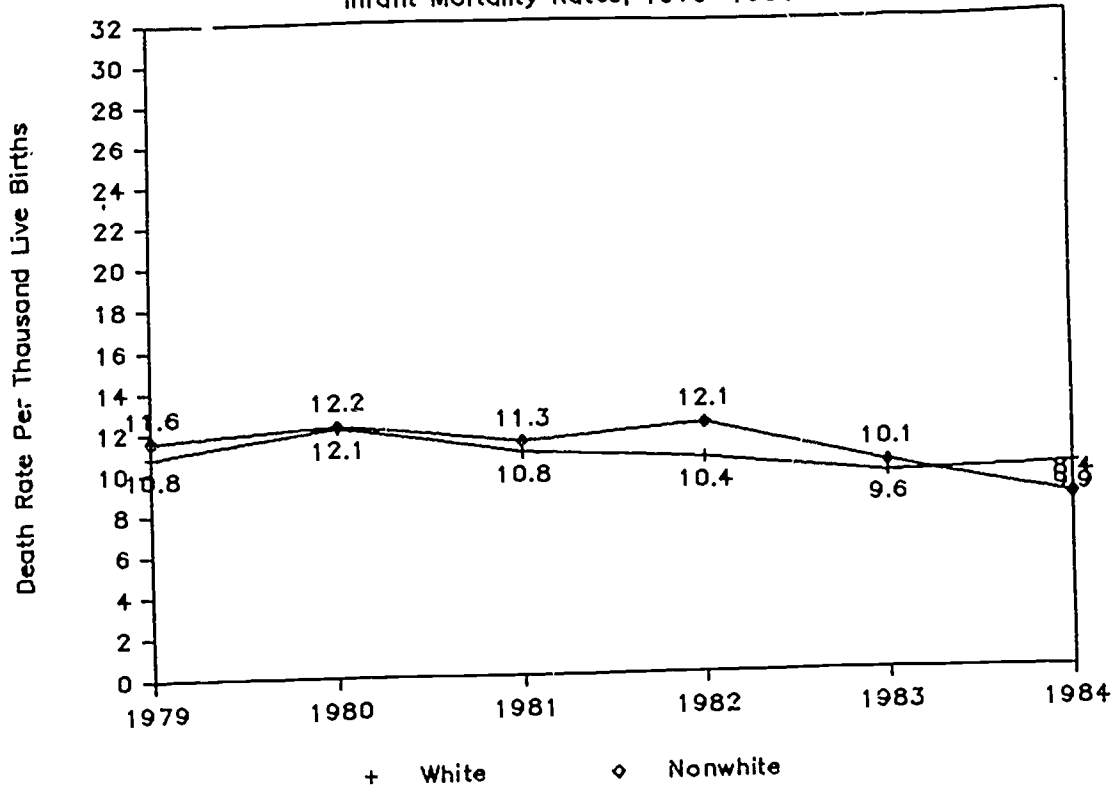
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	N/A	N/A	N/A	N/A	N/A	4.9	4.9 <sup>a</sup>	--
Nonwhite	N/A	N/A	N/A	N/A	N/A	6.9	6.9 <sup>a</sup>	--
TOTAL	5.1	5.0	4.9	4.9	N/A	5.1	5.0 <sup>b</sup>	-1.32 <sup>c</sup>

Nonwhite to White ratio (1979): --- (1984): 1.4i (Percent Change In Ratio 1979-1984): ---

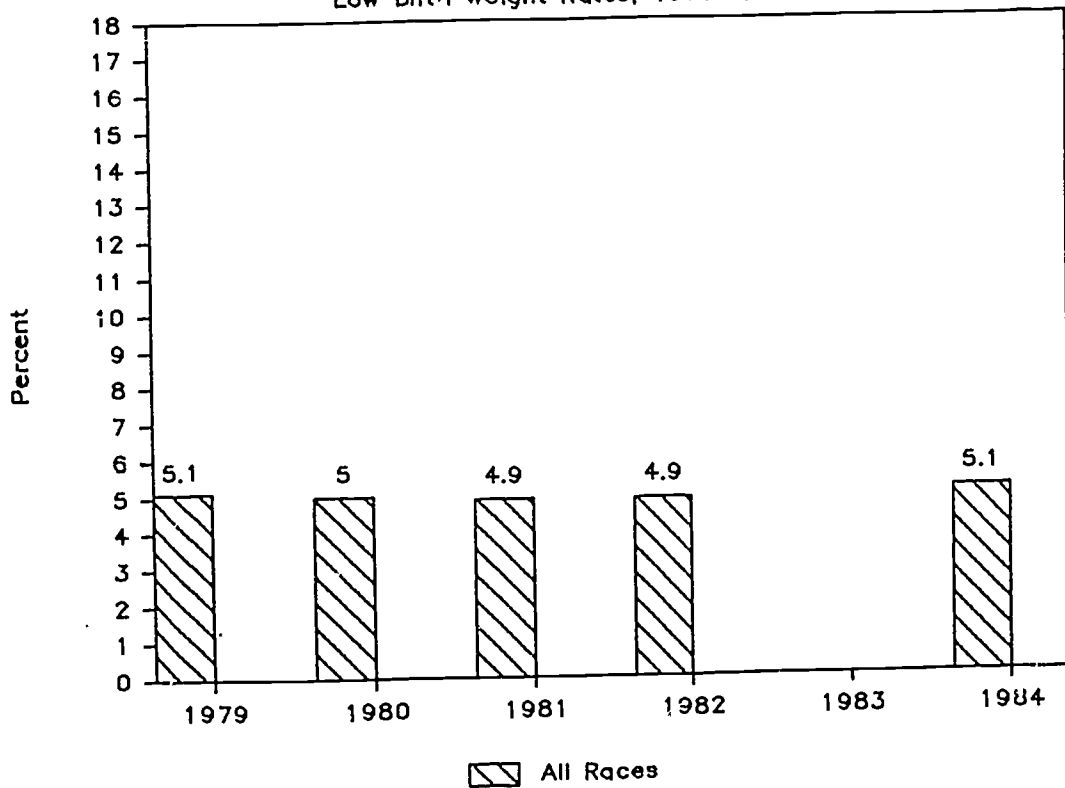
Footnotes:

- a Application for CFS Program was been submitted to USDA in 1985, but had been approved at the time of this report.
- b Figure based on 1984 data alone.
- c Figure based on 1979-82 and 84 data only.
- d Figure based on 1979-82 data only.

## State of Oregon Infant Mortality Rates, 1979-1984



## State of Oregon Low Birth Weight Rates, 1979-1984



COMMONWEALTH OF PENNSYLVANIA

NUMBER OF LIVE BIRTHS (1984): 156,799

NUMBER OF INFANT DEATHS (1984): 1,634

TOTAL POPULATION (1980): 11,854,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 1,210,000 (10.5%)

RACIAL COMPOSITION (BY PERCENT)

White: 89.8

Nonwhite: 10.2 (The NonWhite population 86.4% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 143,050

PERCENT WIC "ELIGIBLES" SERVED: 42.8%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.1	11.9	10.6	10.2	9.8	8.8	10.6	-6.10
Nonwhite	21.6	22.2	19.3	19.2	19.4	20.0	20.3	-1.33
TOTAL	13.4	13.3	11.9	11.5	11.2	10.4	12.0	-4.88

Nonwhite to White ratio (1979): 1.79      (1984): 2.27      (Percent Change In Ratio 1)      7.31

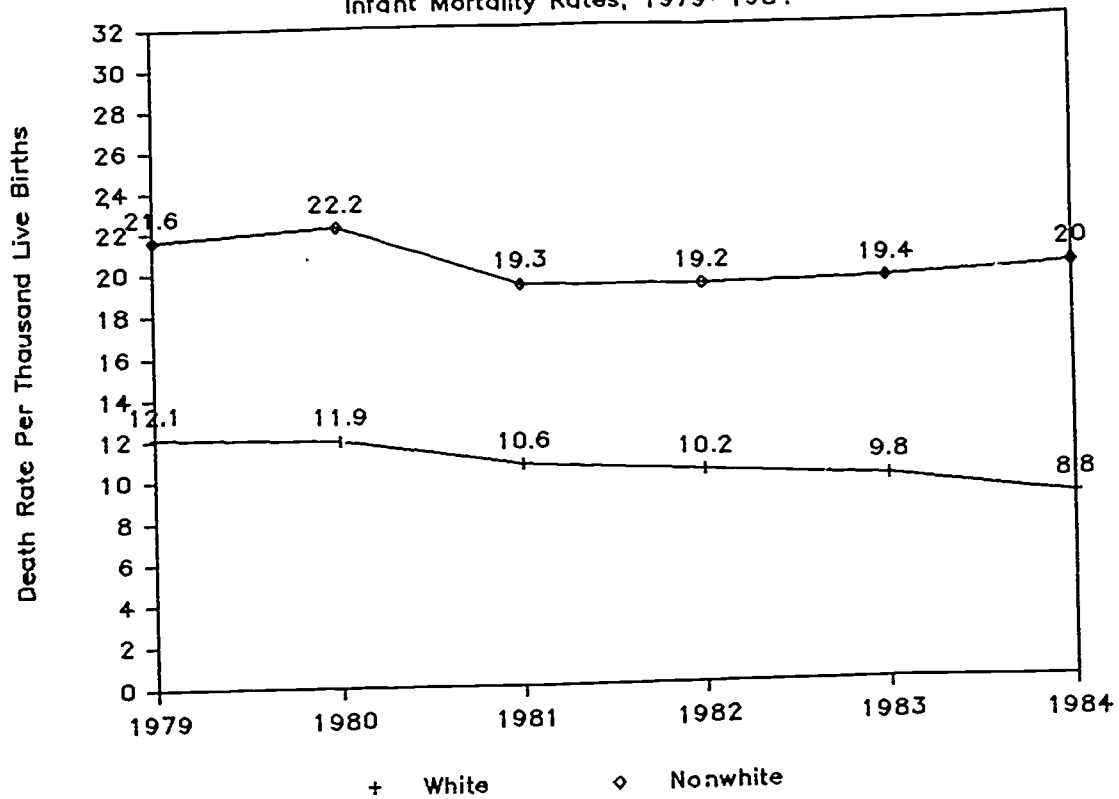
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.9	5.6	5.5	5.6	5.6	5.6	5.6	-1.01
Nonwhite	13.3	12.6	13.2	17.8	13.3	13.4	13.1	-0.23
TOTAL	7.0	6.5	6.6	6.6	6.7	6.7	6.7	-0.82

Nonwhite to white ratio (1979): 2.25      (1984): 2.39      (Percent Change In Ratio 1979-1984): 6.15

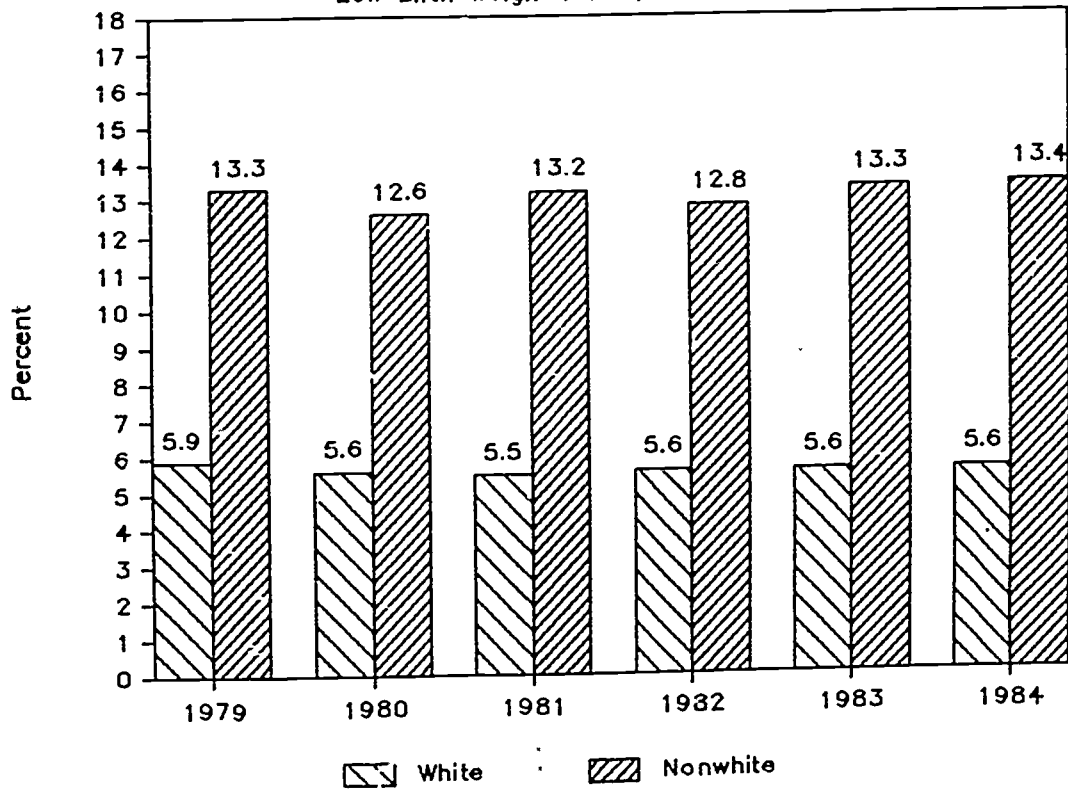
# Commonwealth of Pennsylvania

## Infant Mortality Rates, 1979-1984



# Commonwealth of Pennsylvania

## Low Birth Weight Rates, 1979-1984





S T A T E O F R H O D E I S L A N D

NUMBER OF LIVE BIRTHS (1984): 12,647

NUMBER OF INFANT DEATHS (1984): 125

TOTAL POPULATION (1984): 947,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 94,000 (10.3%)

RACIAL COMPOSITION (BY PERCENT)

White: 94.7

Nonwhite: 5.3 (The Nonwhite population is 56% Black and 29.6% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 14,103

PERCENT WIC "ELIGIBLES" SERVED: 51.9%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.3	10.7	11.3	9.4	10.9	9.5	10.7	-4.22
Nonwhite	32.1	11.9	14.4	15.7	17.3	13.7	17.5	-8.70
TOTAL	14.1	10.9	11.7	10.0	11.5	9.9	11.4	-5.76

