

**Health Disparities in Delaware 2004:
Indicators**

for

Delaware Division of Public Health

by

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Introduction

The purpose of this study is to examine the disparities between blacks and whites in Delaware by looking at death rates, birth rates, and hospitalization rates. The black/white disparity ratio will also be used as a measure of inequality between blacks and whites. The black/white disparity ratio divides the black rate of death by the white rate of death. In tandem these graphs are effective at showing the disparity trends in Delaware and help the reader grasp a better understanding of areas in need of improvement. The differences in mortality indicators can be seen in the Life Expectancy tables between blacks and whites since 1979 (Figure 1.1).

Figure 1.1
Life Expectancy in Delaware by Race and Gender

Year	All Races			White			Black		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
2001	76.3	73.9	78.7	77.1	74.6	79.5	72.1	69.5	74.4
2000	76.5	73.9	79.0	77.1	74.5	79.6	72.5	69.4	75.5
1999	76.8	73.9	79.6	77.6	74.7	80.3	72.6	68.8	76.2
1998	75.9	73.3	78.4	77.0	74.5	79.4	70.3	66.9	73.5
1997	75.8	73.3	78.2	76.7	74.2	79.1	71.0	68.3	73.5
1996	75.4	72.5	78.1	76.7	73.9	79.4	68.8	65.2	72.2
1995	75.5	72.5	78.4	76.8	74.2	79.4	68.9	64.4	73.5
1994	75.1	71.4	78.7	76.1	72.6	79.6	69.5	65.0	74.1
1993	75.2	71.9	78.5	76.5	73.6	79.3	68.5	63.4	73.6
1992	75.4	72.4	78.2	76.3	73.5	78.9	70.3	66.2	74.3
1991	75.0	71.9	77.9	76.0	73.0	78.9	69.4	66.2	72.4
1990	75.0	71.9	77.9	76.0	73.2	78.8	69.3	65.4	73.1
1989	74.3	71.1	77.3	75.3	72.2	78.2	68.4	64.4	72.4
1988	74.2	70.9	77.3	75.1	71.9	78.2	68.8	65.0	72.6
1987	74.3	71.0	77.5	75.1	71.8	78.3	69.7	66.1	73.1
1986	74.0	70.5	77.5	74.9	71.4	78.3	68.9	65.0	72.8
1985	73.9	70.5	77.1	74.9	71.7	78.0	68.3	64.2	72.6
1984	74.6	71.3	77.8	75.5	72.2	78.7	69.1	65.8	72.4
1983	74.6	71.1	78.0	75.5	72.1	78.8	69.4	65.5	73.4
1982	73.7	70.1	77.2	74.6	70.9	78.3	68.4	65.2	71.5
1981	73.6	70.1	77.0	74.3	70.9	77.6	69.4	65.1	73.9
1980	73.1	69.5	76.7	74.0	70.5	77.5	67.6	63.3	72.4
1979	73.1	69.2	77.1	74.0	70.0	78.1	67.6	64.1	71.2

Source: Delaware Health Statistics Center, Division of Public Health

A black newborn in Delaware are expected to live 72.1 years, while a white newborn is expected to live 77.1 years, a difference of five years. A black female newborn is expected to live 74.4 years opposed to a white female newborn, which is expected to live 79.5 years. A black male newborn has the lowest life expectancy at 69.5 years compared to a white male newborn at 74.6. As Figure 1.1 shows, life expectancy for both black males and black females has steadily climbed since 1979. Black males and black females improved far more than their white counterparts but still lag significantly behind both whites and the all race, both sex averages. While the black female trails the average white female life expectancy by just over four years, it is the black male who is behind all of the groups, including black females, by almost five years. The differences in life expectancy are directly related to differences in mortality for a wide range of diseases. This report is intended to highlight the problems and challenges associated with health disparities among the races.

There are two schools of thought when dealing with health disparities in the United States. The first and most widely held is improving the health care system to fix the inequities that exist. The second is improving health promotion in all areas by educating the general public of the long-term benefits of a healthier lifestyle. J. Michael McGinnis writes that ninety-five percent of all funding in this country put towards health is spent on the medical services, leaving only five percent for health promotion.¹ But it is estimated that forty percent of deaths are caused by specific behavior problems that could be prevented with more education, while only ten to fifteen percent of deaths could be avoided by better access to, or availability of, health care.

Behavioral choices are the biggest determinant in an individual's health in the United States. The way we eat, whether we smoke or drink, and having unprotected sex are just a few of the many choices individuals make that affect their health. McGinnis believes through better health care promotion, there would be a dramatic improvement in the mortality and morbidity of all races. This is shown through the healthy people initiative started in 1990, which showed large improvements in Infant Mortality, Childhood Death Rates, Adolescent Death Rates, and Adult Death Rates.

¹ McGinnis, J.M., Pamela Williams-Russo, James R. Knickman. "The Case for More Active Policy Attention To Health Promotion", *Health Affairs*, Vol. 21, No. 2, 2002.

As health disparities grow in certain areas such as HIV/AIDS and diabetes, it is important that education of the masses takes place in the regions of most need. As blacks continue to lag behind whites in many health areas, it is important to examine a wide array of causal factors including behavior, genetics, social circumstances, environmental conditions, and shortfalls in medical care.

Health Disparity Indicators

There were 12 indicators used in this study to outline the degree of disparity that exists between blacks and whites. The three data sources for these indicators were birth records, death records, and inpatient hospital discharge records.

Heart Disease Death Rate represents the number of heart disease deaths per 100,000 population. Rates are age-adjusted to the 2000 U.S. population standard. Heart disease was the leading cause of death in Delaware for 1998-2002 accounting for over 9,800 deaths.

Cancer Death Rate represents the number of cancer deaths per 100,000 population. Rates are age-adjusted to the 2000 U.S. population standard. Cancer was the second leading cause of death in Delaware for 1998-2002, accounting for over 8,300 deaths.

Stroke Death Rate represents the number of stroke deaths per 100,000 population. Rates are age-adjusted to the 2000 U.S. population standard. Stroke was the third leading cause of death in Delaware for 1998-2002.

Diabetes Death Rate represents the number of diabetes mellitus deaths per 100,000 population. Rates are age-adjusted to the 2000 U.S. population standard. Diabetes represents the sixth leading cause of death in Delaware for 1998-2002.

HIV Infection/AIDS Death Rate represents the number of HIV Infection/AIDS deaths per 100,000 population. Rates are age-adjusted to the 2000 U.S. population standard. HIV Infection/AIDS was the thirteenth leading cause of death in Delaware for 1998-2002.

