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# STUDIES

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## HEALTH STATUS OF BLACKS IN NORTH CAROLINA

by

Kathryn B. Surles  
Karen T. Graham  
Delton Atkinson

### ABSTRACT

The health status of North Carolina's Black citizens is improving; for example, infant mortality and death from heart disease, stroke, nephritis/nephrosis, and non-motor-vehicle unintentional injuries have recently declined. The Black North Carolinian's risk of death from chronic obstructive pulmonary diseases and suicide remains well below that of Whites, and smoking and drinking appear less prevalent among minority females than others. The gap in life expectancy between White and minority females has also narrowed.

For many of the health indicators examined in this report, however, there remain serious disparities between Blacks and other North Carolinians; for example, Blacks are experiencing high rates of low birthweight, infant and maternal mortality, birth defects, and developmental disability. These high rates parallel high and rising rates of Black teenage pregnancy, repeat teenage pregnancy, and births out of wedlock. Black mothers also are more likely than others to have late or no prenatal care.

In the mortality area, Blacks are experiencing high rates of death from heart disease, cancer, stroke, diabetes, chronic liver disease/cirrhosis, nephritis/nephrosis, AIDS, unintentional injuries, and homicide. High rates of hypertension and alcohol use among Black decedents also are observed. And the Black North Carolinian's risk of death from diabetes, liver disease/cirrhosis, and homicide is **rising**.

This study also reveals high incidences of site-specific cancer and very high and rising rates of AIDS, syphilis, gonorrhea, and chlamydia among Blacks. Further, sample surveys reveal high prevalences among Blacks of behaviors and lifestyles that contribute to morbidity and premature mortality.

Both a national initiative, *Healthy People 2000*, and a corresponding North Carolina initiative, *Healthy Carolinians 2000*, offer a vision for the 21st Century. That vision is characterized by "... greatly reduced disparities in the health status of populations within our society." Toward that goal, the present report provides baseline (1990) data and recent trends for a number of the national health objectives for Blacks. This report also points up certain data deficiencies that need to be addressed (see Conclusion) and suggests that one means to that end is a periodic statewide survey that oversamples minority populations, at least Blacks and Native Americans.

## HEALTH STATUS OF BLACKS IN NORTH CAROLINA

Recent studies have described North Carolina's minority populations in terms of *Who and Where*<sup>1</sup> and assessed the health status of the state's Native American residents.<sup>2</sup> An earlier study<sup>3</sup> documented the disproportionate illness and death being experienced by the state's minority population and how this disparity had not been appreciably altered in the past decade.

The present study of African Americans parallels the health status report for Native Americans.<sup>2</sup> Funding from the Public Health Foundation and a grant-in-aid from the North Carolina Minority Health Council and the Office of Minority Health have enabled the State Center to undertake the recent series of minority studies and to initiate a minority health surveillance system. The latter will allow for rapid update of minority health indices and trends in the future.

### TECHNICAL NOTES

For the population-based rates of this report, the population bases represent straight-line interpolations/extrapolations of the 1980 and 1990 censuses (since intercensal population estimates are not produced for Native Americans and those for Blacks have not been corrected to reflect 1990 census counts). The census figures used for this purpose are from the 100-percent tabulations; other census results cited in this report may represent sample tabulations.

In comparing population-based rates among race groups, either age-specific or age-adjusted rates are required because minority populations are much younger than Whites; thus, comparisons of crude rates among the races would be misleading in terms of relative risk. For this reason, mortality rates are age-adjusted by the direct method; and birth, abortion, and pregnancy rates are specific for age groups 15-44 and 15-17.

In the section on maternal and infant health, live births for 1990 and 1991 use the definition of a newborn's race as that of its mother. Prior to 1990 for North Carolina (1989 for the U.S.), the darker of the mother's

and father's race (if different) was ascribed to the newborn at birth. For infant deaths, race of the decedent is that recorded on the death certificate.

Some of the tables and figures of this report include data for Native Americans. Others show only Black and White data. In these cases, data for Native Americans are not included because the trend data are considered to be of unacceptable quality as described previously<sup>2</sup> and county data generally involve small numbers of Indian events. Even for Blacks and Whites, the user of county-specific data should keep in mind the statistical problem of small numbers; many of the rates or percentages may be associated with large random errors.

Throughout this report, reference is made to those Year 2000 national health objectives that are specific for Blacks.<sup>4</sup> Although some of those may not be entirely appropriate for North Carolina, they at least identify areas in which North Carolina needs to examine available data. A complete list of the national objectives for Blacks is found in Appendix 1.

All data in this report are for residents of the state or county except the Medical Examiner data of Table 30. Definitions for a number of the terms used in this report are found in the Glossary beginning on page 33. Note the race definitions on pages 36 and 37 and that the terms "African American" and "Black" are used interchangeably in this report.

Throughout this report, Blacks are compared to Whites on a variety of health measures. In most cases Blacks are shown to have lower health status, on average. The advantages of showing the data by race are obvious for targeting resources and interventions toward populations most in need; however, there are hazards of interpretation.

**Race in and of itself does not cause poor health status.** We do not have a complete understanding of why race is associated with health problems, but it is very likely that factors such as socioeconomic status, stress, and racism are among the underlying causes of the lower health status of Blacks (on average) compared to Whites. Very few of our health data have these types of

information recorded, while most do have information on race. Thus, race often serves as a surrogate measure for a variety of other related factors.

## POPULATION CHARACTERISTICS

The 1990 census indicates that one of every four persons in North Carolina is a member of a minority group. Blacks constitute the largest minority (about 22% of the total population), with American Indians a distant second (1.2%). The large Black population makes North Carolina one of only seven states in which Blacks constitute more than one-fifth of the population. Only six states had a higher number of Blacks in 1990. At that time, North Carolina residents reporting race as Black (African American) numbered 1,456,323.

The previously cited report<sup>1</sup> examines a variety of census data for race and Hispanic subgroups of the state's population. For Blacks and Native Americans, health indicators from the 1990 census and the corresponding percent changes since 1980 are compared to those for Whites. Among the findings for Blacks are these:

- Between 1980 and 1990, the Black population grew by 10.4 percent. This compares to 12.4 percent for Whites, 23.7 percent for Native Americans, and 105.5 percent for all other races.
- Natural increase (excess of births over deaths) as opposed to in-migration accounted for virtually all (99.8%) of the Black population's growth. Like Whites, Blacks lost population aged 5-17.
- Compared to Whites in 1990, Blacks were far more urban, far younger, and their males far more likely to be incarcerated.
- Black incomes were below those of American Indians and far below those of Whites. Poverty remains especially prevalent among Black and Indian families with children, especially those headed by a female.

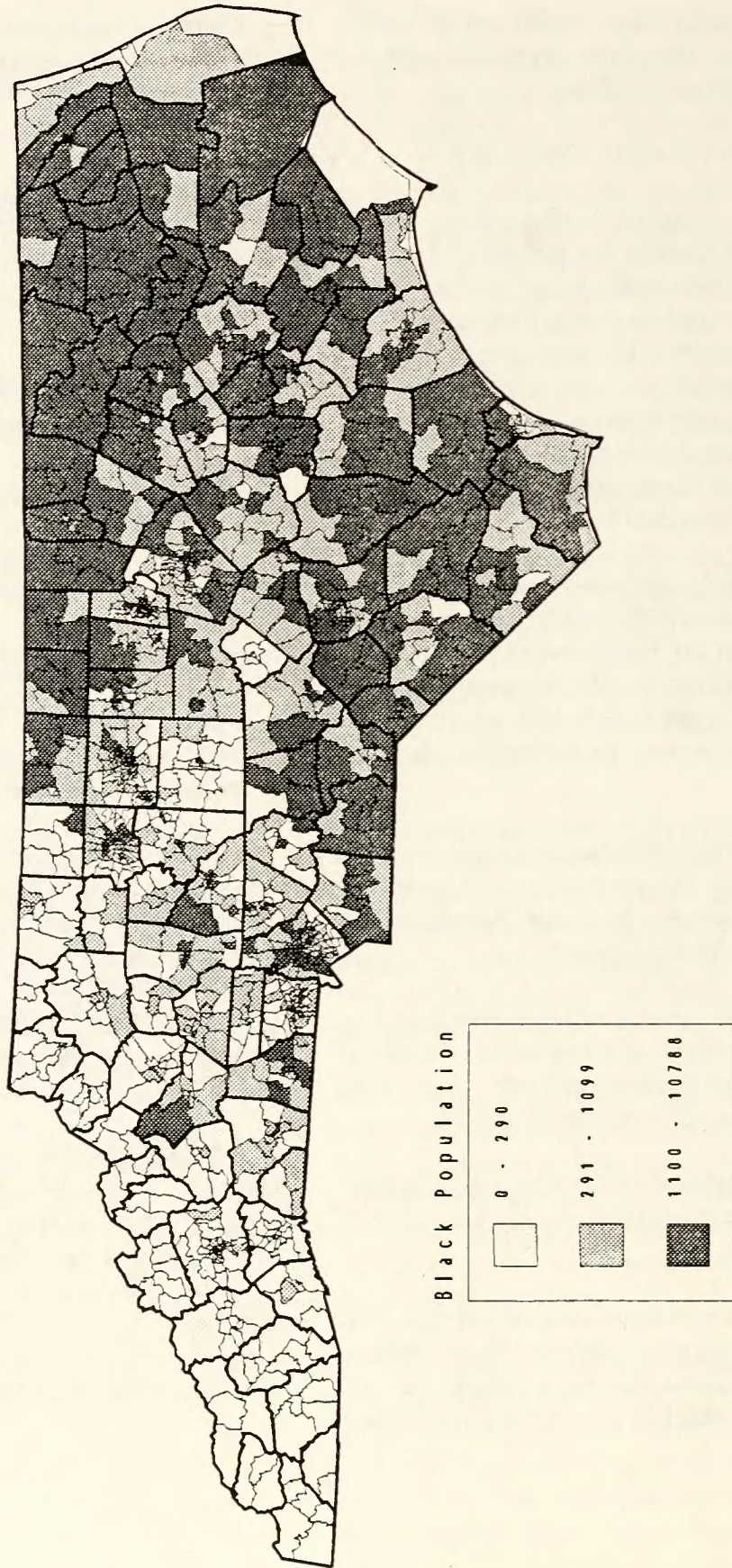
- During the 1980s, female-headed families with children became increasingly more prevalent among minorities. In 1990, a Black child was half as likely as a White child to belong to a married-couple family.
- Low educational levels remain a problem of minorities. Compared to Whites in 1990, Blacks were 20 percent less likely to have graduated from high school and one-half as likely to have attended college four or more years.
- In 1990, a Black was two-and-a-half times as likely as a White to be unemployed.
- Black housing conditions remain worse than those of Native Americans and much worse than those of Whites. In 1990, one-half of Blacks versus two-thirds of Indians and nearly three-fourths of Whites owned their homes, and more Blacks (23%) than Indians (12%) and Whites (6%) had no household vehicle.
- Compared to Whites, Black women are twice as likely to have never married and more likely to be separated, widowed, or divorced.

In Figure 1, shadings categorize census tracts (metropolitan counties) and block numbering areas (nonmetropolitan counties) according to the size of their 1990 Black populations. The user will note that these county subdivisions vary widely in spatial size as they do also in total population size. Altogether, the state is comprised of a combined total of 1,492 census tracts and block numbering areas.

Finally, in examining the locations of North Carolina Blacks, Table 1 provides for county-specific comparisons by race and Hispanic origin. The reader may obtain additional county-level detail by contacting one of 36 data centers where publicly accessible census products are maintained. The locations and telephone numbers of these centers are available from the State Data Center, Office of State Planning, at (919) 733-4131.

Figure 1

## Black Population by Census Tract and Block Numbering Area



Source: U.S. Census 1990. Darker boundaries delineate counties; lighter boundaries are for census tracts (CTs) or block numbering areas (BNAs) (see Glossary, pages 33 and 34). Shadings depict the number of Black persons living in the CT or the BNA; the three categories are approximately equal in terms of the number of subdivisions (CTs and BNAs) represented.

## MATERNAL AND INFANT HEALTH

### *Birth, Abortion, and Pregnancy Rates*

As shown by the trend data of Table 2 and Figure 2, both Blacks and Whites have experienced increases in the birth rate. In contrast, the White abortion rate declined while that for Blacks rose during the 1981-1991 period.

These trends for teenage girls (ages 15-17) are shown in Table 3 and Figure 3. Although the abortion rates for Whites and Blacks have both recently declined, the birth rates have continued to rise. As a result, the pregnancy rates for Black and White girls aged 15-17 have risen 22 and 11 percent respectively since 1981.

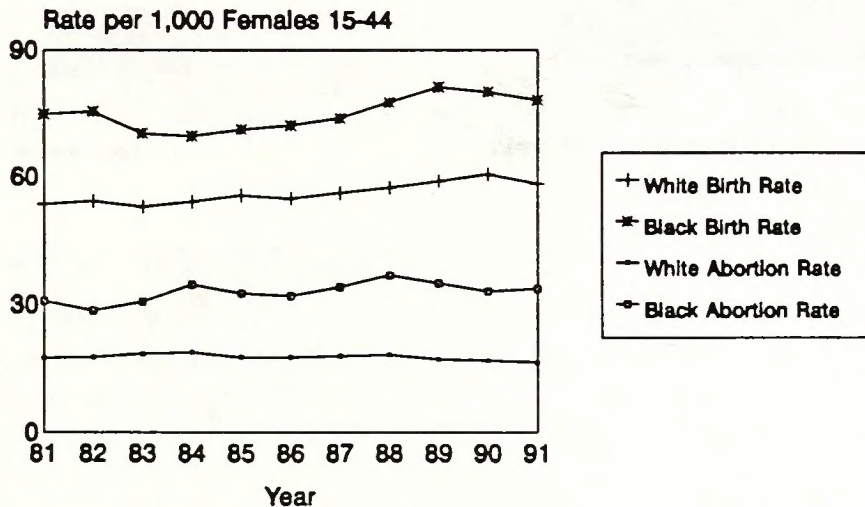
Of note in Figure 3 are the differential patterns between Blacks and Whites. Whereas, until 1989, the birth and abortion rates of White teens were about the

same, the birth rate of Black teens has been consistently higher than the abortion rate. As observed for Whites, the differential between the two Black rates widened in the 1989-1991 period.

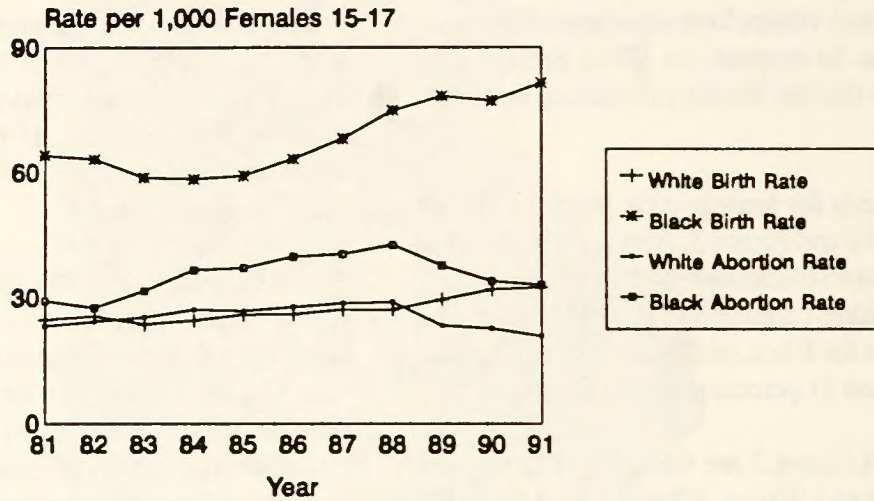
In considering these trends, the reader should be aware that, nationally, the rate of sexual activity among adolescents has increased and the age of initiation of sexual activity has declined.<sup>4</sup> This occurs in the face of declining abortion opportunities for North Carolina's poor,<sup>5</sup> as later discussed.

As shown by the statewide rates of Figure 4, the 1987-91 birth rate for Blacks was slightly higher than that for American Indians and about one-third higher than that for Whites. At the same time, the Black abortion rate was much higher than both the White and Indian rates, as shown in Figure 5. These same birth and abortion patterns are observed among teenagers.<sup>2</sup>

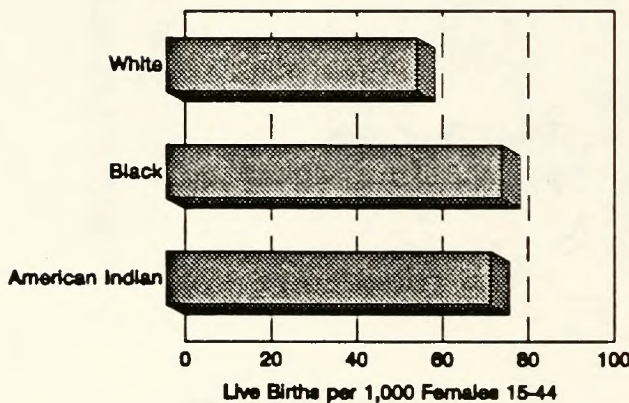
**FIGURE 2**  
**Live Birth and Abortion Rates by Race**  
**North Carolina 1981-1991**



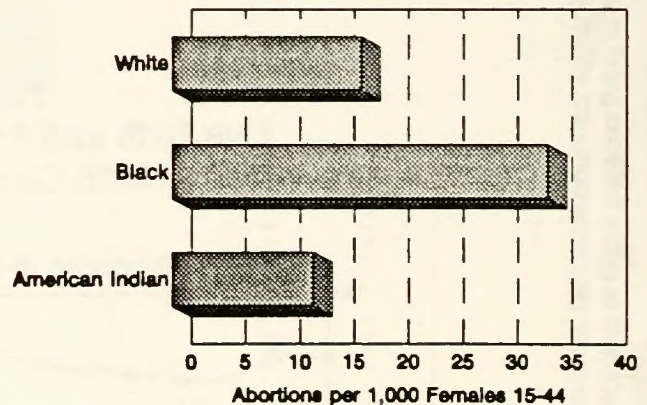
**FIGURE 3**  
**Live Birth and Abortion Rates for Females 15-17 by Race**  
**North Carolina 1981-1991**



**FIGURE 4**  
**Birth Rates by Race**  
**North Carolina 1987-91**



**FIGURE 5**  
**Abortion Rates by Race**  
**North Carolina 1987-91**



For all women 15-44, Table 4 displays the 1987-91 White and Black birth, abortion, and pregnancy rates for the state and 88 counties having sizable Black populations. These same data for females 15-17 are displayed in Table 5. The numbers of events underlying the rates of Tables 4 and 5 are found in Tables 6 and 7.

Among the Year 2000 national health objectives for Blacks is a target of 120 pregnancies per 1,000 girls aged 15-19 (baseline data were unavailable for Blacks aged 15-17).<sup>4</sup> The corresponding 1990 North Carolina rate was 29 percent higher at 155.3. Alternatively, *Healthy People 2000*<sup>4</sup> suggests that a 35-percent

reduction in the pregnancy rate for Black girls 15-17 should be the target. Focus on ages 15-17 rather than 15-19 is due to greater economic and child health problems among the state's younger mothers.

In examining the rates of Table 5, counties having Black pregnancy rates above 137 (state rate plus 20 percent) should be especially concerned. From Table 7, are the numbers large? What are the birth and abortion components?

**Repeat teenage pregnancy** is a problem of growing concern. During 1987-91, a Black girl aged 15-17 was three-and-one-half times as likely as a White to have a second or higher-order pregnancy that ended in a live birth, fetal death, or induced abortion (see Table 8). She was five times as likely to have a third or higher-order pregnancy.

As shown in Table 8, the repeat (nonfirst or multiparous) pregnancy rate for Black teens grew by more than one-third between 1987 and 1991, to 32.4 per

1,000 females 15-17. The corresponding White rate grew by 22 percent to 8.8.

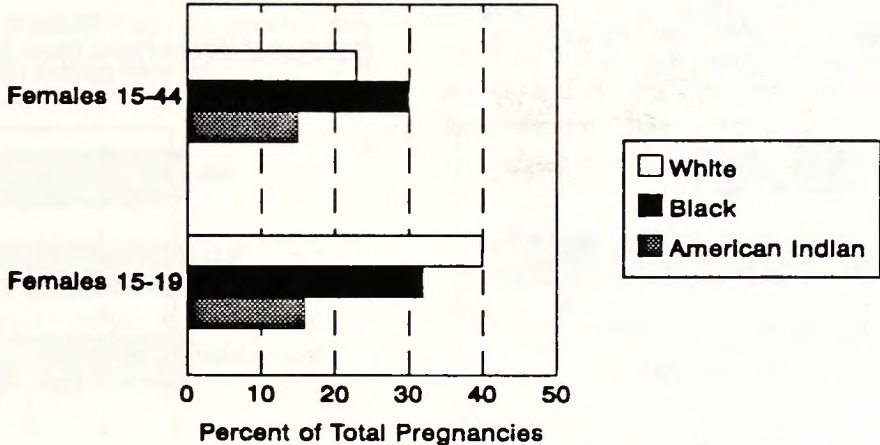
*Note: Prior pregnancies may include both spontaneous and induced abortions.*

**Abortion Fractions**

The abortion rate estimates the probability of a woman becoming pregnant and having an abortion. It may be compared to the birth rate. The abortion fraction, on the other hand, measures the probability of a pregnant woman having an abortion.

When 1987-91 abortions are viewed as a fraction of total pregnancies, it is found that pregnant Blacks (30%) were much more likely than pregnant Whites (23%) or pregnant American Indians (15%) to obtain an abortion. Among teenagers, however, the pattern is reversed: pregnant Blacks were less likely than pregnant Whites to obtain an abortion. These abortion incidence data are depicted in Figure 6.

**FIGURE 6**  
**Abortion Fractions by Race and Age**  
**North Carolina 1987-91**



For both Blacks and Whites, the abortion fraction declined after 1984 while the number of state-funded abortions dropped from a high of 6,645 in FY 84 to 2,219 in FY 92.<sup>5</sup> However, the state abortion fund will nearly triple in FY 94 to \$1.2 million,<sup>6</sup> making abortion more accessible to low-income women.

### Unintended Pregnancy

The prevention of unintended (unwanted or mistimed) pregnancies would greatly reduce the number of induced abortions and should reduce low birthweight, infant mortality, and other adverse pregnancy outcomes.

The measurement of whether or not pregnancies are intended is an uncertain process. For present purposes, let us assume that all induced abortions are unintended pregnancies as are all other pregnancies to unmarried women and to girls under the age of 18. This would mean that, of all North Carolina pregnancies terminating during 1987-91, the proportions unintended were 34% for Whites, 74% for Blacks, and 54% for Native Americans, as depicted in Figure 7.

*Note: Some births to unmarried women and to girls under age 18 are intended, but we have assumed*

*in the opposite direction that all births to married women and to those 18 and older are intended, some of which are not. Thus, the above definition for "unintended pregnancy" appears a fairly reasonable surrogate measure.*

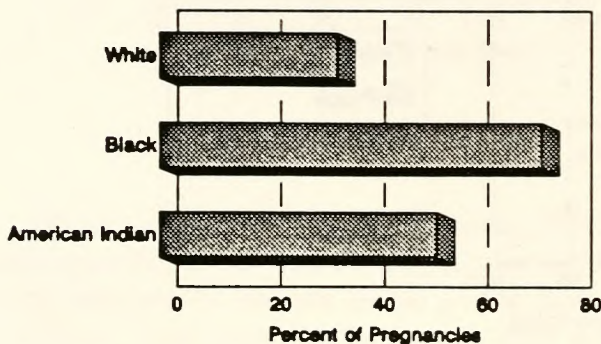
Based on a 1988 nationwide survey, the Centers for Disease Control estimates that 78 percent of Black pregnancies in the last five years were unintended (unwanted or mistimed). The Year 2000 national objective is to reduce that figure by nearly half, to 40 percent.<sup>4</sup>

### Maternal Characteristics

For Blacks, Whites, and American Indians, Table 9 shows five-year numbers and percentage distributions of live births for maternal factors known to be related to infant survival. For the categories associated with elevated infant loss (labeled A-H), Black percentages are generally higher than those for both Whites and Indians. Exceptions to this pattern are:

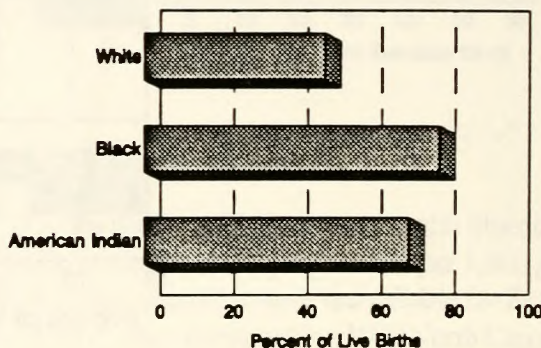
- Black mothers are less likely than Whites to be 35 or older (but more likely than Whites to be under 18).
- Black mothers are equally likely as Whites and less likely than Indians to have had fewer than nine years of schooling.

**FIGURE 7**  
Percentage of Pregnancies Unintended\*  
North Carolina 1987-91



\*Defined as all abortions and all other pregnancies to unmarried women and to girls under age 18.

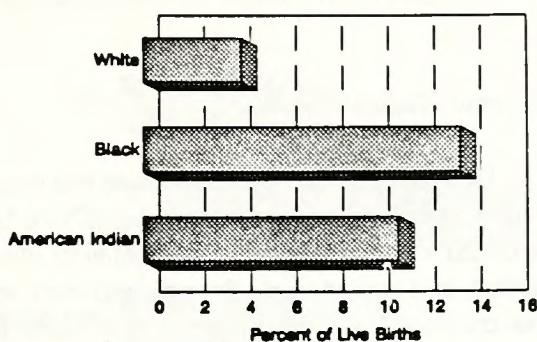
**FIGURE 8**  
Percentage of Mothers Having One or More Risk Factors\* by Race  
North Carolina 1987-91



\*One or more of eight sociodemographic characteristics; See A-H of Table 9.



**FIGURE 9**  
**Percentage of Mothers Having Inadequate Prenatal Care\* by Race**  
**North Carolina 1987-91**



\*As defined by the Kessner Index. See Glossary.

received: Medicaid, WIC, and health department prenatal care. The minority percentages are much higher than those for Whites although the gap narrowed between 1988 and 1991. During this period, the income eligibility level for Medicaid rose from 100 to 185 percent of the federal poverty level, which served to increase the percentages of pregnant women receiving WIC and health department prenatal care.