Nonwhite to white ratio (1979): 2.61 (1984): 1.44 (Percent Change in Ratio 1979-1984): -44.74%

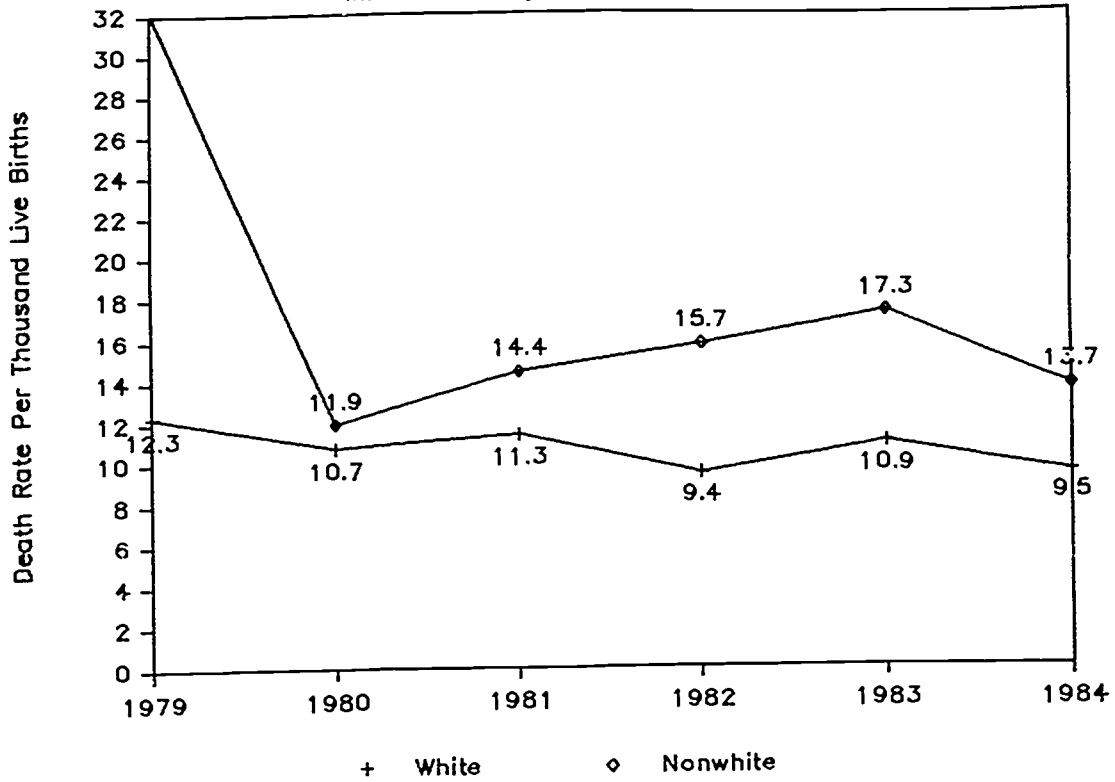
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.1	5.9	5.4	5.5	6.0	5.6	5.8	-1.50
Nonwhite	10.8	10.8	10.3	11.1	11.1	10.1	10.7	-1.17
TOTAL	6.7	6.4	5.9	6.1	6.1	6.1	6.2	-1.78

Nonwhite to white ratio (1979): 1.77 (1984): 1.80 (Percent Change in Ratio 1979-1984): 1.87%

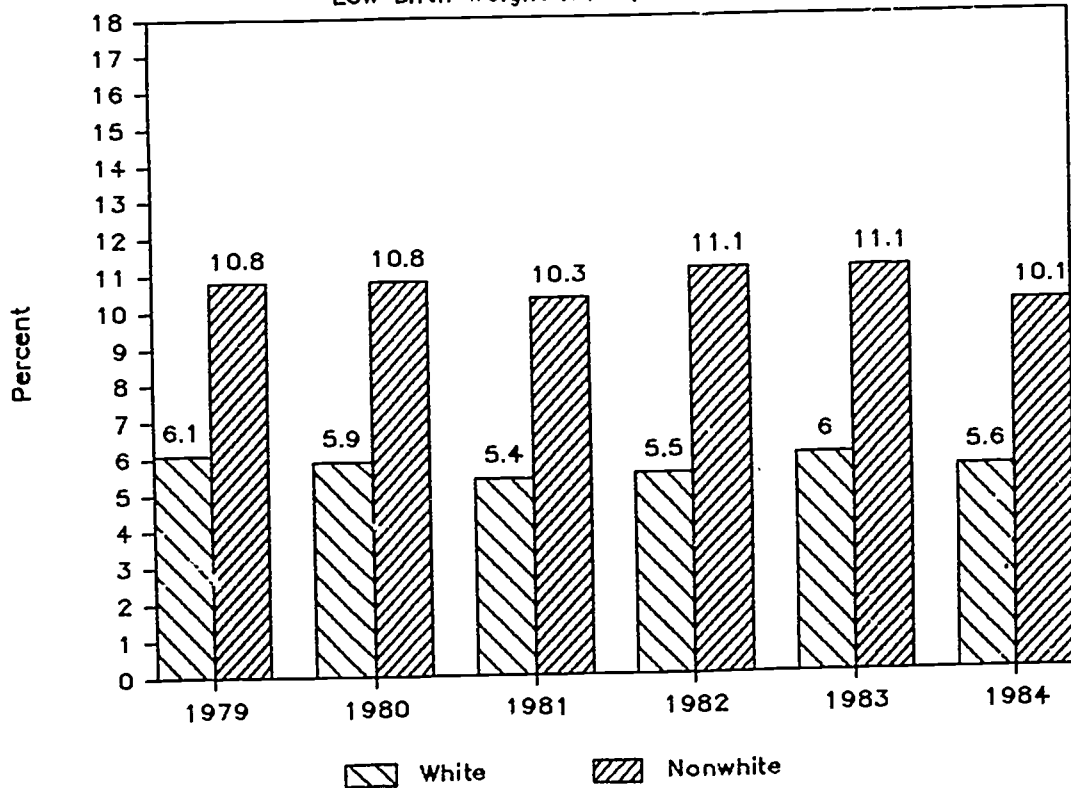
## State of Rhode Island

Infant Mortality Rates, 1979-1984



## State of Rhode Island

Low Birth Weight Rates, 1979-1984



STATE OF SOUTH CAROLINA

NUMBER OF LIVE BIRTHS (1984): 50,561

NUMBER OF INFANT DEATHS (1984): 743

TOTAL POPULATION (1980): 3,122,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 500,000 (16.6%)

RACIAL COMPOSITION (BY PERCENT)

White: 68.8

Nonwhite: 31.2 (The Nonwhite population is 97% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 68,488

PERCENT WIC "ELIGIBLES" SERVED: 47.0%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.3	10.1	12.4	12.0	11.3	11.1	11.7	-1.64
Nonwhite	23.6	22.4	21.6	22.2	20.6	20.2	21.8	-3.01
TOTAL	17.0	15.6	16.2	16.1	15.0	14.7	15.8	-2.77

Nonwhite to White ratio (1979): 1.92 (1984): 1.82 (Percent Change In Ratio 1979-1984): -5.15

L O W B I R T H W E I G H T P E R C E N T

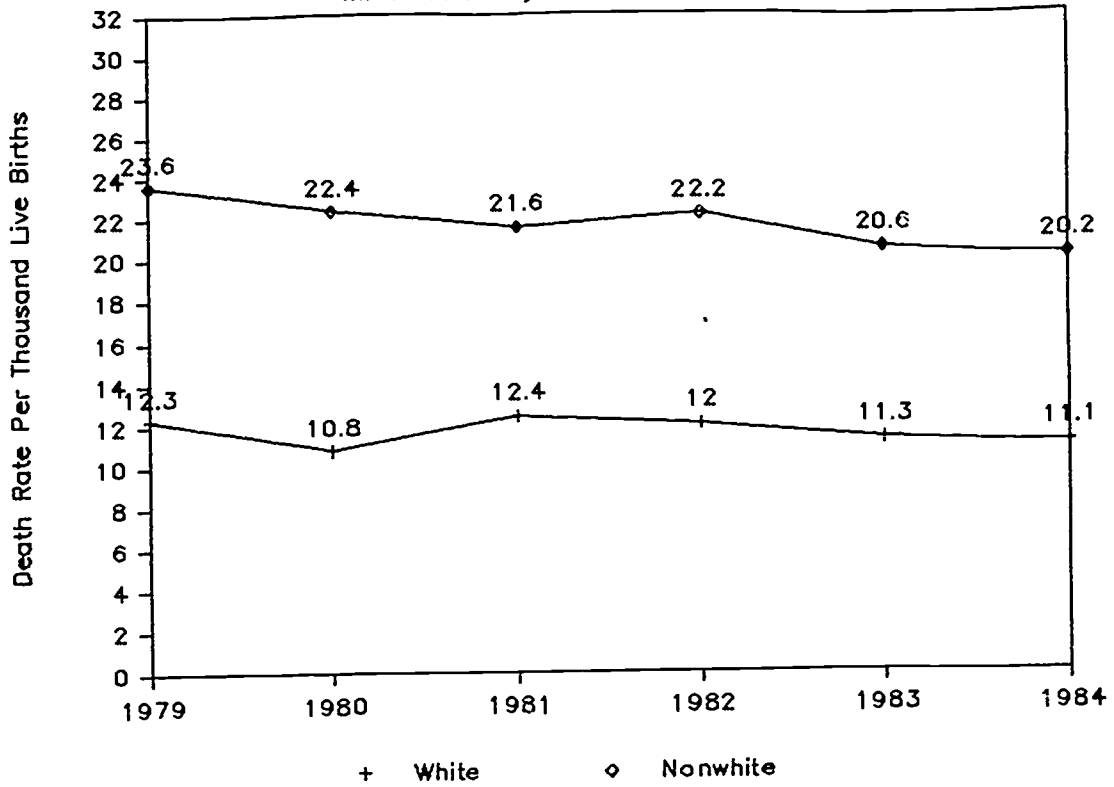
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.2	6.0	6.1	6.1	6.1	6.3	6.1	0.34
Nonwhite	12.7	12.4	12.3	12.9	12.5	12.6	12.7	-0.13
TOTAL	8.9	8.7	8.9	8.9	8.7	8.8	8.8	-0.21

Nonwhite to White ratio (1979): 2.05 (1984): 2.0 (Percent Change In Ratio 1979-1984): -2.36

282

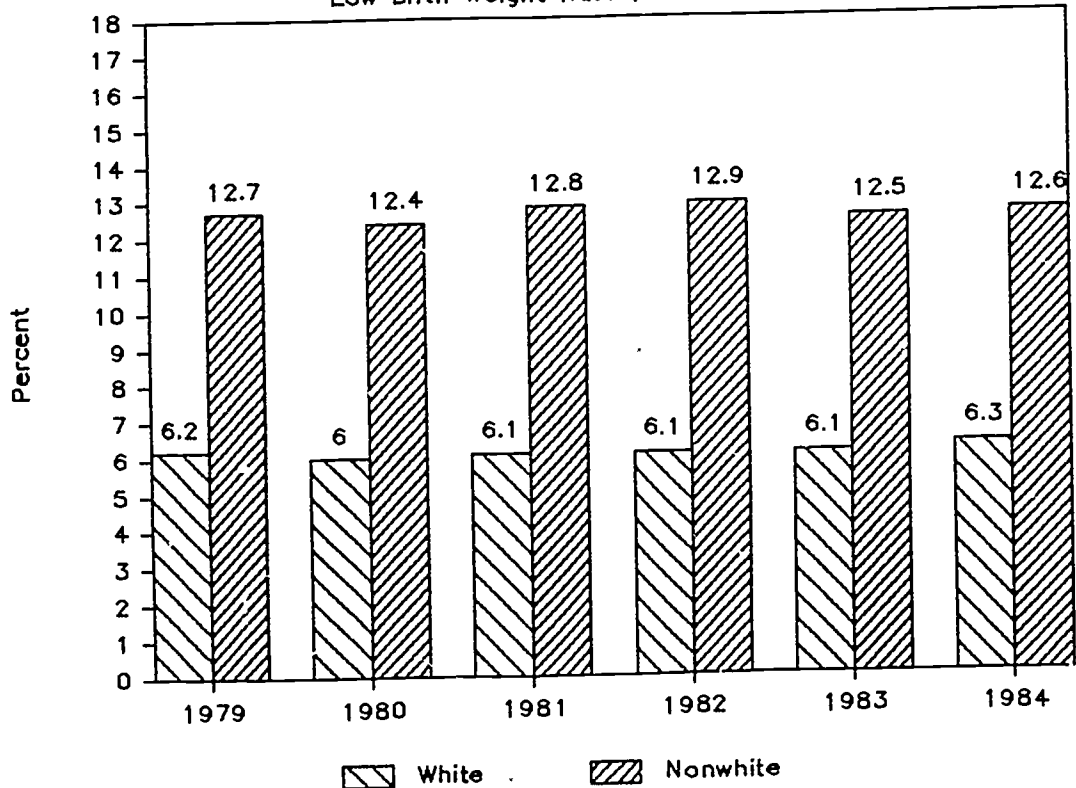
## State of South Carolina

Infant Mortality Rates, 1979-1984



## State of South Carolina

Low Birth Weight Rates, 1979-1984



S T A T E   O F   S O U T H   D A K O T A

NUMBER OF LIVE BIRTHS (1984): 12,431

NUMBER OF INFANT DEATHS (1984): 124

TOTAL POPULATION (1980): 691,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 113,000 (16.9)

RACIAL COMPOSITION (BY PERCENT)

White: 92.6

Nonwhite: 7.4 (The Nonwhite population is 3.9% Black and 88.2% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 9.893

PERCENT WIC "ELIGIBLES" SERVED: 28.8%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1985<sup>a</sup>): 1,715

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	9.2	8.9	9.8	8.2	8.2	8.8	8.9	-0.43
Nonwhite	N/A	N/A	N/A	N/A	N/A	N/A	---	---
TOTAL	11.3	10.9	11.2	10.2	10.8	10.0	10.7	-2.25