Homicide Rate represents the number of homicide deaths per 100,000 population. Rates are age-adjusted to the 2000 U.S. population standard. Homicide was the seventeenth leading cause of death in Delaware for 1998-2002.

Alcohol-Induced Death Rate represents the number of alcohol-induced deaths per 100,000 population. Rates are age-adjusted to the 2000 U.S. population standard. The category alcohol-induced deaths includes not only the deaths from dependent and non-dependent use of alcohol, but also accidental poisoning by alcohol. It excludes unintentional injuries, homicides, and other causes indirectly related to alcohol use.

Infant Death Rate represents the number of deaths to children less than one year of age per 1,000 live births.

Teen Birth Rate represents the number of births to teens 15-19 years of age per 1000 females in that age group.

Late or No Prenatal Care represents the percent of all women giving birth who received their first prenatal visit in the third trimester of pregnancy or received no prenatal visits.

Percent of Low Birth Weight Babies represents the percent of all babies weighting less than 5.5 pounds (<2500 grams) at birth.

Asthma Hospitalization Rate represents the number of inpatient hospitalizations for asthma per 100,000 population. Rates are adjusted to the 2000 U.S. population standard.

For each death rate, birth rate, or hospitalization rate there will be two graphs that will represent a specific geographic region. The values in each graph show the five-year moving average for each period designated on the horizontal axis. These regions will consist of the rates for the entire state or one of the three Delaware counties, Kent, New Castle, or Sussex. The first graph will track the rates over a designated set of years for both blacks and whites within the specified region.

The second graph will show the black/white disparity ratio, which is the black rate divided by the white rate. The black/white disparity ratio will represent the percentage of disparity in the specified region as well as any progress that is being made in regard to disparity between blacks and whites. The further the ratio is from one, the higher the disparity between blacks and whites in that area. For example, in Sussex County there are 297.5 heart disease deaths per 100,000 for blacks and there are 249.4 heart disease deaths per 100,000 for whites. The black/white disparity ratio would be 1.2 because the amount of black deaths divided by the number of white deaths equals 1.2 (risk is 20% higher for blacks than for whites).

The rates are age adjusted to the 2000 U.S. population standard and the data was compiled by the Delaware Health Statistics Center.

The Delaware 2002 disparity ratios for the 12 indicators are summarized in Figure 2.1 below.

Figure 2.1
Delaware Health Disparity Ratios

Indicator	DE 2002	DE 1997	US 2002	Trend
Heart Disease	1.16	1.11	1.30	Increase
Cancer	1.20	1.45	1.25	Decrease
Stroke	1.39	1.57	1.40	Decrease
Diabetes	2.33	2.33	2.14	No Change
HIV/AIDS	15.56	8.23	8.65	Increase
Homicide	3.94	3.56	5.67	Increase
Alcohol Induced	1.34	1.57	N/A	Decrease
Infant Death	2.41	2.63	2.48	Decrease
Teen Births	2.35	2.74	1.86	Decrease
Prenatal Care	2.19	3.11	N/A	Decrease
Low Birth Weight	1.95	2.08	N/A	Decrease
Asthma Hospitalization	2.93	2.53	N/A	Increase

Source: Center for Applied Demography & Survey Research, University of Delaware

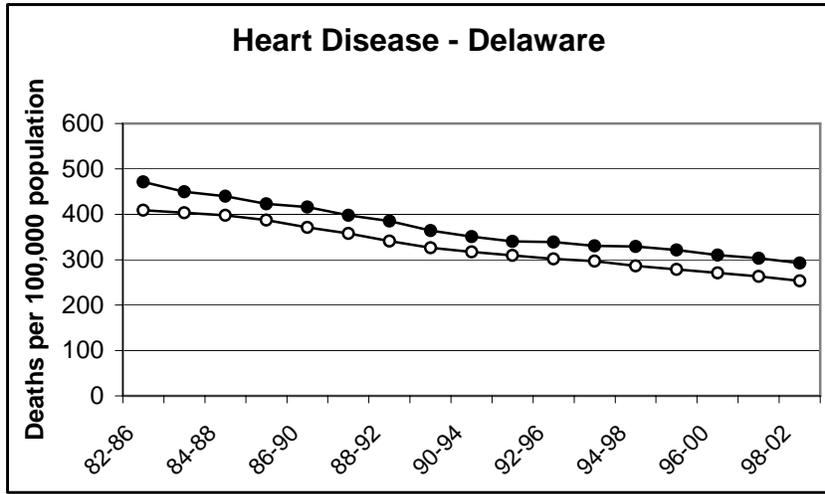
Heart Disease

Heart Disease remains the leading killer in both the United States and in the state of Delaware. The 2002 black/white disparity ratio is at 1.16, meaning Delaware blacks are about 16% more likely than whites to die of heart disease. This is an increase from 1997, where the black/white disparity ratio was 1.11.

However, Delaware's black/white disparity ratio is significantly lower than that of the United States at 1.30. With blacks being 30% more likely to die of heart disease nationally than whites, Delaware is well ahead of the curve compared to the rest of the nation. Still, due to the large number of deaths from heart disease there can be a larger cumulative effect.

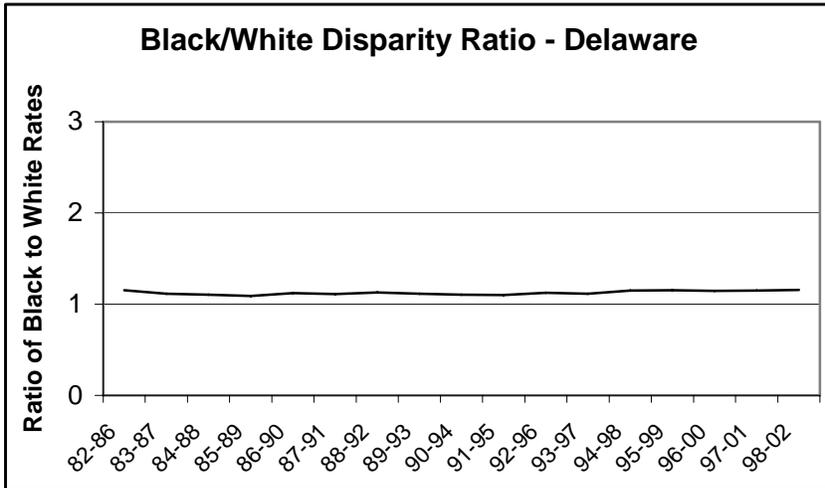
Kent, New Castle, and Sussex have all shown drastic improvement in the last twenty years in the amount of deaths per 100,000 for both blacks and whites. In all three counties the changes in the amount of deaths per year mirrored each other. Kent County has had so much success that they have a black/white disparity ratio that is below 1. But while there have been vast improvements in New Castle and Sussex counties in the totals deaths, the black/white disparity ratio has remained fairly constant for the past 20 years.