Table 14 shows the 1988-1991 percentages of **MEDICAID** births where prenatal WIC or maternity care coordination (case management) was received. Again, the minority percentages are higher than those for Whites with mothers of both race groups experiencing large increases in maternity care coordination since the service was first offered in 1988. Still, in 1991, more than half of eligible women in each race group did not receive the service.

Efforts to increase the number of women on Medicaid who receive maternity care coordination and WIC should result in savings in newborn medical care costs. The studies cited above<sup>8,9</sup> estimate that, for every \$1 spent on maternity care coordination, the Medicaid program saves \$2 in early newborn medical care costs. One dollar spent on WIC is estimated to save Medicaid \$3 in newborn costs.

Births out of wedlock are particularly numerous and increasing among Black mothers, resulting in Black mothers being more likely than others to have one or more of the A-H risk factors. This result is depicted in Figure 8. The corresponding numbers and percentages for the state and selected counties are found in Table 10; only in Onslow and Cumberland is the Black percentage below 70. For both Blacks and Whites, this percentage has risen steadily since 1985.

### ***Prenatal Care***

Among live births during 1987-91, Black mothers were more likely than either White or Indian mothers to have no prenatal care or care after the first trimester of pregnancy, as shown in Table 11. The Year 2000 national target for all race/ethnic groups is that 90 percent of mothers receive prenatal care in the first trimester.<sup>4</sup> The state's 1990 Black baseline percentage was one-third lower at 59.4. The percentage rose slightly in 1991 to 60.2, but remains below the 62.2 percent experienced in 1981.

In addition to time of first visit, a prenatal care index developed by Kessner<sup>7</sup> takes into account the number of prenatal visits and gestational age at delivery. Using these criteria (see Glossary, page 36), Figure 9 shows that Black mothers are far more likely than White mothers to have "inadequate" care. The 1987-91 Black and White numbers and percentages for selected counties are found in Table 12. More than one-fourth of all Black births in Johnston, Nash, and Wayne counties involved inadequate prenatal care. In another nine counties, more than one-fifth of all Black births were to mothers having inadequate care.

### ***Enhanced Prenatal Care***

Nonmedical prenatal services such as education, counseling, and nutrition (food programs) have been shown to be effective in reducing poor pregnancy outcomes among low-income women.<sup>8,9</sup> A later section on low birthweight provides some supporting data.

Table 13 shows 1988-1991 trends in the percentages of White and minority live births by type of service

Note: Blacks account for about 92 percent of minority live births in North Carolina. WIC and "maternity care coordination" are defined in the Glossary.

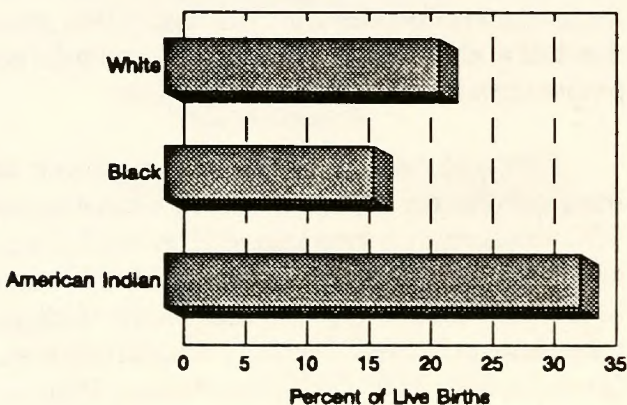
### Maternal Medical Conditions

The North Carolina birth certificate was revised in 1988 to include checkboxes for medical risk factors associated with the pregnancy and delivery. Anemia, diabetes, and hypertension during pregnancy are the most commonly recorded medical conditions of the mother.

As shown in Table 15, Black and Indian mothers delivering in 1988-91 were more likely than Whites to have anemia, Black and White mothers were about equally likely to have hypertension, and Black mothers were least likely to have diabetes. These results may be partly due to a reporting artifact since Black mothers may be less likely than others to have existing conditions recorded prenatally due to late or no care.

An item related to smoking during pregnancy was also added to the birth certificate in 1988. As shown in Figure 10, Black mothers appear less likely than others to smoke, a phenomenon also observed in other states. As above, less opportunity to record the practice prenatally may be a factor.

**FIGURE 10**  
Percentage of Mothers Who Smoked by Race  
North Carolina 1988-91



For the state and selected counties, Table 16 provides the 1988-91 numbers and percentages of Black and White mothers who reported smoking during pregnancy. Cessation counseling by clinicians should be a high priority of local health departments, especially in those 14 counties where more than one-fifth of Black mothers reported smoking.

The occurrence of a primary or repeat C-Section is also indicated on the revised birth certificate. As shown in Table 17, racial differences in use of the procedure do not appear large statewide; however, the procedure appears particularly prevalent in some counties. The reduction of Cesarean sections to no more than 15 per 100 deliveries is among the Year 2000 health objectives for the nation.<sup>4</sup> During 1988-91, no county met that goal.

### Maternal Mortality

Based solely on the underlying cause of death (ICD-9 codes 630-676), 34 Black maternal deaths were reported during 1987-91; 14 of these occurred in 1990 alone. The resulting five-year rate of 23.0 per 100,000 live births compares to a White rate of 5.6.

The Year 2000 national target for Blacks is 5.0 maternal deaths per 100,000 live births.<sup>4</sup> The state's unusually high 1990 baseline rate of 45.5 (14 deaths) included three deaths due to ectopic pregnancy and four due to complications from hypertension.

National studies have found that up to 40 percent of maternal deaths have been misclassified as nonmaternal using only the underlying cause of death.<sup>4</sup> In North Carolina, an enhanced surveillance system, where death certificates are matched to live birth and fetal death records, identifies at least 50 percent more maternal deaths than are identified just from cause-of-death coding.

### Low Birthweight

Table 18 shows the numbers and percentages of 1987-91 live births by birthweight by race. Blacks were more likely than American Indians and much more likely

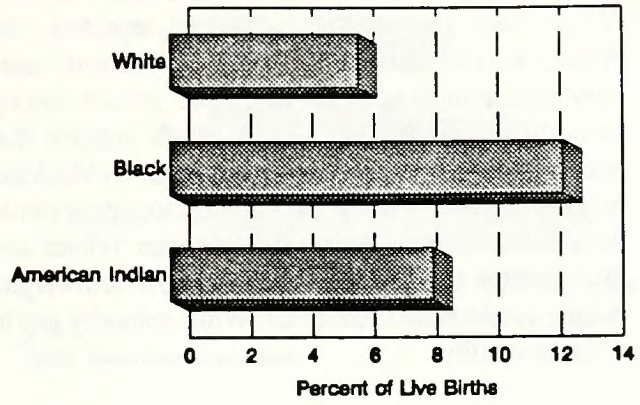
than Whites to have infants weighing under 1500 or 1500-2499 grams at birth.

The Year 2000 low birthweight objectives for Blacks are 9.0 percent for under 2500 grams and 2.0 percent for under 1500 grams.<sup>4</sup> The state's 1990 Black percentages were much higher at 12.9 and 3.0 respectively.

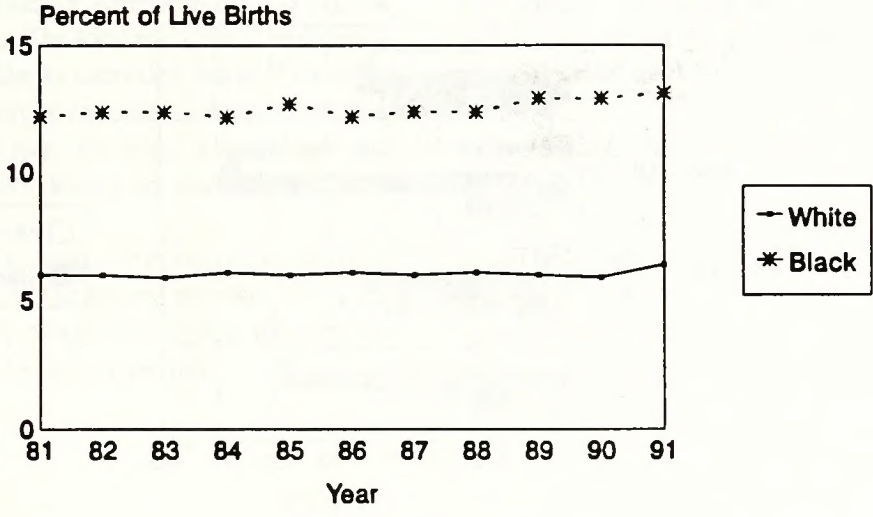
Figure 11 compares the 1987-91 Black, White, and Indian percentages of births under 2500 grams, and Figure 12 compares the Black and White percentages over time. The Black percentage remains twice that of Whites as neither race group has been successful in reducing low birthweight.

County-level data for Black and White births under 2500 grams are given in Table 19. In nearly all counties, the percentage for Blacks exceeds the national low-birthweight target of 9.0 percent.

**FIGURE 11**  
Percentage Low-Weight Births by Race  
North Carolina 1987-91



**FIGURE 12**  
Percent Low-Weight Births by Race  
North Carolina 1981-1991

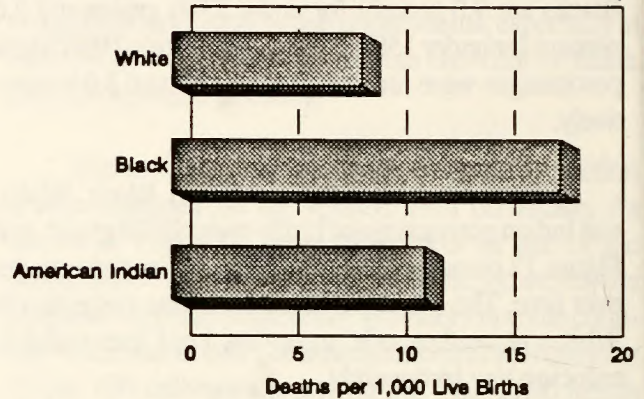


As mentioned earlier, previous studies<sup>8,9</sup> have shown substantial benefits of both WIC and maternity care coordination in reducing low birthweight among low-income (Medicaid) women in North Carolina. When these analyses are performed separately for Whites and minorities,<sup>10</sup> the benefits of WIC and maternity care coordination appear to be greater among minorities than Whites. These results suggest that increasing the number of minority women on Medicaid who receive prenatal WIC and maternity care coordination will reduce the differential between Whites and minorities in the rates of low and very low birthweight, which in turn would reduce the White-minority gap in infant mortality.

**Fetal and Infant Mortality**

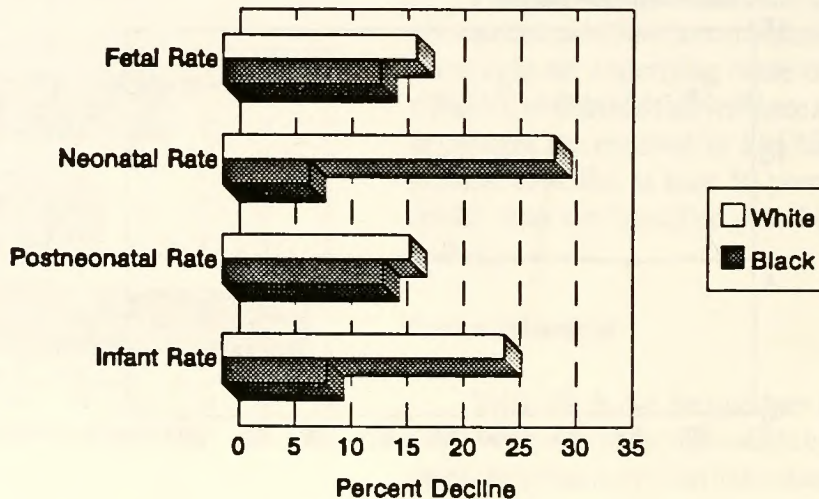
For each type of death (fetal, neonatal, postneonatal, infant), the 1987-91 death rates for Blacks exceeded those of both Whites and American Indians, as shown in Table 20. Low birthweight/respiratory distress followed by Sudden Infant Death Syndrome and birth defects accounted for 47 percent of the Black infant deaths. The statewide infant death rate for Blacks, Whites, and Indians are depicted in Figure 13.

**FIGURE 13**  
**Infant Death Rates by Race**  
**North Carolina 1987-91**



For each type of death examined here, Year 2000 national objectives for Blacks and the corresponding 1990 state rates are shown in the text table on page 14. In both fetal and neonatal mortality, North Carolina Blacks clearly have a long way to go to achieve the national goals. This follows a decade (1981-1991) in which the state's Black fetal, neonatal, and infant death rates declined by only 14.0, 7.7, and 9.4 percent respectively (Figure 14); whereas Year 2000 Black targets require statewide reductions of one-third or more in each 1990 rate.

**FIGURE 14**  
**Percentage Decline in Fetal and Infant Death Rates by Race**  
**North Carolina 1981 to 1991**



Concerning the relatively small 1981-1991 decline in Black neonatal mortality, a partial explanation may be that the reduction in fetal mortality resulted in higher-risk infants surviving to the neonatal period. Despite this possibility, however, White neonatal mortality declined by 30 percent.

Table 21 provides the 1987-91 numbers of Black and White infant deaths and those rates for counties having sizable Black populations. The reader should note that some of the rates are based on very small numbers. Among those counties having at least 20 Black infant deaths, almost all Black rates are at least double the White rates. In Union, Moore, Halifax, Lee, and Mecklenburg counties, Black rates are about three to four times those for Whites.

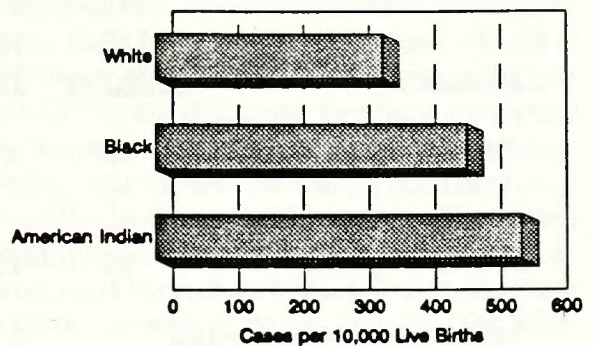
### *Birth Defects*

The North Carolina Birth Defects Registry combines data from several separate sources to provide an estimate of birth defects incidence in the state. Sources are birth and infant death records, newborn Medicaid claims, newborn hospital discharge records, neonatal intensive care unit records, and Children's Special Health Services (CSHS) records. The CSHS program serves poverty-level children with various developmental disabilities who are treated through local public health departments.

As shown in Table 22 and Figure 15, the state's 1989-90 Black incidence rate for birth defects was between the higher rate for American Indians and the lower rate for Whites. The total rate (minor malformations excluded) for Blacks exceeded that for Whites by 37 percent, due largely to excesses in musculoskeletal defects. High Black rates for heart, eye and ear, and central nervous system defects are also observed.

*Note: Due to the way data are collected in the birth defects registry, the figures presented here reflect primarily congenital defects that are detectable in the newborn period.*

**FIGURE 15**  
Birth Defects Incidence Rates\* by Race  
North Carolina Birth Defects Registry 1989-90



\*Minor malformations excluded.

### *Developmental Disabilities*

A number of North Carolina early intervention programs identify children with or at risk for developmental delay (see Glossary, page 34). These programs are the Child Service Coordination Program, Children's Special Health Services, Developmental Day, Early Childhood Intervention, and Developmental Evaluation Centers.

Based on data from these several programs, minority children aged 0-3 are more than twice as likely as Whites to be classified as having or being at risk for developmental delay. The FY 1990 rates per 1,000 children aged 0-3 were 57.5 for minorities versus 26.1 for Whites. The extent to which these rates reflect differential use of public versus private providers is unknown.

### *Year 2000 Health Objectives*

Cited below are nine of the nation's maternal and infant health objectives for Blacks, i.e., those for which the State Center has annual measures. Others may be found in the list of Appendix 1.

## MATERNAL AND INFANT HEALTH OBJECTIVES FOR BLACKS

Health Status Indicator	U.S. Objective <sup>4</sup>	N.C. 1990
• Maternal Death Rate	5.0	45.5
• Percent Low Birthweight (under 2500 grams)	9.0	12.9
• Percent Very Low Birthweight (under 1500 grams)	2.0	3.0
• Fetal Death Rate (20+ weeks)	7.5	14.1
• Neonatal Death Rate	7.0	11.9
• Postneonatal Death Rate	4.0	4.5
• Infant Death Rate	11.0	16.5
• Percent Prenatal Care in First Trimester	90.0	59.4
• Pregnancy Rate for Girls 15-19	120.0	155.3

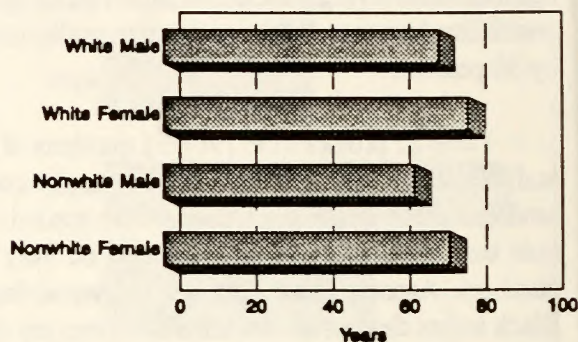
## MORTALITY

### *Life Expectancy*

According to unpublished estimates from North Carolina's Office of State Planning, minority males and females born in North Carolina in 1990 could expect to live 6.3 and 4.9 fewer years respectively than their White counterparts (see Figure 16). At age 65 in 1990, the minority male and female could each expect 1.3 fewer years of remaining life. Only for females has the racial gap narrowed since 1980.

This section examines a variety of factors involved in the minority person's relatively short life span and the Year 2000 national objectives that attempt to address the racial gap.

FIGURE 16  
Life Expectancy at Birth by Race-Sex Group  
North Carolina 1990



Source: North Carolina Office of State Planning.

### *Leading Causes of Death*

Tables 23 and 24 provide the numbers of deaths, years of life lost (YLL), and those rankings for all Blacks (12 leading causes) and for male and female Blacks (5 leading causes). The rankings vary considerably for death counts versus YLLs and for males versus females, although heart disease ranks high on any list. For both male and female Blacks, conditions in the perinatal period, homicide, and motor vehicle injuries are major causes of years of life lost, although they are secondary to cancer among Black females.

Compared to the death-count rankings for Whites (data not shown), diabetes and homicide rank higher while chronic obstructive pulmonary diseases rank much lower among Blacks.

### *Median Age at Death*

Excluding the major causes of infant death, Table 25 provides 1987-91 counts of deaths and median ages at death by race. For all causes of death, the median age of Blacks is above that for Indians but nearly six years below that for Whites. The median age of Black decedents is at least six years below that of White decedents for cerebrovascular disease, pneumonia/influenza, chronic liver disease/cirrhosis, non-motor-vehicle unintentional injuries, and suicide. The Black-White differentials are especially large for non-motor-

vehicle injuries (16.6 years), liver disease/cirrhosis (10.3 years), and suicide (8.7 years). These are exactly the same causes for which Native American median ages at death are especially low.

Having now provided the median ages at death, we should hasten to say that these measures are subject to population dynamics as well as factors that influence health and longevity. For example, if two groups have exactly the same age-specific death rates, the younger group will have a lower median age at death than the older group, just due to population distribution. The median ages of North Carolina's population groups in 1990 were 34.7 for Whites, 28.5 for Blacks, and 27.3 for American Indians,<sup>1</sup> so lower median ages at death among minorities are to be expected. However, population distribution alone would not account for the Native and African American's exceedingly low medians for non-motor-vehicle injuries, liver disease/cirrhosis, and suicide.

Keeping in mind the above caution about median age, Table 26 provides Black and White death counts and median ages at death for counties having at least 500 Black residents in 1990. In using these data, the reader should also be wary of medians based on small numbers of deaths (say, fewer than 20).

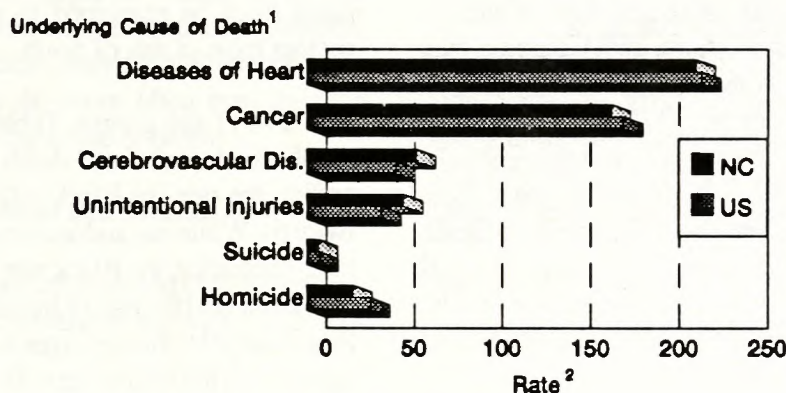
### Age-Adjusted Death Rates

Table 27 provides 1987-91 cause-specific age-adjusted death rates by race. As shown by the resulting ratios, the Black rates are generally higher than those of both Whites and Native Americans -- major exceptions being relatively low Black rates for suicide and chronic obstructive pulmonary disease. Compared to both Whites and Indians, Blacks have a particularly high rate of death from AIDS. Compared to Whites alone, Blacks have particularly high rates of death from diabetes, nephritis/nephrosis, and homicide. For these causes, the Black rates are on the order of three to four times the White rates.

Comparing North Carolina Blacks to Blacks nationwide, Figure 17 reveals higher state rates for cerebrovascular disease and unintentional injuries. The state's Black homicide rate is actually 28 percent lower than the U.S. rate.

Based on older data for the U.S. (1987),<sup>11</sup> the higher North Carolina Black mortality from unintentional injuries is shown to involve both motor vehicle and other unintentional injuries, but more the former than the latter. Higher diabetes mortality among North Carolina Blacks is also observed.

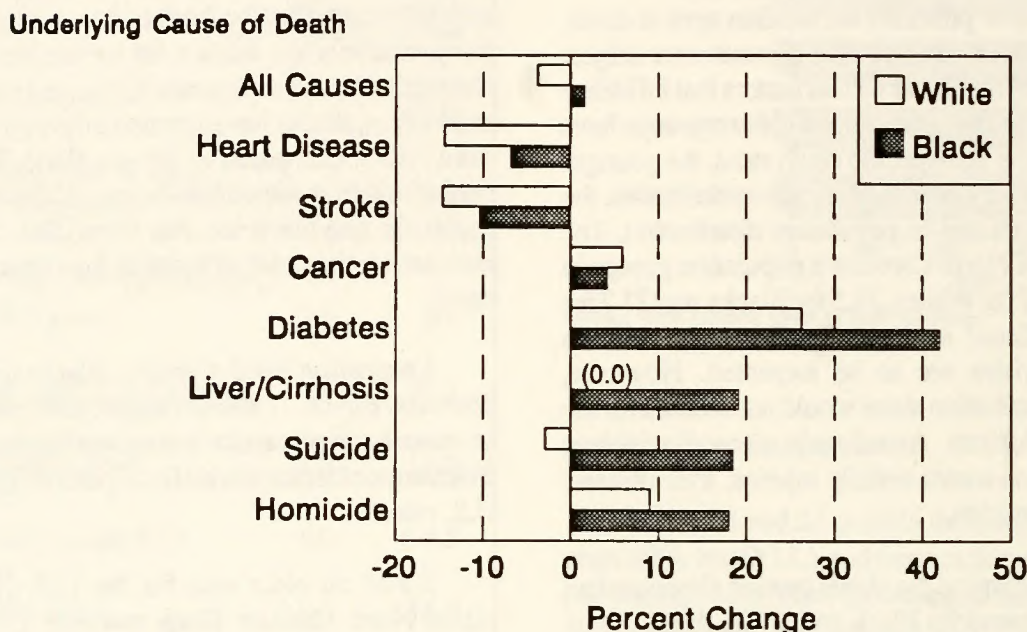
**FIGURE 17**  
**Age-Adjusted Death Rates for Blacks**  
**North Carolina 1987-91 and United States 1988-90**



<sup>1</sup> ICD-9 codes are listed in Appendix 2.

<sup>2</sup> Deaths per 100,000 population using 10-year age groups and U.S. 1940 population as standard for direct age adjustment.

**FIGURE 18**  
**Percent Changes in Selected Age-Adjusted Death Rates by Race**  
**North Carolina 1982-86 to 1987-91**



When the Black and White death rates of Table 27 are compared to corresponding rates for the preceding period 1982-86, Blacks are shown to have experienced lower declines in the cardiovascular diseases; for example, the decline in heart disease was 7 percent for Blacks versus 14 percent for Whites. At the same time, Blacks experienced much higher increases than Whites in mortality from diabetes (42% vs. 26%), chronic liver disease/cirrhosis (19% vs. no change), suicide (19% vs. a 3% reduction), and homicide (18% vs. 9%). Meanwhile, cancer mortality rose 4 percent among Blacks versus 6 percent among Whites, while death from nephritis/nephrosis dropped about 17 percent and death from non-motor-vehicle unintentional injuries dropped about 7 percent for each race. Selected ones of the 1982-86 to 1987-91 percent changes in age-adjusted mortality are depicted in Figure 18.

#### *Age-Specific Death Rates*

While summary measures like median age at death and the age-adjusted death rate are highly useful in making multiple comparisons among groups, they in no way replace age-specific death rates. Ultimately, the latter must be examined to identify the population sectors most at risk of death.

For 11 age groups, Table 28 shows the 1987-91 numbers of deaths and death rates by race. As seen earlier, the rate for Black infants (under one year) is twice the White rate and one-and-a-half times the Indian rate. Thereafter, the Black rate falls between the lower White rate and the higher Indian rate, up to ages 25-34. From that point through ages 45-54, the Black rates are again twice the White rates. The Black-to-White ratios then diminish with Blacks 85 and older experiencing lower mortality than Whites.



## *Mentioned Conditions*

The North Carolina death certificate allows for the encoding of up to 20 diseases, injuries, or complications that caused or contributed to a death. The underlying cause of death, used in the preceding mortality analyses, is selected from among all mentioned conditions as the one that initiated events resulting in the death.