Nonwhite to White ratio (1979): --- (1984): --- (Percent Change In Ratio 1979-1984): ---

L O W   B I R T H   W E I G H T   P E R C E N T

	1979	1980	1981	1982	1983	1984	1 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	N/A	N/A	N/A	N/A	N/A	4.8	4.8	---
Nonwhite	N/A	N/A	N/A	N/A	N/A	N/A	---	---
TOTAL	5.0	5.2	5.3	5.1	5.1	5.1	5.1	0.43

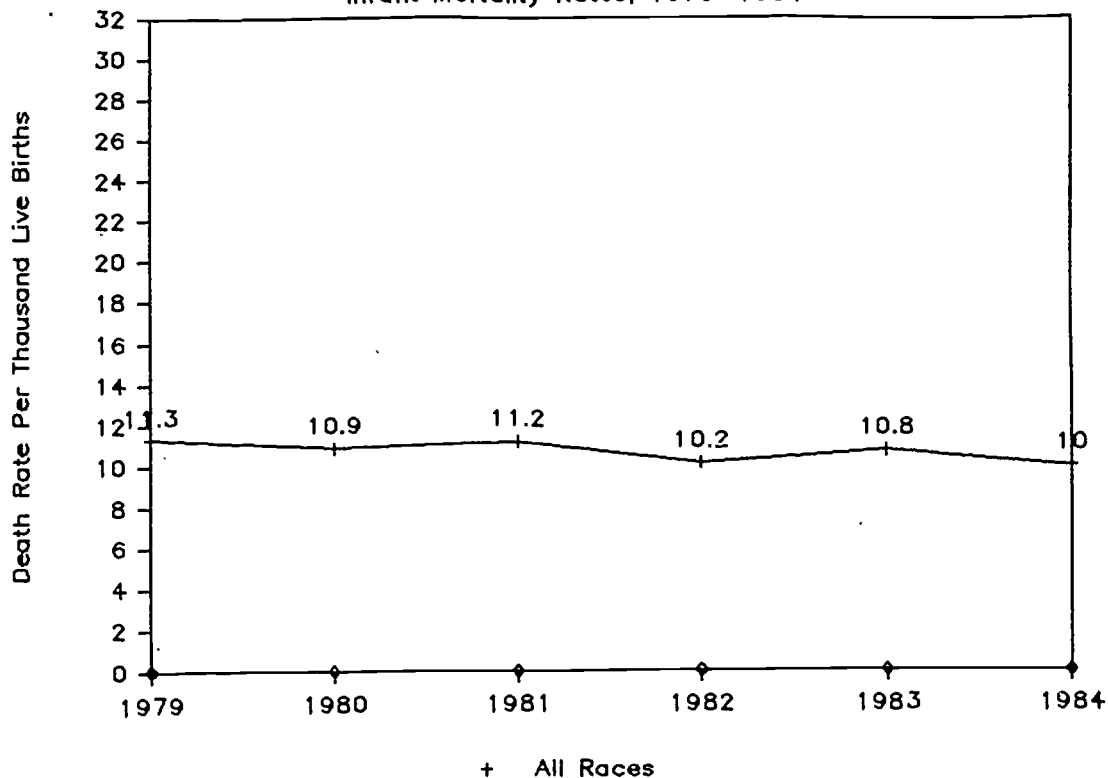
Nonwhite to White ratio (1979): --- (1984): --- (Percent Change In Ratio 1979-1984): ---

Footnotes:

<sup>a</sup> Figure obtained from USDA.

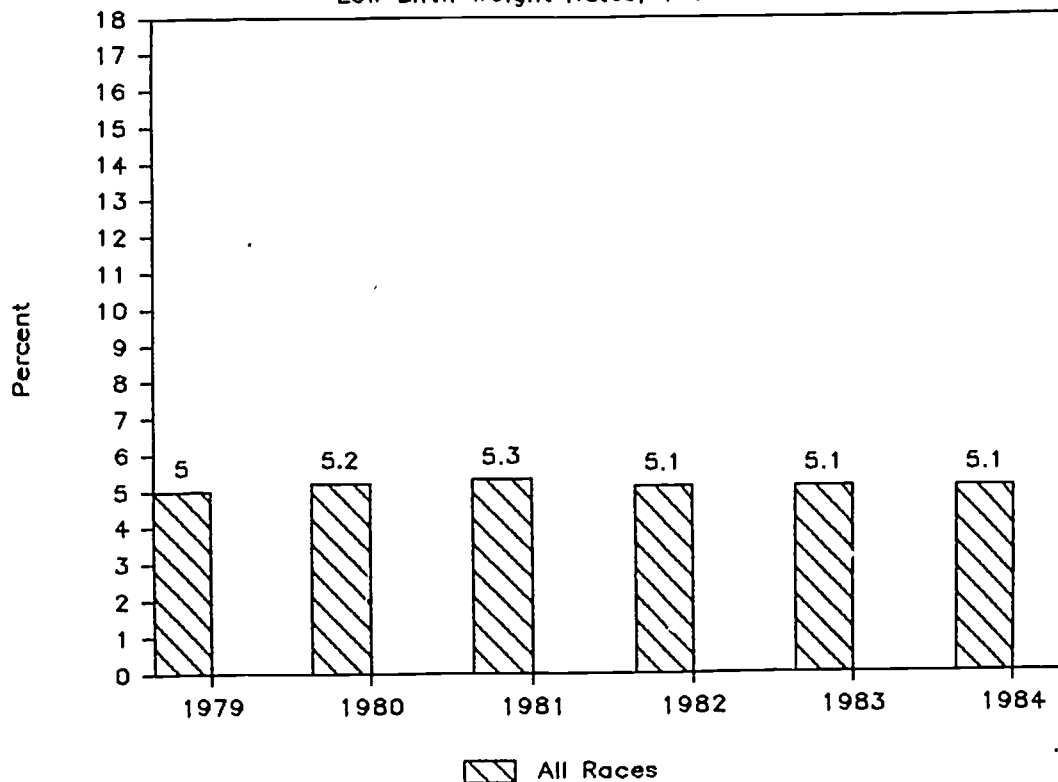
## State of South Dakota

Infant Mortality Rates, 1979-1984



## State of South Dakota

Low Birth Weight Rates, 1979-1984



S T A T E O F T E N N E S S E E

NUMBER OF LIVE BIRTHS (1984): 64,937

NUMBER OF INFANT DEATHS (1984): 768

TOTAL POPULATION (1980): 4,591,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 736,000 (16.5%)

RACIAL COMPOSITION (BY PERCENT)

White: 83.5

Nonwhite: 11.5 (The NonWhite population is .96% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 57,906

PERCENT WIC "ELIGIBLES" SERVED: 30.7%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): 27,635

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.5	11.8	10.1	10.0	10.6	9.8	10.6	-2.87
Nonwhite	20.3	18.8	20.8	18.6	19.7	18.5	19.5	-1.50
TOTAL	13.5	13.4	12.6	12.0	12.7	11.8	12.7	-2.55

Nonwhite to White ratio (1979): 1.77 (1984): 1.89 (Percent Change In Ratio 1979-1984): 6.94

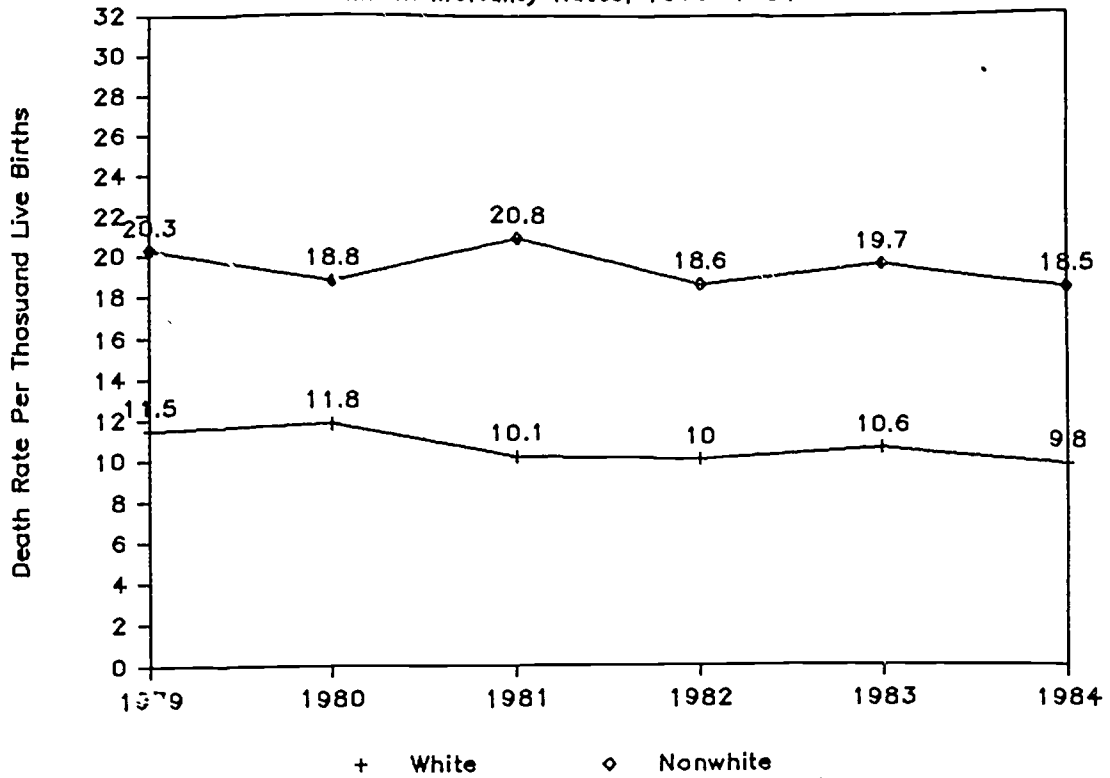
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.5	6.4	6.4	6.3	6.5	6.4	6.4	-0.29
Nonwhite	12.5	13.3	13.4	13.0	13.0	13.0	13.0	0.83
TOTAL	7.9	8.0	8.0	7.9	8.0	8.0	8.0	0.26

Nonwhite to White ratio (1979): 1.92 (1984): 2.03 (Percent Change In Ratio 1979-1984): 5.62

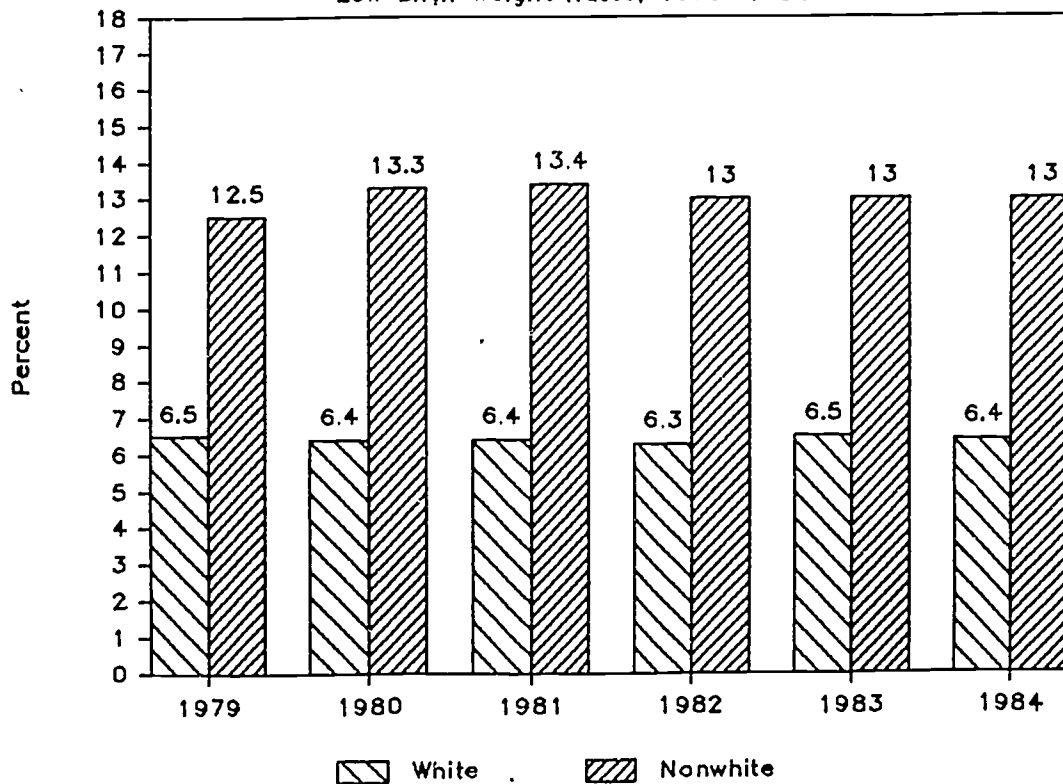
# State of Tennessee

## Infant Mortality Rates, 1979-1984



# State of Tennessee

## Low Birth Weight Rates, 1979-1984





S T A T E O F T E X A S

NUMBER OF LIVE BIRTHS (1984): 298,756

NUMBER OF INFANT DEATHS (1984): 3,118

TOTAL POPULATION (1980): 14,229,000 NUMBER (and percent) LIVING BELOW POVERTY (1980): 2,036,000 (14.7%)

RACIAL COMPOSITION (BY PERCENT)

White: 78.7

Nonwhite: 21.3 (Nonwhite population is 56.4% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 178,468 PERCENT WIC "ELIGIBLES" SERVED: 29.4

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.8	10.6	10.0	9.3	9.7	9.4	10.0	-2.66
Nonwhite	15.6	14.1	13.8	12.9	12.7	11.8	13.5	-5.38
TOTAL	12.9	12.1	11.6	10.8	11.0	10.4	11.5	-4.17

Nonwhite to White ratio (1979): 1.44 (1984): 1.26 (Percent Change In Ratio 1979-1984): -13.09