Figure 3.1
Heart Disease Death Rates by Race
Delaware 1982-2002



Source: Delaware Division of Public Health

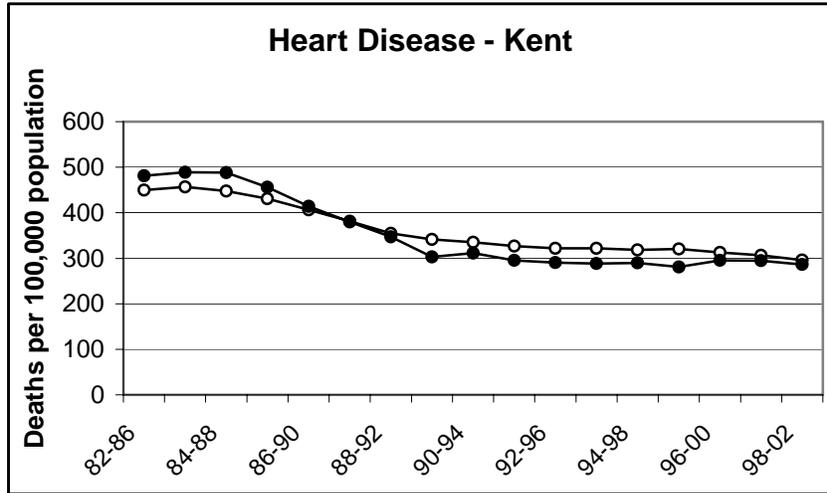
Figure 3.2
Heart Disease Death Black/White Disparity Ratio
Delaware 1982-2002



Source: Delaware Division of Public Health

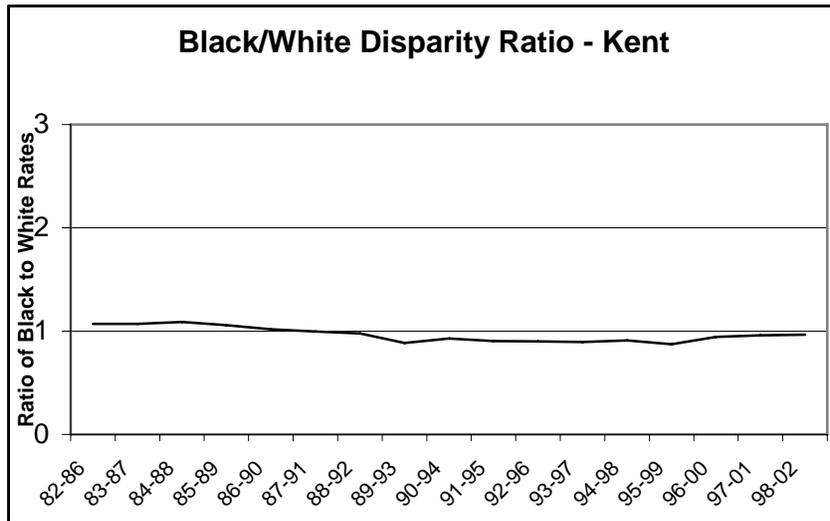
Since 1982-86, there has been a steady decrease in the amount of deaths per 100,000 in both blacks and whites with a leveling off around 1991-95. But there has been little change between blacks and whites with the ratio staying just above one. The state information provides a much better look at the black/white disparity because the counties tend to offer more active changes year to year, while the state shows gradual trends.

Figure 3.3
Heart Disease Death Rates by Race
Kent County 1982-2002



Source: Delaware Division of Public Health

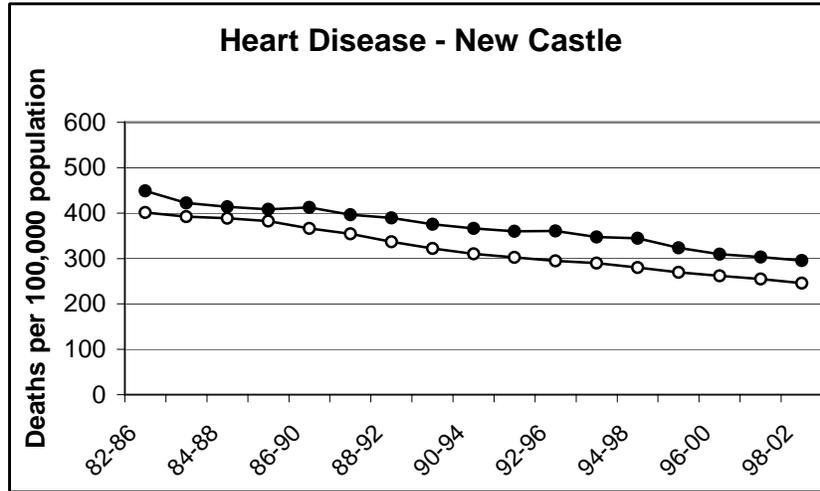
Figure 3.4
Heart Disease Death Black/White Disparity Ratio
Kent County 1982-2002



Source: Delaware Division of Public Health

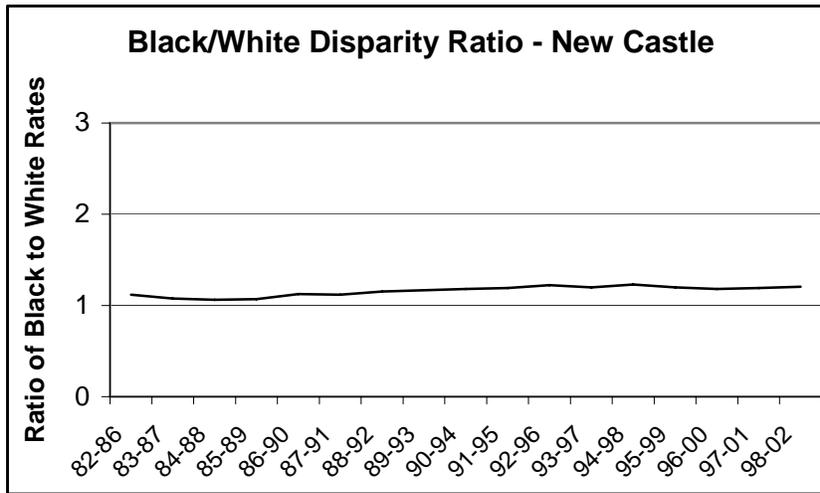
Kent County has shown sharp decreases in the rate of heart disease deaths per 100,000 in both races between 1982-86 and 1990-94. Around 1995 the ratios level off and remain static to this point around 300 deaths per 100,000 for both races. The dramatic changes do not translate into the black/white disparity ratio where the numbers remain constant around a ratio slightly below one (meaning there are fewer deaths per 100,000 for blacks than whites).