In 1990, the average number of mentioned conditions was slightly higher for Blacks (2.88) than for Whites (2.84) or American Indians (2.78). When only non-violent causes of death are considered, the same pattern is observed with averages of 2.86 for Blacks, 2.82 for Whites, and 2.71 for Indians.

For the period 1989-91, Table 29 displays the numbers of deaths and age-adjusted death rates for six leading mentioned conditions by race. Except for atherosclerosis, the Black rates are two to three times the White rates. Compared to both Whites and Indians, Black North Carolinians appear much more at risk of death associated with hypertension, septicemia, and nephritis/nephrosis.

In considering these rates of mentioned conditions, the user should keep in mind that the death certificate asks for only "conditions contributing to death" and may not reflect all conditions present at death.

Except for hypertension and alcohol use, the death rates of Table 29 may be compared to those of Table 27 since they are adjusted to the same standard population. Obviously, these conditions, especially atherosclerosis, contribute to mortality far more often than they are considered the underlying cause of death.

## *Medical Examiner Deaths and Alcohol*

North Carolina law requires that all deaths suspected to be due to a violent or traumatic injury or

accident be investigated by a Medical Examiner. Medical Examiners are licensed physicians across the state who devote their time to investigating such non-natural deaths. Certain other categories of deaths also fall under the purview of the Medical Examiner—deaths that are medically unattended, those that occur during a surgical procedure, those that are due to suspicious circumstances, or deaths where the death is sudden or not related to a known previous disease.

A large amount of information is collected on each death investigated by a Medical Examiner. This information is compiled from a death certificate completed by the Medical Examiner, a detailed "Report of Investigation by Medical Examiner," an autopsy report if an autopsy was performed, a motor vehicle crash report (if appropriate), and the results of a variety of toxicology laboratory tests. One of the most frequent toxicology tests is a blood test for ethanol.

A person is legally intoxicated in North Carolina if his blood alcohol concentration is 10 percent or greater. (Note: Effective October 1, 1993, new legislation has redefined legal intoxication to mean a blood alcohol content of .08 percent or greater. House Bill 385 ratified July 5, 1993.)

For those causes of death for which the Medical Examiner data are complete, and for decedents 15 and older who were tested for blood alcohol, Table 30 shows by race-sex group the 1987-91 percentages of deaths with a blood alcohol of .10 percent or greater. In total, nonwhites were about one-third more likely than Whites to be legally intoxicated when the violence occurred; however, White and nonwhite males dying from homicide, drowning, and fire were about equally likely to be intoxicated at the .10 percent level. The minority excess in legal intoxication was particularly great for female drowning victims.

*Note: The percentages in Table 30 are for deaths occurring in North Carolina.*



FIGURE 20

Percentage of Deaths Certified by a Medical Examiner by Race  
North Carolina 1987-91

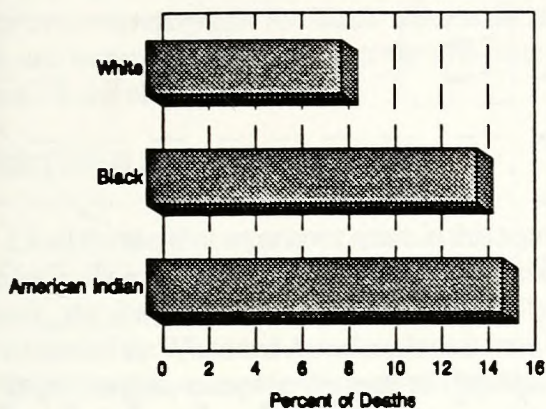
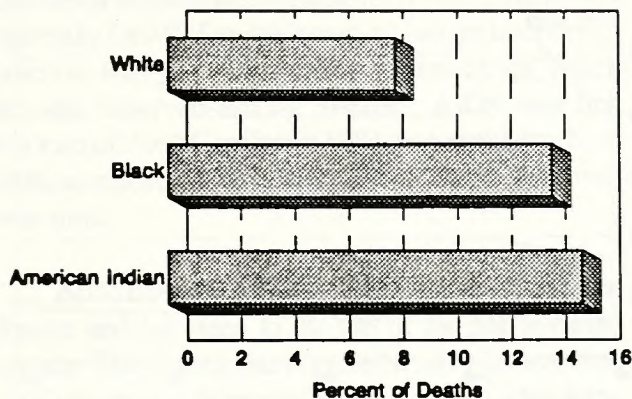


FIGURE 21

Percentage of Decedents Autopsied by Race  
North Carolina 1987-91



## CANCER INCIDENCE

The North Carolina Central Cancer Registry (CCR) collects information on all new cases of cancer diagnosed in the state. The resulting data are used to support cancer program planning, development, and evaluation efforts.

The CCR began operating in 1987, but 1990 was the first year of statewide coverage. Using these data, Tables 31 and 32 show the numbers and percentage distributions of White and Black cases by site, stage at diagnosis, and age at diagnosis, for males and females respectively. Among male cases, Blacks were more likely than Whites to have cancer of the prostate, oral cavity, larynx, pancreas and other (unlisted) sites; to be diagnosed at the distant stage; and to be under age 55 when diagnosed. Among female cases, Blacks were more likely than Whites to have cancer of the colon/rectum, cervix, kidney, and other (unlisted) sites; to be diagnosed at the regional or distant stage; and to be under age 55 when diagnosed.

Going a step further, Table 33 compares the three leading sites of 1990 new cancer cases by age, race, and sex. Among male cases, leading sites for Whites and

Blacks are exactly the same at ages under 15 and 55 and older. The oral cavity is a leading site for Black males aged 35-54, while prostate, lung, and colon/rectum are leading sites for both Black and White males 55 and older.

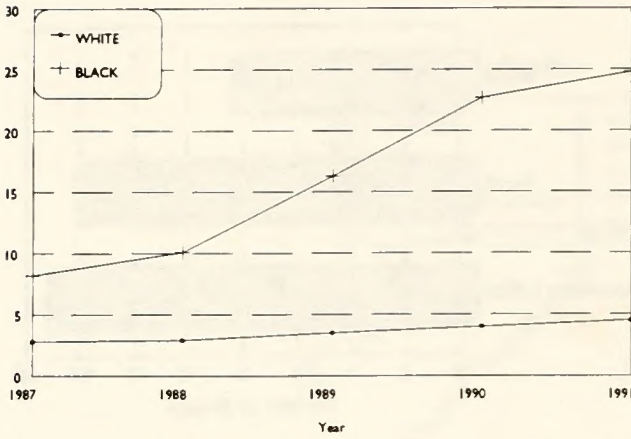
Among female cases also, the leading sites for Blacks and Whites are the same at ages under 15 and 55 and older. The cervix uteri is a leading site for Black females aged 35-54 while breast, colon/rectum, and lung are leading sites for both Black and White females 55 and older.

The examination of race-specific cancer incidence rates for counties would require age-adjustment, which is not considered feasible with only one year of data available. Future reports on race-specific incidence should combine multiple years of data to produce county-level sex-specific age-adjusted rates for total cancer and at least the four leading sites: lung, female breast, prostate, and colon/rectum.

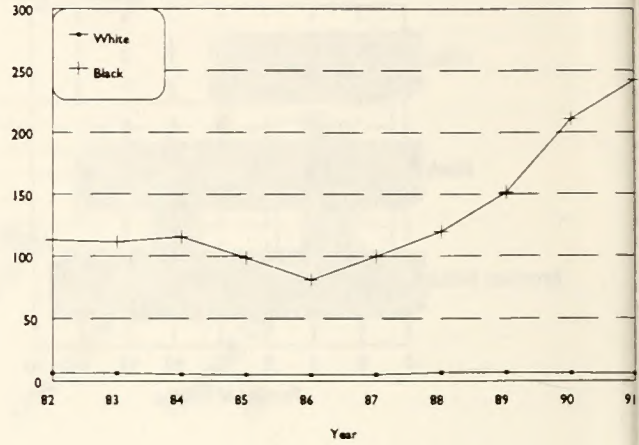
The potential for reducing cancer incidence and mortality through prevention and early detection strategies appears to be large.<sup>4</sup> The Healthy People 2000 objectives for cancer include reduction of cigarette

**Figure 22**  
**Trends in Leading Infectious Diseases, North Carolina 1982-1991 or 1987-1991**  
**(Reported Cases per 100,000 Population)**

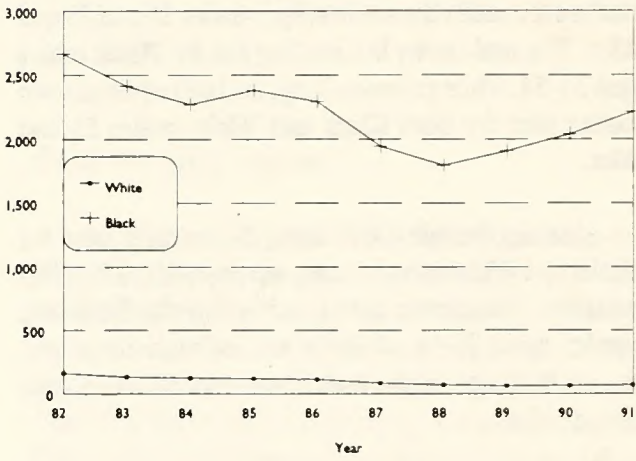
**AIDS**



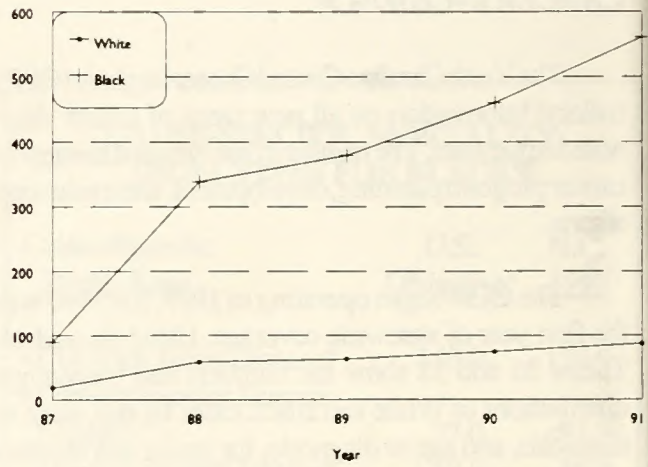
**SYPHILIS**



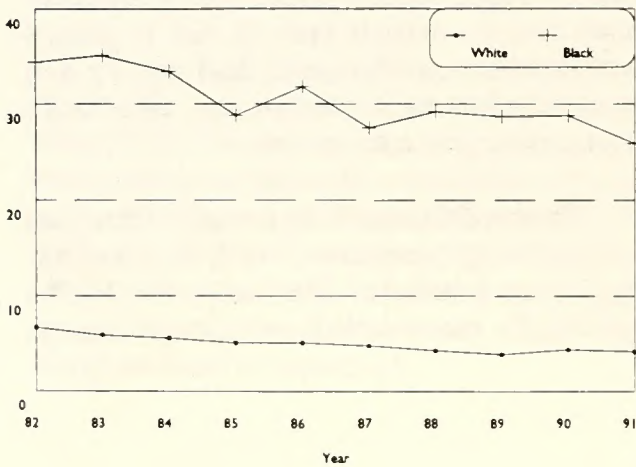
**GONORRHEA**



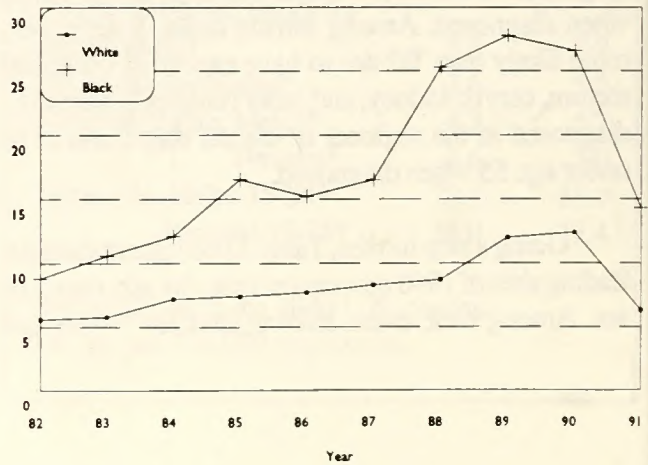
**CHLAMYDIA**



**TUBERCULOSIS**



**HEPATITIS B**



smoking, dietary change, and improvements in early detection. Specific objectives address smoking reductions for Blacks 20 and older, increases in clinical breast exams and mammograms for Black women 40 and older, and increased use of Pap tests for low-income women 18 and older.

## INFECTIOUS DISEASES

Of all the racial comparisons made in this report, those for leading infectious diseases are by far the most dramatic. As shown in Table 34, the 1987-91 Black rates exceeded the White and American Indian rates by very large margins, except in the case of Hepatitis B where the Indian rate was higher.

When the Black rates of Table 34 are compared to those of Whites, the following rate ratios are observed: AIDS 5.7, syphilis 25.9, gonorrhea 28.2, chlamydia 6.0, tuberculosis 6.5, and Hepatitis B 2.3. While these differentials are striking, especially for syphilis and gonorrhea, the reader should keep in mind that infectious disease counts are subject to testing and reporting biases which tend to underrepresent persons tested in the private health sector.

Figure 22 displays Black and White trends in the case rates for leading infectious diseases. Recent increases in the AIDS, syphilis, gonorrhea, and chlamydia rates of Blacks must be cause for concern. However, especially for AIDS and chlamydia, changes in reporting practices may contribute to the upward trends, which are also observed among Whites. AIDS was first reported in North Carolina in 1984, as was chlamydia in 1986, so reporting performance should have improved over time.

AIDS has emerged as a major sexually transmitted disease and has risen to the top of the public health agenda. This disease has occurred mainly among three high-risk groups: homosexual or bisexual males, intravenous drug users, and hemophiliacs.

Figure 23 depicts the state's 1987-91 Black and White percentages of AIDS cases by risk factor. Black persons with AIDS were more likely than Whites to be intravenous drug users and much less likely than Whites to be homosexual or bisexual males.

**FIGURE 23**  
**Percentage of AIDS Cases by Risk Factor**  
**North Carolina 1987-91**

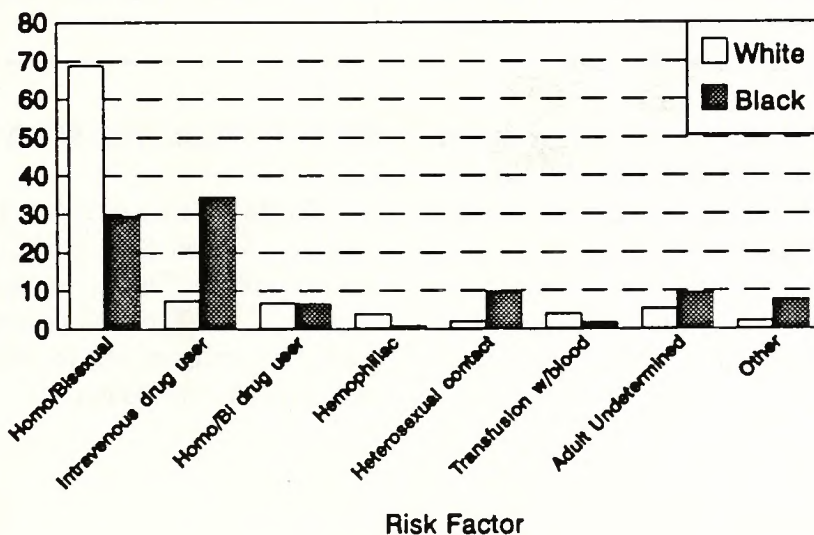


Figure 24 depicts geographical patterns in the 1987-91 Black case rates for the six diseases examined in this report. The following bullets describe major findings for counties having 20 or more cases of the specified disease among Blacks:

- **AIDS** - The highest Black case rates occurred among residents of Durham and Guilford counties. Those rates were twice the rate for Blacks statewide (23.8 per 100,000 population).
- **SYPHILIS** - Mecklenburg, Harnett, Johnston, and Catawba counties had Black case rates above 300 (compared to a statewide Black rate of 165.6). Seven other counties had Black rates above 200.
- **GONORRHEA** - Mecklenburg, Wilson, Forsyth, and Lenoir counties had Black rates exceeding the statewide rate (1,982.8) by at least 70 percent. Mecklenburg County alone reported nearly 21,000 Black cases during the five-year period; Forsyth County reported nearly 10,000.
- **CHLAMYDIA** - Compared to a Black rate of 368 statewide, Black rates in Wilson, Wake, and Gaston counties were two- to four-fold. Other high-rate counties include Nash, Henderson, Greene, and Rowan, whose rates exceeded 600.
- **TUBERCULOSIS** - The highest Black rates occurred among residents of Northampton, Johnston, Wilson, and Lenoir counties. Other counties having Black rates at least twice the statewide rate include Pitt, Sampson, Columbus, and Hertford.
- **HEPATITIS B** - Cabarrus County had the highest Black rate, 79.7. Black rates in Buncombe, Rowan, Gaston, Anson, and Mecklenburg counties all exceeded twice the statewide rate (22.1).

The Year 2000 infectious disease objectives for Blacks are cited in the box below. Methods employed

to control and prevent HIV infection will likely have a positive effect on controlling other sexually transmitted diseases (STDs). Meanwhile, STD control efforts should attempt to reduce all STDs rather than achieve an accelerated decline of one infection leading to a corresponding increase in others.<sup>4</sup>

Concerning tuberculosis, achievement of the Year 2000 target depends directly on the application of preventive therapy among high-risk populations.<sup>4</sup> The control of HIV infection should also reduce the risk of tuberculosis.

#### INFECTIOUS DISEASE OBJECTIVES FOR BLACKS

<u>Disease Indicator</u>	U.S. <u>Objective</u> <sup>4</sup>	N.C. <u>1990</u>
• AIDS (cases)	No more than 1993 incidence	332 cases
• Primary/Secondary Syphilis Rate*	65.0	108.6
• Gonorrhea Rate*	1300.0	2042.0
• Tuberculosis Rate*	10.0	29.0

\*Reported cases per 100,000 population.

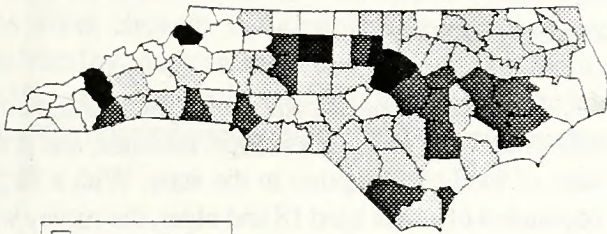
#### HEALTH-RELATED SURVEYS

In the absence of reporting systems to provide needed data, the state conducts sample surveys as resources permit. The surveys discussed below provide estimates for Whites and minorities (nonwhites). In 1990, Blacks accounted for about 90 percent of the state's minority population.

Figure 24

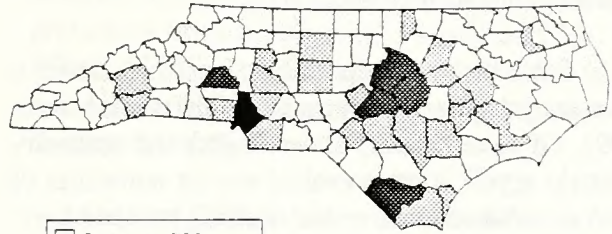
# Nonwhite Case Rates for Infectious Diseases North Carolina Counties 1987-91 (Reported Cases per 100,000 Population)

AIDS



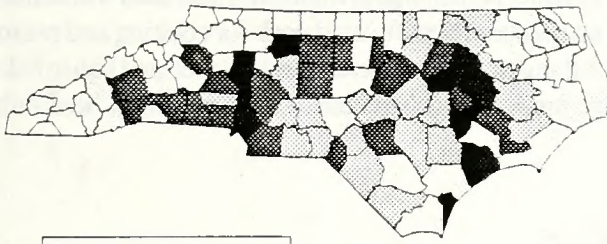
Pop. < 500
0.0 TO 5.4
6.1 TO 15.8
16.8 TO 25.1
26.7 TO 34.5

SYPHILIS



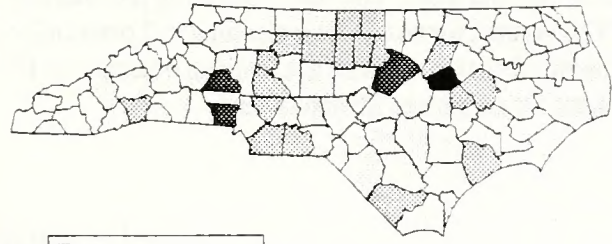
Pop. < 500
0.0 TO 128.1
136.7 TO 230.3
257.9 TO 352.5
391.1

GONORRHEA



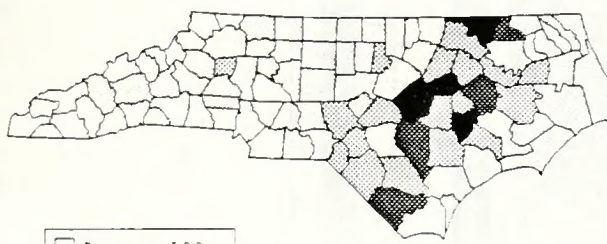
Pop. < 500
263.8 TO 1140.1
1194.8 TO 1810.5
1878.6 TO 2403.6
2532.4 TO 3151.0

CHLAMYDIA



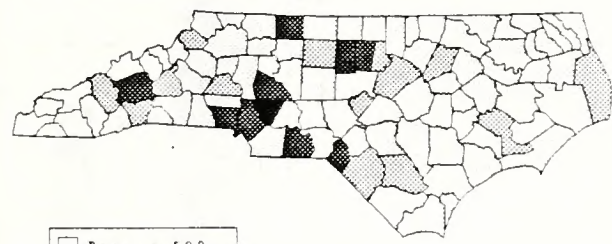
Pop. < 500
0.0 TO 361.3
383.1 TO 667.0
736.5 TO 882.0
1312.2

TUBERCULOSIS



Pop. < 500
0.0 TO 30.1
33.3 TO 52.8
57.1 TO 64.7
71.8 TO 89.2

HEPATITIS B



Pop. < 500
0.0 TO 20.5
24.6 TO 32.0
34.7 TO 58.7
79.7

## Behavioral Risk Factor Surveillance System (BRFSS)

North Carolina participates with the Centers for Disease Control in this national telephone interview survey that solicits information about the health behaviors of adults 18 and older. Post-survey adjustments serve to make the results representative of all adults, not just those having telephones.

Table 35 shows the percentages of North Carolina race-sex groups reporting each of eight risk factors in 1991. Of these, obesity (overweight) and sedentary lifestyle appear more prevalent among nonwhites of both sexes while smoking and drinking are more prevalent among males of both race groups. Current smoking and binge drinking appear particularly prevalent among the state's nonwhite male population.

The state's 1991 overweight prevalence of 35.8 percent for nonwhite females 18 and older compares to a Year 2000 national objective of 30 percent for Black women 20 and older. The state's smoking prevalences of 32.9 percent for nonwhite males and 16.2 percent for nonwhite females compare to a national objective of 18 percent for all Blacks 20 and older.<sup>4</sup>

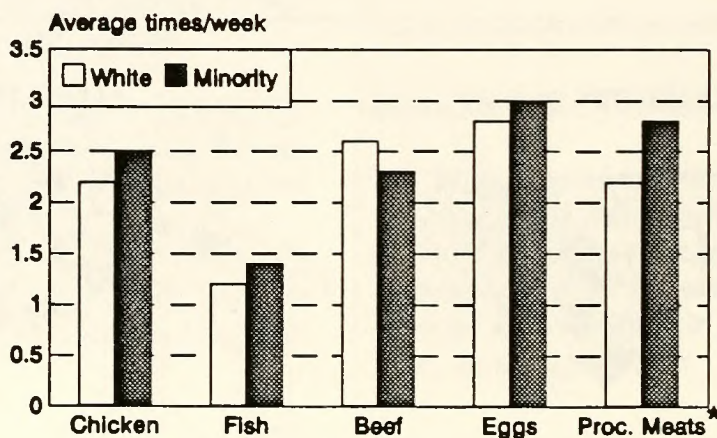
Trends in the BRFSS estimates were not available at the time of this writing. However, the North Carolina annual estimates for race-sex groups are known to exhibit a fair amount of random fluctuation so that trend analysis may not be feasible. In the future, oversampling of nonwhites, separately for Blacks and American Indians, is recommended to obtain stable annual estimates for the state's minority populations.

## Dietary Fat Survey<sup>2</sup>

The 1989 North Carolina survey was designed to collect data regarding knowledge, attitudes, and practices of food consumption in the state. With a target population of adults aged 18 and older, the survey was conducted by telephone using a random-digit-dialing method. Completed interviews included 791 Whites and 225 minorities.

As shown in Figure 25, minorities were found to eat processed meats, eggs, chicken, and fish more often and beef less often than Whites. Compared to Whites, a greater percentage of minorities also used whole rather than lower-fat milk, used pork for cooking and seasoning vegetables, preferred fried chicken and fish to baked or broiled, and purchased regular ground beef rather

FIGURE 25  
Average Times per Week that Certain Foods are Eaten  
North Carolina 1989



\* Processed meats include luncheon meats, hotdogs, bologna, bacon, and sausage.



than lean or extra lean. In addition to these indications of higher-fat diets among minorities than Whites, minorities were found to trim fat from beef or pork and remove skin from chicken or turkey less often than Whites, as shown in Figure 26.

Compared to Whites, a smaller percentage of minorities had had their cholesterol checked, knew the recommended cholesterol level, and knew steps to take to lower cholesterol. Among those who had been advised by a doctor to lower their cholesterol, minorities (5%) were much less likely than Whites (24%) to have had the doctor prescribe cholesterol-lowering medication.