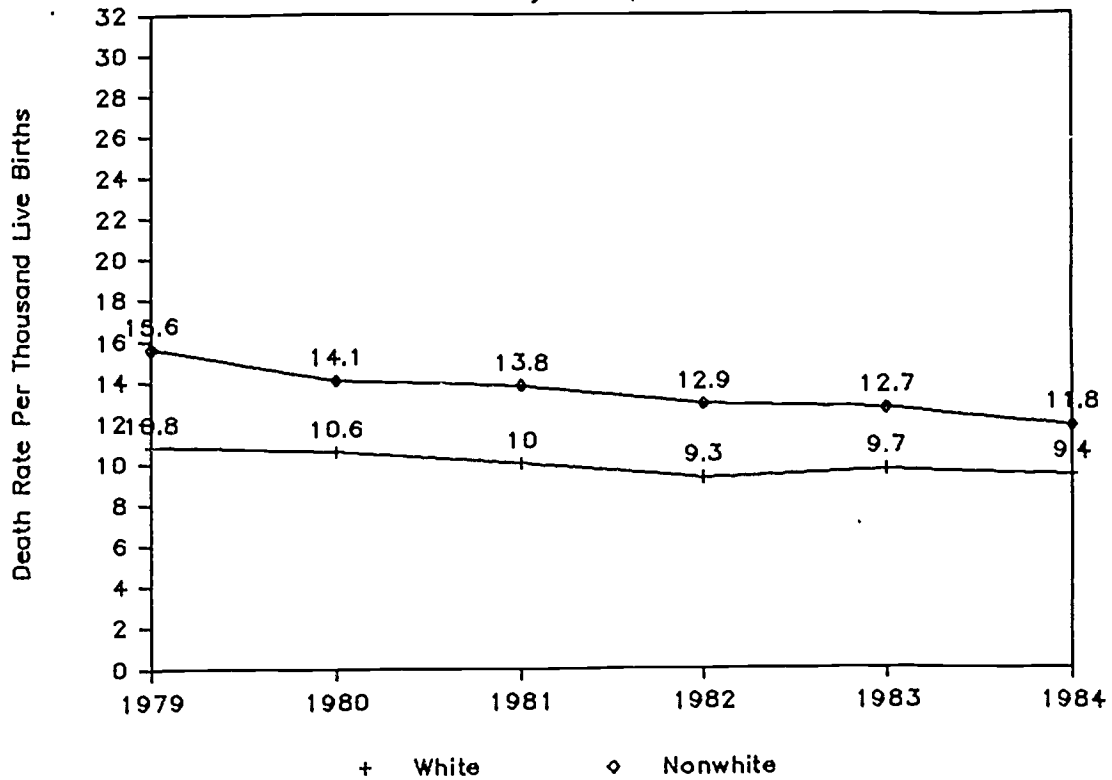
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.9	6.0	5.9	5.9	5.9	5.8	5.9	-0.33
Nonwhite	8.5	8.2	8.3	8.1	8.3	8.2	8.3	-0.69
TOTAL	7.0	7.0	6.9	6.9	6.9	6.8	6.9	-0.58

Nonwhite to White ratio (1979): 1.44 (1984): 1.41 (Percent Change In Ratio 1979-1984): -1.87

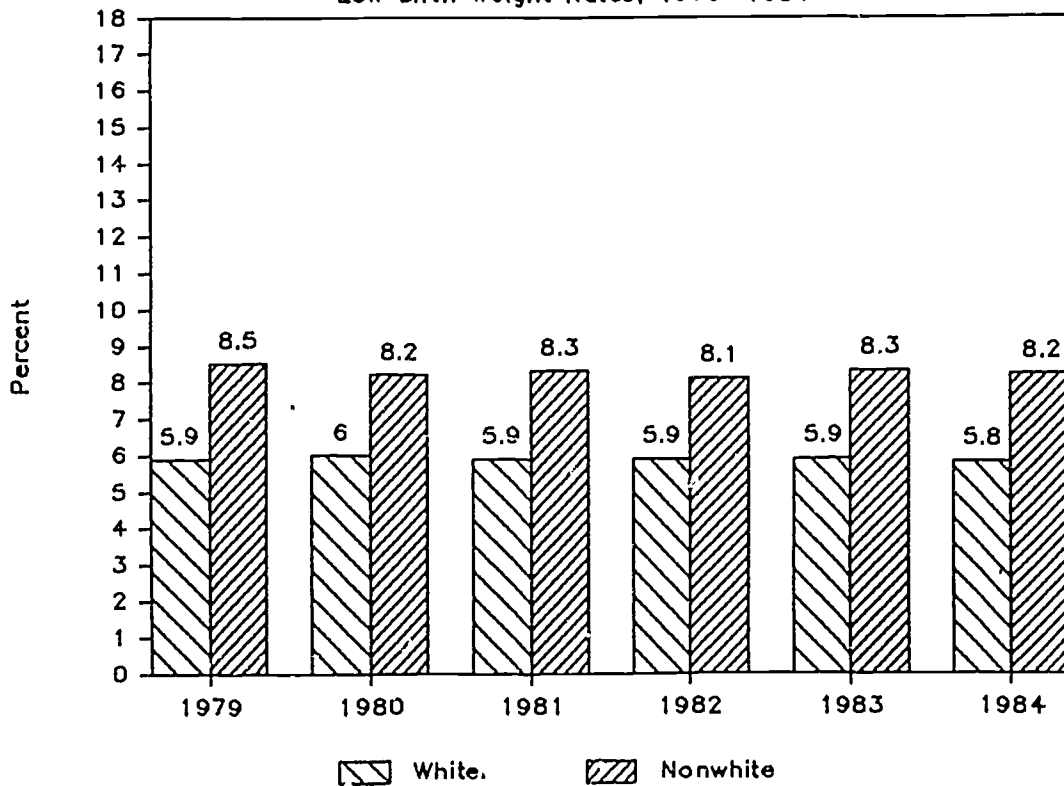
## State of Texas

### Infant Mortality Rates, 1979-1984



## State of Texas

### Low Birth Weight Rates, 1979-1984



S T A T E O F U T A H

NUMBER OF LIVE BIRTHS (1984): 38,286

NUMBER OF INFANT DEATHS (1984): 350

TOTAL POPULATION (1980): 1,461,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 148,000 (10.3%)

RACIAL COMPOSITION (BY PERCENT)

White: 94.7

Nonwhite: 5.3 (The Nonwhite is 11.5% Black and 24.7% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 22,768

PERCENT WIC "ELIGIBLES" SERVED: 23.53%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E<sup>a</sup>

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.8	10.5	9.6	11.0	8.8	9.1	10.0	-2.67
Nonwhite	---	---	---	---	7.0	---	7.0 <sup>b</sup>	---
TOTAL	10.7	10.4	9.8	11.0	8.7	9.1	10.0	-4.31
-----								
Nonwhite to White ratio (1979): N/A			(1983): 0.80		(Percent Change In Ratio 1979-1984): N/A			

L O W B I R T H W E I G H T P E R C E N T<sup>a</sup>

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.5	5.2	5.4	5.5	5.5	5.4	5.4	-0.31
Nonwhite	---	---	---	---	7.0	---	7.0 <sup>b</sup>	---
TOTAL	5.6	5.3	5.4	5.6	5.6	5.6	5.5	0.05
-----								
Nonwhite to White ratio (1979): N/A			(1983): 1.27		(Percent Change In Ratio 1979-1984): N/A			

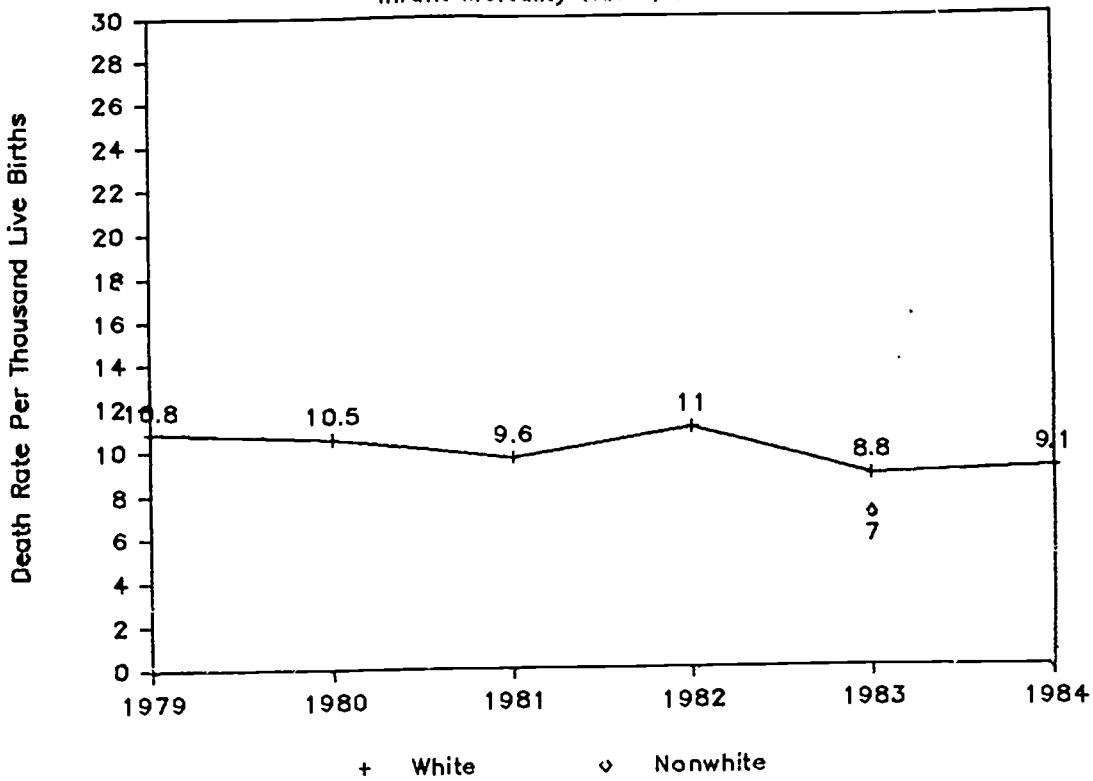
Footnotes:

<sup>a</sup> Source: Bureau of Health Statistics, Office Management Planning, Utah Department of Health.

<sup>b</sup> Based on 1983 data only.

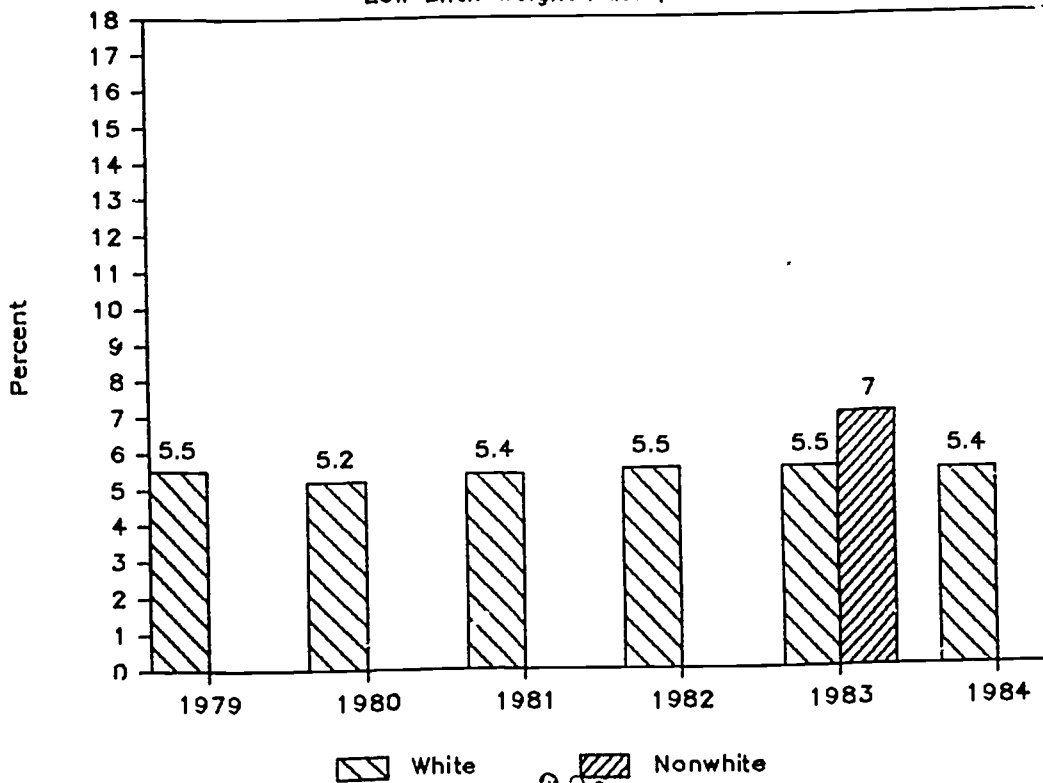
## State of Utah

### Infant Mortality Rates, 1979-1984



## State of Utah

### Low Birth Weight Rates, 1979-1984



301

S T A T E   O F   V E R M O N T

NUMBER OF LIVE BIRTHS (1984): 7,940

NUMBER OF INFANT DEATHS (1984): 70

TOTAL POPULATION (1980): 511,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 59,000 (12.1%)

RACIAL COMPOSITION (BY PERCENT)

White: 99.2

Nonwhite: 0.8 (The Nonwhite population is 25% Black and 25% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 59,594

PERCENT WIC "ELIGIBLES" SERVED: 34.6%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No program.<sup>a</sup>

I N F A N T   M O R T A L I T Y   R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	--	--	--	--	--	--	--	--
Nonwhite	--	--	--	--	--	--	--	--
TOTAL	8.1	10.9	7.9	9.3	8.7	8.8	9.0	3.89

Nonwhite to White ratio (1979): N/A      (1984): N/A      (Percent Change In Ratio 1979-1984): N/A