Figure 3.5
Heart Disease Death Rates by Race
New Castle County 1982-2002



Source: Delaware Division of Public Health

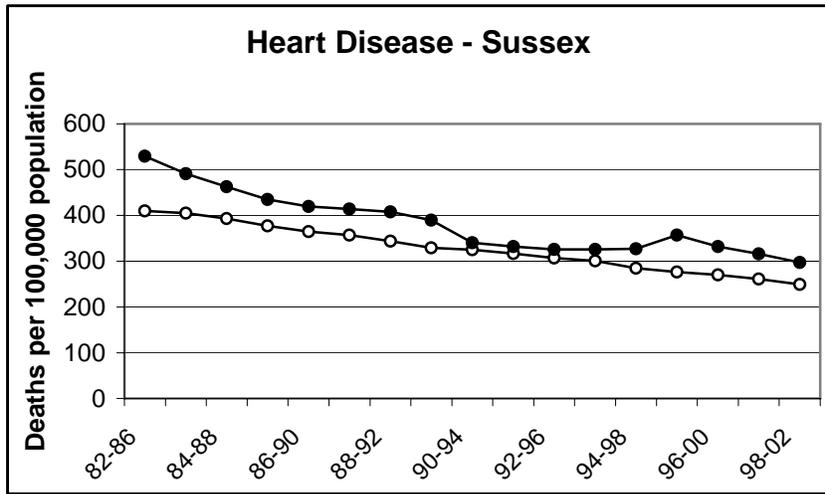
Figure 3.6
Heart Disease Death Black/White Disparity Ratio
New Castle County 1982-2002



Source: Delaware Division of Public Health

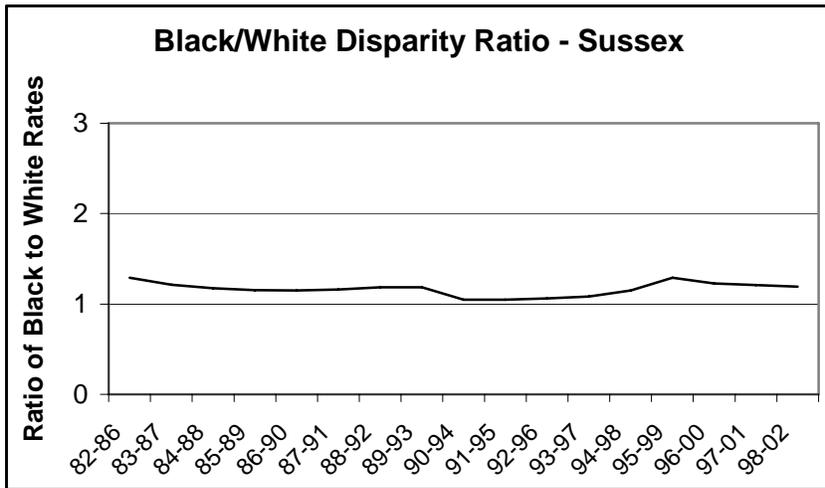
Much like the state, New Castle County has shown gradual but significant changes since 1982-86 in both blacks and whites. The steady year-to-year progress shows that there have been improvements in treatment that have extended to both races. However, the black/white disparity ratio shows that there exists room for improvement with blacks remaining more likely than whites to die of heart disease.

Figure 3.7
Heart Disease Death Rates by Race
Sussex County 1982-2002



Source: Delaware Division of Public Health

Figure 3.8
Heart Disease Death Black/White Disparity Ratio
Sussex County 1982-2002



Source: Delaware Division of Public Health

Starting in 1982-86 there were disparities of over 100 more deaths per 100,000 between blacks and whites. The ratio between the two races slowly started to decrease between 1982-86 and 1991-95 where they became virtually even. Around 1996-00 there was a steep increase in the amount of deaths per 100,000 in blacks, which caused an increase in the black/white ratio. Since then both blacks and whites have been decreasing with the black/white ratio slowly decreasing again. The sporadic behavior of the black/white ratio may be partially due to the small black population in Sussex County.

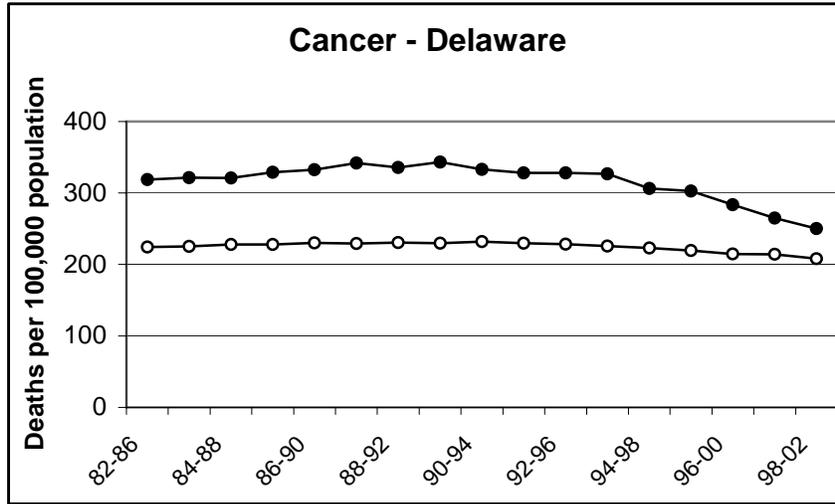
Cancer

The black/white disparity ratio for cancer in Delaware has been greatly improved from 1997 to 2002. The ratio was at 1.45 in 1997 but has now been reduced to 1.20 in 2002. This small decrease in disparity will have a large effect because of the unusually high cancer rates in Delaware. There was a brief increase in the amount of black deaths in the state during the mid-eighties to early nineties but since then there has been a gradual decrease, while the amount of white deaths has remained fairly consistent.

Delaware's black/white disparity ratio at 1.20 is slightly lower than that of the United States at 1.25. Delaware has shown vast improvements state wide in the last 6 years in the rate blacks are dying of cancer, but still needs to improve the overall death rate for all races.