Concerning weight management, minorities were slightly less likely than Whites to be trying to lose weight and slightly more likely than Whites to use exercise or physical activity when trying to lose weight. Fifty-four percent of each group reported that they had, over the past two years, changed their diet to reduce the risk of heart disease. Finally, minorities were more likely than

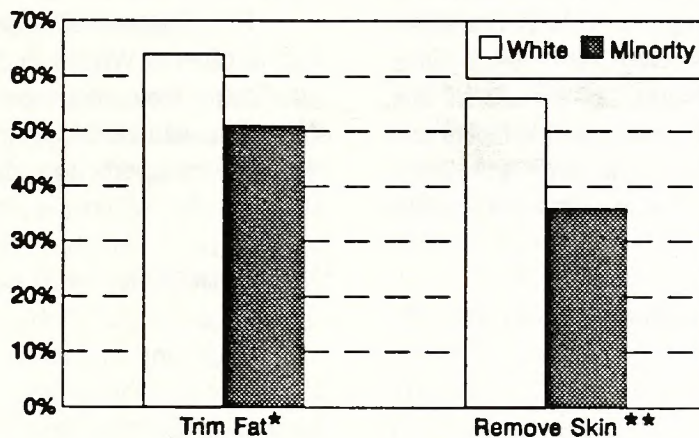
Whites to feel that "starchy" foods such as potatoes, rice, and pasta are fattening; to agree that foods labeled no cholesterol are also low in fat; and to feel that low-fat foods are expensive.

### Diabetes Survey<sup>13</sup>

This 1990 survey of 1,163 adult North Carolinians revealed, as expected from mortality analyses, a higher prevalence of diabetes among minorities (5.5%) than Whites (4.2%). Further, the survey revealed serious racial disparities in the medical care and treatment of diagnosed diabetics:

- Minorities (86%) were less likely than Whites (98%) to receive a diet from the attending health care professional.
- Minorities (80%) were less likely than Whites (93%) to have had their blood sugar checked on their last visit to the doctor for diabetes care.

**FIGURE 26**  
Percent of Residents Who Trim Fat/Remove Skin to Lower Fat Content  
North Carolina 1989



\*Trim fat from beef or pork.  
\*\*Remove skin from chicken or turkey.

- Minorities (14%) were less likely than Whites (31%) to self-test for blood sugar at least four times a week.

It is not surprising, then, that the survey revealed racial disparities in the medical histories of diagnosed diabetics:

- Minorities (23%) were more likely than Whites (7%) to report foot or ankle sores that did not heal properly.
- Minorities (21%) were more likely than Whites (5%) to report difficulty distinguishing hot or cold.
- Minorities (3 of 44) were more likely than Whites (1 of 101) to report toe, foot, leg, or partial leg amputations, but the small numbers render rate comparisons invalid.
- Minorities (53%) were more likely than Whites (32%) to report that diabetes had affected their retina.

Among the Year 2000 national objectives for diabetes is to reduce diabetes prevalence to no more than 3.2 percent for Blacks (vs. N.C.'s 5.5) and lower extremity amputations to no more than 6.1 per 1,000 Black diabetics.<sup>4</sup>

#### *Childhood Injury Survey<sup>4</sup>*

Noting that children from poorer families tend to experience higher rates of unintended injury, this 1984 sample survey of 970 North Carolina households with children (under age 20) sought to identify household hazards or risk conditions related to serious burns, poisonings, and injuries related to the automobile, water, and firearms. Results revealed that White households had, on average, 35 percent fewer environmental risk conditions than did nonwhite or minority households.

#### *Survey of Knowledge and Attitudes About AIDS<sup>15</sup>*

In this 1987 telephone survey of 600 North Carolina adults, race did not seem to have a very strong or consistent association with overall knowledge about

AIDS. However, analysis did suggest that Whites were twice as likely as nonwhites to know about the use of condoms to prevent AIDS.

#### *Survey of Substance Use at Delivery<sup>16</sup>*

This study of urine specimens examined the incidence of substance use among a sample of 1,609 women delivering in ten of the state's larger hospitals during September - December 1990. Compared to Whites, nonwhite women were over 30 times as likely to test positive for cocaine and 61 percent more likely to test positive for marijuana. Estimates of nonwhite use around the time of delivery were 3.25 percent for cocaine and 2.08 percent for marijuana.

#### *Survey of Oral Health in Schools<sup>17</sup>*

A stratified cluster sample of North Carolina public school classrooms in school year 1986-87 achieved 4,426 White and 2,223 nonwhite oral examinations performed by public health dentists. At each age through nine years, nonwhites had more primary tooth caries than Whites and proportionately more of these were decayed surfaces, especially at younger ages. For all ages 5-17, a lower percentage of nonwhites (65.5) than Whites (84.9) had ever-diseased permanent teeth that were filled. Although Whites and nonwhites had similar scores for decayed/missing/filled surfaces, scores were particularly high for some population subgroups such as 17-year-old nonwhite females.

For all ages 6-17, nonwhites had sealants about half as often as Whites, and for ages 7-17, periodontal conditions were more prevalent among nonwhites. Nonwhites had a strikingly higher prevalence of calculus than Whites; at some ages, the nonwhite percentage was twice that for Whites.

#### *Youth Risk Behavior Survey*

Beginning in March 1993, the North Carolina Department of Public Instruction participates with the Centers for Disease Control in this national survey of 9th-12th grade students. Analysis of the first year's data is in progress, with no estimates currently available.

Future updates of the present report should examine these data in race-sex detail. Behaviors examined include: those that result in intentional and unintentional injuries; tobacco use; alcohol and other drug use; sexual behaviors that result in teen pregnancy, HIV infection, and other sexually transmitted diseases; dietary behaviors; and physical activity. Data will be collected biennially.

## ACCESS TO HEALTH CARE

A study recently reported in the *American Journal of Public Health*<sup>18</sup> found that, among Medicare patients 65 or older, Whites were substantially more likely to get newer high-tech treatments and tests. Large disparities in cardiac services were found, even though the patients had similar insurance coverage. In addition to other explanations for the racial difference in care, the authors state that "the effect of patient race on physician and institutional decision making may be another important cause of our findings."

### Other findings:

- More Black patients had Medicaid coverage in addition to Medicare.
- Whites were more likely to buy Medigap policies to help cover co-payments; Blacks were twice as likely to have to pay out-of-pocket expenses.
- Blacks were less likely to get hip and knee replacements, mammograms, and other tests.

Hospital discharge data collected by the North Carolina Medical Database Commission could easily be used to assess minority use of inpatient services except for one fact: race of the patient is not collected. In addition to that fact, there is no centralized reporting system for data on hospital outpatient and nonhospital health services. These data deficiencies must be corrected.

Meanwhile, the North Carolina Office of Minority Health recently surveyed 30 local health departments and 24 NAACP branches throughout the state

to assess the health care needs of African-Americans in North Carolina.<sup>19</sup> A majority of both health department and NAACP representatives felt that more help was needed with transportation and with hours available to serve African-Americans. Half of health departments and 54 percent of NAACP representatives identified location of the health department as an area in need of improvement.

## BLACK PERCEPTIONS OF THE YEAR 2000 HEALTH OBJECTIVES

*Healthy People 2000*<sup>4</sup> offers a national vision for the 21st Century. This vision is characterized by significant reductions in preventable death and disability, enhanced quality of life, and **greatly reduced disparities in the health status of populations within our society**. Those goals are addressed through the declaration of several hundred health objectives covering 21 areas of natality, mortality, morbidity, preventive interventions, and health-related behaviors. The Year 2000 objectives for Blacks are listed in Appendix 1.

Using *Healthy People 2000* as a guide, Schneider et al.<sup>20</sup> have identified "the major public health goals and objectives that Black public health and political leaders agreed were of highest priority for Black Americans: those that are both important and most likely to be successfully addressed."

In a nationwide survey, responding Black health leaders ranked reducing alcohol and other drug abuse of primary importance, followed by preventing and controlling the human immunodeficiency virus (HIV) and the acquired immunodeficiency syndrome (AIDS) and preventing, detecting, and controlling hypertension, heart disease, and stroke. Black mayors listed preventing and controlling HIV/AIDS as of primary importance, followed by preventing and controlling sexually transmitted diseases and reducing alcohol and other drug abuse. Black legislators were split between reducing alcohol and other drug abuse, preventing and controlling HIV/AIDS, and improving maternal and infant health as of primary importance.

The prevention, detection and control of cancer, diabetes, and other disabling conditions were also seen as very important goals. Two objectives—reducing alcohol/drug abuse and reducing violence/abuse—were considered more resistant to change than others.

## HEALTHY CAROLINIANS

Keenly aware of North Carolina's unfavorable ranking on many of the national health status indicators, Governor James G. Martin established in August 1991 the Governor's Task Force on Health Objectives for the Year 2000. The deliberations of this 25-member body resulted in the November 1992 publication of North Carolina objectives addressing 11 broad areas of concern: injury; infant mortality; immunization; dental decay; physical fitness; nutrition; sexually transmitted diseases; abuse of tobacco, alcohol, and other drugs; mental health; chronic diseases, and environmental pollution.

The report of the Task Force identifies special target populations and emphasizes community-based intervention strategies. To date, leaders in 43 of the state's 100 counties have plans to develop responsive health improvement plans for their communities; 13 counties already have active task forces.

The North Carolina effort, called *Healthy Carolinians 2000*, addresses the health problems of disadvantaged people through the establishment of improvement targets for "nonwhites." Specific targets include those for teenage pregnancy, low birthweight, infant mortality, homicide among nonwhite males, obesity among children and nonwhite females 25 and over, and sexually transmitted diseases.<sup>21</sup>

For more information about *Healthy Carolinians 2000*, the reader may contact Ms. Sarah Ahmad, Project Director, at (919) 715-4173.

## SUMMARY

Among the more salient findings of the present study are those listed below. In general, the health indicators for North Carolina Blacks are not as favor-

able as those for the state's White and Native American residents.

### *Maternal and Infant Health*

- For total women aged 15-44 and teenage girls aged 15-17, the birth and abortion rates of Blacks are much higher than those of Whites.
- Abortion is much more likely among pregnant Blacks than others, EXCEPT among pregnant girls aged 15-17 where Whites are more likely to obtain an abortion.
- The rise in teenage pregnancy has been twice as great for Blacks as for Whites.
- A Black girl aged 15-17 is increasingly more likely than a White to have a second or higher-order pregnancy.
- Unintended pregnancy is far more prevalent among Blacks than Whites.
- Black mothers are much more likely than others to have sociodemographic characteristics associated with elevated infant loss. Births to unmarried women are particularly numerous among Blacks.
- Black mothers are much more likely than others to have late or no prenatal care.
- Nonwhite mothers are more likely than Whites to receive Medicaid assistance, WIC, and health department prenatal care; but more than half of Medicaid clients still do not receive maternity care coordination (case management).
- Black mothers are more likely than Whites to have anemia and to die from pregnancy-related conditions.
- Black infants are more likely than others to have low or very low birthweights, and no improvements in this area have occurred in many years.

- Fetal, neonatal, postneonatal, and infant death rates are much higher for Blacks than others.
- The Black incidence rate for birth defects is much higher than that for Whites, due largely to musculoskeletal defects.
- A nonwhite child aged 0-3 is twice as likely as a White to be diagnosed as having or being at risk for developmental delay.
- On each of nine Year 2000 maternal and infant health objectives for U.S. Blacks, the indicators for North Carolina Blacks are less than good.

### ***Mortality***

- The major contributors to Black mortality in North Carolina tend to vary according to the indicator examined:

<b><u>Indicator</u></b>	<b><u>Major Contributors</u></b>
Number of Deaths	Heart Disease, cancer, stroke, diabetes, non-motor-vehicle unintentional injuries
Years of Life Lost	Conditions in the perinatal period, heart disease, cancer, homicide, motor vehicle injuries
Low Median Age at Death (compared to Whites)	Non-motor-vehicle unintentional injuries, chronic liver disease/cirrhosis, suicide
High Age-Adjusted Death Rate (compared to Whites)	AIDS, homicide, nephritis/nephrosis, diabetes

<b><u>Indicator</u></b>	<b><u>Major Contributors</u></b>
High Age-Adjusted Death Rate (compared to U.S. Blacks)	Stroke, unintentional injuries, diabetes, male cirrhosis
Rising Age-Adjusted Death Rate	Diabetes, liver disease/cirrhosis, homicide
High Age-Adjusted Mentioned Conditions Rate (compared to Whites)	Hypertension, alcohol use, nephritis/nephrosis

The choice of which of these lists are more important will depend in part on the user's purpose. The Centers for Disease Control has often used years-of-life-lost measures in mortality analyses reported in its *Morbidity and Mortality Weekly Report*, while age-adjusted death rates were used in the determination of Year 2000 national health objectives. Meanwhile, one can hardly ignore the rising trends in Black deaths from diabetes, liver disease/cirrhosis, and homicide.

### ***Morbidity***

- High cancer incidence among North Carolina Blacks includes prostate, oral cavity, larynx, and pancreas for males and colon/rectum, cervix, and kidney for females.
- Black residents are experiencing very high rates of gonorrhea, syphilis, tuberculosis, and AIDS.
- Black residents are experiencing increases in AIDS, syphilis, gonorrhea, and chlamydia.
- A variety of sample surveys in North Carolina reveal high Black prevalences of obesity, sedentary lifestyle, current smoking, binge drinking, dietary fat, diabetes and related medical conditions, household risk conditions related to unintentional injuries, and substance use (cocaine and marijuana) at delivery.

## CONCLUSION

This study of the health status of North Carolina's Black population reveals a number of trends and patterns that need attention and action. Certain data deficiencies are also identified: failure to oversample minorities in sample surveys in order to obtain stable estimates for these groups; failure to collect patient's race in hospital discharge reporting; and lack of reporting systems for hospital outpatient and nonhospital health services. Data related to chronic disease prevalence and quality of life among minorities and Whites

are also seriously lacking. One means to address several of these deficiencies is a periodic statewide survey that oversamples minority populations, at least Blacks and Native Americans.

It is clear that improvement in the public health and other social support systems that serve minorities is immediately required. Meanwhile, further development and use of pertinent data must be undertaken to make informed decisions that meet the changing needs of a growing and aging minority population.

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## GLOSSARY

**Abortion** — Induced abortion, or the purposeful interruption of pregnancy. Spontaneous abortions are not reportable in North Carolina.

**Abortion Fraction** — The number of induced abortions per 1,000 deliveries (live births plus fetal deaths plus abortions).

**Abortion Rate** — The number of induced abortions per 1,000 females of a specified age group (15-44 or 15-17 in this report).

**Age-Adjusted Death Rate** — Deaths per 100,000 population using 10-year age groups and the 1940 U.S. population as the standard for direct age adjustment. The rates are free of the effects of a population's age composition and thus permit the user to assess the relative risk of death among population groups. Use of the 1940 U.S. population as the standard follows the convention of the National Center for Health Statistics, allowing for comparisons of state and national rates.

**Age-Specific Death Rate** — Deaths in the age group per 100,000 population in the age group.

**Birth Defect** — Any abnormal condition present at birth, not including injuries caused by the delivery. These are primarily ICD-9 codes 740-759.

**Birth Order** — The sum of previous children now living, previous children born alive and now dead, and previous fetal deaths (any gestational age) plus one for the present birth. Previous induced abortions may be included, effective with the 1988 revised birth certificate.

**Birth Rate** — The number of live births per 1,000 females of a specified age group (15-44 and 15-19 in this report).

**Block Numbering Area (BNA)** — Small statistical subdivisions of a county for grouping and numbering blocks in nonmetropolitan counties where local census statistical areas committees have not established census tracts. State agencies and the Census Bureau delineated BNAs for the 1990 census, using guidelines similar to those for the delineation of census tracts. BNAs do not cross county boundaries.

**Causes of Death** — All diseases, morbid conditions, or injuries which either resulted in or contributed to death and in the case of injuries, the circumstances of the injury or violence. Unless otherwise specified, deaths are tabulated by underlying cause of death (see definition).

**Cancer Site (Primary)** — The anatomical location where the cancer began. It can be any organ or tissue in the body.

**Cancer Stage at Diagnosis** — Broad categories describing how far the disease has spread from the site of origin:

**In Situ** — Only the pathologist may make this designation which refers to a lesion that has not begun to invade its tissue of origin. Other terms that may be used are preinvasive, noninfiltrating, or intraepithelial.

**Localized** — The tumor is confined to its tissue of origin (i.e., no extension beyond the outer limits of the tissue and no evidence of metastases elsewhere in the body).

**Regional** — The tumor has (a) spread by direct extension from the tissue of origin to surrounding organs or tissues, (b) spread into regional lymph nodes, or (c) both. There must be no evidence of distant metastases.

**Distant** — The tumor has extended beyond the immediately adjacent organs or tissues to distant organs, tissues and/or distant lymph nodes. Includes systemic and diffuse disease categories.

**Unstaged/Unknown** — Used when there is only very extenuating circumstances.

**Census Tract** — Small, relatively permanent statistical subdivisions of a county. They are delineated for all metropolitan areas and other densely populated counties by local census statistical areas committees following Census Bureau guidelines.

Census tracts usually have between 2,500 and 8,000 persons and, when first delineated, are designed to be homogeneous with respect to population characteristics, economic status, and living conditions. Census tracts do not cross county boundaries. The spatial size of census tracts varies widely depending on the density of settlement. Census tract boundaries are delineated with the intention of being maintained over a long time so that statistical comparisons can be made from census to census. However, physical changes in street patterns caused by highway construction, new development, etc., may require occasional revisions; census tracts occasionally are split due to large population growth, or combined as a result of substantial population decline.

*Note: Figure 1 of this report depicts the numbers of African Americans living in census tracts (metropolitan counties) and block numbering areas (nonmetropolitan counties). Data are from the U.S. Census 1990.*

**Death** — The permanent disappearance of any evidence of life at any time after live birth. N.C. law (G.S. 90-322) also defines criteria for certifying "brain death."

**Developmental Delay** — The condition of a child being with or at risk for a developmental disability. Children with an established, clinical diagnosis of a physical or psychological nature that is known to be associated with developmental disability, such as Down's syndrome or pervasive developmental disorder, are classified as developmentally delayed. There may also be circumstances wherein biological and/or environmental insults place a child at risk for subsequent delay. These latter conditions are associated with poor birth outcomes, e.g., low birthweight or, for otherwise normal births, the presence of parent/family risk factors, e.g., maternal age less than 15. Definitions for all three categories of risk (established, biological and environmental) are composed of multiple risk items, and a child may have risk indicators from more than one risk category. As the number of risk factors increases, so does the probability of developmental delay.

**Fetal Death** — Death prior to the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy, as indicated by the fact that after such expulsion or extraction

the fetus does not breathe or show any evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles (definition adopted by World Health Organization in 1950). Consistent with North Carolina law, this report includes only fetal deaths which do not qualify as therapeutic abortions and which result from pregnancies of 20 or more weeks gestation.

**Fetal Death Rate** — Fetal deaths per 1,000 deliveries (live births plus fetal deaths).

**ICD: International Classification of Diseases** — A numerical system used worldwide for classifying all causes of death. The Ninth Revision was first applied to 1979 deaths.

**Infant Death** — Death of a liveborn child under one year of age. Infant deaths are the sum of neonatal and postneonatal deaths (see definitions).

**Infant Death Rate** — The number of infant deaths per 1,000 live births.

**Kessner Index** — See Prenatal Care (Kessner) Index.

**Live Birth** — The complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or any definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached (definition adopted by World Health Organization in 1950).

**Low Birthweight** — 2500 grams (5 pounds, 8 ounces) or less at birth, regardless of the period of gestation (World Health Organization 1950). Weights under 1500 grams are considered "very low birthweight."

**Maternity Care Coordination** — A formal case management process with a primary focus on the organization of services and resources to respond to the health care needs of a pregnant woman who has been determined to be eligible for Medicaid.

**Median Age at Death** — Age above and below which half of the deaths are found. Age at death is reported in completed years as of the last birthday.

**Medicaid** — A public assistance program that pays for the medical care of people who are eligible for cash assistance payments or who have medical needs greater than their resources. The largest share of Medicaid costs is paid by the federal government.

**Mentioned Condition** — A disease, injury, or complication that caused or contributed to a death.

**Minority** — Race other than White, or person of Hispanic origin.

**Natural Increase** — The excess of births over deaths in a population.

**Neonatal Death** — Death of a liveborn child under 28 days of age.

**Neonatal Death Rate** — Neonatal deaths per 1,000 live births.

**Out-of-Wedlock Birth** — Birth to a woman who has never been legally married or who has been widowed or legally divorced from her husband in excess of 280 days.

**Postneonatal Death** — Death of an infant 28 days and over but less than one year of age.

**Postneonatal Death Rate** — Postneonatal deaths per 1,000 neonatal survivors (live births minus neonatal deaths). However, the Year 2000 objectives express the rate per 1,000 live births.

**Pregnancies** — The total number of live births plus fetal deaths of 20 or more weeks gestation plus induced abortions.

**Pregnancy Rate** - The number of pregnancies per 1,000 women of a specified age (15-44 or 15-17).

**Prenatal Care (Kessner) Index** — A categorical index of a woman's quantity of prenatal care based on three variables:

- The trimester in which the first prenatal visit occurred;
- The number of prenatal visits; and
- The number of weeks gestation at time of delivery.

A woman may have received ADEQUATE, INADEQUATE, INTERMEDIATE, or UNKNOWN amount of care. INADEQUATE is assigned if either (a) there was no prenatal care visit, or (b) the first prenatal visit took place in the third trimester, or (c) one of the following combinations occurred:

<u>Gestation</u> <u>(Weeks)</u>		<u>Number of Prenatal</u> <u>Visits</u>
18-21	and	0
22-29	and	1 or less
30-31	and	2 or less
32-33	and	3 or less
34-48	and	4 or less

**Race** — As used by the Census Bureau, race reflects self-identification; it does not denote any clear-cut scientific definition of biological stock.

**White**--Includes persons who indicate their race as White or report entries such as Canadian, German, Italian, Lebanese, Near Easterner, Arab, or Polish.

**Black**--Includes persons who indicate their race as "Black or Negro" or report entries such as African American, Afro-American, Black Puerto Rican, Jamaican, Nigerian, West Indian, or Haitian.

*Note: In this report, the terms "African American" and "Black" are used interchangeably.*

**American Indian**--Includes persons who indicate their race as "American Indian," report the name of an Indian tribe, or report such entries as Canadian Indian, French-American Indian, or Spanish-American Indian. Some census counts are for American Indians, Eskimos, and Aleuts as a group. Eskimos and Aleuts represent only 0.4 percent of the combined group in North Carolina.

*Note: In this report, the terms "American Indian," "Indian," and "Native American" are used interchangeably.*

**Repeat Pregnancy** — A second or higher-order pregnancy resulting in live birth, fetal death, or induced abortion.

**Residence** — The place (county, state, etc.) in which a person resides at the time of an event. College students and military personnel are considered residents of the college or military community. For deaths of inmates of long-term institutions, the institution is considered the residence if the decedent has resided there at least one year. For births, residence is that of the mother.

**Sociodemographic Risk Factors** — Maternal characteristics that have been found to be associated with high fetal and infant mortality rates. These include age under 18, age 35 or older, education under 12 completed years, marital status unmarried, birth order of 4 or more, history of a fetal death, history of a liveborn infant who died.

**Underlying Cause of Death** — (a) The disease or injury which initiated the train of morbid events leading to death, or (b) the circumstances of the injury or violence which produced the fatal injury.

**Unintended Pregnancies** — Defined in this report as the sum of all induced abortions and all other pregnancies to unmarried women and to girls under the age of 18.

**Violent Deaths** — Deaths due to homicide, suicide, motor vehicle and other injuries, and legal intervention.

**WIC** — The Special Supplemental Food Program for Women, Infants, and Children. This nationwide program, funded by the U.S. Department of Agriculture, provides nutrition education for low-income women and children and vouchers for the purchase of specific supplemental foods and infant formula. Pregnant, breast-feeding, and postpartum women; infants; and children up to age 5 who are at medical or nutritional risk are eligible.

**Years of Life Lost** — The expected years of life remaining, comparing decedent's age at death to the race-sex-specific life expectancy at birth (using North Carolina life tables).