L O W   B I R T H   W E I G H T   P E R C E N T

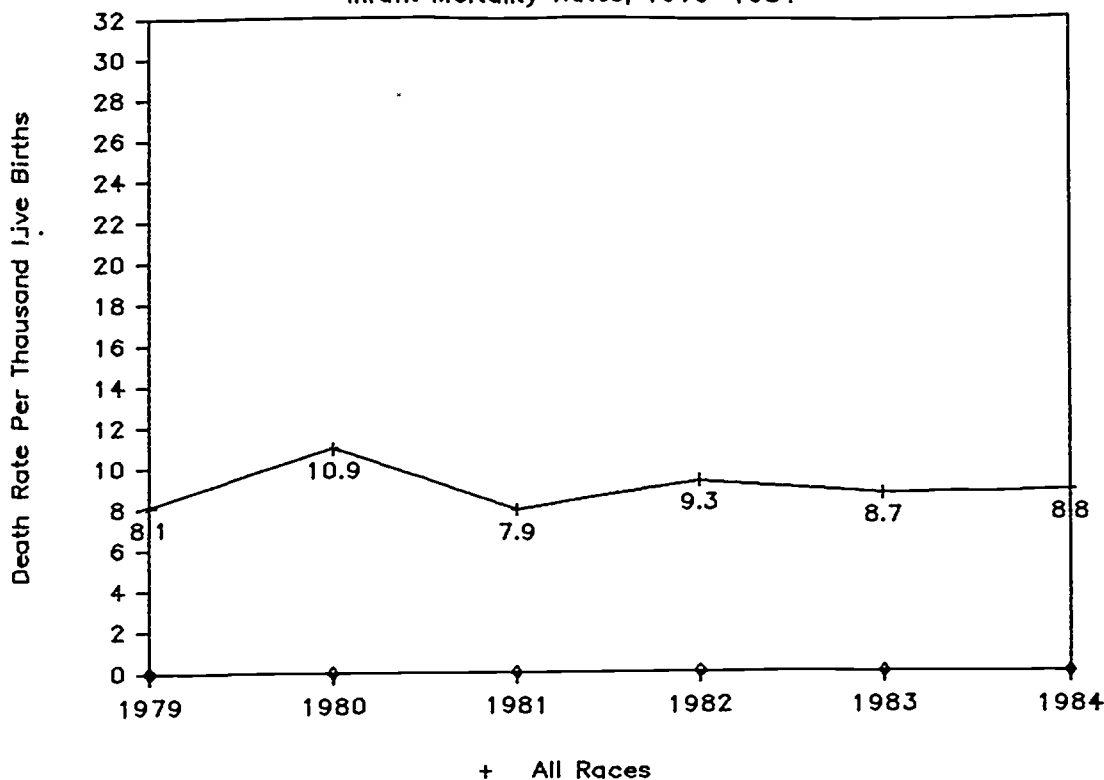
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	--	--	--	--	--	--	--	--
Nonwhite	--	--	--	--	--	--	--	--
TOTAL	6.1	5.9	6.1	5.9	6.0	6.1	6.0	0.40

Nonwhite to White ratio (1979): N/A      (1984): N/A      (Percent Change In Ratio 1979-1984): N/A

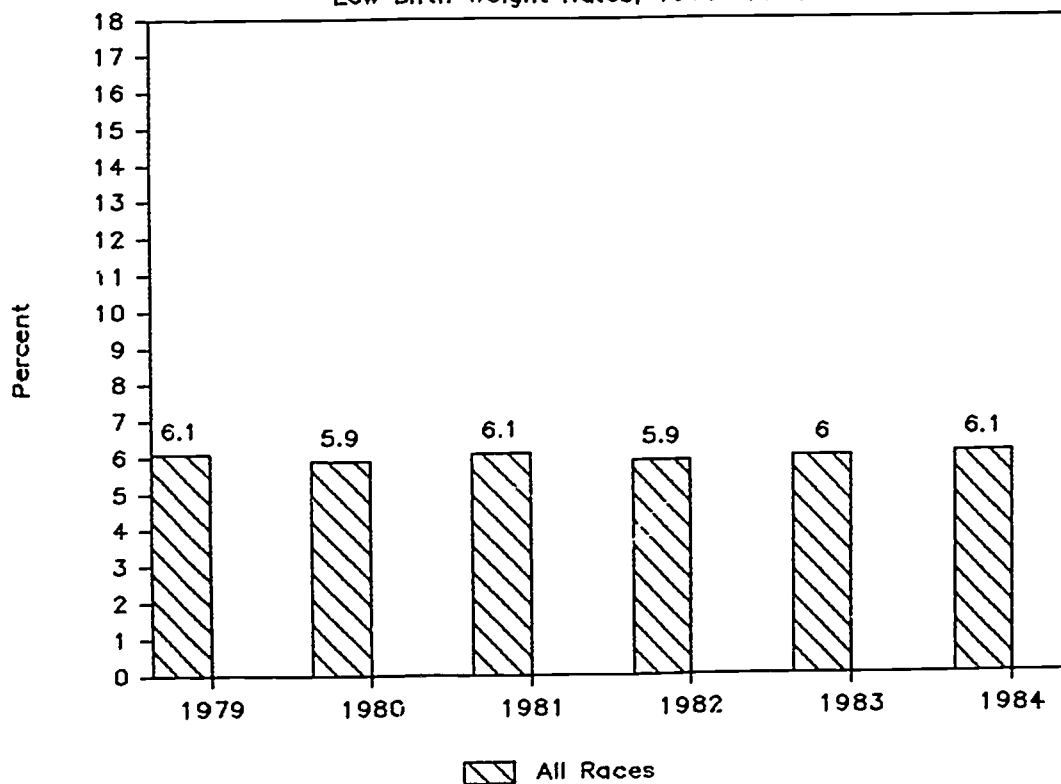
Footnotes:

<sup>a</sup> Vermont does not compile health statistics by racial categories, as the state is nearly 100% white

## State of Vermont Infant Mortality Rates, 1979-1984



## State of Vermont Low Birth Weight Rates, 1979-1984



STATE OF VIRGINIA

NUMBER OF LIVE BIRTHS (1984): 82,662

NUMBER OF INFANT DEATHS (1984): 1,014

TOTAL POPULATION (1980): 5,347,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 611,000 (11.8%)

RACIAL COMPOSITION (BY PERCENT)

White: 79.1

Nonwhite: 20.9 (The Nonwhite population is 90.3% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 59,594

PERCENT WIC "ELIGIBLES" SERVED: 34.6%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	12.5	11.8	10.6	10.7	9.6	9.9	10.9	-4.40
Nonwhite	21.0	19.0	18.4	19.3	19.8	19.2	19.5	-1.65
TOTAL	14.8	13.7	12.6	12.9	12.2	12.3	13.1	-3.54

Nonwhite to white ratio (1979): 1.68      (1984): 1.94      (Percent Change In Ratio 1979-1984): 15.44

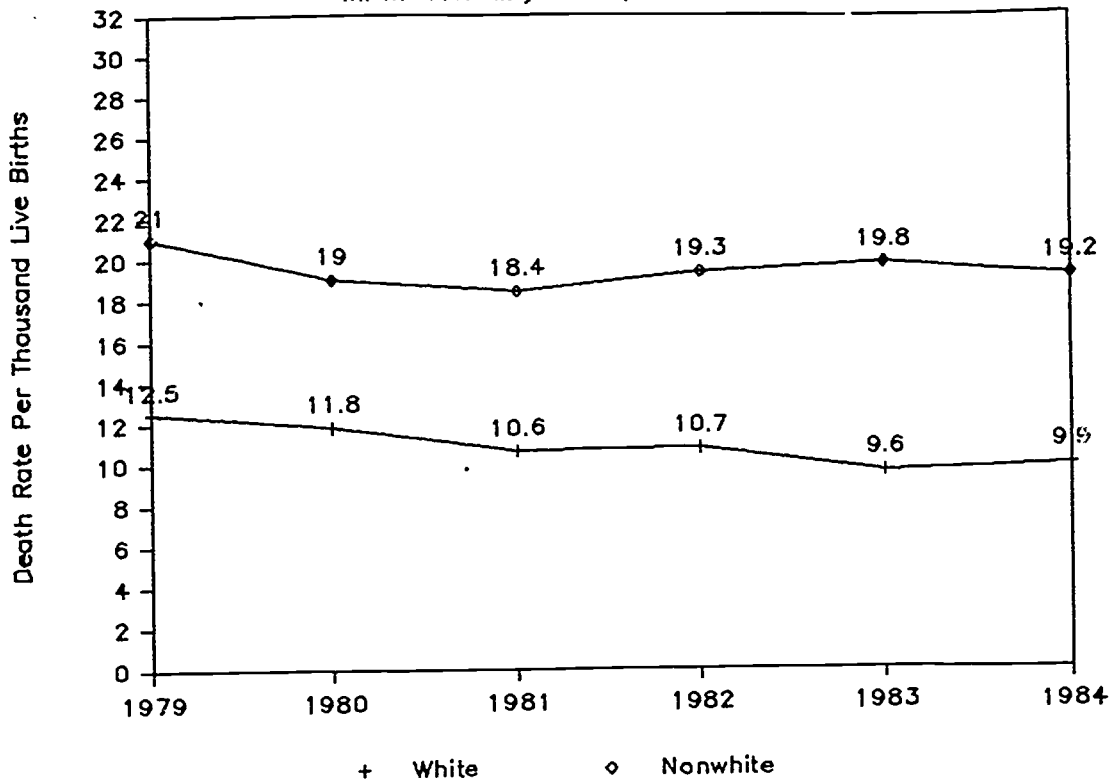
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.1	5.9	5.9	5.7	5.7	5.8	5.9	-0.98
Nonwhite	11.7	12.3	11.8	12.1	11.9	11.8	11.9	0.22
TOTAL	7.6	7.5	7.4	7.3	7.3	7.3	7.4	-0.80

Nonwhite to white ratio (1979): 1.92      (1984): 2.03      (Percent Change In Ratio 1979-1984): 6.07

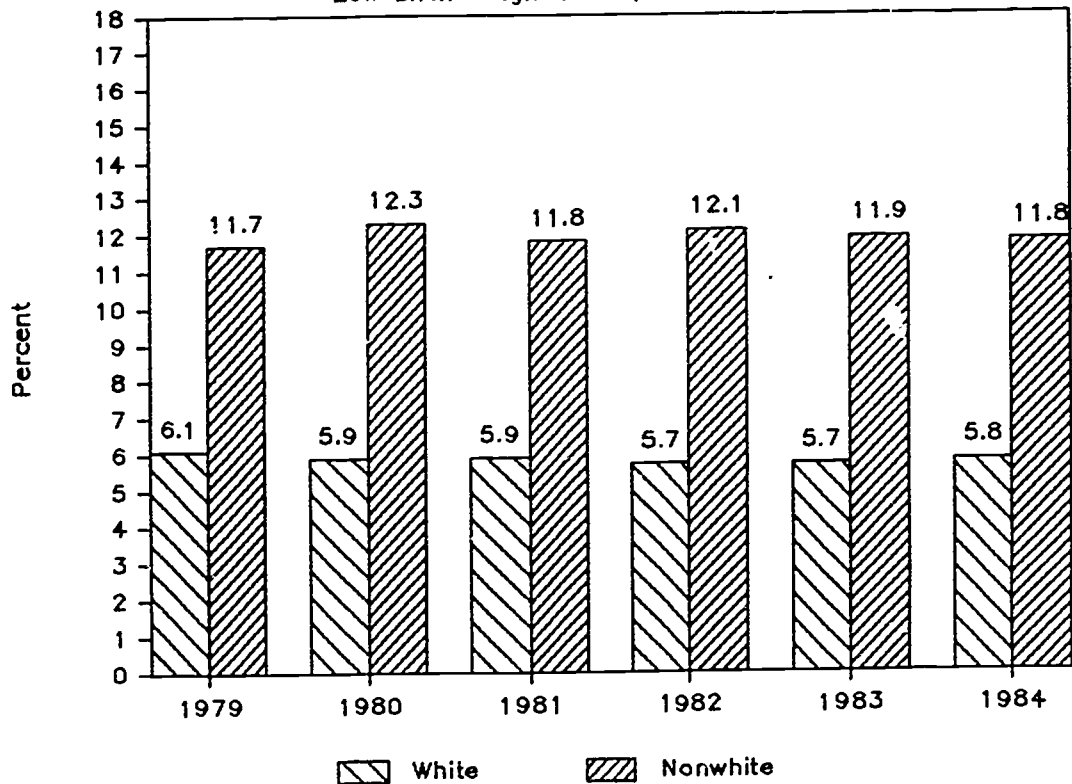
# Commonwealth of Virginia

## Infant Mortality Rates, 1979-1984



# Commonwealth of Virginia

## Low Birth Weight Rates, 1979-1984





S T A T E O F W A S H I N G T O N

NUMBER OF LIVE BIRTHS (1984): 68,947

NUMBER OF INFANT DEATHS (1984): 704

TOTAL POPULATION (1980): 4,132,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 396,000 (9.8%)

RACIAL COMPOSITION (BY PERCENT)

White: 91.5

Nonwhite: 8.5 (The NonWhite population is 30% Black and 17% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 36,417

PERCENT WIC "ELIGIBLES" SERVED: 28.6%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	11.6	11.7	10.4	10.5	9.4	10.1	10.6	-2.46
Nonwhite	10.3	11.9	10.9	12.0	10.1	10.9	11.0	1.86
TOTAL	11.4	11.8	10.5	10.7	9.5	10.2	10.7	-1.89

Nonwhite to White ratio (1979): 0.89      (1984): 1.08      (Percent Change In Ratio 1979-1984): 21.54