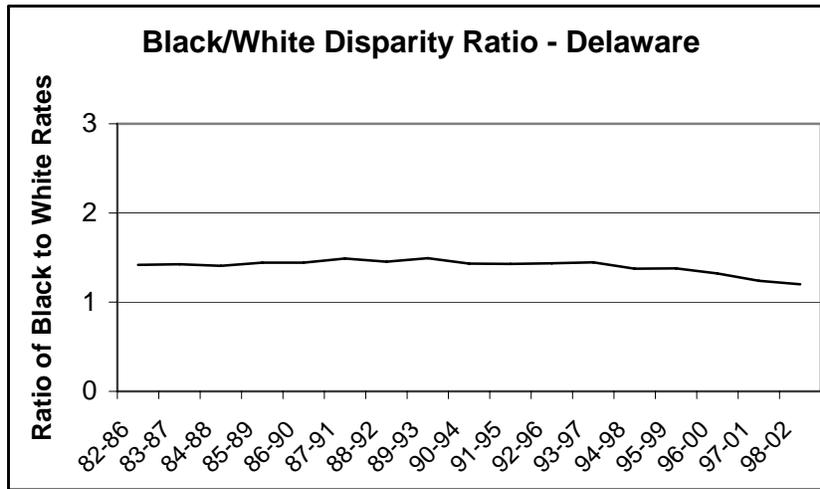
Kent and Sussex counties had sporadic changes in the deaths from cancer between 1988 and 1995. New Castle County mimicked the state with blacks showing steady improvements in the last ten years, while whites showed improvement by moving from 232 to 209.2 deaths per 100,000.

Figure 4.1
Cancer Death Rates by Race
Delaware 1982-2002



Source: Delaware Division of Public Health

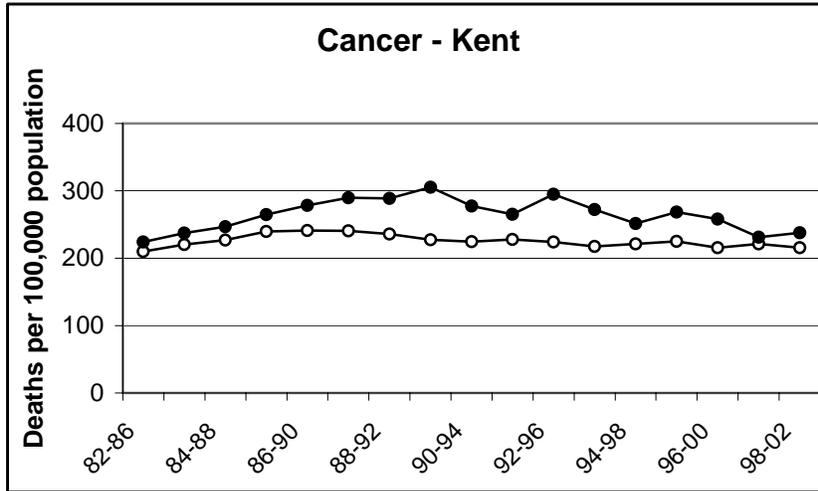
Figure 4.2
Cancer Death Black/White Disparity Ratio
Delaware 1982-2002



Source: Delaware Division of Public Health

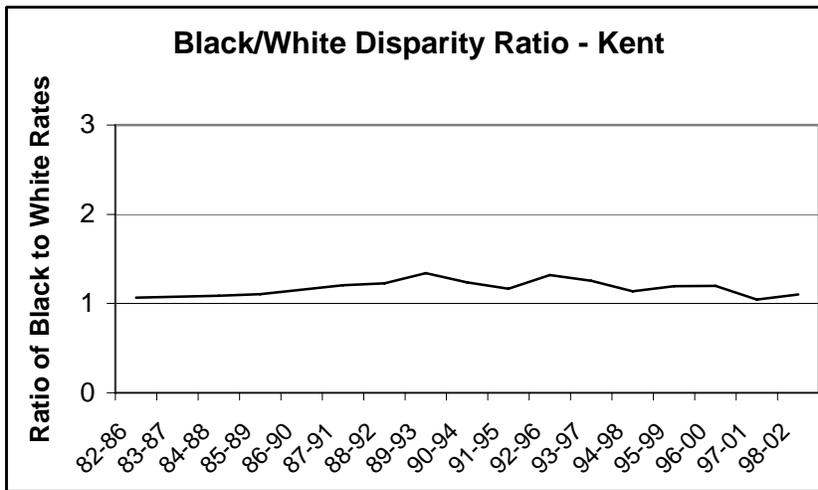
In 1982-86 there were over 100 more deaths by blacks per 100,000 than whites due to cancer in Delaware. This trend continued until 1994-98 where the ratio slowly started to decline. The amount of deaths by cancer from whites has remained static since 1982-86 to the present, hovering around 200 deaths per 100,000, while blacks have started to make a steady improvement in cancer deaths since 1995-99. The black/white disparity ratio has steadily been declining for the past five years.

Figure 4.3
Cancer Death Rates by Race
Kent County 1982-2002



Source: Delaware Division of Public Health

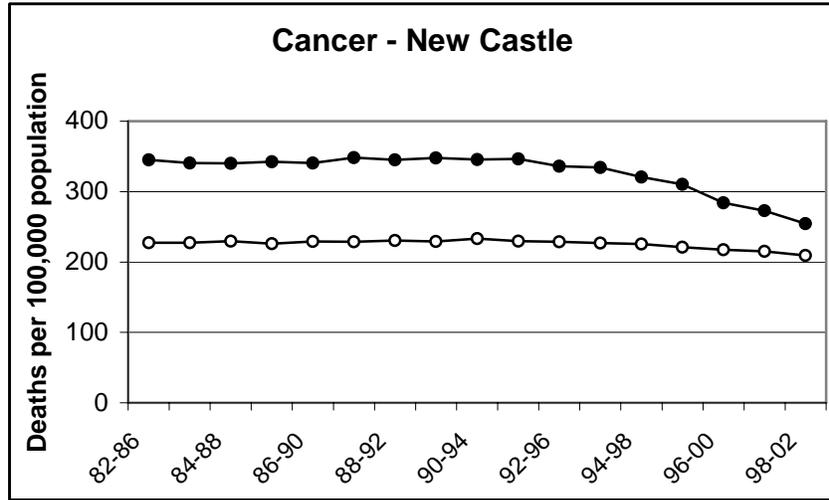
Figure 4.4
Cancer Death Black/White Disparity Ratio
Kent County 1982-2002