# TABLES

TABLES



TABLE 1

POPULATION COUNTS BY RACE AND HISPANIC ORIGIN  
NORTH CAROLINA AND COUNTIES 1990

COUNTY	TOTAL	WHITES	BLACKS	AMERICAN INDIANS, ESKIMOS, ALEUTS	ASIANS OR PACIFIC ISLANDERS	OTHER RACES	HISPANIC ORIGIN (of any race)
THE STATE	6,628,637	5,008,491	1,456,323	80,155	52,166	31,502	76,726
Alamance	108,213	86,373	20,822	303	487	228	736
Alexander	27,544	25,667	1,673	52	49	103	184
Alleghany	9,590	9,338	177	8	5	62	85
Anson	23,474	12,264	11,106	69	27	8	67
Ashe	22,209	21,960	144	21	31	53	102
Avery	14,867	14,596	158	23	23	67	118
Beaufort	42,283	28,949	13,194	28	48	64	197
Bertie	20,388	7,790	12,531	46	14	7	32
Bladen	28,663	16,926	11,199	464	30	44	150
Brunswick	50,985	41,336	9,211	242	81	115	376
Buncombe	174,821	158,979	14,336	486	765	255	1,173
Burke	75,744	69,521	5,178	133	794	118	344
Cabarrus	98,935	85,286	12,853	313	375	108	483
Caldwell	70,709	66,506	3,881	105	111	106	315
Camden	5,904	4,388	1,481	21	9	5	24
Carteret	52,556	47,445	4,385	269	293	164	450
Caswell	20,693	12,155	8,436	26	20	56	136
Catawba	118,412	106,370	10,689	232	830	291	921
Chatham	38,759	29,423	8,845	125	69	297	564
Cherokee	20,170	19,313	361	405	42	49	131
Chowan	13,506	8,349	5,087	24	29	17	95
Clay	7,155	7,061	41	39	7	7	40
Cleveland	84,714	66,362	17,741	114	394	103	376
Columbus	49,587	32,897	15,181	1,370	53	86	242
Craven	81,613	58,660	21,116	319	765	753	1,821

TABLE 1 (continued)

POPULATION COUNTS BY RACE AND HISPANIC ORIGIN  
NORTH CAROLINA AND COUNTIES 1990

COUNTY	TOTAL	WHITES	BLACKS	AMERICAN INDIANS, ESKIMOS, ALEUTS	ASIANS OR PACIFIC ISLANDERS	OTHER RACES	HISPANIC ORIGIN (of any race)
Cumberland	274,566	170,069	87,496	4,425	5,769	6,807	13,298
Currituck	13,736	12,051	1,545	66	51	23	110
Dare	22,746	21,766	811	37	79	53	199
Davidson	126,677	113,296	12,314	395	477	195	602
Davie	27,859	25,194	2,482	86	53	44	129
Duplin	39,995	25,927	13,259	104	47	658	1,015
Durham	181,835	109,886	67,654	425	3,233	637	2,054
Edgecombe	56,558	24,665	31,661	73	68	91	255
Forsyth	265,878	196,918	66,102	551	1,662	645	2,102
Franklin	36,414	23,288	12,843	74	63	146	290
Gaston	175,093	150,868	22,676	397	915	237	864
Gates	9,305	5,101	4,180	8	13	3	21
Graham	7,196	6,731	1	454	6	4	29
Granville	38,345	23,069	14,909	99	100	168	356
Greene	15,384	8,747	6,521	16	6	94	169
Guilford	347,420	249,584	91,655	1,637	3,726	818	2,887
Halifax	55,516	26,009	27,586	1,711	145	65	237
Harnett	67,822	51,117	15,315	601	299	490	1,159
Haywood	46,942	46,011	648	180	67	36	240
Henderson	69,285	66,158	2,361	197	286	283	846
Hertford	22,523	9,214	12,970	228	94	17	81
Hoke	22,856	9,635	9,878	3,176	85	82	218
Hyde	5,411	3,596	1,781	4	3	27	43
Iredell	92,931	77,207	14,869	193	356	306	672
Jackson	26,846	23,609	425	2,667	109	36	155

TABLE 1 (continued)

POPULATION COUNTS BY RACE AND HISPANIC ORIGIN  
NORTH CAROLINA AND COUNTIES 1990

COUNTY	TOTAL	WHITES	BLACKS	AMERICAN INDIANS, ESKIMOS, ALEUTS	ASIANS OR PACIFIC ISLANDERS	OTHER RACES	HISPANIC ORIGIN (of any race)
Johnston	81,306	65,773	14,389	178	159	807	1,262
Jones	9,414	5,687	3,677	8	19	23	53
Lee	41,374	31,216	9,401	169	191	397	800
Lenoir	57,274	34,322	22,539	70	151	192	463
Lincoln	50,319	45,710	4,108	120	172	209	570
McDowell	35,681	33,901	1,479	72	200	29	114
Macon	23,499	22,919	385	76	60	59	165
Madison	16,953	16,744	136	19	32	22	86
Martin	25,078	13,788	11,186	20	40	44	99
Mecklenburg	511,433	364,651	134,468	1,936	8,461	1,917	6,693
Mitchell	14,433	14,354	23	19	19	18	50
Montgomery	23,346	16,773	6,001	92	150	330	556
Moore	59,013	47,464	10,882	309	150	208	470
Nash	76,677	51,874	24,142	218	223	220	606
New Hanover	120,284	94,895	24,097	435	616	241	924
Northampton	20,798	8,397	12,328	42	11	20	116
Onslow	149,838	111,939	29,808	939	2,994	4,158	8,035
Orange	93,851	75,871	14,893	286	2,361	440	1,279
Pamlico	11,372	8,362	2,951	33	20	6	61
Pasquotank	31,298	19,403	11,583	59	184	69	246
Pender	28,855	19,828	8,770	76	44	137	273
Perquimans	10,447	6,979	3,426	18	20	4	28
Person	30,180	20,740	9,106	181	15	138	249
Pitt	107,924	70,643	35,921	214	709	437	977
Polk	14,416	13,276	1,053	17	25	45	115

TABLE 1 (continued)

POPULATION COUNTS BY RACE AND HISPANIC ORIGIN  
NORTH CAROLINA AND COUNTIES 1990

COUNTY	TOTAL	WHITES	BLACKS	AMERICAN INDIANS, ESKIMOS, ALIUTS	ASIANS OR PACIFIC ISLANDERS	OTHER RACES	HISPANIC ORIGIN (of any race)
Randolph	106,546	99,042	6,367	453	358	326	734
Richmond	44,518	30,816	12,869	502	195	136	293
Robeson	105,179	37,986	26,185	40,511	239	258	704
Rockingham	86,064	67,893	17,548	149	190	284	620
Rowan	110,605	91,851	17,773	262	444	275	651
Rutherford	56,918	50,133	6,514	95	98	78	342
Sampson	47,297	30,273	15,686	876	75	387	727
Scotland	33,754	19,025	12,176	2,430	83	40	318
Stanly	51,765	45,269	5,972	155	249	210	309
Stokes	37,223	34,917	2,069	52	79	106	254
Surry	61,704	58,383	2,780	66	84	391	602
Swain	11,268	7,950	196	3,075	31	16	78
Transylvania	25,520	24,121	1,189	79	99	32	154
Tyrrell	3,856	2,297	1,543	4	5	7	11
Union	84,211	70,023	13,427	294	257	210	675
Vance	38,892	21,146	17,512	69	60	105	271
Wake	423,380	324,011	88,057	1,148	8,177	1,987	5,396
Warren	17,265	6,593	9,847	763	14	48	98
Washington	13,997	7,556	6,366	13	35	27	65
Watauga	36,952	35,930	768	59	152	43	249
Wayne	104,666	69,172	33,793	265	839	597	1,356
Wilkes	59,393	56,237	2,824	69	100	163	362
Wilson	66,061	40,623	24,896	70	177	295	537
Yadkin	30,488	28,884	1,295	22	26	261	388
Yancey	15,419	15,221	151	27	11	9	49

**Table 2**

**Live Birth, Abortion, and Pregnancy Rates by Race  
North Carolina 1981-1991**

<u>Year</u>	<u>Birth Rate*</u>		<u>Abortion Rate*</u>		<u>Pregnancy Rate*</u>	
	<u>Whites</u>	<u>Blacks</u>	<u>Whites</u>	<u>Blacks</u>	<u>Whites</u>	<u>Blacks</u>
1981	53.6	74.8	17.5	30.9	71.6	106.8
1982	54.3	75.5	17.7	28.7	72.4	105.2
1983	53.0	70.3	18.5	30.7	71.9	102.1
1984	54.2	69.6	18.9	34.7	73.5	105.1
1985	55.7	71.2	17.7	32.6	73.8	104.7
1986	55.0	72.2	17.7	32.0	73.1	105.2
1987	56.3	73.9	18.0	34.1	74.8	108.9
1988	57.5	77.6	18.3	36.9	76.2	115.6
1989	59.0	81.2	17.2	35.0	76.6	117.4
1990	60.6	80.1	16.9	33.1	77.9	114.4
1991	58.4	78.1	16.4	33.7	75.2	112.8

\*Number of events per 1,000 females 15-44. Pregnancies are the sum of live births, fetal deaths, and abortions.

**Table 3**

**Live Birth, Abortion, and Pregnancy Rates for Females 15-17 by Race  
North Carolina 1981-1991**

<u>Year</u>	<u>Birth Rate*</u>		<u>Abortion Rate*</u>		<u>Pregnancy Rate*</u>	
	<u>Whites</u>	<u>Blacks</u>	<u>Whites</u>	<u>Blacks</u>	<u>Whites</u>	<u>Blacks</u>
1981	24.7	64.1	23.3	29.3	48.3	94.7
1982	25.6	63.1	24.3	27.6	50.1	91.5
1983	23.7	58.7	25.4	31.6	49.2	91.3
1984	24.6	58.3	27.2	36.6	52.1	95.4
1985	25.9	59.1	26.8	37.1	52.9	97.3
1986	26.1	63.1	27.8	39.8	54.1	103.8
1987	27.1	68.0	28.7	40.4	56.1	109.2
1988	27.2	74.8	29.0	42.6	56.5	118.6
1989	29.6	78.3	23.4	37.7	53.2	116.8
1990	31.9	77.2	22.7	33.9	55.1	112.2
1991	32.5	81.4	20.9	33.0	53.6	115.4

\*Number of events per 1,000 females 15-17. Pregnancies are the sum of live births, fetal deaths, and abortions.

Table 4

Live Birth, Abortion, and Pregnancy Rates by Race  
North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Birth Rate</u>		<u>Abortion Rate</u>		<u>Pregnancy Rate</u>	
	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>
North Carolina	58.4	78.2	17.4	34.5	76.1	113.8
<b>COUNTY*</b>						
Alamance	55.3	78.1	19.0	43.0	74.9	122.3
Alexander	53.4	68.5	8.5	19.0	62.3	88.5
Anson	55.9	86.8	11.5	23.4	67.6	111.5
Beaufort	56.4	82.6	10.7	18.9	67.6	103.3
Bertie	53.4	77.1	10.0	12.4	64.0	90.8
Bladen	54.6	76.5	10.8	16.5	65.7	94.4
Brunswick	64.3	75.9	15.9	22.4	80.6	98.5
Buncombe	57.9	83.4	23.0	42.2	81.2	126.6
Burke	57.0	69.6	13.1	24.3	70.4	94.6
Cabarrus	58.6	83.6	15.3	32.2	74.2	117.0
Caldwell	59.3	82.5	11.6	16.2	71.2	100.5
Camden	55.5	58.7	8.8	18.6	64.8	77.3
Carteret	61.5	66.6	16.9	17.4	78.8	84.6
Caswell	60.9	55.9	12.3	21.7	73.3	78.3
Catawba	59.2	88.2	15.1	26.4	74.8	115.6
Chatham	62.2	68.3	14.7	32.0	77.4	101.1
Chowan	64.2	76.3	8.8	16.8	73.3	94.8
Cleveland	61.7	88.9	11.2	24.3	73.5	114.3
Columbus	56.0	88.8	12.4	22.2	68.9	112.1
Craven	83.5	90.6	16.5	26.9	100.3	118.7
Cumberland	81.6	86.0	20.6	36.3	102.7	123.5
Currituck	67.2	82.2	14.4	12.0	81.8	96.2
Dare	62.7	101.0	26.1	28.7	89.2	133.2
Davidson	57.5	70.7	14.8	31.0	72.8	102.9
Davie	52.5	74.8	14.8	26.1	67.6	101.5
Duplin	65.0	79.9	10.9	32.3	76.6	113.9
Durham	52.1	69.3	17.8	50.8	70.3	120.9
Edgecombe	57.2	76.4	18.1	29.3	75.9	106.4

\*Counties having 500 or more Black population in 1990.

Table 4 (continued)

**Live Birth, Abortion, and Pregnancy Rates by Race  
North Carolina and Selected Counties\* 1987-1991**

<u>Residence</u>	<u>Birth Rate</u>		<u>Abortion Rate</u>		<u>Pregnancy Rate</u>	
	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>
<b>COUNTY*</b>						
Forsyth	53.6	74.4	20.5	48.3	74.5	123.6
Franklin	56.2	69.0	17.5	26.7	74.0	96.8
Gaston	62.7	88.4	15.7	32.7	78.8	122.2
Gates	59.8	69.3	11.1	16.6	71.3	87.2
Granville	57.9	72.4	17.1	33.3	75.4	106.3
Greene	51.0	65.6	11.8	20.4	63.2	86.8
Guilford	51.9	67.9	24.1	44.7	76.4	113.6
Halifax	57.6	87.9	18.8	22.6	76.8	111.6
Harnett	67.7	93.1	14.3	27.7	82.4	121.8
Haywood	57.1	58.0	15.1	44.3	72.6	102.3
Henderson	60.2	94.1	17.9	34.7	78.6	129.6
Hertford	48.1	84.4	14.3	22.1	63.2	107.6
Hoke	69.1	83.3	13.3	19.4	82.6	103.5
Hyde	55.1	78.3	9.2	18.3	65.1	98.0
Iredell	60.0	84.7	13.9	23.7	74.4	109.6
Johnston	62.3	82.0	13.9	30.8	76.5	113.6
Jones	64.4	71.0	8.5	22.3	73.7	94.6
Lee	65.7	87.9	17.8	36.3	83.8	125.3
Lenoir	55.9	70.7	15.8	23.0	72.3	94.6
Lincoln	60.8	84.6	13.0	22.4	74.2	107.8
McDowell	58.7	75.1	12.9	17.1	71.9	92.9
Martin	53.3	78.3	10.2	16.6	63.9	95.5
Mecklenburg	57.7	78.1	22.0	42.9	80.0	122.0
Montgomery	69.0	78.3	14.8	24.5	84.1	103.9
Moore	61.1	87.3	16.2	23.5	77.8	112.2
Nash	56.1	81.4	13.7	28.7	70.3	111.4
New Hanover	48.9	81.1	26.7	40.0	75.8	122.1
Northampton	57.0	80.8	13.1	25.0	70.3	106.6
Onslow	104.9	110.8	18.7	38.3	124.1	150.1
Orange	36.2	53.7	20.8	63.1	57.2	117.8

\*Counties having 500 or more Black population in 1990.

Table 4 (continued)

Live Birth, Abortion, and Pregnancy Rates by Race  
 North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Birth Rate</u>		<u>Abortion Rate</u>		<u>Pregnancy Rate</u>	
	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>
<b>COUNTY*</b>						
Pamlico	56.1	81.3	10.7	22.4	67.4	105.0
Pasquotank	65.6	71.6	11.7	20.6	77.9	93.5
Pender	57.6	78.4	12.9	22.3	70.9	102.3
Perquimans	57.6	91.8	5.7	9.2	64.3	101.8
Person	56.5	78.4	17.1	37.1	74.1	116.5
Pitt	45.3	79.3	21.9	24.2	67.5	104.7
Polk	57.8	73.3	16.2	19.3	74.3	93.5
Randolph	59.4	78.0	15.1	34.4	74.8	113.5
Richmond	58.8	85.4	14.8	19.6	74.0	106.0
Robeson	56.9	88.8	17.0	23.4	74.4	113.4
Rockingham	57.8	68.5	16.9	25.9	75.0	95.4
Rowan	59.6	79.8	15.1	32.4	75.2	113.4
Rutherford	62.2	85.8	12.6	20.4	75.5	107.9
Sampson	58.6	72.2	14.0	21.7	73.1	94.8
Scotland	55.6	79.9	13.3	13.9	69.3	95.5
Stanly	61.2	87.8	12.0	26.6	73.6	116.1
Stokes	51.7	66.6	11.9	26.2	63.9	93.6
Surry	58.9	75.0	11.9	25.2	71.2	100.5
Transylvania	56.4	69.9	11.9	28.8	68.5	99.5
Tyrrell	54.4	85.0	6.8	20.7	61.6	106.3
Union	61.9	100.2	12.1	25.7	74.3	127.6
Vance	58.2	85.9	16.9	28.8	75.7	116.0
Wake	52.4	71.9	20.9	48.3	73.7	121.4
Warren	61.2	73.0	17.4	24.7	79.0	98.7
Washington	55.1	85.5	10.1	14.7	65.6	101.5
Watauga	34.2	15.7	18.4	44.6	52.8	60.3
Wayne	64.3	75.6	12.4	24.2	77.0	100.8
Wilkes	54.5	68.8	10.8	20.9	65.8	89.9
Wilson	50.8	77.0	17.2	39.5	68.2	117.4
Yadkin	57.1	61.1	12.0	29.9	69.5	92.4

\*Counties having 500 or more Black population in 1990.



Table 5

Live Birth, Abortion, and Pregnancy Rates for Females 15-17 by Race  
 North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Birth Rate</u>		<u>Abortion Rate</u>		<u>Pregnancy Rate</u>	
	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>
North Carolina	29.6	75.8	25.0	37.6	54.9	114.4
<b>COUNTY*</b>						
Alamance	28.7	71.2	33.9	51.9	62.9	124.7
Alexander	26.3	18.6	10.9	18.6	37.2	37.2
Anson	27.8	67.1	22.9	20.6	50.7	88.1
Beaufort	27.9	82.8	17.8	22.8	45.7	107.0
Bertie	21.8	46.0	10.2	14.6	33.5	60.6
Bladen	25.6	48.5	17.8	16.9	44.0	67.6
Brunswick	45.0	53.0	24.9	21.1	70.8	74.0
Buncombe	29.9	87.2	31.6	61.4	62.0	149.7
Burke	40.6	62.2	19.6	34.5	60.3	96.7
Cabarrus	28.9	107.2	27.3	35.3	56.2	144.4
Caldwell	50.2	97.1	20.5	25.6	71.3	126.1
Camden	40.4	27.6	24.7	22.1	65.0	49.7
Carteret	35.3	59.9	27.2	25.7	62.7	85.6
Caswell	19.8	18.5	18.2	21.7	38.0	41.0
Catawba	35.2	106.8	22.4	53.4	58.1	161.6
Chatham	24.9	55.3	23.7	37.2	48.6	93.4
Chowan	20.8	56.1	22.1	18.2	42.9	75.9
Cleveland	42.7	113.2	21.0	26.3	63.7	141.8
Columbus	28.8	71.5	15.0	20.3	44.6	92.2
Craven	32.6	75.2	23.4	28.6	56.0	104.5
Cumberland	33.2	67.4	27.9	39.5	61.4	107.5
Currituck	28.9	39.0	18.4	14.6	47.3	53.7
Dare	12.9	56.8	26.4	34.1	39.3	90.9
Davidson	35.5	63.4	28.8	44.6	64.9	110.9
Davie	27.6	78.9	20.9	47.3	49.3	126.2
Duplin	36.4	57.8	21.4	42.9	58.1	101.2
Durham	15.2	79.8	32.2	70.8	47.5	151.3
Edgecombe	29.6	79.1	33.7	28.5	63.8	107.8

\*Counties having 500 or more Black population in 1990.

Table 5 (continued)

Live Birth, Abortion, and Pregnancy Rates for Females 15-17 by Race  
North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Birth Rate</u>		<u>Abortion Rate</u>		<u>Pregnancy Rate</u>	
	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>
<b>COUNTY*</b>						
Forsyth	22.0	81.9	30.4	58.0	52.4	140.6
Franklin	18.2	72.6	20.5	32.6	39.7	106.4
Gaston	49.3	93.8	23.1	27.2	72.5	122.3
Gates	13.3	39.6	15.5	18.9	28.8	58.5
Granville	22.2	59.1	30.5	36.8	52.6	95.9
Greene	16.2	43.1	20.3	22.1	37.9	65.2
Guilford	20.6	78.4	34.8	55.4	55.6	135.0
Halifax	25.7	61.9	29.6	22.9	56.1	85.7
Harnett	32.7	80.7	22.3	30.4	54.9	112.4
Haywood	38.5	21.5	19.8	75.3	58.8	96.8
Henderson	32.1	92.6	24.1	61.7	56.7	154.3
Hertford	26.1	73.5	27.3	25.7	53.4	100.3
Hoke	31.9	80.9	26.4	16.3	58.4	97.2
Hyde	13.9	84.6	25.0	30.8	38.9	119.2
Iredell	34.2	100.0	19.5	32.7	54.2	133.7
Johnston	31.4	84.5	25.5	36.4	57.5	121.4
Jones	22.3	40.6	22.3	29.5	46.7	70.1
Lee	30.7	102.8	25.3	40.8	56.0	144.4
Lenoir	26.5	68.6	28.8	22.2	55.9	91.9
Lincoln	44.5	95.8	20.0	20.8	65.0	118.2
McDowell	39.6	72.9	22.4	15.6	62.2	88.5
Martin	19.2	59.8	17.7	16.4	37.0	76.7
Mecklenburg	19.6	99.4	33.9	54.6	53.7	154.7
Montgomery	49.1	85.2	28.2	24.9	77.9	110.1
Moore	28.2	82.7	22.4	23.0	51.2	107.0
Nash	21.5	60.7	14.7	21.7	36.6	83.3
New Hanover	23.5	94.5	31.6	45.4	55.3	140.8
Northampton	26.9	64.5	26.9	32.0	53.9	97.1
Onslow	41.4	61.3	30.1	35.9	71.5	97.3
Orange	13.7	55.1	27.9	58.7	41.6	114.5

\*Counties having 500 or more Black population in 1990.

Table 5 (continued)

Live Birth, Abortion, and Pregnancy Rates for Females 15-17 by Race  
 North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Birth Rate</u>		<u>Abortion Rate</u>		<u>Pregnancy Rate</u>	
	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>
<b>COUNTY*</b>						
Pamlico	23.3	71.6	14.3	34.4	37.6	106.0
Pasquotank	34.1	66.4	24.8	20.4	59.5	89.4
Pender	24.7	56.9	24.2	32.6	48.9	90.3
Perquimans	21.7	78.4	10.0	0.0	31.7	78.4
Person	19.0	52.4	31.6	48.6	50.6	102.0
Pitt	20.2	75.6	21.4	19.1	41.6	96.4
Polk	28.5	49.3	23.6	35.2	53.0	84.5
Randolph	37.0	81.0	24.2	39.9	61.6	122.2
Richmond	35.0	74.1	23.0	27.0	58.0	101.6
Robeson	33.2	83.7	25.6	27.1	59.0	111.3
Rockingham	37.0	69.5	26.2	35.9	63.4	107.4
Rowan	35.4	89.4	22.4	38.4	58.2	129.1
Rutherford	45.7	68.2	20.1	19.4	66.6	88.5
Sampson	33.2	52.7	21.5	25.5	54.7	78.6
Scotland	43.5	85.3	19.1	11.4	62.5	100.0
Stanly	37.0	100.9	19.6	31.7	57.3	138.5
Stokes	27.3	33.1	17.7	12.0	45.3	48.2
Surry	37.3	67.6	18.1	20.3	55.7	87.8
Transylvania	30.5	81.9	16.8	52.6	48.2	134.5
Tyrrell	20.8	54.9	0.0	22.0	20.8	76.9
Union	22.1	91.6	19.6	25.6	41.8	118.7
Vance	33.3	81.7	31.1	34.9	65.4	118.3
Wake	12.7	72.1	25.4	51.4	38.3	124.8
Warren	25.5	42.0	38.3	26.2	63.8	68.2
Washington	20.8	73.8	9.1	12.1	29.8	89.6
Watauga	27.5	0.0	16.6	160.0	44.1	160.0
Wayne	23.7	66.8	19.9	21.6	43.9	89.0
Wilkes	38.3	45.1	16.1	16.6	55.2	64.1
Wilson	21.2	74.4	24.8	45.6	46.0	121.6
Yadkin	25.8	26.5	20.8	39.7	46.7	66.2

\*Counties having 500 or more Black population in 1990.

Table 6

**Live Births, Abortions, and Pregnancies by Race  
North Carolina and Selected Counties\* 1987-1991**

<u>Residence</u>	<u>Live Births</u>		<u>Abortions</u>		<u>Pregnancies</u>	
	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>
North Carolina	338,596	147,766	100,656	65,241	441,555	214,995
<b>COUNTY*</b>						
Alamance	5,367	2,094	1,846	1,154	7,263	3,279
Alexander	1,581	133	252	37	1,843	172
Anson	696	1,194	143	322	842	1,535
Beaufort	1,714	1,284	326	294	2,053	1,606
Bertie	411	1,142	77	184	493	1,344
Bladen	1,000	1,034	197	223	1,202	1,276
Brunswick	2,621	852	650	252	3,288	1,106
Buncombe	10,262	1,411	4,073	713	14,409	2,142
Burke	4,496	415	1,033	145	5,557	564
Cabarrus	5,579	1,341	1,459	516	7,067	1,876
Caldwell	4,544	381	888	75	5,462	464
Camden	251	101	40	32	293	133
Carteret	3,099	353	853	92	3,971	448
Caswell	778	563	157	218	937	788
Catawba	7,301	1,213	1,862	363	9,227	1,590
Chatham	2,073	719	490	337	2,579	1,064
Chowan	506	462	69	102	577	574
Cleveland	4,508	2,052	818	560	5,367	2,637
Columbus	2,016	1,602	448	400	2,481	2,022
Craven	5,411	2,305	1,068	683	6,502	3,020
Cumberland	16,322	9,764	4,125	4,125	20,543	14,022
Currituck	861	123	184	18	1,047	144
Dare	1,545	88	644	25	2,198	116
Davidson	7,429	1,136	1,912	499	9,399	1,654
Davie	1,460	218	412	76	1,881	296
Duplin	1,785	1,254	300	507	2,104	1,787
Durham	7,508	6,887	2,563	5,048	10,127	12,017
Edgecombe	1,567	3,170	496	1,215	2,078	4,418

\*Counties having 500 or more Black population in 1990.

Table 6 (continued)

Live Births, Abortions, and Pregnancies by Race  
North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Live Births</u>		<u>Abortions</u>		<u>Pregnancies</u>	
	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>
<b>COUNTY*</b>						
Forsyth	12,722	6,805	4,873	4,420	17,688	11,301
Franklin	1,465	1,100	456	426	1,930	1,542
Gaston	10,947	2,571	2,750	952	13,774	3,555
Gates	302	329	56	79	360	414
Granville	1,467	1,277	434	588	1,909	1,876
Greene	461	509	107	158	571	673
Guilford	15,720	9,099	7,301	5,983	23,125	15,211
Halifax	1,525	2,821	497	726	2,033	3,582
Harnett	4,012	1,791	845	533	4,882	2,344
Haywood	2,695	38	714	29	3,423	67
Henderson	3,837	241	1,142	89	5,007	332
Hertford	470	1,292	140	338	618	1,646
Hoke	726	962	140	224	868	1,196
Hyde	197	163	33	38	233	204
Iredell	5,074	1,591	1,177	445	6,290	2,058
Johnston	4,656	1,472	1,036	553	5,720	2,040
Jones	395	306	52	96	452	408
Lee	2,222	992	603	409	2,837	1,413
Lenoir	2,090	2,037	589	662	2,702	2,723
Lincoln	3,136	420	670	111	3,827	535
McDowell	2,208	123	485	28	2,703	152
Martin	773	1,062	148	225	926	1,295
Mecklenburg	26,752	14,897	10,197	8,186	37,124	23,269
Montgomery	1,193	534	255	167	1,453	709
Moore	2,736	1,104	725	297	3,483	1,419
Nash	3,340	2,553	814	899	4,181	3,493
New Hanover	5,718	2,503	3,119	1,236	8,874	3,769
Northampton	419	1,104	96	342	517	1,455
Onslow	12,360	3,444	2,205	1,189	14,629	4,665
Orange	4,335	1,184	2,496	1,393	6,859	2,599

\*Counties having 500 or more Black population in 1990.