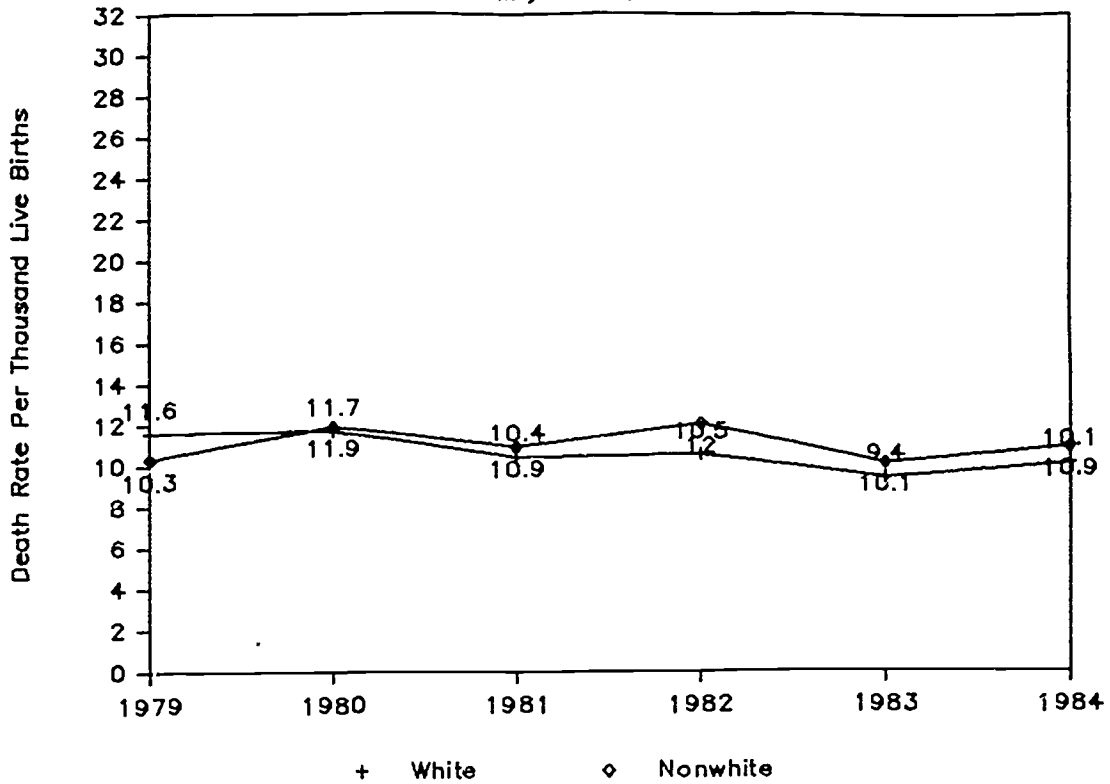
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	4.9	4.8	4.9	4.7	4.9	4.5	4.8	-1.59
Nonwhite	7.1	6.9	7.4	7.1	6.9	7.9	7.2	2.41
TOTAL	5.2	5.1	5.3	5.1	5.2	5.1	5.2	-0.35

Nonwhite to White ratio (1979): 1.45      (1984): 1.76      (Percent Change In Ratio 1979-1984): 21.16

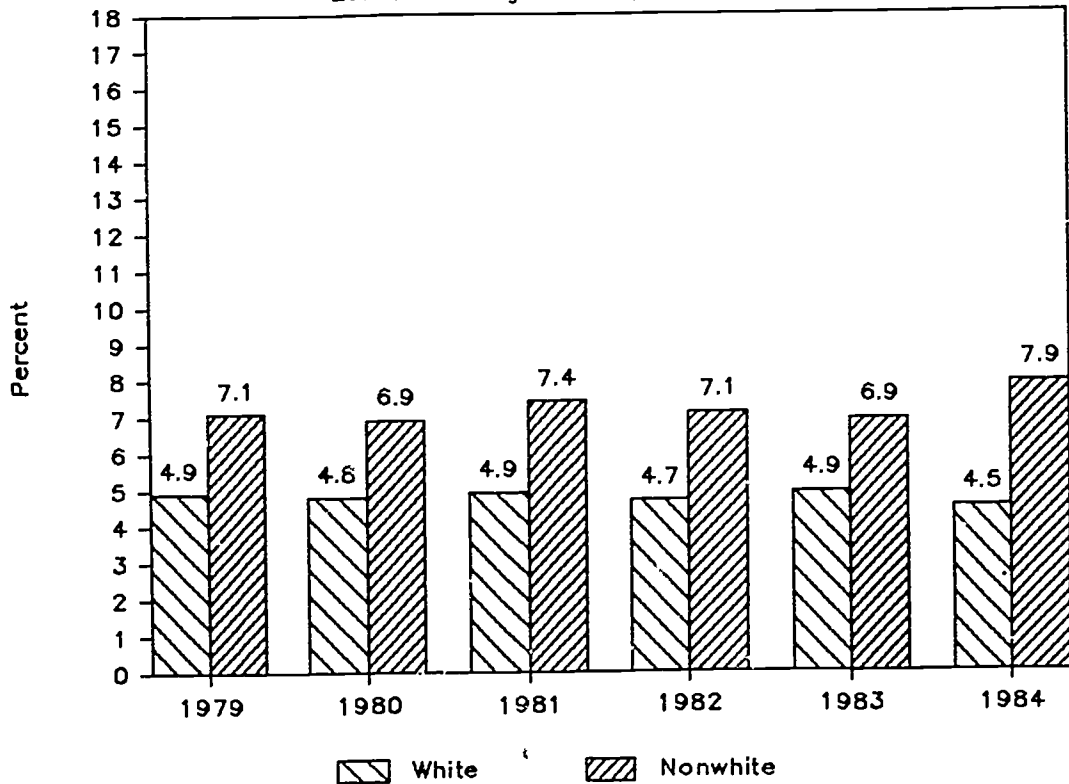
# State of Washington

## Infant Mortality Rates, 1979-1984



# State of Washington

## Low Birth Weight Rates, 1979-1984



STATE OF WEST VIRGINIA

NUMBER OF LIVE BIRTHS (1984): 24,551

NUMBER OF INFANT DEATHS (1984): 269

TOTAL POPULATION (1980): 1,950,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 287,000 (15%)

RACIAL COMPOSITION (BY PERCENT)

White: 96.2

Nonwhite: 3.8 (The Nonwhite population is 86.7% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 25,901

PERCENT WIC "ELIGIBLES" SERVED: 34.9%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	13.4	11.4	12.6	11.4	10.6	10.8	11.7	-2.81
Nonwhite	22.0	19.5	21.8	12.6	16.6	15.2	18.0	-3.69
TOTAL	13.7	11.8	13.1	11.4	10.9	11.0	12.0	-3.86

Nonwhite to White ratio (1979): 1.64 (1984): 1.41 (Percent Change In Ratio 1979-1984): -14.28

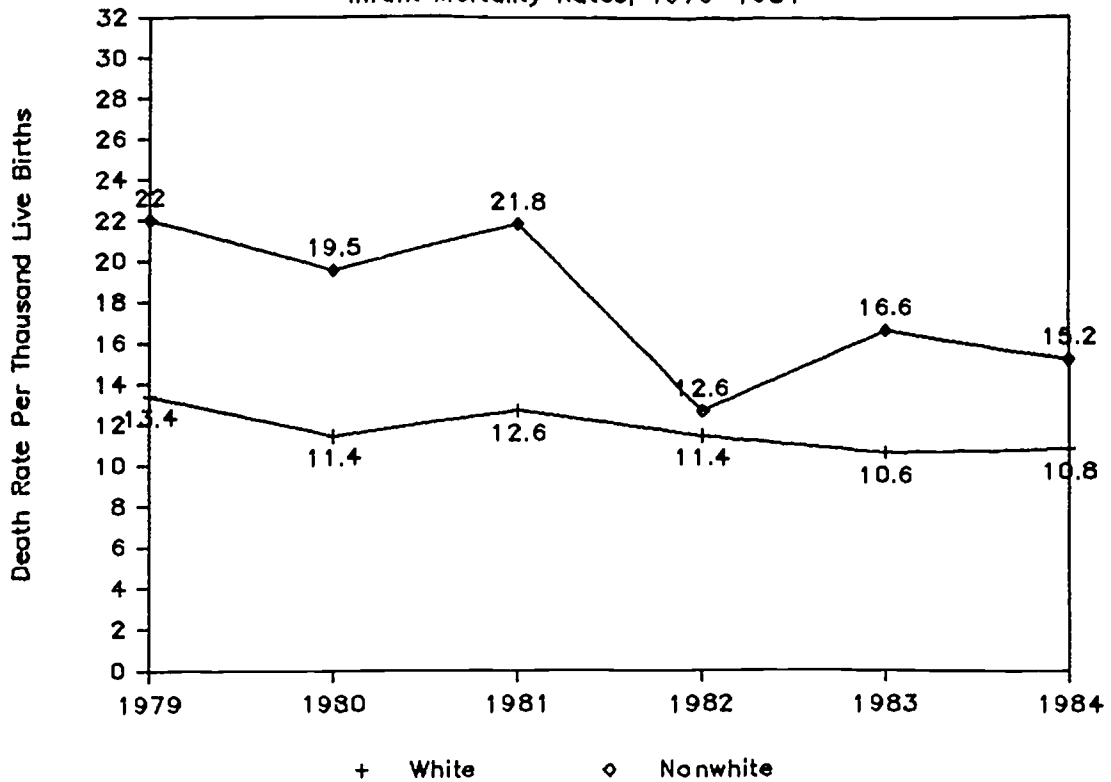
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	6.5	6.5	6.9	6.6	6.5	6.6	6.6	0.37
Nonwhite	12.2	11.8	11.1	9.8	10.8	12.7	11.4	1.37
TOTAL	6.8	6.7	7.1	6.7	6.7	6.9	6.8	0.37

Nonwhite to White ratio (1979): 1.88 (1984): 1.92 (Percent Change In Ratio 1979-1984): 2.52

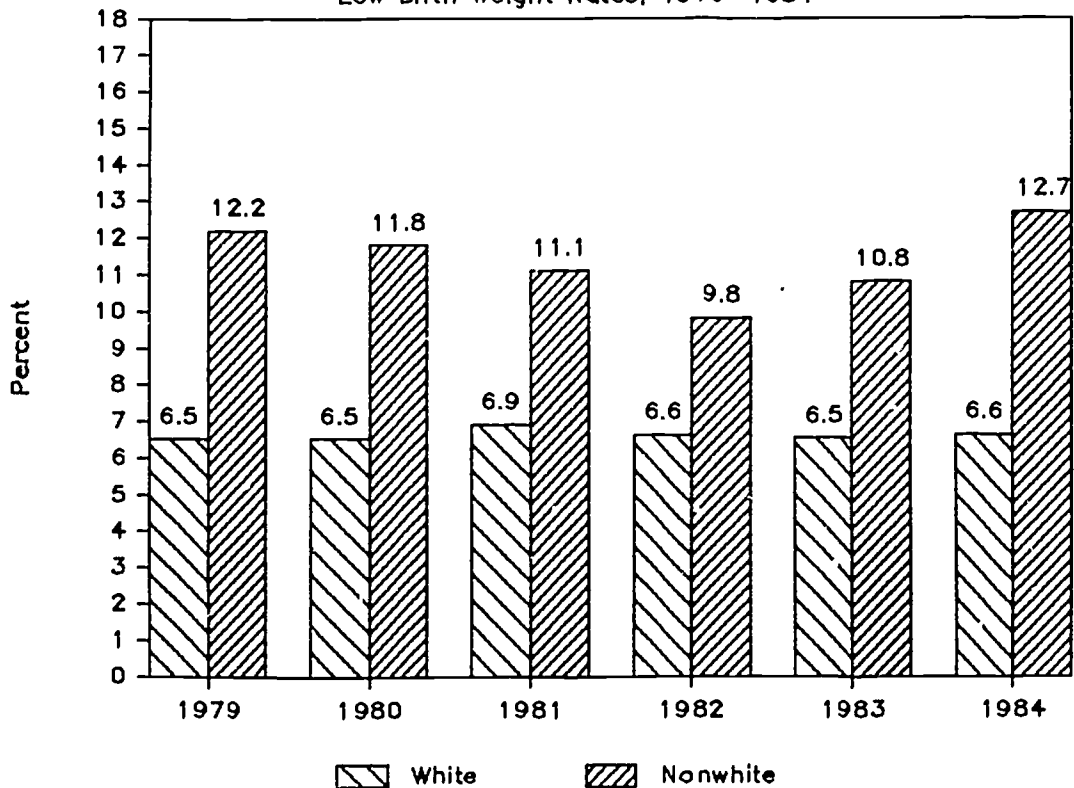
## State of West Virginia

Infant Mortality Rates, 1979-1984



## State of West Virginia

Low Birth Weight Rates, 1979-1984



STATE OF WISCONSIN

NUMBER OF LIVE BIRTHS (1984): 73,050

NUMBER OF INFANT DEATHS (1984): 723

TOTAL POPULATION (1980): 4,706,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 398,000 (8.7%)

RACIAL COMPOSITION (BY PERCENT)

White: 94.4

Nonwhite: 5.6 (The Nonwhite population is 69.6% Black.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 61,421<sup>a</sup> PERCENT WIC "ELIGIBLES" SERVED: 45.7%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	10.3	9.7	9.7	8.6	8.8	9.0	9.4	-2.51
Nonwhite	17.2	17.1	17.4	18.3	17.8	18.4	17.7	1.40
TOTAL	10.8	10.3	10.3	9.4	9.6	9.9	10.1	-1.62

Nonwhite to White ratio (1979): 1.67 (1984): 2.04 (Percent Change In Ratio 1979-1984): 22.43

L O W B I R T H W E I G H T P E R C E N T

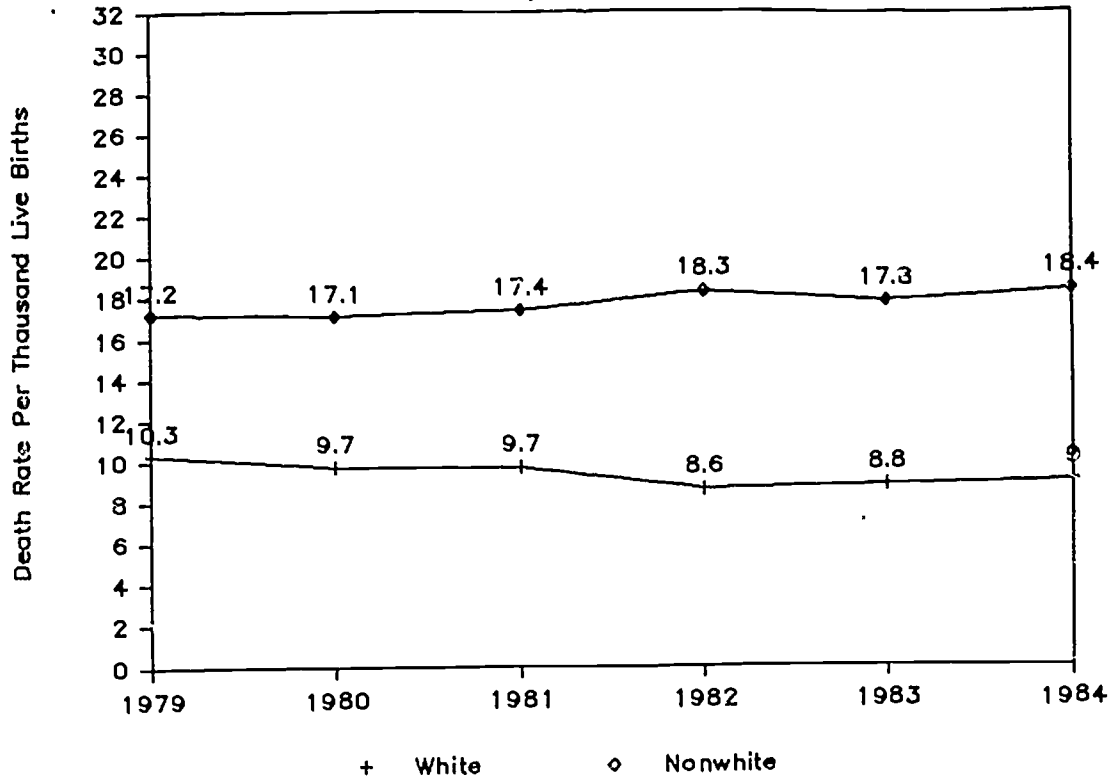
	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	5.0	4.9	4.8	4.5	4.8	4.6	4.8	-1.56
Nonwhite	11.3	11.6	11.2	10.6	11.5	10.8	11.2	-0.75
TOTAL	5.4	5.4	5.3	5.0	5.4	5.1	5.3	-1.01