Source: Delaware Division of Public Health

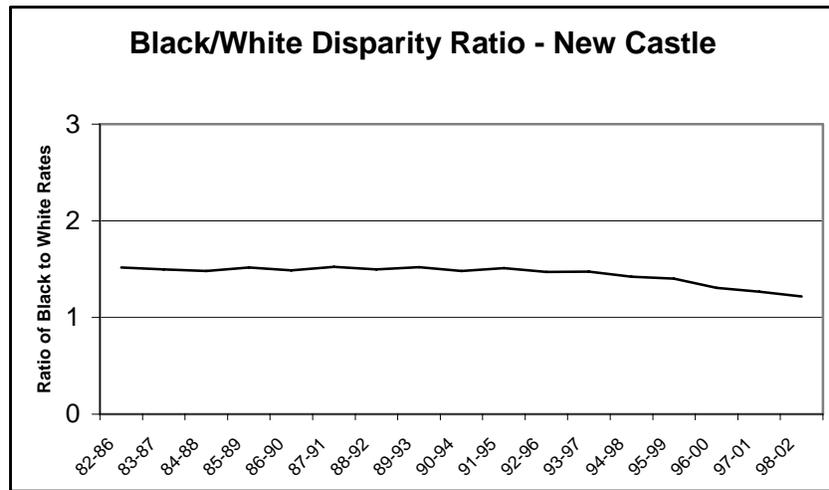
The death rates of blacks and whites were relatively even in 1982-86 but then started to gradually grow apart as cancer deaths increased in the county. The increase in deaths for whites was halted and started to decline in 1986-90. Black cancer death rates continued to increase for another three years before finally starting to decline. Because of the sporadic jumps in cancer deaths for blacks, the black/white disparity ratio is characterized by up and down peaks until finally starting to level off around 1.1 disparity between blacks and whites.

Figure 4.5
Cancer Death Rates by Race
New Castle County 1982-2002



Source: Delaware Division of Public Health

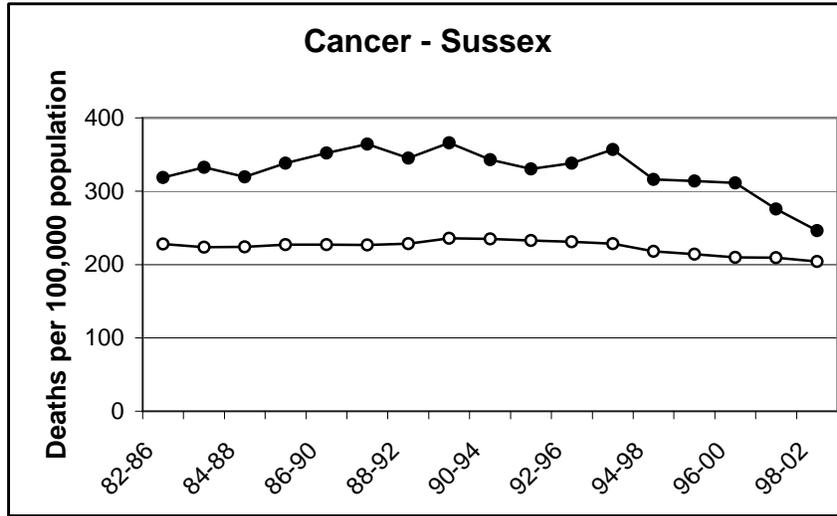
Figure 4.6
Cancer Death Black/White Disparity Ratio
New Castle County 1982-2002



Source: Delaware Division of Public Health

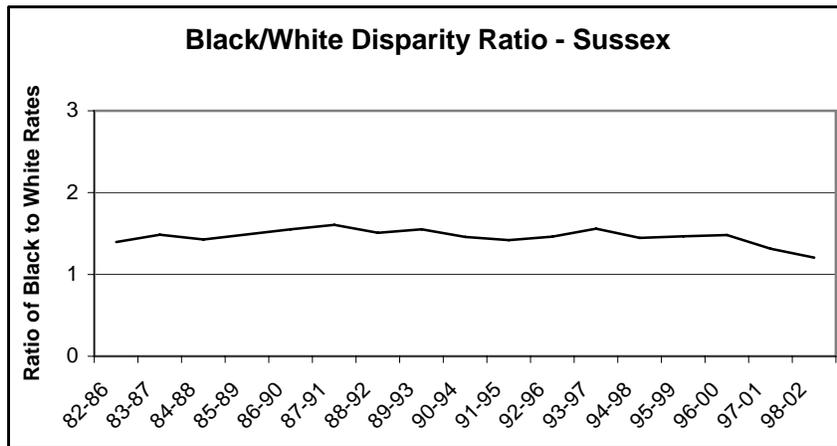
From 1982-86 to 1991-95 there was a gap of over 100 more cancer deaths per 100,000 for blacks than for whites in New Castle County. This trend continued until a steep decline started in 1992-96, which is still continuing today. Because there was a significant gap in cancer deaths, the black/white disparity ratio hovered around 1.5 for much of the time but has now started to decrease steadily since 1992-96. There has been little change in the cancer rates for whites from 1982 to 2002 in New Castle County, where the number of deaths has only been reduced from 232 to 209.4 deaths per 100,000.

Figure 4.7
Cancer Death Rates by Race
Sussex County 1982-2002



Source: Delaware Division of Public Health

Figure 4.8
Cancer Death Black/White Disparity Ratio
Sussex County 1982-2002



Source: Delaware Division of Public Health

The cancer death rate for blacks between 1982 and 1997 was very sporadic showing a lot of up and down movement, showing little progress. The cancer death rate for blacks started to level out and eventually decline around 1998. The cancer death rates for whites remained stagnant at just over 200 deaths per 100,000 during the previous twenty years. Because the cancer death rate for blacks was erratic and the white death rate was stationary, the black/white disparity ratio also reflected that with several peaks until the ratio gradually started to decline around 1996-2000.