Table 6 (continued)

**Live Births, Abortions, and Pregnancies by Race  
North Carolina and Selected Counties\* 1987-1991**

<u>Residence</u>	<u>Live Births</u>		<u>Abortions</u>		<u>Pregnancies</u>	
	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>
<b>COUNTY*</b>						
Pamlico	454	257	87	71	546	332
Pasquotank	1,379	1,078	245	310	1,637	1,407
Pender	1,201	773	270	220	1,478	1,009
Perquimans	374	340	37	34	417	377
Person	1,289	872	391	412	1,691	1,296
Pitt	4,450	3,802	2,154	1,159	6,624	5,020
Polk	680	91	191	24	874	116
Randolph	6,766	592	1,720	261	8,528	862
Richmond	1,948	1,317	489	303	2,451	1,636
Robeson	2,404	2,870	717	755	3,140	3,665
Rockingham	4,286	1,553	1,251	588	5,569	2,163
Rowan	5,783	1,718	1,460	697	7,290	2,442
Rutherford	3,277	704	662	167	3,976	885
Sampson	1,905	1,347	456	405	2,376	1,769
Scotland	1,229	1,262	295	219	1,532	1,508
Stanly	2,957	641	579	194	3,557	848
Stokes	2,114	163	485	64	2,615	229
Surry	3,785	235	768	79	4,579	315
Transylvania	1,367	97	288	40	1,661	138
Tyrrell	129	144	16	35	146	180
Union	5,086	1,695	995	435	6,107	2,159
Vance	1,358	1,918	394	643	1,767	2,591
Wake	22,605	9,139	9,025	6,144	31,764	15,423
Warren	327	791	93	267	422	1,069
Washington	430	664	79	114	512	789
Watauga	1,761	20	946	57	2,721	77
Wayne	4,934	3,157	949	1,012	5,905	4,209
Wilkes	3,502	224	693	68	4,224	293
Wilson	2,359	2,494	797	1,280	3,166	3,802
Yadkin	1,803	90	378	44	2,194	136

\*Counties having 500 or more Black population in 1990.

Table 7

Live Births, Abortions, and Pregnancies for Females 15-17 by Race  
North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Live Births</u>		<u>Abortions</u>		<u>Pregnancies</u>	
	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>
North Carolina	13,568	14,512	11,474	7,197	25,180	21,901
<b>COUNTY*</b>						
Alamance	218	181	257	132	477	317
Alexander	72	4	30	4	102	8
Anson	34	137	28	42	62	180
Beaufort	75	171	48	47	123	221
Bertie	15	85	7	27	23	112
Bladen	46	86	32	30	79	120
Brunswick	159	83	88	33	250	116
Buncombe	436	166	461	117	905	285
Burke	300	36	145	20	446	56
Cabarrus	234	164	221	54	455	221
Caldwell	348	57	142	15	494	74
Camden	18	5	11	4	29	9
Carteret	140	35	108	15	249	50
Caswell	24	23	22	27	46	51
Catawba	381	156	242	78	628	236
Chatham	60	61	57	41	117	103
Chowan	17	37	18	12	35	50
Cleveland	289	288	142	67	431	361
Columbus	109	180	57	51	169	232
Craven	170	208	122	79	292	289
Cumberland	501	726	421	425	928	1,158
Currituck	33	8	21	3	54	11
Dare	22	5	45	3	67	8
Davidson	415	111	336	78	758	194
Davie	74	25	56	15	132	40
Duplin	97	116	57	86	155	203
Durham	122	601	258	533	380	1,139
Edgecombe	72	355	82	128	155	484

\*Counties having 500 or more Black population in 1990.

Table 7 (continued)

**Live Births, Abortions, and Pregnancies for Females 15-17 by Race  
North Carolina and Selected Counties\* 1987-1991**

<u>Residence</u>	<u>Live Births</u>		<u>Abortions</u>		<u>Pregnancies</u>	
	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>
<b>COUNTY*</b>						
Forsyth	360	675	499	478	859	1,159
Franklin	39	120	44	54	85	176
Gaston	804	303	376	88	1,182	395
Gates	6	21	7	10	13	31
Granville	48	122	66	76	114	198
Greene	12	41	15	21	28	62
Guilford	437	830	739	586	1,180	1,429
Halifax	65	257	75	95	142	356
Harnett	160	191	109	72	269	266
Haywood	177	2	91	7	270	9
Henderson	189	30	142	20	334	50
Hertford	22	137	23	48	45	187
Hoke	29	114	24	23	53	137
Hyde	5	22	9	8	14	31
Iredell	256	202	146	66	405	270
Johnston	207	174	168	75	379	250
Jones	11	22	11	16	23	38
Lee	92	126	76	50	168	177
Lenoir	93	254	101	82	196	340
Lincoln	202	60	91	13	295	74
McDowell	154	14	87	3	242	17
Martin	25	113	23	31	48	145
Mecklenburg	566	1,639	979	900	1,549	2,552
Montgomery	80	72	46	21	127	93
Moore	112	126	89	35	203	163
Nash	111	207	76	74	189	284
New Hanover	197	296	265	142	464	441
Northampton	18	105	18	52	36	158
Onslow	323	140	235	82	558	222
Orange	70	78	142	83	212	162

\*Counties having 500 or more Black population in 1990.



Table 7 (continued)

Live Births, Abortions, and Pregnancies for Females 15-17 by Race  
North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Live Births</u>		<u>Abortions</u>		<u>Pregnancies</u>	
	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>	<u>Black</u>
<b>COUNTY*</b>						
Pamlico	18	25	11	12	29	37
Pasquotank	59	78	43	24	103	105
Pender	45	68	44	39	89	108
Perquimans	13	36	6	0	19	36
Person	42	56	70	52	112	109
Pitt	103	392	109	99	212	500
Polk	29	7	24	5	54	12
Randolph	367	65	240	32	611	98
Richmond	123	143	81	52	204	196
Robeson	122	349	94	113	217	464
Rockingham	240	180	170	93	411	278
Rowan	282	198	178	85	463	286
Rutherford	230	74	101	21	335	96
Sampson	105	130	68	63	173	194
Scotland	89	179	39	24	128	210
Stanly	166	86	88	27	257	118
Stokes	102	11	66	4	169	16
Surry	233	20	113	6	348	26
Transylvania	71	14	39	9	112	23
Tyrrell	6	10	0	4	6	14
Union	164	186	145	52	310	241
Vance	75	197	70	84	147	285
Wake	335	669	671	477	1,013	1,157
Warren	12	53	18	33	30	86
Washington	16	61	7	10	23	74
Watauga	73	0	44	4	117	4
Wayne	148	316	124	102	274	421
Wilkes	226	19	95	7	326	27
Wilson	83	274	97	168	180	448
Yadkin	77	4	62	6	139	10

\*Counties having 500 or more Black population in 1990.

Table 8

Multiparous (Nonfirst) Pregnancies and Rates  
for Females 15-17  
North Carolina 1987-1991

<u>Year</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Rate*</u>	<u>Number</u>	<u>Rate*</u>
1987	690	7.2	955	24.1
1988	802	8.6	1,105	28.3
1989	748	8.2	1,118	29.2
1990	821	9.2	1,167	31.1
1991	769	8.8	1,196	32.4
1987-91	3,830	8.4	5,541	29.0

\*Nonfirst pregnancies per 1,000 females 15-17.

Table 9

Numbers and Percentages of Live Births by Selected Characteristic by Race  
North Carolina 1987-91

	Whites		Blacks		American Indians	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Total	338,596	100.0	147,766	100.0	8,087	100.0
Mother's Age						
< 18 (A)	13,964	4.1	16,016	10.8	705	8.7
18-34	299,584	88.5	124,497	84.3	7,050	87.2
35+ (B)	23,753	7.0	6,843	4.6	304	3.8
Unknown	1,228	0.4	365	0.2	27	0.3
Mother's Education						
< 9 (C)	11,088	3.3	4,673	3.2	477	5.9
9-11 (D)	56,597	16.7	38,608	26.1	2,628	32.5
12+	270,518	79.9	104,197	70.5	4,971	61.5
Unknown	393	0.1	288	0.2	11	0.1
Out-of-Wedlock						
Yes (E)	44,182	13.0	92,046	62.3	3,594	44.4
No	294,385	86.9	55,703	37.7	4,493	55.6
Unknown	29	0.0	17	0.0	0	0.0
Birth Order						
1	131,168	38.7	48,664	32.9	2,930	36.2
2-3	167,832	49.6	70,997	48.0	3,888	48.1
4+ (F)	39,131	11.6	27,855	18.9	1,252	15.5
Unknown	465	0.1	250	0.2	17	0.2
Previous Fetals						
Yes (G)	74,801	22.1	35,491	24.0	1,502	18.6
No	263,519	77.8	112,128	75.9	6,577	81.3
Unknown	276	0.1	147	0.1	8	0.1
Previous Live Births Now Dead						
Yes (H)	5,200	1.5	3,658	2.5	199	2.5
No	333,111	98.4	143,949	97.4	7,876	97.4
Unknown	285	0.1	159	0.1	12	0.1
Any One or More of A-H	165,790	49.0	118,244	80.0	5,788	71.6

Table 10

Numbers and Percentages of Mothers Having One or More  
Sociodemographic Risk Factors by Race  
North Carolina and Selected Counties\*1987-91

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
North Carolina	165,790	49.0	118,244	80.0
<b>COUNTY*</b>				
Alamance	2,550	47.5	1,681	80.3
Alexander	814	51.5	101	75.9
Anson	317	45.5	991	83.0
Beaufort	710	41.4	1,037	80.8
Bertie	168	40.9	932	81.6
Bladen	516	51.6	823	79.6
Brunswick	1,515	57.8	684	80.3
Buncombe	5,433	52.9	1,191	84.4
Burke	2,479	55.1	330	79.5
Cabarrus	2,704	48.5	1,177	87.8
Caldwell	2,733	60.1	327	85.8
Camden	126	50.2	76	75.2
Carteret	1,565	50.5	274	77.6
Caswell	386	49.6	436	77.4
Catawba	3,883	53.2	1,033	85.2
Chatham	1,026	49.5	583	81.1
Chowan	233	46.0	372	80.5
Cleveland	2,346	52.0	1,695	82.6
Columbus	1,023	50.7	1,345	84.0
Craven	2,452	45.3	1,669	72.4
Cumberland	7,376	45.2	6,637	68.0
Currituck	487	56.6	91	74.0
Dare	815	52.8	74	84.1
Davidson	4,062	54.7	942	82.9
Davie	697	47.7	170	78.0
Duplin	919	51.5	1,041	83.0
Durham	3,420	45.6	5,501	79.9
Edgecombe	791	50.5	2,690	84.9

\*Counties having 500 or more Black population in 1990.

Table 10 (continued)

Numbers and Percentages of Mothers Having One or More  
Sociodemographic Risk Factors by Race  
North Carolina and Selected Counties\*1987-91

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<b>COUNTY*</b>				
Forsyth	5,682	44.7	5,584	82.1
Franklin	728	49.7	898	81.6
Gaston	6,378	58.3	2,204	85.7
Gates	138	45.7	240	72.9
Granville	749	51.1	1,051	82.3
Greene	183	39.7	446	87.6
Guilford	7,747	49.3	7,347	80.7
Halifax	860	56.4	2,390	84.7
Harnett	1,979	49.3	1,450	81.0
Haywood	1,422	52.8	27	71.1
Henderson	2,013	52.5	212	88.0
Hertford	217	46.2	1,079	83.5
Hoke	357	49.2	795	82.6
Hyde	87	44.2	139	85.3
Iredell	2,452	48.3	1,340	84.2
Johnston	2,354	50.6	1,260	85.6
Jones	199	50.4	243	79.4
Lee	1,025	46.1	820	82.7
Lenoir	1,062	50.8	1,692	83.1
Lincoln	1,706	54.4	333	79.3
McDowell	1,175	53.2	96	78.0
Martin	310	40.1	862	81.2
Mecklenburg	11,613	43.4	11,886	79.8
Montgomery	719	60.3	473	88.6
Moore	1,295	47.3	890	80.6
Nash	1,699	50.9	2,063	80.8
New Hanover	2,956	51.7	2,133	85.2
Northampton	207	49.4	940	85.1
Onslow	4,671	37.8	1,802	52.3
Orange	2,123	49.0	965	81.5

\*Counties having 500 or more Black population in 1990.

Table 10 (continued)

Numbers and Percentages of Mothers Having One or More  
Sociodemographic Risk Factors by Race  
North Carolina and Selected Counties\* 1987-91

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<b>COUNTY*</b>				
Pamlico	241	53.1	217	84.4
Pasquotank	641	46.5	851	78.9
Pender	620	51.6	619	80.1
Perquimans	176	47.1	286	84.1
Person	627	48.6	683	78.3
Pitt	1,856	41.7	3,107	81.7
Polk	347	51.0	73	80.2
Randolph	3,626	53.6	497	84.0
Richmond	1,076	55.2	1,095	83.1
Robeson	1,317	54.8	2,506	87.3
Rockingham	2,335	54.5	1,250	80.5
Rowan	3,065	53.0	1,442	83.9
Rutherford	1,826	55.7	601	85.4
Sampson	984	51.7	1,109	82.3
Scotland	688	56.0	1,090	86.4
Stanly	1,456	49.2	537	83.8
Stokes	940	44.5	127	77.9
Surry	1,922	50.8	182	77.4
Transylvania	745	54.5	85	87.6
Tyrrell	63	48.8	118	81.9
Union	2,264	44.5	1,446	85.3
Vance	767	56.5	1,607	83.8
Wake	10,045	44.4	7,069	77.3
Warren	177	54.1	616	77.9
Washington	172	40.0	554	83.4
Watauga	900	51.1	18	90.0
Wayne	2,184	44.3	2,499	79.2
Wilkes	1,856	53.0	162	72.3
Wilson	1,104	46.8	2,087	83.7
Yadkin	831	46.1	65	72.2

\*Counties having 500 or more Black population in 1990.

Table 11

Numbers and Percentages of Mothers by Time of First  
Prenatal Care by Race  
North Carolina 1987-91

<u>Time of First Visit</u>	<u>Whites</u>		<u>Blacks</u>		<u>American Indians</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Total	338,596	100.0	147,766	100.0	8,087	100.0
No Care	3,060	0.9	5,062	3.4	136	1.7
1st Trimester	280,979	83.0	89,396	60.5	5,308	65.6
2nd Trimester	45,683	13.5	42,916	29.0	2,127	26.3
3rd Trimester	8,048	2.4	9,733	6.6	497	6.1
Unknown	826	0.2	659	0.4	19	0.2

Table 12

**Numbers and Percentages of Mothers Having  
Inadequate Prenatal Care\* by Race  
North Carolina and Selected Counties\*\* 1987-91**

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
North Carolina	14,646	4.3	20,357	13.8
<b>COUNTY**</b>				
Alamance	250	4.7	354	16.9
Alexander	88	5.6	31	23.3
Anson	39	5.6	210	17.6
Beaufort	49	2.9	149	11.6
Bertie	8	1.9	107	9.4
Bladen	60	6.0	152	14.7
Brunswick	167	6.4	129	15.1
Buncombe	272	2.7	137	9.7
Burke	208	4.6	40	9.6
Cabarrus	315	5.6	275	20.5
Caldwell	302	6.6	65	17.1
Camden	13	5.2	8	7.9
Carteret	135	4.4	55	15.6
Caswell	52	6.7	109	19.4
Catawba	331	4.5	181	14.9
Chatham	105	5.1	115	16.0
Chowan	17	3.4	54	11.7
Cleveland	318	7.1	455	22.2
Columbus	100	5.0	247	15.4
Craven	299	5.5	281	12.2
Cumberland	490	3.0	810	8.3
Currituck	45	5.2	14	11.4
Dare	39	2.5	14	15.9
Davidson	384	5.2	172	15.1
Davie	53	3.6	26	11.9
Duplin	93	5.2	207	16.5
Durham	135	1.8	601	8.7
Edgecombe	93	5.9	586	18.5

\*As defined by the Kessner Index. See Glossary.

\*\*Counties having 500 or more Black population in 1990.



Table 12 (continued)

Numbers and Percentages of Mothers Having  
Inadequate Prenatal Care\* by Race  
North Carolina and Selected Counties\*\* 1987-91

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<b>COUNTY**</b>				
Forsyth	365	2.9	646	9.5
Franklin	54	3.7	121	11.0
Gaston	667	6.1	446	17.3
Gates	8	2.6	32	9.7
Granville	55	3.7	107	8.4
Greene	19	4.1	62	12.2
Guilford	600	3.8	1,091	12.0
Halifax	58	3.8	266	9.4
Harnett	203	5.1	385	21.5
Haywood	143	5.3	2	5.3
Henderson	124	3.2	24	10.0
Hertford	21	4.5	138	10.7
Hoke	20	2.8	76	7.9
Hyde	18	9.1	27	16.6
Iredell	358	7.1	331	20.8
Johnston	367	7.9	384	26.1
Jones	26	6.6	52	17.0
Lee	119	5.4	178	17.9
Lenoir	106	5.1	410	20.1
Lincoln	205	6.5	89	21.2
McDowell	156	7.1	12	9.8
Martin	20	2.6	80	7.5
Mecklenburg	731	2.7	1,518	10.2
Montgomery	81	6.8	74	13.9
Moore	113	4.1	127	11.5
Nash	307	9.2	640	25.1
New Hanover	229	4.0	442	17.7
Northampton	16	3.8	104	9.4
Onslow	416	3.4	258	7.5
Orange	122	2.8	172	14.5

\*As defined by the Kessner Index. See Glossary.

\*\*Counties having 500 or more Black population in 1990.

Table 12 (continued)

Numbers and Percentages of Mothers Having  
Inadequate Prenatal Care\* by Race  
North Carolina and Selected Counties\*\* 1987-91

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<b>COUNTY**</b>				
Pamlico	27	5.9	44	17.1
Pasquotank	44	3.2	117	10.9
Pender	63	5.2	153	19.8
Perquimans	13	3.5	49	14.4
Person	44	3.4	102	11.7
Pitt	117	2.6	435	11.4
Polk	33	4.9	9	9.9
Randolph	402	5.9	95	16.0
Richmond	114	5.9	246	18.7
Robeson	172	7.2	623	21.7
Rockingham	221	5.2	252	16.2
Rowan	509	8.8	394	22.9
Rutherford	124	3.8	93	13.2
Sampson	131	6.9	240	17.8
Scotland	96	7.8	249	19.7
Stanley	114	3.9	83	12.9
Stokes	42	2.0	9	5.5
Surry	119	3.1	22	9.4
Transylvania	42	3.1	7	7.2
Tyrrell	7	5.4	12	8.3
Union	205	4.0	283	16.7
Vance	57	4.2	367	19.1
Wake	690	3.1	1,333	14.6
Warren	13	4.0	80	10.1
Washington	15	3.5	81	12.2
Watauga	39	2.2	1	5.0
Wayne	376	7.6	839	26.6
Wilkes	88	2.5	6	2.7
Wilson	85	3.6	231	9.3
Yadkin	79	4.4	14	15.6

\*As defined by the Kessner Index. See Glossary.

\*\*Counties having 500 or more Black population in 1990.

**Table 13**  
**Percentages of Live Births by Type of Service by Race**  
**North Carolina 1988-1991**

<b><u>Type of Service and Race</u></b>	<b>Year of Birth</b>			
	<b><u>1988</u></b>	<b><u>1989</u></b>	<b><u>1990</u></b>	<b><u>1991</u></b>
<b>Newborn Hospitalization Paid by Medicaid</b>				
White	13.7	18.6	24.2	30.8
Minority	45.2	52.5	59.8	66.2
<b>Mother Received Prenatal WIC*</b>				
White	19.2	22.1	24.2	27.8
Minority	49.7	53.7	56.1	59.5
<b>Mother Received Prenatal Care in Health Department</b>				
White	13.3	14.6	16.3	18.6
Minority	32.4	34.1	36.7	39.2

\*Women, Infants, and Children supplemental food program; see Glossary.

**Table 14**  
**Percentages of Medicaid Births by Type of Service by Race**  
**North Carolina 1988-1991**

<u>Type of Service and Race</u>	<u>Year of Birth</u>			
	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<b>Mother Received Prenatal WIC*</b>				
White	69.2	72.4	70.2	70.4
Minority	72.0	74.8	74.5	75.3
<b>Mother Received Maternity Care Coordination**</b>				
White	22.8	34.1	37.5	39.3
Minority	24.7	36.8	43.7	45.0

\*Women, Infants, and Children supplemental food program; see Glossary.

\*\*Case management; see Glossary.

**Table 15**  
**Numbers and Percentages of Mothers Having Selected**  
**Medical Risk Factors by Race**  
**North Carolina 1988-91**

<u>Birth Certificate</u> <u>Indicates Mother Had</u>	<u>Whites</u>		<u>Blacks</u>		<u>American Indians</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Anemia	4,987	1.8	5,291	4.4	233	3.6
Diabetes	8,883	3.2	2,980	2.5	231	3.6
Hypertension	10,726	3.9	4,485	3.7	197	3.0

Table 16

Numbers and Percentages of Mothers  
Who Smoked by Race  
North Carolina and Selected Counties\* 1988-91

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
North Carolina	60,989	22.2	20,406	16.9
<b>COUNTY*</b>				
Alamance	1,027	23.7	331	19.5
Alexander	282	22.4	17	15.5
Anson	113	20.5	154	15.5
Beaufort	349	25.3	118	11.3
Bertie	71	21.7	109	12.1
Bladen	194	23.5	94	11.0
Brunswick	700	33.2	107	15.4
Buncombe	2,273	27.5	241	21.1
Burke	1,001	27.8	61	18.4
Cabarrus	984	21.4	163	15.0
Caldwell	1,087	29.5	82	26.7
Camden	46	21.8	6	7.1
Carteret	632	25.6	53	19.2
Caswell	153	24.3	69	14.9
Catawba	1,274	21.5	130	13.2
Chatham	330	19.3	95	17.1
Chowan	85	21.4	53	14.8
Cleveland	937	25.7	277	16.4
Columbus	433	27.3	288	21.6
Craven	870	20.1	242	12.9
Cumberland	2,999	22.8	1,174	14.9
Currituck	145	20.5	5	5.3
Dare	216	17.2	7	10.1
Davidson	1,790	29.9	182	19.6
Davie	289	24.4	38	20.8
Duplin	402	27.7	168	16.4
Durham	814	13.3	970	17.1
Edgecombe	387	30.9	366	14.2

\*Counties having 500 or more Black population in 1990.

Table 16 (continued)

Numbers and Percentages of Mothers  
Who Smoked by Race  
North Carolina and Selected Counties\* 1988-91

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<b>COUNTY*</b>				
Forsyth	2,382	23.1	1,321	23.6
Franklin	292	24.4	118	13.3
Gaston	2,542	28.5	323	15.2
Gates	50	20.4	35	13.3
Granville	256	21.3	177	17.2
Greene	69	18.4	68	16.6
Guilford	2,918	22.8	1,506	20.0
Halifax	347	28.2	400	17.1
Harnett	913	28.6	217	14.8
Haywood	630	29.2	11	35.5
Henderson	775	25.1	45	25.0
Hertford	93	24.0	153	14.4
Hoke	156	26.9	120	15.3
Hyde	37	24.3	21	14.6
Iredell	1,013	24.2	253	19.7
Johnston	904	23.7	213	17.6
Jones	90	28.7	52	20.3
Lee	444	24.7	161	19.7
Lenoir	465	27.6	387	23.2
Lincoln	633	24.9	52	15.0
McDowell	488	27.4	19	19.6
Martin	173	27.9	93	11.1
Mecklenburg	2,826	12.9	2,023	16.6
Montgomery	261	26.7	67	15.3
Moore	420	19.3	155	17.6
Nash	555	20.5	281	13.6
New Hanover	1,119	24.0	386	18.8
Northampton	75	21.6	150	16.8
Onslow	2,101	21.4	314	11.3
Orange	467	13.4	204	21.1

\*Counties having 500 or more Black population in 1990.

Table 16 (continued)

Numbers and Percentages of Mothers  
Who Smoked by Race  
North Carolina and Selected Counties\* 1988-91

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<b>COUNTY*</b>				
Pamlico	99	26.8	40	19.7
Pasquotank	220	19.8	100	11.4
Pender	262	25.7	79	12.3
Perquimans	82	27.9	33	12.5
Person	234	22.3	125	18.0
Pitt	742	20.4	497	16.1
Polk	121	21.6	13	18.1
Randolph	1,489	27.0	70	14.8
Richmond	372	23.5	133	12.1
Robeson	574	29.0	419	18.1
Rockingham	975	28.2	218	17.4
Rowan	1,167	25.0	256	18.4
Rutherford	608	22.6	75	12.9
Sampson	372	23.9	188	16.9
Scotland	280	27.9	196	19.1
Stanly	492	20.4	100	19.2
Stokes	509	29.6	24	17.4
Surry	609	19.6	34	17.3
Transylvania	294	26.8	17	20.5
Tyrrell	35	36.1	19	18.1
Union	677	16.1	233	16.8
Vance	292	26.2	245	15.3
Wake	2,328	12.5	1,397	18.3
Warren	71	27.8	98	15.5
Washington	90	24.8	75	13.9
Watauga	256	18.0	5	27.8
Wayne	939	23.6	498	19.3
Wilkes	745	26.8	38	22.0
Wilson	344	18.0	225	11.1
Yadkin	377	26.6	16	22.9

\*Counties having 500 or more Black population in 1990.

Table 17

Numbers and Percentages of Mothers Having  
a Primary or Repeat C-Section by Race  
North Carolina and Selected Counties\* 1988-91

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
North Carolina	65,014	23.7	26,950	22.3
<b>COUNTY*</b>				
Alamance	1,033	23.8	366	21.5
Alexander	359	28.5	24	21.8
Anson	147	26.6	203	20.4
Beaufort	363	26.3	302	28.9
Bertie	92	28.1	149	16.6
Bladen	185	22.4	185	21.7
Brunswick	548	26.0	180	25.9
Buncombe	1,996	24.2	276	24.1
Burke	910	25.3	105	31.6
Cabarrus	1,201	26.1	291	26.7
Caldwell	983	26.7	102	33.2
Camden	68	32.2	29	34.5
Carteret	670	27.2	92	33.3
Caswell	109	17.3	74	16.0
Catawba	1,377	23.2	224	22.7
Chatham	375	21.9	100	18.0
Chowan	96	24.2	97	27.0
Cleveland	742	20.3	312	18.5
Columbus	330	20.8	258	19.4
Craven	1,001	23.1	497	26.5
Cumberland	2,476	18.8	1,530	19.4
Currituck	139	19.7	21	22.3
Dare	289	23.0	13	18.8
Davidson	1,600	26.7	242	26.1
Davie	311	26.2	46	25.1
Duplin	362	25.0	238	23.3
Durham	1,239	20.2	1,074	18.9
Edgecombe	300	24.0	511	19.8

\*Counties having 500 or more Black population in 1990.