Nonwhite to White ratio (1979): 2.26 (1984): 2.35 (Percent Change In Ratio 1979-1984): 3.89

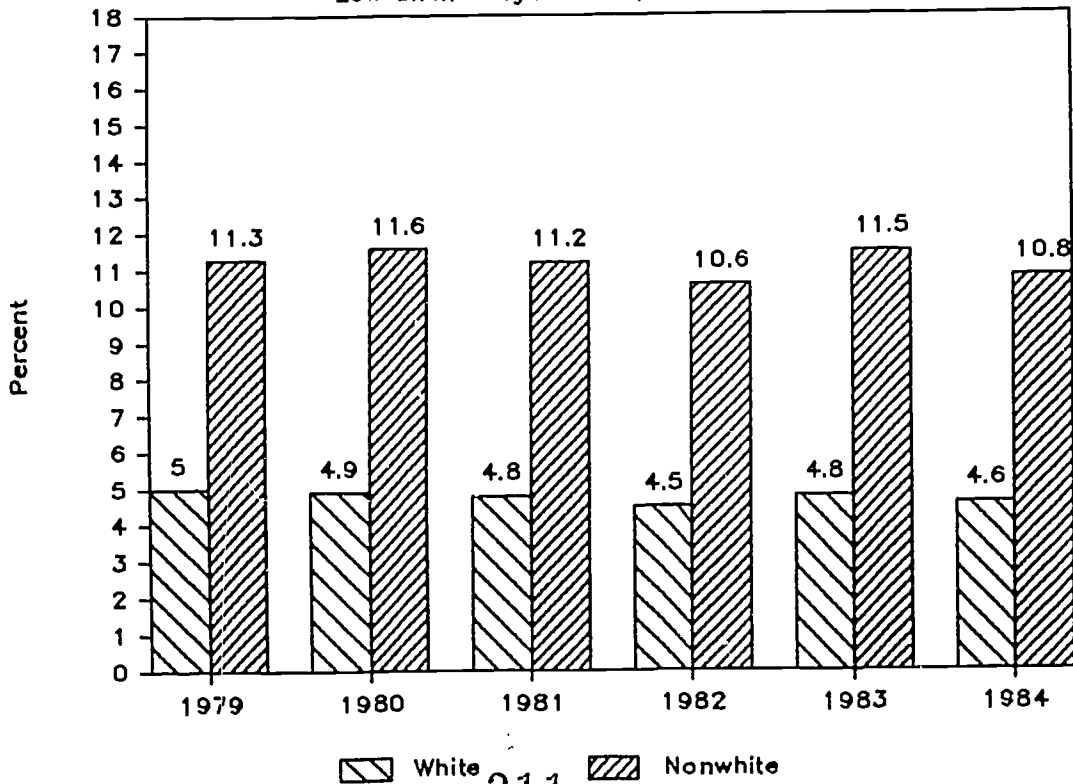
Footnotes:

<sup>a</sup> WIC data based on 11 months data; Dec. 1983 was missing.

## State of Wisconsin Infant Mortality Rates, 1979-1984



## State of Wisconsin Low Birth Weight Rates, 1979-1984



311

STATE OF WYOMING

NUMBER OF LIVE BIRTHS (1984): 9,753

NUMBER OF INFANT DEATHS (1984): 108

TOTAL POPULATION (1980): 470,000

NUMBER (and percent) LIVING BELOW POVERTY (1980): 36,000 (7.9%)

RACIAL COMPOSITION (BY PERCENT)

White: 94.9

Nonwhite: 5.1 (The NonWhite population is 12.5% Black and 29.6% Native American.)

AVERAGE MONTHLY NUMBER OF WIC PARTICIPANTS (FY 1984): 6,976

PERCENT WIC "ELIGIBLES" SERVED: 51.1%

AVERAGE MONTHLY NUMBER OF PARTICIPANTS IN COMMODITY SUPPLEMENTAL FOOD PROGRAM (FY 1984): No Program.

I N F A N T M O R T A L I T Y R A T E

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	13.2	9.4	11.4	9.9	10.0	11.1	10.8	-1.73
Nonwhite	12.6	19.8	7.5	9.5	8.0	10.5	11.3	7.43
TOTAL	13.2	9.9	11.2	9.9	9.8	11.1	10.9	-2.24

Nonwhite to White ratio (1979): 0.95      (1984): 0.95      (Percent Change In Ratio 1979-1984): -0.90

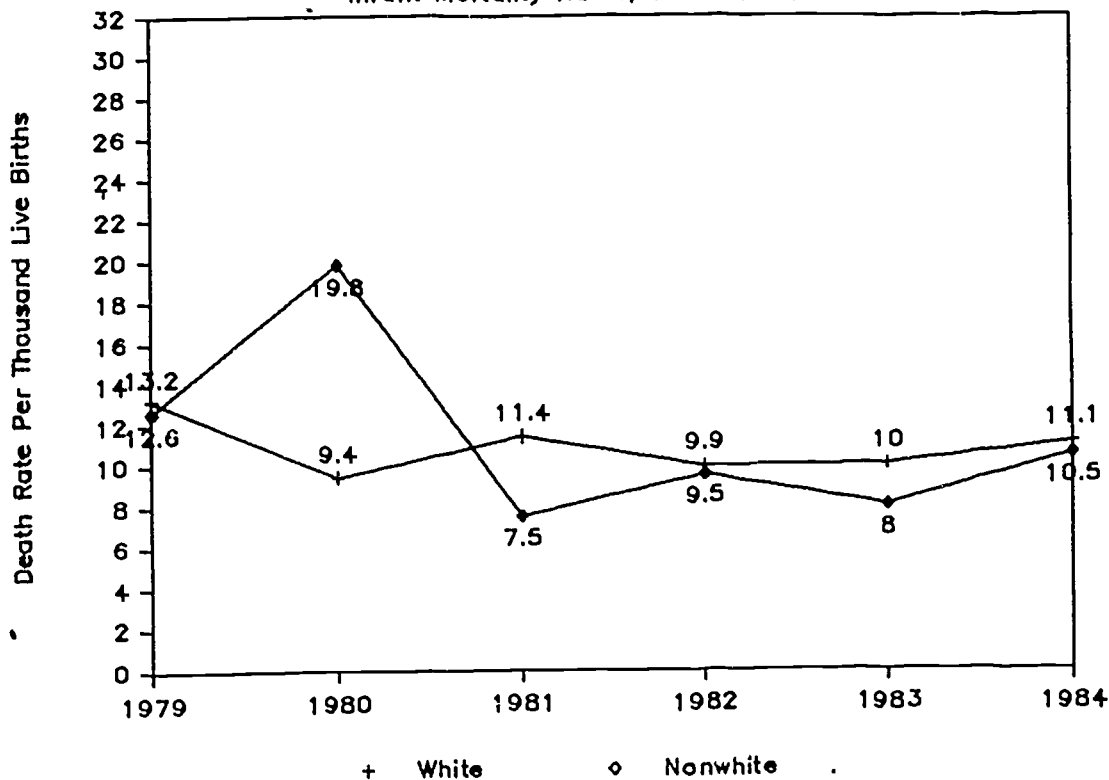
L O W B I R T H W E I G H T P E R C E N T

	1979	1980	1981	1982	1983	1984	6 YR. UNWEIGHTED AVERAGE (1979-1984)	AVERAGE ANNUAL PERCENT CHANGE
White	7.5	7.3	6.6	7.1	7.0	7.1	7.1	-0.93
Nonwhite	9.2	8.3	7.5	8.0	8.5	6.1	7.9	-6.95
TOTAL	7.6	7.4	6.6	7.1	7.0	7.1	7.1	-1.17

Nonwhite to White ratio (1979): 1.23      (1984): 0.86      (Percent Change In Ratio 1979-1984): -29.96

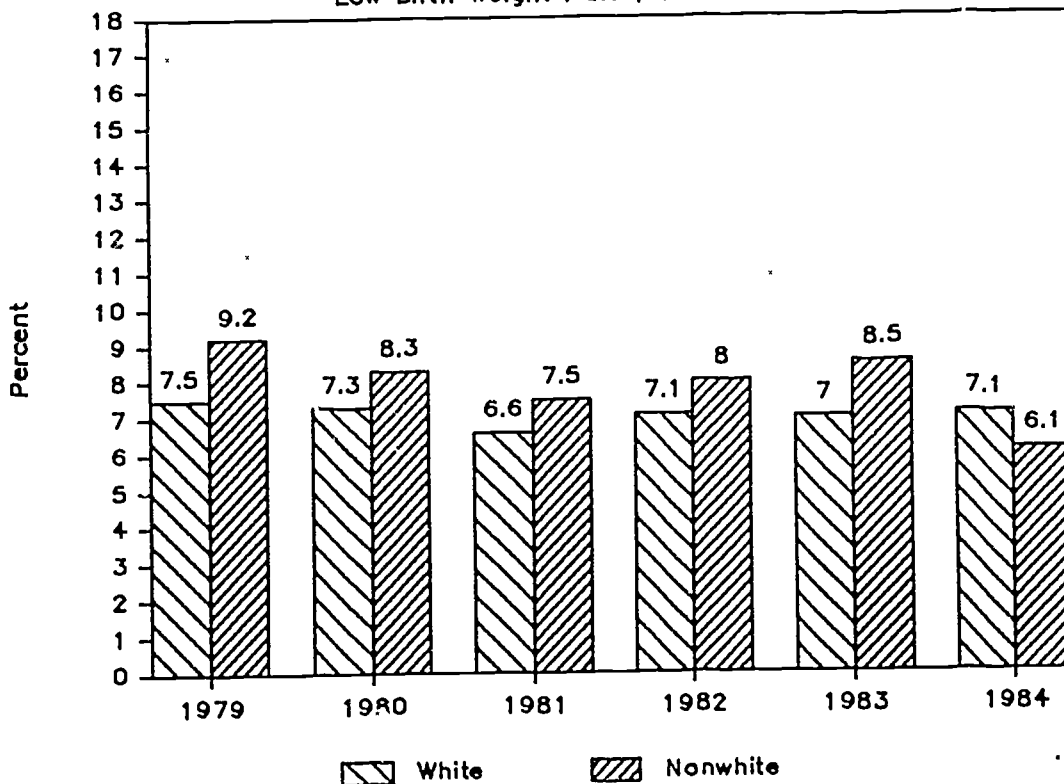
## State of Wyoming

### Infant Mortality Rates, 1979-1984



## State of Wyoming

### Low Birth Weight Rates, 1979-1984





## APPENDIX A

### ADVISORY COMMITTEE ON "POOR INFANTS, POOR CHANCES"

Amy Fine, M.P.H., R.N.  
Maternal and Child Health Consultant  
National Institute of Medicine  
Washington, D.C.

Jonathan Kotch, M.D., M.P.H.  
Associate Professor  
Department of Maternal and Child Health  
The University of North Carolina  
Chapel Hill, North Carolina

Brenda Lucas  
WIC Parent & WIC Program Advocate  
Baltimore, MD

Nancy Rudner, F.N.P.  
Maternal and Child Health Consultant  
Washington, D.C.

Linda Smith, M.S., R.D.  
Nutrition Consultant/WIC Specialist  
Washington, D.C.