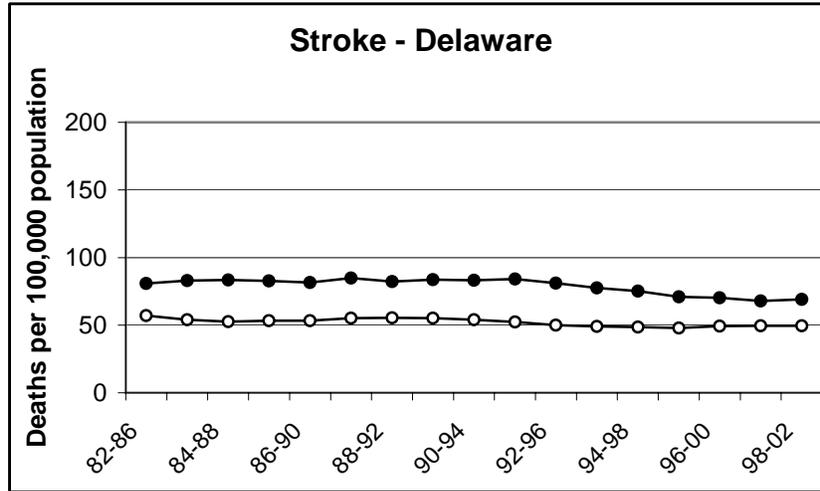
Stroke

As the third leading killer in Delaware, stroke has shown only a small improvement in the number of deaths for both blacks and whites in the past 20 years. Despite these small changes, the black/white disparity ratio has improved slightly since 1997. The 1997 disparity ratio was 1.57 and the 2002 ratio is 1.39.

The U.S. black/white disparity ratio at 1.40 is virtually even with Delaware disparity ratio at 1.39. While Delaware is even with the United States, there is still much to improve because there has been very little change in the amount of deaths, unlike many of the other diseases.

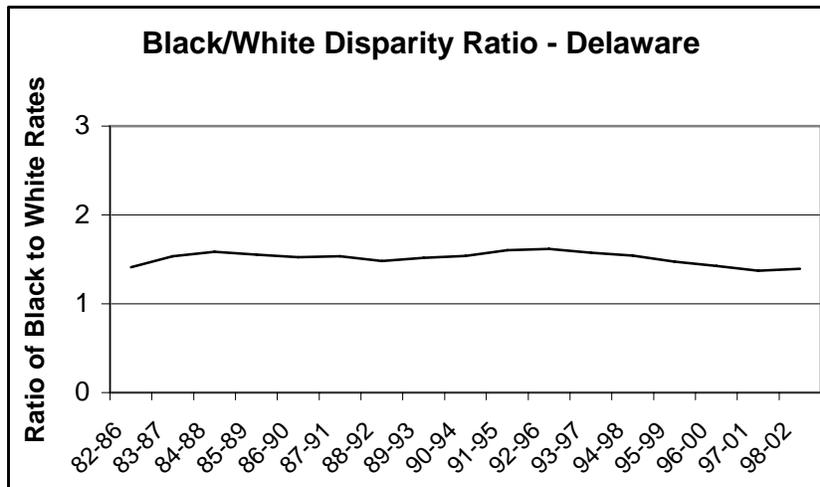
Kent County blacks had a large increase in stroke deaths between 1988 and 1993. Starting in 1994, the death rates declined back to rates that were comparable to that of whites. Sussex County has made vast improvements in both the number of stroke deaths and the black/white disparity ratio in the past 20 years. Sussex has gone from disparity ratios that were above 2 to levels that are well below the national average.

Figure 5.1
Stroke Death Rates by Race
Delaware 1982-2002



Source: Delaware Division of Public Health

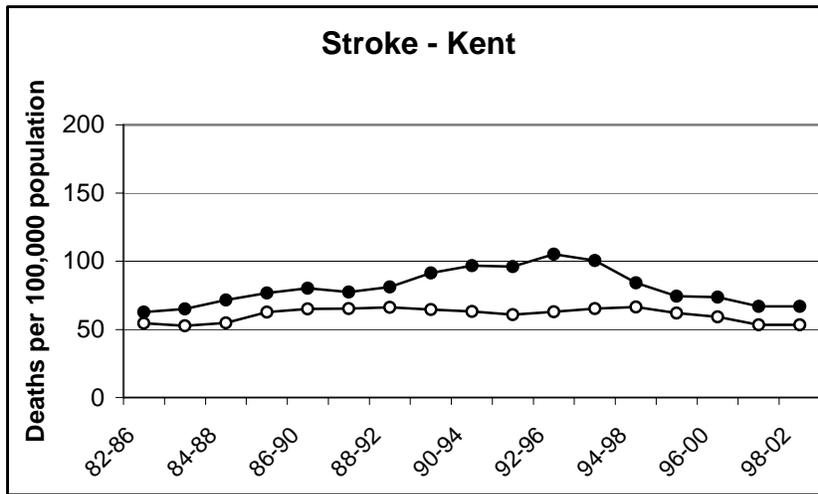
Figure 5.2
Stroke Death Black/White Disparity Ratio
Delaware 1982-2002



Source: Delaware Division of Public Health

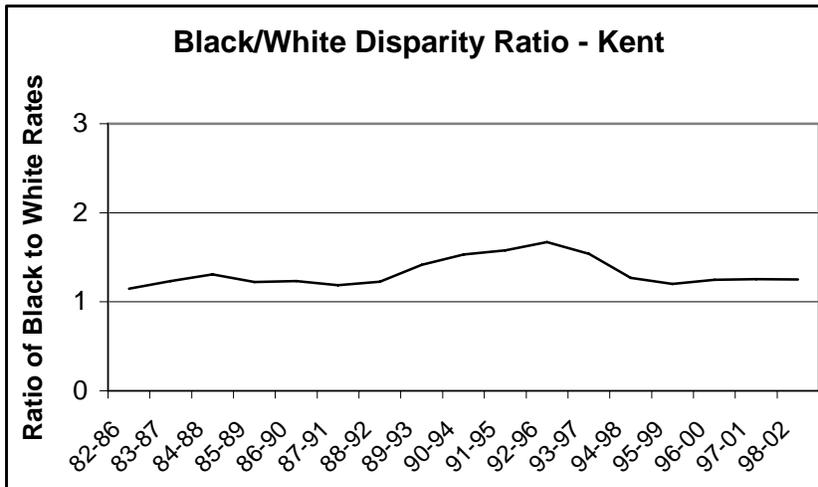
From 1982-86 to 1991-95, there was a difference of about 25 more stroke deaths per year for blacks than for whites in Delaware. The stroke deaths for blacks gradually started to decrease in 1996 and have steadily moved closer to the death rates of whites. The black/white disparity ratio remained around 1.5 for most of the last twenty years and has recently started to decline somewhat. The amount of stroke death for whites has remained around 50 per 100,000 in Delaware for the last twenty years, while the blacks have shown improvement in the last five years.