Table 17 (continued)

Numbers and Percentages of Mothers Having  
a Primary or Repeat C-Section by Race  
North Carolina and Selected Counties\* 1988-91

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<b>COUNTY*</b>				
Forsyth	2,558	24.8	1,297	23.1
Franklin	246	20.6	177	19.9
Gaston	1,872	21.0	387	18.2
Gates	56	22.9	55	20.8
Granville	283	23.6	223	21.7
Greene	107	28.6	76	18.5
Guilford	3,318	26.0	2,050	27.2
Halifax	305	24.8	589	25.1
Harnett	728	22.8	323	22.0
Haywood	475	22.0	10	32.3
Henderson	795	25.8	46	25.6
Hertford	90	23.3	221	20.8
Hoke	139	24.0	175	22.3
Hyde	34	22.4	39	27.1
Iredell	1,126	26.9	418	32.5
Johnston	944	24.7	235	19.4
Jones	79	25.2	81	31.6
Lee	453	25.2	129	15.8
Lenoir	477	28.3	416	25.0
Lincoln	678	26.7	96	27.7
McDowell	445	25.0	27	27.8
Martin	166	26.7	192	22.9
Mecklenburg	5,128	23.4	2,317	19.0
Montgomery	283	29.0	117	26.7
Moore	733	33.7	317	35.9
Nash	596	22.0	467	22.6
New Hanover	1,152	24.7	449	21.8
Northampton	98	28.2	228	25.6
Onslow	2,041	20.8	714	25.7
Orange	713	20.5	172	17.8

\*Counties having 500 or more Black population in 1990.

Table 17 (continued)

**Numbers and Percentages of Mothers Having  
a Primary or Repeat C-Section by Race  
North Carolina and Selected Counties\* 1988-91**

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<b>COUNTY*</b>				
Pamlico	104	28.2	48	23.6
Pasquotank	348	31.3	281	32.2
Pender	228	22.4	118	18.4
Perquimans	80	27.2	60	22.7
Person	232	22.2	140	20.1
Pitt	1,029	28.3	668	21.6
Polk	119	21.3	13	18.1
Randolph	1,339	24.3	86	18.2
Richmond	477	30.1	278	25.3
Robeson	468	23.7	516	22.2
Rockingham	837	24.2	334	26.7
Rowan	1,102	23.6	372	26.8
Rutherford	435	16.2	94	16.1
Sampson	353	22.7	282	25.4
Scotland	288	28.7	232	22.6
Stanly	658	27.3	141	27.1
Stokes	430	25.0	39	28.3
Surry	610	19.7	42	21.3
Transylvania	199	18.1	17	20.5
Tyrrell	30	30.9	19	18.1
Union	1,012	24.1	323	23.3
Vance	274	24.6	371	23.1
Wake	3,945	21.2	1,543	20.2
Warren	56	22.0	145	22.9
Washington	106	29.2	155	28.7
Watauga	342	24.1	10	55.6
Wayne	761	19.1	435	16.8
Wilkes	808	29.1	57	32.9
Wilson	580	30.4	514	25.3
Yadkin	403	28.4	16	22.9

\*Counties having 500 or more Black population in 1990.

Table 18

Numbers and Percentages of Live Births by Birthweight by Race  
North Carolina 1987-91

	Whites		Blacks		American Indians	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Total	338,596	100.0	147,766	100.0	8,087	100.0
Under 1500 grams	3,641	1.1	4,358	2.9	122	1.5
1500-2499 grams	16,919	5.0	14,469	9.8	564	7.0
2500 or more grams	317,784	93.9	128,755	87.1	7,395	91.4
Unknown	252	0.1	184	0.1	6	0.1

Table 19

**Number and Percentage of Mothers with  
Low-Weight Births by Race  
North Carolina and Selected Counties\* 1987-91**

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
North Carolina	20,560	6.1	18,827	12.7
<b>COUNTY*</b>				
Alamance	344	6.4	285	13.6
Alexander	108	6.8	17	12.8
Anson	37	5.3	157	13.1
Beaufort	94	5.5	175	13.6
Bertie	22	5.4	145	12.7
Bladen	75	7.5	138	13.3
Brunswick	154	5.9	117	13.7
Buncombe	602	5.9	167	11.8
Burke	373	8.3	61	14.7
Cabarrus	366	6.6	160	11.9
Caldwell	307	6.8	59	15.5
Camden	20	8.0	11	10.9
Carteret	170	5.5	34	9.6
Caswell	50	6.4	65	11.5
Catawba	449	6.1	156	12.9
Chatham	97	4.7	100	13.9
Chowan	23	4.5	45	9.7
Cleveland	282	6.3	276	13.5
Columbus	111	5.5	198	12.4
Craven	262	4.8	280	12.1
Cumberland	867	5.3	1,147	11.7
Currituck	63	7.3	13	10.6
Dare	62	4.0	15	17.0
Davidson	534	7.2	149	13.1
Davie	85	5.8	30	13.8
Duplin	103	5.8	150	12.0
Durham	418	5.6	858	12.5
Edgecombe	108	6.9	441	13.9

\*Counties having 500 or more Black population in 1990.

Table 19 (continued)

**Number and Percentage of Mothers with  
Low-Weight Births by Race  
North Carolina and Selected Counties\* 1987-91**

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<b>COUNTY*</b>				
Forsyth	787	6.2	990	14.5
Franklin	85	5.8	130	11.8
Gaston	809	7.4	336	13.1
Gates	19	6.3	48	14.6
Granville	102	7.0	188	14.7
Greene	29	6.3	59	11.6
Guilford	917	5.8	1,125	12.4
Halifax	89	5.8	325	11.5
Harnett	237	5.9	229	12.8
Haywood	205	7.6	2	5.3
Henderson	253	6.6	33	13.7
Hertford	28	6.0	176	13.6
Hoke	43	5.9	106	11.0
Hyde	14	7.1	23	14.1
Iredell	319	6.3	209	13.1
Johnston	325	7.0	198	13.5
Jones	23	5.8	32	10.5
Lee	133	6.0	136	13.7
Lenoir	158	7.6	287	14.1
Lincoln	175	5.6	35	8.3
McDowell	131	5.9	13	10.6
Martin	51	6.6	120	11.3
Mecklenburg	1,579	5.9	2,159	14.5
Montgomery	86	7.2	67	12.5
Moore	150	5.5	149	13.5
Nash	200	6.0	294	11.5
New Hanover	330	5.8	354	14.1
Northampton	30	7.2	127	11.5
Onslow	679	5.5	344	10.0
Orange	236	5.4	155	13.1

\*Counties having 500 or more Black population in 1990.

Table 19 (continued)

Number and Percentage of Mothers with  
Low-Weight Births by Race  
North Carolina and Selected Counties\* 1987-91

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<b>COUNTY*</b>				
Pamlico	34	7.5	35	13.6
Pasquotank	86	6.2	122	11.3
Pender	63	5.2	81	10.5
Perquimans	19	5.1	25	7.4
Person	85	6.6	101	11.6
Pitt	265	6.0	500	13.2
Polk	40	5.9	8	8.8
Randolph	441	6.5	76	12.8
Richmond	122	6.3	160	12.1
Robeson	172	7.2	363	12.6
Rockingham	291	6.8	206	13.3
Rowan	345	6.0	223	13.0
Rutherford	202	6.2	102	14.5
Sampson	112	5.9	180	13.4
Scotland	92	7.5	155	12.3
Stanly	207	7.0	75	11.7
Stokes	151	7.1	12	7.4
Surry	258	6.8	27	11.5
Transylvania	66	4.8	7	7.2
Tyrrell	6	4.7	11	7.6
Union	307	6.0	191	11.3
Vance	108	8.0	237	12.4
Wake	1,148	5.1	1,108	12.1
Warren	26	8.0	114	14.4
Washington	21	4.9	68	10.2
Watauga	99	5.6	5	25.0
Wayne	268	5.4	384	12.2
Wilkes	248	7.1	26	11.6
Wilson	161	6.8	301	12.1
Yadkin	115	6.4	10	11.1

\*Counties having 500 or more Black population in 1990.

Table 20

Fetal, Neonatal, Postneonatal, Total and Cause-Specific Infant Deaths  
and Rates by Race  
North Carolina 1987-91

	Whites		Blacks		American Indians	
	<u>Number</u>	<u>Rate</u>	<u>Number</u>	<u>Rate</u>	<u>Number</u>	<u>Rate</u>
Fetal Deaths <sup>1</sup>	2,303	6.8	1,988	13.3	62	7.6
Neonatal Deaths <sup>2</sup>	1,935	5.7	1,846	12.5	59	7.3
Postneonatal Deaths <sup>3</sup>	1,046	3.1	807	5.5	36	4.5
Infant Deaths <sup>4</sup>	2,981	8.8	2,653	18.0	95	11.7
SIDS Deaths <sup>5</sup>	437	1.3	332	2.2	17	2.1
Low Birthweight/ Respiratory Distress <sup>6</sup>	389	1.1	598	4.0	13	1.6
Birth Defects <sup>7</sup>	709	2.1	329	2.2	18	2.2
Perinatal Condition <sup>8</sup>	67	0.2	59	0.4	3	0.4
Injuries <sup>9</sup>	92	0.3	82	0.6	1	0.1

<sup>1</sup>Stillbirths of at least 20 weeks gestation. Rate is per 1,000 deliveries.

<sup>2</sup>Death of a liveborn child under 28 days of age. Rate is per 1,000 live births.

<sup>3</sup>Death of an infant 28 days to one year of age. Rate is per 1,000 neonatal survivors.

<sup>4</sup>Death of a liveborn child under one year of age. Rate is per 1,000 live births.

<sup>5</sup>ICD-9 code 798.0.

<sup>6</sup>ICD-9 codes 764, 765, 769-770.7.

<sup>7</sup>ICD-9 codes 740-759.

<sup>8</sup>ICD-9 code 771.

<sup>9</sup>ICD-9 codes 800-999.

Table 21

Infant Deaths and Rates by Race  
 North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Rate**</u>	<u>Number</u>	<u>Rate**</u>
North Carolina	2,981	8.8	2,653	18.0
<b>COUNTY*</b>				
Alamance	41	7.6	35	16.7
Alexander	14	8.9	2	15.0
Anson	3	4.3	20	16.8
Beaufort	14	8.2	20	15.6
Bertie	2	4.9	17	14.9
Bladen	16	16.0	13	12.6
Brunswick	15	5.7	13	15.3
Buncombe	90	8.8	23	16.3
Burke	44	9.8	8	19.3
Cabarrus	54	9.7	15	11.2
Caldwell	64	14.1	7	18.4
Camden	2	8.0	3	29.7
Carteret	32	10.3	5	14.2
Caswell	5	6.4	10	17.8
Catawba	77	10.5	20	16.5
Chatham	14	6.8	12	16.7
Chowan	4	7.9	3	6.5
Cleveland	48	10.6	31	15.1
Columbus	23	11.4	25	15.6
Craven	46	8.5	36	15.6
Cumberland	151	9.3	178	18.2
Currituck	10	11.6	5	40.7
Dare	11	7.1	1	11.4
Davidson	70	9.4	19	16.7
Davie	5	3.4	4	18.3
Duplin	14	7.8	22	17.5
Durham	51	6.8	122	17.7
Edgecombe	12	7.7	51	16.1

\*Counties having 500 or more Black population in 1990.

\*\*Infant deaths (under 1 year) per 1,000 live births.



Table 21 (continued)

Infant Deaths and Rates by Race  
North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Rate**</u>	<u>Number</u>	<u>Rate**</u>
<b>COUNTY*</b>				
Forsyth	113	8.9	142	20.9
Franklin	13	8.9	21	19.1
Gaston	110	10.0	50	19.4
Gates	5	16.6	2	6.1
Granville	14	9.5	20	15.7
Greene	5	10.8	14	27.5
Guilford	139	8.8	161	17.7
Halifax	11	7.2	63	22.3
Harnett	35	8.7	33	18.4
Haywood	27	10.0	0	0.0
Henderson	35	9.1	9	37.3
Hertford	4	8.5	22	17.0
Hoke	6	8.3	13	13.5
Hyde	1	5.1	3	18.4
Iredell	56	11.0	26	16.3
Johnston	42	9.0	18	12.2
Jones	8	20.3	6	19.6
Lee	16	7.2	21	21.2
Lenoir	20	9.6	38	18.7
Lincoln	23	7.3	3	7.1
McDowell	15	6.8	3	24.4
Martin	7	9.1	16	15.1
Mecklenburg	196	7.3	299	20.1
Montgomery	13	10.9	10	18.7
Moore	17	6.2	24	21.7
Nash	25	7.5	40	15.7
New Hanover	45	7.9	32	12.8
Northampton	6	14.3	22	19.9
Onslow	118	9.5	76	22.1
Orange	33	7.6	18	15.2

\*Counties having 500 or more Black population in 1990.

\*\*Infant deaths (under 1 year) per 1,000 live births.

Table 21 (continued)

Infant Deaths and Rates by Race  
North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Rate**</u>	<u>Number</u>	<u>Rate**</u>
<b>COUNTY*</b>				
Pamlico	5	11.0	5	19.5
Pasquotank	12	8.7	13	12.1
Pender	10	8.3	8	10.3
Perquimans	5	13.4	6	17.6
Person	9	7.0	15	17.2
Pitt	46	10.3	97	25.5
Polk	9	13.2	2	22.0
Randolph	57	8.4	16	27.0
Richmond	29	14.9	22	16.7
Robeson	17	7.1	46	16.0
Rockingham	32	7.5	21	13.5
Rowan	63	10.9	21	12.2
Rutherford	40	12.2	11	15.6
Sampson	17	8.9	26	19.3
Scotland	13	10.6	23	18.2
Stanly	22	7.4	13	20.3
Stokes	17	8.0	2	12.3
Surry	36	9.5	7	29.8
Transylvania	9	6.6	1	10.3
Tyrrell	3	23.3	2	13.9
Union	30	5.9	38	22.4
Vance	15	11.0	25	13.0
Wake	174	7.7	186	20.4
Warren	1	3.1	15	19.0
Washington	5	11.6	17	25.6
Watauga	12	6.8	1	50.0
Wayne	39	7.9	50	15.8
Wilkes	41	11.7	13	58.0
Wison	16	6.8	25	10.0
Yadkin	11	6.1	1	11.1

\*Counties having 500 or more Black population in 1990.

\*\*Infant deaths (under 1 year) per 1,000 live births.

Table 22

Numbers and Rates of Birth Defects by Race  
North Carolina Birth Defects Registry 1989-90

<u>Type of Defect</u>	<u>Whites</u>		<u>Blacks</u>		<u>American Indians</u>	
	<u>Number</u>	<u>Rate</u> <sup>1</sup>	<u>Number</u>	<u>Rate</u> <sup>1</sup>	<u>Number</u>	<u>Rate</u> <sup>1</sup>
Total <sup>2</sup>	4,872	346.2	2,873	473.6	165	557.2
Central Nervous System <sup>3</sup>	214	15.2	126	20.8	6	20.3
Eye and Ear <sup>4</sup>	198	14.1	134	22.1	10	33.8
Heart <sup>5</sup>	1,060	75.3	618	101.9	30	101.3
Respiratory System <sup>6</sup>	205	14.6	94	15.5	7	23.6
Digestive System <sup>7</sup>	398	28.3	167	27.5	9	30.4
Genitourinary <sup>8</sup>	1,008	71.6	493	81.3	32	108.1
Hypospadias <sup>9</sup>	427	30.3	154	25.4	19	64.2
Musculoskeletal <sup>10</sup>	1,984	141.0	1,301	214.5	79	266.8
Chromosomal <sup>11</sup>	194	13.8	58	9.6	3	10.1

<sup>1</sup>Cases per 10,000 live births.

<sup>2</sup>ICD-9 codes 740-759 excluding minor malformations, i.e., codes 743.8, 744.1, 744.5, 747.5, 750.0, 751.0, 755.0, 756.2, 757.2, 757.3, 757.6.

<sup>3</sup>ICD-9 codes 740.0-742.9.

<sup>4</sup>ICD-9 codes 743.0-743.6, 743.9, 744.0, 744.2-744.3.

<sup>5</sup>ICD-9 codes 745.0-747.4, 747.6-747.9.

<sup>6</sup>ICD-9 codes 748.0-748.9.

<sup>7</sup>ICD-9 codes 749.0-749.2, 750.1-750.9, 751.1-751.9.

<sup>8</sup>ICD-9 codes 752.0-753.9.

<sup>9</sup>ICD-9 code 752.6.

<sup>10</sup>ICD-9 codes 754.0-754.8, 755.1-756.1, 756.3-756.9.

<sup>11</sup>ICD-9 codes 758.0-758.9.

Table 23

**Twelve Leading Causes of Black Mortality:  
Numbers of Deaths, Years of Life Lost,\* and Corresponding Ranks  
North Carolina 1987-91**

<u>Underlying Cause**</u>	<u>Deaths</u>		<u>YLL*</u>	
	<u>Number</u>	<u>Rank</u>	<u>Number</u>	<u>Rank</u>
Diseases of Heart	19,824	1	92,873	2
Cancer	13,973	2	86,617	3
Cerebrovascular Disease	5,857	3	27,178	8
Diabetes	2,283	4	14,529	12
All Other Unintentional Injuries and Adverse Effects	2,263	5	52,128	6
Homicide and Legal Intervention	1,887	6	63,339	4
Pneumonia and Influenza	1,859	7	—	—
Motor Vehicle Injuries	1,808	8	57,919	5
Conditions in the Perinatal Period	1,602	9	108,818	1
Chronic Obstructive Pulmonary Diseases	1,206	10	—	—
Chronic Liver Disease and Cirrhosis	1,019	11	16,669	11
Nephritis, Nephrotic Syndrome, and Nephrosis	973	12	—	—
Congenital Anomalies	—	—	28,273	7
AIDS	—	—	26,637	9
Sudden Infant Death Syndrome	—	—	22,553	10

\*Years of Life Lost (YLL) is the expected years of life remaining, comparing decedent's age at death to the sex-specific life expectancy at birth of a North Carolina nonwhite.

\*\*ICD-9 codes are listed in Appendix 2.

Table 24

**Five Leading Causes of Black Male and Female Mortality:  
Number of Deaths, Years of Life Lost,\* and Corresponding Ranks  
North Carolina 1987-91**

<b>Underlying Cause **</b>	<b>Deaths</b>	<b>Males</b>			<b>Females</b>			
		<b>Rank</b>	<b>YLL*</b>	<b>Rank</b>	<b>Deaths</b>	<b>Rank</b>	<b>YLL*</b>	<b>Rank</b>
Heart Disease	10,046	1	42,633	3	9,778	1	50,240	3
Cancer	8,097	2	—	—	5,876	2	54,593	1
Cerebrovascular Disease	2,582	3	—	—	3,275	3	—	—
All Other Unintentional Injuries and Adverse Effects	1,627	4	37,847	5	—	—	—	—
Homicide and Legal Intervention	1,463	5	45,826	2	—	—	17,513	4
Conditions in the Perinatal Period	—	—	57,322	1	—	—	51,496	2
Motor Vehicle Injuries	—	—	40,642	4	—	—	17,277	5
Diabetes	—	—	—	—	1,436	4	—	—
Pneumonia and Influenza	—	—	—	—	779	5	—	—

\*Years of Life Lost (YLL) is the expected years of life remaining, comparing decedent's age at death to the sex-specific life expectancy at birth of a North Carolina nonwhite.

\*\*ICD-9 codes are listed in Appendix 2.

**Table 25**  
**Deaths and Median Ages at Death by Race**  
**North Carolina 1987-91**

<u>Underlying Cause of Death*</u>	<u>Number of Deaths</u>			<u>Median Age at Death</u>		
	<u>Whites</u>	<u>Blacks</u>	<u>American Indians</u>	<u>Whites</u>	<u>Blacks</u>	<u>American Indians</u>
All Causes	216,273	67,606	2,172	74.3	68.5	66.1
Diseases of Heart	74,773	19,824	670	76.8	72.7	71.8
Cerebrovascular Disease	16,960	5,857	120	81.1	74.7	75.6
Atherosclerosis	1,508	451	14	84.6	81.3	81.1
Cancer	49,908	13,973	375	69.8	68.9	68.7
Diabetes Mellitus	4,110	2,283	100	73.4	69.8	70.3
AIDS/HTLV-III/LAV Infection	684	899	12	36.9	35.9	31.1
Septicemia	1,959	868	18	78.9	74.3	75.5
Pneumonia and Influenza	7,380	1,859	53	82.9	75.7	76.3
Chronic Obstructive Pulmonary Disease	8,853	1,206	66	74.0	70.8	72.9
Chronic Liver Disease and Cirrhosis	2,459	1,019	31	62.4	52.1	50.6
Nephritis, Nephrotic Syndrome and Nephrosis	1,662	973	26	78.7	74.1	77.5
Motor Vehicle Injuries	5,611	1,808	169	31.3	32.3	31.3
All Other Unintentional Injuries	5,183	2,263	84	61.9	45.3	40.5
Suicide	3,708	459	34	44.1	35.4	31.3
Homicide	1,546	1,887	66	34.0	30.7	31.9

\*ICD-9 codes are listed in Appendix 1.

Table 26

Deaths and Median Ages at Death by Race  
North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Median</u>	<u>Number</u>	<u>Median</u>
North Carolina	216,273	74.3	67,606	68.5
<b>COUNTY*</b>				
Alamance	4,191	75.0	1,024	69.0
Alexander	990	74.0	63	68.1
Anson	746	76.0	583	69.2
Beaufort	1,619	74.8	771	71.5
Bertie	564	74.6	679	70.4
Bladen	968	73.4	642	69.9
Brunswick	1,820	70.2	409	69.8
Buncombe	8,221	75.9	892	72.2
Burke	3,026	72.9	244	70.3
Cabarrus	3,768	74.5	630	69.2
Caldwell	2,829	73.3	194	67.3
Camden	203	73.0	69	68.0
Carteret	2,209	73.3	222	70.2
Caswell	567	73.7	423	70.5
Catawba	4,519	73.7	519	66.7
Chatham	1,274	75.8	470	69.1
Chowan	528	76.7	274	72.3
Cleveland	3,292	74.8	878	67.8
Columbus	1,782	73.3	917	69.4
Craven	2,130	73.4	881	70.0
Cumberland	5,084	68.4	2,659	64.0
Currituck	579	70.9	110	67.6
Dare	764	72.4	51	71.8
Davidson	4,552	72.8	533	67.1
Davie	1,041	74.7	135	69.7
Duplin	1,433	74.1	806	70.3
Durham	4,327	75.8	2,867	68.9
Edgecombe	1,494	74.1	1,502	68.7

\*Counties having 500 or more Black population in 1990.

Table 26 (continued)

Deaths and Median Ages at Death by Race  
North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Median</u>	<u>Number</u>	<u>Median</u>
<b>COUNTY*</b>				
Forsyth	8,768	75.4	3,216	69.2
Franklin	1,096	75.3	673	70.3
Gaston	6,957	72.7	1,094	68.3
Gates	303	76.5	232	71.8
Granville	1,120	73.8	843	69.9
Greene	407	73.9	248	70.2
Guilford	11,234	75.3	3,683	67.4
Halifax	1,661	75.2	1,517	68.2
Harnett	2,211	72.9	734	67.3
Haywood	2,550	75.4	52	72.8
Henderson	3,920	77.1	144	70.9
Hertford	605	77.1	709	71.2
Hoke	437	73.8	376	68.7
Hyde	242	76.5	110	70.8
Iredell	3,568	74.6	666	69.4
Johnston	3,112	72.3	739	67.7
Jones	257	73.4	201	68.8
Lee	1,434	73.0	465	66.8
Lenoir	1,861	73.5	1,282	70.5
Lincoln	1,828	73.7	156	69.7
McDowell	1,705	74.4	91	73.9
Martin	811	74.3	623	69.6
Mecklenburg	12,501	74.3	5,404	63.4
Montgomery	829	75.3	273	70.2
Moore	2,626	75.3	625	69.6
Nash	2,426	73.7	1,224	67.6
New Hanover	3,906	73.3	1,222	70.1
Northampton	556	75.3	761	69.4
Onslow	2,185	68.3	598	59.8
Orange	1,980	75.8	622	69.7

\*Counties having 500 or more Black population in 1990.



Table 26 (continued)

Deaths and Median Ages at Death by Race  
North Carolina and Selected Counties\* 1987-1991

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Median</u>	<u>Number</u>	<u>Median</u>
<b>COUNTY*</b>				
Pamlico	457	74.8	169	73.3
Pasquotank	1,046	76.6	531	70.3
Pender	776	72.4	519	71.2
Perquimans	414	75.0	205	72.8
Person	1,008	74.7	453	69.5
Pitt	2,456	73.8	1,790	68.3
Polk	944	78.2	70	68.9
Randolph	3,878	72.5	322	69.0
Richmond	1,662	72.3	736	70.0
Robeson	2,126	72.6	1,387	69.4
Rockingham	3,356	74.5	899	70.1
Rowan	4,720	75.6	909	70.8
Rutherford	2,691	75.0	325	69.7
Sampson	1,720	75.2	856	69.1
Scotland	928	72.3	597	68.7
Stanly	2,204	74.3	280	69.3
Stokes	1,363	73.7	103	69.8
Surry	2,860	75.0	188	69.3
Transylvania	1,160	76.1	49	70.6
Tyrrell	131	74.7	94	70.2
Union	2,535	72.4	579	65.8
Vance	1,276	75.2	903	68.9
Wake	8,566	73.5	3,243	67.4
Warren	428	76.3	600	71.3
Washington	407	76.0	302	68.0
Watauga	1,129	75.4	9	81.3
Wayne	2,894	72.9	1,735	68.8
Wilkes	2,499	74.3	163	71.3
Wilson	2,088	74.7	1,356	68.1
Yadkin	1,478	76.0	56	71.3

\*Counties having 500 or more Black population in 1990.