Jeffrey Taylor, Ph.D.  
Chief, Division of Research,  
Demonstration and Evaluation  
Center for Health Promotion  
Michigan Department of Health  
Lansing, Michigan

## APPENDIX B

### STATE DIRECTORY FOR VITAL STATISTICS DATA

- ALABAMA Ms. Ruth Whisonant  
Director, Statistical Services  
Bureau of Vital Statistics  
State Office Building  
Montgomery, AL 36130-1701  
telephone: (205) 261-5041
- ALASKA M John McConnaughey  
State Registrar of Vital Statistics  
Dept. of Health and Social Services  
P.O. Box H-O1A  
Juneau, AL 99811  
telephone: (907) 465-3037
- ARIZONA Mr. Alphonso Bravo  
Vital Records Section  
Arizona Dept. of Health Services  
1740 W. Adams, Room 300  
Phoenix, AZ 85007  
telephone: (602) 255-1068
- ARKANSAS Mr. Werner Hancy  
Vital Records  
Arkansas Dept. of Health  
4815 West Markham St.  
Little Rock, AR 72205-3867  
telephone: (501) 661-2510
- CALIFORNIA Ms. Gwendolyn Doebbert  
Health Demographics Section  
Dept. of Health Services  
714 P Street, Room 1476  
Sacramento, CA 95814  
telephone: (916) 445-1010
- COLORADO Dyonne Richardson or Janet Lehman  
Health Statistics Section  
Colorado Dept. of Health  
4210 East 11th Avenue  
Denver, CO 80220  
telephone (303) 320-8475
- CONNECTICUT Mr. Richard Gruber  
Director Health Policy Planning and  
Statistics Division  
State Dept. of Health Services  
150 Washington St.  
Hartford, CT 06106  
telephone: (303) 566-1188

**DELAWARE**            Mr. Michael L. Richards  
 Chief, Vital Statistics  
 Division of Public Health  
 Jesse S. Cooper Memorial Building  
 Dover, DE 19901  
 telephone: (302) 736-4721

**DISTRICT OF COLUMBIA**    Mr. Abraham Davis  
 Vital Records Branch  
 Research and Statistics Division  
 615 Pennsylvania Avenue, NW  
 Washington, DC 20004  
 telephone: (202) 727-0702

**FLORIDA**                Mr. Gary Sammet  
 Office of Vital Statistics  
 P.O. Box 210  
 Jacksonville, FL 32231  
 telephone: (904) 359-6960

**GEORGIA**                Ms. Susan Stiefel  
 Vital Records Service  
 Dept. of Human Resources  
 47 Trinity Avenue, SW  
 Atlanta, GA 30334  
 telephone: (404) 898-6480

**HAWAII**                 Ms. Marie Viele  
 Research and Statistics Office  
 Hawaii Dept. of Health  
 P.O. Box 3378  
 Honolulu, HI 96801  
 telephone (808) 548-6454

**IDAHO**                  Ms. Jane Anderson or Jan Wick  
 Bureau of Vital Statistics,  
 Standards and Local Health Services  
 Dept. of Health and Welfare  
 450 State St.  
 Boise, ID 83720  
 telephone: (208) 334-5980

**ILLINOIS**                Ms. Mary Huck  
 Freedom of Information Office  
 Illinois Dept. of Public Health  
 535 West Jefferson St.  
 Springfield, IL 62761  
 telephone: (217) 782-4977

INDIANA Ms. Susie Dorrell  
Public Health Statistics  
State Board of Health  
1330 W. Michigan St.  
P.O. Box 1964  
Indianapolis, IN 46206  
telephone: (317) 633-0311

IOWA Mr. Michael Dare  
Vital Records/Statistical Service  
Iowa Dept. of Health  
Robert Lucas Building  
Des Moines, IA 50319  
telephone: (515) 281-4945

KANSAS Terri O'Brate  
Research Analyst  
Office of Information System  
and Computing  
Dept. of Health and Environment  
Forbes Field  
Topeka, KS 66620-0001  
telephone: (913) 862-9360 ex. 556

KENTUCKY Ms. Evelyn Jones  
Vital Statistics  
Dept. of Human Resources  
275 East Main St.  
Frankfort, KY 40621  
telephone: (502) 564-2757

LOUISIANA Ms. Audrey Collins  
Public Health Statistics  
Dept. of Health and Human Resources  
Office of Health Services and  
Environmental Quality  
P.O. Box 60630  
New Orleans, LA 70160  
telephone: (504) 568-5458

MAINE Mr. Dale Welch  
State Vital Statistics  
Bureau Health Planning/Development  
State House, Mail Station #11  
Augusta, ME 04333  
telephone: (207) 289-3001

MARYLAND Ms. Estelle Apelberg  
Maryland Center for Health Statistics  
201 West Preston St.  
Baltimore, MD 21201  
telephone: (301) 225-5950

317

- MASSACHUSETTS Ms. Charlene Zion  
Public Information Officer  
Registry of Vital Records and  
Health Statistics  
Division of Health Statistics/Research  
1 Ashburton Place, Room 107  
Boston, MA 02108  
telephone: (617) 727-2977
- MICHIGAN Ms. Kathy Bishop  
State Registrar's Office  
Michigan Dept. of Health  
P.O. Box 30035  
Lansing, MI 48909  
telephone: (517) 373-4790
- MINNESOTA Sue Beard-Johnson  
Health Program Aide  
Minnesota Center for Health Statistics  
Minnesota Dept. of Health  
717 SE Delaware St.  
P.O. Box 9441  
Minneapolis, MN 55440  
telephone: (612) 623-5353
- MISSISSIPPI Ms. Nancy Terry  
Public Health Statistics  
State Board of Health  
P.O. Box 1700  
Jackson, MS 39205  
telephone: (601) 354-6607
- MISSOURI Mr. Garland Land  
State Registrar of Vital Statistics  
Missouri Division of Health  
P.O. Box 570  
Jefferson City, MO 65102  
telephone: (314) 751-6400
- MONTANA Mr. John C. Wilson  
Chief, Bureau of Records  
and Statistics  
State Dept. of Health and  
Environmental Sciences  
Helena, MT 59620  
telephone: (406) 444-4228
- NEBRASKA Ms. Kay Pinkley  
Bureau of Vital Statistics  
Dept. of Health  
Box 95007  
Lincoln, NE 68509-5007  
telephone: (402) 471-2241

NEVADA Mrs. Olga Larson  
Vital Statistics  
Division of Health  
Capitol Complex  
Carson City, NV 89710  
telephone: (702) 885-4480

NEW HAMPSHIRE Mrs. Betty DeAngelis  
Bureau of Vital Records and Health Statistics  
6 Hazen Drive, H and W Building  
Concord, NH 03301-6527  
telephone: (603) 271-4645

NEW JERSEY Mr. Henry Watson  
Public Health Statistics  
John Fitch Plaza  
CN 360  
Trenton, NJ 08625  
telephone: (609) 984-6702

NEW MEXICO Ms. Patricia Totkamachi  
Health Statistics Section  
HSD/HED  
P.O. Box 968  
Santa Fe, NM 87504-0968  
telephone: (505) 827-2539

NEW YORK CITY Mr. Hwa, Chih Li  
Bureau of Vital Records  
The City of New York Dept. of Health  
125 Worth Street  
New York, NY 10013  
telephone: (212) 566-7040

NEW YORK STATE Mr. Michael A. Ellrott  
Health Statistics  
New York State Dept. of Health  
Empire State Plaza, Tower Building  
Albany, NY 12237  
telephone: (518) 474-8260

NORTH CAROLINA Ms. Kathy Blue  
North Carolina Dept. of Human Resources  
State Center for Health Statistics  
P.O. Box 2091  
Raleigh, NC 27602  
telephone: (919) 733-4728

NORTH DAKOTA Mr. Larry L. Graf  
Office of Statistical Services  
North Dakota State Dept. of Health  
State Capitol, Judicial Wing  
Bismarck, ND 58505  
telephone: (701) 224-3321

- OHIO** Ms. Mary Smith  
Chief Statistician  
Statistical Analysis Unit  
Division of Data Services  
Dept. of Health  
246 N. High St., P.O. Box 118  
Columbus, OH 43216  
telephone: (614) 462-7800
- OKLAHOMA** Mr. Dick Lorenz  
Maternal and Child Health Service  
Oklahoma State Dept. of Health  
1000 NE 10th St.  
P.O. Box 53551  
Oklahoma City, OK 73152  
telephone: (405) 271-6761
- OREGON** Ms. Joyce Grant-Worley  
Supervising Research Analyst  
State Health Division  
P.O. Box 231  
Portland, OR 97207  
telephone: (503) 229-6123
- PENNSYLVANIA** Ms. Patricia W. Potrzebowski  
Director, Division of Health Statistics  
and Research  
State Health Data Center  
P.O. Box 90  
Harrisburg, PA 17108  
telephone: (717) 783-2548
- RHODE ISLAND** Ms. Roberta Chevoya  
Division of Health Statistics  
Rhode Island Dept. of Health  
101 Cannon Building  
75 Davis St.  
Providence, RI 02908  
telephone: (401) 227-2812
- SOUTH CAROLINA** Ms. Linda Jacobs  
Data Management and Research Analyst  
Office of Vital Records and  
Public Health Statistics  
South Carolina Dept. of Health and  
Environmental Control  
2600 Bull St.  
Columbia, SC 29201  
telephone: (803) 758-5333

**SOUTH DAKOTA** Mr. William D. Johnson  
Health Services Administrator  
Vital Records Program  
State Dept. of Health  
Joe Foss Building  
Pierre, SD 57501  
telephone: (605) 773-3355

**TENNESSEE** Ms. Bonnie H. Harrah  
Manager, Information and Referral  
Center for Health Statistics  
Tennessee Dept. of Health and Environment  
C2-242 Cordell Hull Building  
Nashville, TN 37219  
telephone: (615) 741-1954

**TEXAS** Mr. Bill Barrington  
Director of Statistical Services  
Texas Dept. of Health  
1100 West 49th St.  
Austin, TX 78756-3191  
telephone: (512) 458-7362

**UTAH** Mr. Marvin Levy  
Director, Bureau of Health Statistics  
Utah Dept. of Health  
P.O. Box 2500  
Salt Lake City, UT 84110  
telephone: (801) 533-7416

**VERMONT** Ms. Karen Barin  
Public Health Statistics  
Vermont Dept. of Health  
P.O. Box 70  
Burlington, VT 05402  
telephone: (802) 863-7275

**VIRGINIA** Ms. B. P. Derr  
Vital Records and Health Statistics  
P.O. Box 1000  
Richmond, VA 23208-1000  
telephone: (804) 786-6206

**WASHINGTON** Teresa J. Jennings  
Research Analyst  
Vital Records Data Services  
Dept. of Social and Health Services  
Olympia, WA 98504-0095  
telephone: (206) 753-5938

**WEST VIRGINIA** Ms. Chuck Bailey  
State Dept. of Health  
Charleston, WV 25305  
telephone: (304) 348-9100

321



**WISCONSIN**

**Mr. Raymond Nashold**  
**Director, Bureau of Health Statistics**  
**and State Registrar**  
**Division of Health**  
**P.O. Box 309**  
**Madison, WI 53701**  
**telephone: (608) 266-1334**

**WYOMING**

**Ms. Lucinda McCaffrey**  
**Vital Statistics Analyst**  
**Dept. of Health and Social Services**  
**Hathaway Building**  
**Cheyenne, WY 82002**  
**telephone: (307) 777-7591**

## APPENDIX C

### USDA METHOD FOR DETERMINING NUMBER OF INCOME ELIGIBLES

The method of determining the estimates of potentially income-eligible population for all state agencies is as follows:

1. The number of children under 5 under 185 percent of poverty was provided by the Census Bureau from the 1980 census data.
2. The estimate of the number of women categorically eligible was determined by multiplying the total number of births in 1979 by 1.25 (to cover the span of time for potential eligibility for women, 1 1/2 years). This product was then multiplied by the percent that the number of children under 5 under 185 percent of poverty represent out of the total number of children under 5, as reported by the Census Bureau.
3. The estimate for children (includes infants) from (1) was added to the estimate for women from (2) for the total number of estimated income-eligible persons for all states.

## APPENDIX D REFERENCES

1. Public Health Service/U.S. Department of Health and Human Services: "The 1990 Health Objectives for the Nation: A Midcourse Review," November 1986.
2. National Center for Health Statistics: "Advance Report of Final Mortality Statistics, 1984". Monthly Vital Statistics Report. Vol. 35, No. 6 Supp. (2). DHHS Pub. No. (PHS) 86-1120. Public Health Service. Hyattsville, Md., September 26, 1986.
3. Personal communication, Mr. Rob Weinzimmer, National Center for Health Statistics, November 11, 1986.
4. NCHS: "Advance Report of Final Mortality Statistics, 1984," 1986.
5. National Center of Health Statistics: "Advance report of Final Natality Statistics, 1984". Monthly Vital Statistics Report. Vol. 35, No. 4 Supp. DHHS Pub. No. (PHS) 86-1120. Public Health Service, Hyattsville, Md., July 18, 1986.
6. Ibid.
7. Institute of Medicine: "Preventing Low Birthweight, A Summary." National Academy Press, Washington, DC, 1985.
8. Editorial, "Infant Mortality Reexamined," Journal of the American Medical Association, Vol. 247, No. 7, February 19, 1982.
9. "The Health of America's Children: Maternal and Child Health Data Book." Children's Defense Fund, Washington, DC, 1987.
10. Wallace, H.M., Goldstein, H. and Ericson, A. "Comparison of Infant Mortality in the U.S. and Sweden." Clinical Pediatrics, Vol. 21 (3):156-162, March 1982.
11. Lee, K., Paneth, N., Gartner, L.M., and Pearlman, M. "The Very Low-Birth-Weight Rate: Principal Predictor of Neonatal Mortality in Industrialized Populations," Journal of Pediatrics, Vol. 97:759-764, 1980.
12. Ericson, A., "Fetal and Infant Mortality in Norway and the U.S." Journal of the American Medical Association, Vol. 247, No. 7:987-991, 1982.
13. Michigan Department of Health: Infant Mortality in Michigan, May, 1987.
14. Binsacca, D.B., Ellis, J., Martin, D.G., and Petitti, D.B. "Factors Associated with Low Birthweight in an Inner-City Population: The Role of Financial Problems," American Journal of Public Health, Vol. 77:505-506, 1987.
15. Editorial, "Infant Mortality Reexamined," Journal of the American Medical Association, Vol. 247, No. 7, February 19, 1982.
16. Michigan Department of Health: Infant Mortality in Michigan.
17. Wise, Paul, H., M.D., M.P.H., Testimony Before the Select Committee on Hunger, United States House of Representatives, April 29, 1987.
18. Bureau of the Census/U.S. Department of Commerce: "Characteristics of the Population Below the Poverty Level: 1984," Current Population Reports, Consumer Income, Series P-60, No.152, June, 1986.
19. NCHS: "Advance Report of Final Natality Statistics, 1984," 1986.
20. "Update: Incidence of Low Birth Weight, Leads from the Morbidity and Mortality Weekly," Journal of the American Medical Association, Vol. 33, No. 31/32, 1984.
21. Wallace et al, "Comparison of Infant Mortality in the U.S. and Sweden."
22. Kleinman, J.C., Kovar, M.G., Feldman, J.J., and Young, C.A. "A Comparison of 1960 and 1973-1974 Early Neonatal Mortality in Selected States," American Journal of Epidemiology, Vol. 108:454-469, 1978.
23. Lee et al, "The Very Low-Birth-Weight Rate: Principal Predictor of Neonatal Mortality in Industrialized Populations."
24. Wallace et al, "Comparison of Infant Mortality in the U.S. and Sweden."
25. Institute of Medicine, "Preventing Low Birthweight, A Summary."