**Table 27**  
**Age-Adjusted Death Rates by Race Showing Black Ratios**  
**North Carolina 1987-91**

<u>Underlying Cause of Death<sup>2</sup></u>	<u>Rate<sup>1</sup></u>			<u>Ratios: Blacks to</u>	
	<u>Whites</u>	<u>Blacks</u>	<u>American Indians</u>	<u>Whites</u>	<u>Indians</u>
All Causes	508.0	795.3	579.6	1.57	1.37
Diseases of Heart	157.5	220.3	181.7	1.40	1.21
Cerebrovascular Disease	30.9	62.0	31.2	2.01	1.99
Atherosclerosis	2.4	3.8	3.2 <sup>3</sup>	1.58	1.19
Cancer	128.1	172.5	105.4	1.35	1.64
Diabetes Mellitus	9.6	27.4	28.7	2.85	.95
AIDS/HTLV-III/LAV Infection	2.6	12.7	3.0 <sup>3</sup>	4.88	4.23
Septicemia	4.0	9.1	4.5	2.28	2.02
Pneumonia and Influenza	12.9	19.0	12.4 <sup>3</sup>	1.47	1.53
Chronic Obstructive Pulmonary Disease	19.7	14.2	18.3	.72	.78
Chronic Liver Disease and Cirrhosis	7.5	15.5	9.1	2.07	1.70
Nephritis, Nephrotic Syndrome and Nephrosis	3.4	10.4	6.5	3.06	1.60
Motor Vehicle Injuries	22.1	25.2	42.4	1.14	.59
All Other Unintentional Injuries	15.3	29.5	22.0	1.93	1.34
Suicide	13.3	6.4	8.7	.48	.74
Homicide	6.0	26.1	16.8	4.35	1.55

<sup>1</sup>Deaths per 100,000 population using 10-year age groups and the 1940 U.S. population as standard for direct age adjustment.

<sup>2</sup>ICD-9 codes are listed in Appendix 2.

<sup>3</sup>Rate based on fewer than 20 deaths.

Table 28

Age-Specific Deaths and Death Rates by Race  
North Carolina 1987-91

<u>Age Group</u>	<u>Whites</u>		<u>Blacks</u>		<u>American Indians</u>	
	<u>Number</u>	<u>Rate*</u>	<u>Number</u>	<u>Rate*</u>	<u>Number</u>	<u>Rate*</u>
Under 1 Year**	2,981	880.4	2,653	1,795.4	95	1,174.7
01-04	563	45.7	415	86.1	26	98.3
05-14	760	25.0	455	37.0	38	51.6
15-24	3,501	92.6	1,581	117.6	96	127.2
25-34	4,700	111.0	3,160	252.2	123	180.4
35-44	6,705	176.7	4,495	448.2	159	274.3
45-54	12,258	438.6	5,877	985.0	178	484.5
55-64	28,714	1,198.4	9,991	2,046.9	321	1,391.4
65-74	52,290	2,682.4	15,674	3,836.5	479	2,921.3
75-84	61,434	6,134.8	15,231	7,073.3	442	6,038.3
85 and older	42,367	15,253.5	8,074	13,287.0	215	13,530.5

\*Deaths per 100,000 population.

\*\*For American Indians, population estimates were not available for persons under 1 and 1-4 years, and undercounts occurred for persons under 1 in all other race groups. Therefore, 1987-91 live births are used for under 1 and the population 0-4 minus live births is used for ages 1-4.

Table 29

Deaths and Age-Adjusted Death Rates for  
Mentioned Conditions by Race Showing Black Ratios  
North Carolina 1989-91

Condition Mentioned on Death Certificate	Number of Deaths			Age-Adjusted Death Rate			Rate Ratios: Indians to	
	Whites	Blacks	American Indians	Whites	Blacks	American Indians	Whites	Blacks
Atherosclerosis <sup>1</sup>	26,218	6,365	211	80.4	103.1	88.0	1.28	1.17
Diabetes Mellitus <sup>2</sup>	10,249	4,485	158	37.7	87.0	71.7	2.31	1.21
Hypertension <sup>3</sup>	9,259	5,469	122	31.8	106.0	54.9	3.33	1.93
Nephritis, Nephrotic Syndrome, Nephrosis <sup>4</sup>	6,429	3,103	82	22.5	56.7	35.3	2.52	1.61
Septicemia <sup>5</sup>	6,241	2,668	68	21.8	49.2	28.3	2.26	1.74
Alcohol Use <sup>6</sup>	2,779	1,925	78	15.7	48.0	35.7	3.06	1.34

<sup>1</sup>ICD-9 codes 290.4, 414.0, 429.2, 437.0, 440.

<sup>2</sup>ICD-9 code 250.

<sup>3</sup>ICD-9 codes 401-405, 437.2, 642.

<sup>4</sup>ICD-9 codes 580-589.

<sup>5</sup>ICD-9 code 038.

<sup>6</sup>ICD-9 codes 291, 303, 305.0, 571.0-571.3, 790.3, E860, N980.

Table 30

Medical Examiner Deaths Aged 15 and Older that  
 were Tested for Blood Alcohol: Percent with a Level  
 of .10 Percent or Greater by Race-Sex Group  
 North Carolina Occurrences 1987-91

<u>Cause of Death</u>	<u>White Male</u>	<u>White Female</u>	<u>Nonwhite Male</u>	<u>Nonwhite Female</u>
All Injuries and Poisonings	34.2	15.2	44.0	21.0
Homicide	45.4	15.8	44.9	21.4
Suicide	25.5	13.9	20.2	19.7
Motor Vehicle Injuries	39.7	14.9	49.3	16.8
Drowning	42.1	16.3	40.9	27.8
Fire	55.8	30.1	55.3	25.6

**Table 31**  
**Numbers and Percentages of New Cancer Cases by Site, Stage, and Age**  
**North Carolina Males 1990-1995**

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
North Carolina	9,961	100.0	2,111	100.0
<u>Cancer Site</u>				
Prostate	2,486	25.0	628	29.7
Lung	2,149	21.6	445	21.1
Colorectal	1,241	12.5	228	10.8
Bladder	700	7.0	63	3.0
Lymphoma	394	4.0	62	2.9
Oral Cavity	293	2.9	93	4.4
Kidney	310	3.1	53	2.5
Malignant Melanoma	302	3.0	2	0.1
Larynx	227	2.3	67	3.2
Pancreas	206	2.1	55	2.6
Other	1,653	16.6	415	19.7
<u>State at Diagnosis</u>				
In Situ	258	2.6	28	1.3
Localized	4,072	40.9	683	32.4
Regional	2,503	25.1	537	25.4
Distant	2,352	23.6	677	32.1
Unstaged/Unknown	776	7.8	186	8.8
<u>Age at Diagnosis (Years)</u>				
Under 5	20	0.2	12	0.6
5-14	25	0.3	10	0.5
15-24	89	0.9	23	1.1
25-34	204	2.0	37	1.8
35-44	388	3.9	102	4.8
45-54	846	8.5	251	11.9
55-64	2,175	21.8	463	21.9
65-74	3,567	35.8	678	32.1
75-84	2,215	22.2	443	21.0
85 and older	432	4.3	92	4.4

**Table 32**  
**Numbers and Percentages of New Cancer Cases by Site, Stage, and Age**  
**North Carolina Females 1990**

<u>Residence</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
North Carolina	9,878	100.0	1,932	100.0
<u>Cancer Site</u>				
Breast	3,369	34.1	608	31.5
Colorectal	1,290	13.1	278	14.4
Lung	1,086	11.0	162	8.4
Corpus Uteri	500	5.1	96	5.0
Ovary	449	4.5	69	3.6
Lymphoma	377	3.8	53	2.7
Cervix Uteri	275	2.8	112	5.8
Bladder	237	2.4	31	1.6
Malignant Melanoma	249	2.5	5	0.3
Kidney	187	1.9	63	3.3
Other	1,859	18.8	455	23.6
<u>Stage at Diagnosis</u>				
In Situ	606	6.1	89	4.6
Localized	4,151	42.0	649	33.6
Regional	2,649	26.8	607	31.4
Distant	1,863	18.9	463	24.0
Unstaged/Unknown	609	6.2	124	6.4
<u>Age at Diagnosis (Years)</u>				
Under 5	16	0.2	6	0.3
5-14	28	0.3	3	0.2
15-24	73	0.7	20	1.0
25-34	326	3.3	102	5.3
35-44	819	8.3	198	10.2
45-54	1,352	13.7	269	13.9
55-64	2,102	21.3	371	19.2
65-74	2,704	27.4	535	27.7
75-84	1,905	19.3	326	16.9
85 and older	553	5.6	102	5.3

**Table 33**  
**Numbers of New Cancer Cases for Three Leading Sites**  
**by Age, Race, and Sex**  
**North Carolina 1990**

<u>Age</u>		<u>Males</u>		<u>Females</u>	
		<u>Site</u>	<u>Number of Cases</u>	<u>Site</u>	<u>Number of Cases</u>
Under 15	White	Leukemia	14	Leukemia	17
		Brain, CNS	10	Brain, CNS	15
		Lymphoma	5	Kidney	3
	Black	Leukemia	9	Brain, CNS	3
		Brain, CNS	3	Leukemia	2
		Lymphoma	3	Kidney	1
15-34	White	Lymphoma	76	Breast	79
		Testes	68	Cervix Uteri	53
		Malignant Melanoma	22	Lymphoma	43
	Black	Lymphoma	15	Breast	35
		Colorectal	6	Cervix Uteri	20
		Leukemia	4	Lymphoma	11
35-54	White	Lung	242	Breast	1,028
		Colorectal	151	Lung	167
		Malignant Melanoma	105	Colorectal	135
	Black	Lung	81	Breast	204
		Oral Cavity	42	Cervix Uteri	43
		Colorectal	39	Colorectal	41
55-74	White	Prostate	1,500	Breast	1,640
		Lung	1,421	Lung	711
		Colorectal	710	Colorectal	611
	Black	Prostate	369	Breast	276
		Lung	292	Colorectal	144
		Colorectal	113	Lung	91
75+	White	Prostate	934	Breast	622
		Lung	476	Colorectal	528
		Colorectal	368	Lung	201
	Black	Prostate	243	Breast	93
		Lung	72	Colorectal	88
		Colorectal	70	Lung	35



**Table 34**

**Cases and Rates for Leading Infectious Diseases by Race  
North Carolina 1987-91**

<b>Disease</b>	<b>Whites</b>		<b>Blacks</b>		<b>American Indians</b>	
	<b>Number</b>	<b>Rate<sup>1</sup></b>	<b>Number</b>	<b>Rate<sup>1</sup></b>	<b>Number</b>	<b>Rate<sup>1</sup></b>
AIDS	427	4.2	698	23.8	0	0.0
Syphilis <sup>2</sup>	1,585	6.4	11,971	165.6	85	21.5
Gonorrhea <sup>3</sup>	17,424	70.2	143,361	1,982.8	1,040	263.3
Chlamydia	15,133	60.9	26,609	368.0	428	108.4
Tuberculosis <sup>4</sup>	1,070	4.3	2,025	28.0	33	8.4
Hepatitis B	2,372	9.6	1,597	22.1	133	33.7

<sup>1</sup>Reported cases per 100,000 population.

<sup>2</sup>All stages.

<sup>3</sup>All sites.

<sup>4</sup>Verified cases, all forms.

Table 35

Percentages of North Carolina Adults Having Risk Factors by Race-Sex  
Behavioral Risk Factor Surveillance System 1991

<u>Risk Factor</u>	<u>White Males</u>	<u>White Females</u>	<u>Nonwhite Males</u>	<u>Nonwhite Females</u>
Seldom/Never				
Use Seatbelt	18.6	8.9	16.7	12.4
Ever Hypertensive	20.1	16.7	14.1	19.7
Overweight	26.0	25.1	32.3	35.8
Sedentary Lifestyle	58.6	60.1	63.7	68.8
Current Smoker	28.5	19.6	32.9	16.2
Binge Drinker	12.4	3.0	15.6	1.2
Chronic Drinker	5.5	0.8	4.8	0.2
Drinking and Driving	2.2	0.1	2.2	0.7

## APPENDIX 1

# Healthy People 2000 Objectives Targeting Blacks

- 2.3b\* Reduce overweight to a prevalence of no more than 30 percent among black women aged 20 and older. (Baseline: 44 percent for black women aged 20 through 74 in 1976-80)
- Note: For people aged 20 and older, overweight is defined as body mass index (BMI) equal to or greater than 27.8 for men and 27.3 for women. For adolescents, overweight is defined as BMI equal to or greater than 23.0 for males aged 12 through 14, 24.3 for males aged 15 through 17, 25.8 for males aged 18 through 19, 23.4 for females aged 12 through 14, 24.8 for females aged 15 through 17, and 25.7 for females aged 18 through 19. The values for adolescents are the age- and gender-specific 85th percentile values of the 1976-80 National Health and Nutrition Examination Survey (NHANES II), corrected for sample variation. BMI is calculated by dividing weight in kilograms by the square of height in meters. The cut points used to define overweight approximate the 120 percent of desirable body weight definition used in the 1990 objectives.*
- 2.4a Reduce growth retardation among low-income black children younger than age 1 to less than 10 percent. (Baseline: 15 percent in 1988)
- Note: Growth retardation is defined as height-for-age below the fifth percentile of children in the National Center for Health Statistics' reference population.*
- 2.10e Reduce the prevalence of anemia to less than 20 percent among black, low-income pregnant women. (Baseline: 41 percent of those aged 15 through 44 in their third trimester in 1988)
- Note: Iron deficiency is defined as having abnormal results for 2 or more of the following tests: mean corpuscular volume, erythrocyte protoporphyrin, and transferrin saturation. Anemia is used as an index of iron deficiency. Anemia among Alaska Native children was defined as hemoglobin <11 gm/dL or hematocrit <34 percent. For pregnant women in the third trimester, anemia was defined according to CDC criteria. The above prevalences of iron deficiency and anemia may be due to inadequate dietary iron intakes or to inflammatory conditions and infections. For anemia, genetics may also be a factor.*
- 3.4d\* Reduce cigarette smoking to a prevalence of no more than 18 percent among blacks aged 20 and older. (Baseline: 34 percent in 1987)
- Note: A cigarette smoker is a person who has smoked at least 100 cigarettes and currently smokes cigarettes.*
- 4.2a Reduce cirrhosis deaths among black men to no more than 12 per 100,000 black men. (Age-adjusted baseline: 22 per 100,000 in 1987)
- 5.1a Reduce pregnancies among black adolescent girls aged 15 through 19 to no more than 120 per 1,000 black adolescents. (Baseline: 186 per 1,000 for non-white adolescents in 1985)
- Note: For black and Hispanic adolescent girls, baseline data are unavailable for those aged 15 through 17. The targets for these two populations are based on data for women aged 15 through 19. If more complete data become available, a 35-percent reduction from baseline figures should be used as the target.*
- 5.2a Reduce to no more than 40 percent the proportion of all pregnancies among black women that are unintended. (Baseline: 78 percent of pregnancies in the previous 5 years were unintended, either unwanted or earlier than desired, in 1988)
- 5.3a Reduce the prevalence of infertility among black couples to no more than 9 percent. (Baseline: 12.1 percent of married couples with wives aged 15 through 44 in 1988)
- Note: Infertility is the failure of couples to conceive after 12 months of intercourse without contraception.*
- 7.1c Reduce homicides among black men aged 15 through 34 to no more than 72.4 per 100,000 black men. (Baseline: 90.5 per 100,000 in 1987)
- 7.1e Reduce homicides among black women aged 15 through 34 to no more than 16.0 per 100,000 black women. (Baseline: 20.0 per 100,000 in 1987)
- 8.1a\* Increase years of healthy life among blacks to at least 60 years. (Baseline: An estimated 56 years in 1980)
- Note: Years of healthy life (also referred to as quality-adjusted life years) is a summary measure of health that combines mortality (quantity of life) and morbidity and disability (quality of life) into a single measure. For people aged 65 and older, active life-expectancy, a related summary measure, also will be tracked.*
- 8.11 Increase to at least 50 percent the proportion of counties that have established culturally and linguistically appropriate community health promotion programs for racial and ethnic minority populations. (Baseline data available in 1992)
- Note: This objective will be tracked in counties in which a racial or ethnic group constitutes more than 10 percent of the population.*

## Healthy People 2000 Objectives Targeting Blacks (continued)

- 9.1b Reduce deaths among black males caused by unintentional injuries to no more than 51.9 per 100,000 black males. (Age-adjusted baseline: 64.9 per 100,000 in 1987)
- 9.4c Reduce deaths among black men aged 30 through 69 from falls and fall-related injuries to no more than 5.6 per 100,000 black men. (Baseline: 8 per 100,000 in 1987)
- 9.5c Reduce drowning deaths among black males to no more than 3.6 per 100,000 black males. (Age-adjusted baseline: 6.6 per 100,000 in 1987)
- 9.6c Reduce residential fire deaths among black males to no more than 4.3 per 100,000 black males. (Age-adjusted baseline: 5.7 per 100,000 in 1987)
- 9.6d Reduce residential fire deaths among black females to no more than 2.6 per 100,000 black females. (Age-adjusted baseline: 3.4 per 100,000 in 1987)
- 11.1a Reduce asthma morbidity among blacks, as measured by a reduction in asthma hospitalizations to no more than 265 per 100,000 blacks. (Baseline: 334 per 100,000 blacks and other non-whites in 1987)
- 11.4a Reduce the prevalence of blood lead levels exceeding 15 µg/dL and 25 µg/dL among inner-city low-income black children (annual family income less than \$6,000 in 1984 dollars) to no more than 75,000 and zero, respectively. (Baseline: An estimated 234,900 had levels exceeding 15 µg/dL, and 36,700 had levels exceeding 25 µg/dL, in 1984)
- 13.1c Reduce dental caries (cavities) so that the proportion of black children aged 6 through 8 with one or more caries (in permanent or primary teeth) is no more than 40 percent. (Baseline: 61 percent in 1986-87)
- 13.2c Reduce untreated dental caries so that the proportion of black children with untreated caries (in permanent or primary teeth) is no more than 25 percent among children aged 6 through 8 and no more than 20 percent among adolescents aged 15. (Baseline: 38 percent of black children aged 6 through 8 in 1986-87; 38 percent of black adolescents aged 15 in 1986-87)
- 14.1a Reduce the infant mortality rate among blacks to no more than 11 per 1,000 live births. (Baseline: 17.9 per 1,000 live births in 1987)
- 14.1e Reduce the neonatal mortality rate among blacks to no more than 7 per 1,000 live births. (Baseline: 11.7 per 1,000 live births in 1987)
- 14.1h Reduce the postneonatal mortality rate among blacks to no more than 4 per 1,000 live births. (Baseline: 6.1 per 1,000 live births in 1987)
- Note: Infant mortality is deaths of infants under 1 year; neonatal mortality is deaths of infants under 28 days; and postneonatal mortality is deaths of infants aged 28 days up to 1 year.*
- 14.2a Reduce the fetal death rate (20 or more weeks of gestation) among blacks to no more than 7.5 per 1,000 live births plus fetal deaths. (Baseline: 12.8 per 1,000 live births plus fetal deaths in 1987)
- 14.3a Reduce the maternal mortality rate among blacks to no more than 5 per 100,000 live births. (Baseline: 14.2 per 100,000 live births in 1987)
- Note: The objective uses the maternal mortality rate as defined by the National Center for Health Statistics. However, if other sources of maternal mortality data are used, a 50-percent reduction in maternal mortality is the intended target.*
- 14.4b Reduce the incidence of fetal alcohol syndrome among blacks to no more than 0.4 per 1,000 live births. (Baseline: 0.8 per 1,000 live births in 1987)
- 14.5a Reduce low birth weight among blacks to an incidence of no more than 9 percent of live births and very low birth weight to no more than 2 percent of live births. (Baseline: 12.7 and 2.7 percent, respectively, in 1987)
- Note: Low birth weight is weight at birth of less than 2,500 grams; very low birth weight is weight at birth of less than 1,500 grams.*
- 14.9b\* Increase to at least 75 percent the proportion of black mothers who breastfeed their babies in the early postpartum period, and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old. (Baseline: 25 percent at discharge from birth site and 8 percent at 5 to 6 months in 1988)

## Healthy People 2000 Objectives Targeting Blacks (continued)

- 14.11a Increase to at least 90 percent the proportion of pregnant black women who receive prenatal care in the first trimester of pregnancy. (Baseline: 61.1 percent of live births in 1987)
- 15.1a\* Reduce coronary heart disease deaths among blacks to no more than 115 per 100,000 blacks. (Age-adjusted baseline: 163 per 100,000 in 1987)
- 15.2a Reduce stroke deaths among blacks to no more than 27 per 100,000 blacks. (Age-adjusted baseline: 51.2 per 100,000 in 1987)
- 15.3a Reverse the increase in end-stage renal disease (requiring maintenance dialysis or transplantation) among blacks to attain an incidence of no more than 30 per 100,000 blacks. (Baseline: 32.4 per 100,000 in 1987)
- 15.5b Increase to at least 80 percent the proportion of black hypertensive men aged 18 through 34 who are taking action to help control their blood pressure. (Baseline: 63 percent of aware black hypertensive men aged 18 through 34 were taking action to control their blood pressure in 1985)
- Note: High blood pressure is defined as blood pressure equal to or greater than 140 mm Hg systolic and/or 90 mm Hg diastolic and/or taking antihypertensive medication. Actions to control blood pressure include taking medication, dieting to lose weight, cutting down on salt, and exercising.*
- 16.11e Increase to at least 80 percent the proportion of black women aged 40 and older who have ever received a clinical breast examination and a mammogram, and to at least 60 percent those aged 50 and older who have received them within the preceding 1 to 2 years. (Baseline: 28 percent of black women aged 40 and older "ever" in 1987; 19 percent of black women aged 50 and older "within the preceding 2 years" in 1987)
- 17.2c Reduce to no more than 9 percent the proportion of blacks who experience a limitation in major activity due to chronic conditions. (Baseline: 11.2 percent in 1988)
- Note: Major activity refers to the usual activity for one's age-gender group whether it is working, keeping house, going to school, or living independently. Chronic conditions are defined as conditions that either (1) were first noticed 3 or more months ago, or (2) belong to a group of conditions such as heart disease and diabetes, which are considered chronic regardless of when they began.*
- 17.9a Reduce diabetes-related deaths among blacks to no more than 58 per 100,000 blacks. (Age-adjusted baseline: 65 per 100,000 in 1986)
- 17.10a Reduce end-stage renal disease due to diabetes among blacks with diabetes to no more than 2 per 1,000 blacks with diabetes. (Baseline: 2.2 per 1,000 in 1983-86)
- 17.10c Reduce lower extremity amputations due to diabetes among blacks with diabetes to no more than 6.1 per 1,000 blacks with diabetes. (Baseline: 10.2 per 1,000 in 1984-87)
- Note: End-stage renal disease (ESRD) is defined as requiring maintenance dialysis or transplantation and is limited to ESRD due to diabetes. Blindness refers to blindness due to diabetic eye disease.*
- 17.11e Reduce diabetes among blacks to a prevalence of no more than 32 per 1,000 blacks. (Baseline: 36 per 1,000 in 1987)
- 18.1b Confine annual incidence of diagnosed AIDS cases among blacks to no more than 37,000 cases. (Baseline: An estimated 14,000-15,000 cases diagnosed in 1989)
- Note: Targets for this objective are equal to upper bound estimates of the incidence of diagnosed AIDS cases projected for 1993.*
- 19.1a Reduce gonorrhea among blacks to an incidence of no more than 1,300 cases per 100,000 blacks. (Baseline: 1,990 per 100,000 in 1989)
- 19.3a Reduce primary and secondary syphilis among blacks to an incidence of no more 65 cases per 100,000 blacks. (Baseline: 118 per 100,000 in 1989)

## Healthy People 2000 Objectives Targeting Blacks (continued)

- 20.4b Reduce tuberculosis among blacks to an incidence of no more than 10 cases per 100,000 blacks. (Baseline: 28.3 per 100,000 in 1988)
- 21.2h Increase to at least 50 percent the proportion of blacks who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force. (Baseline data available in 1991)
- 21.3b Increase to at least 95 percent the proportion of blacks who have a specific source of ongoing primary care for coordination of their preventive and episodic health care. (Baseline: Less than 80 percent in 1986, as 20 percent reported having no physician, clinic, or hospital as a regular source of care)
- 21.8 Increase the proportion of all degrees in the health professions and allied and associated health profession fields awarded to members of underrepresented racial and ethnic minority groups as follows:

	<i>1985-1986 Baseline</i>	<i>2000 Target</i>
Blacks	5%	8%

*Note: Underrepresented minorities are those groups consistently below parity in most health profession schools—blacks, Hispanics, and American Indians and Alaska Natives*

- 22.4 Develop and implement a national process to identify significant gaps in the Nation's disease prevention and health promotion data, including data for racial and ethnic minorities, people with low incomes, and people with disabilities, and establish mechanisms to meet these needs. (Baseline: No such process exists in 1990)

*Note: Disease prevention and health promotion data includes disease status, risk factors, and services receipt data. Public health problems include such issue areas as HIV infection, domestic violence, mental health, environmental health, occupational health, and disabling conditions.*

## APPENDIX 2

### NINTH REVISION INTERNATIONAL CLASSIFICATION OF DISEASES (ICD) CODES FOR SELECTED CAUSES OF DEATH

<u>CAUSE</u>	<u>ICD CODES</u>
Diseases of Heart	390-398,402,404-429
Cerebrovascular Disease	430-438
Atherosclerosis	440
Cancer	140-208
Diabetes Mellitus	250
AIDS/HTLV-III/LAV Infection	042-044
Septicemia	038
Pneumonia and Influenza	480-487
Chronic Obstructive Pulmonary Disease and Allied Conditions	490-496
Chronic Liver Disease and Cirrhosis	571
Nephritis, Nephrotic Syndrome and Nephrosis	580-589
Maternal Mortality	630-676
Injuries	E800-949
Motor Vehicle Injuries	E810-825
All Other Injuries and Adverse Effects	E800-807, 826-949
Suicide	E950-959
Homicide and Legal Intervention	E960-978





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