Figure 5.3
Stroke Death Rates by Race
Kent County 1982-2002



Source: Delaware Division of Public Health

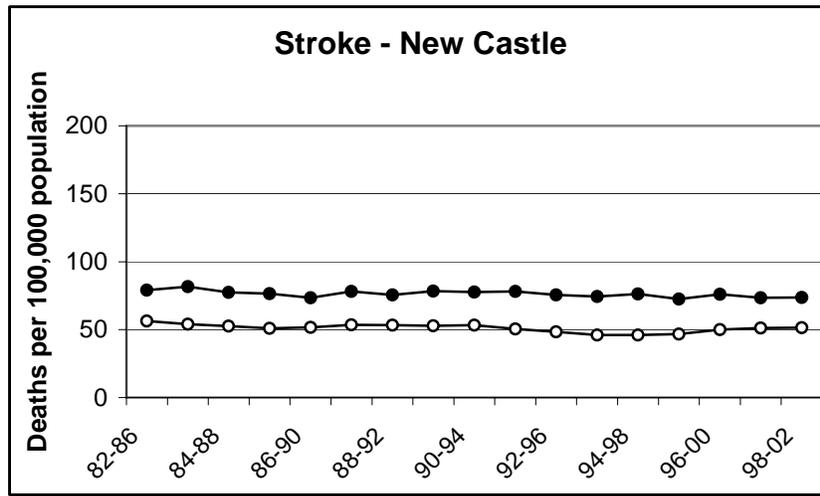
Figure 5.4
Stroke Death Black/White Disparity Ratio
Kent County 1982-2002



Source: Delaware Division of Public Health

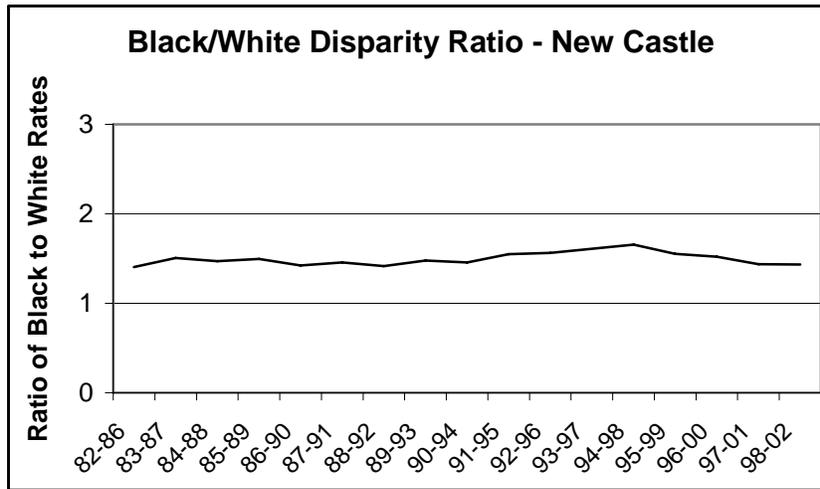
While blacks had slightly higher rates of death than whites, the two races mirrored each other from 1982-86 to 1987-91, until there was a sharp increase in the amount of stroke deaths for blacks. The increase lasted for five years and then gradually moved back to the level that was previously sustained. Again, the amount of stroke deaths for whites remained stable. Because of the spike of black stroke deaths in the middle five years, there was a large spike in the black/white disparity ratio. Besides the spike in deaths, the black/white disparity ratio remained close to 1.25.

Figure 5.5
Stroke Death Rates by Race
New Castle County 1982-2002



Source: Delaware Division of Public Health

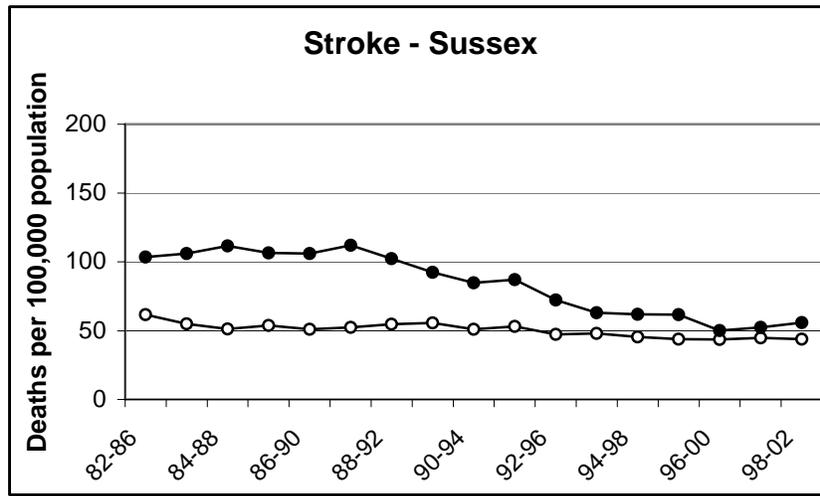
Figure 5.6
Stroke Death Black/White Disparity Ratio
New Castle County 1982-2002



Source: Delaware Division of Public Health

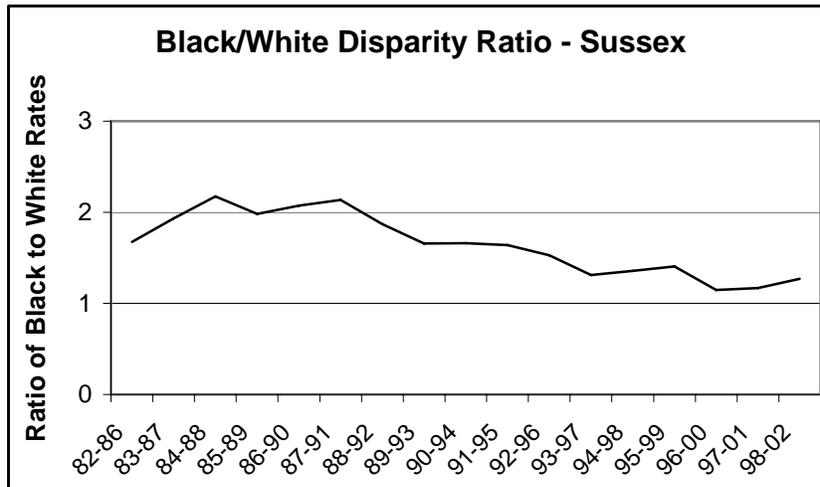
The stroke death rates in New Castle remained the same for all twenty years with a separation of about 25 additional black stroke deaths per 100,000. Both blacks and whites remained at the same level, which in turn led to the black/white disparity ratio being rather stagnant for all twenty years with only one small peak happening around 1994-98. The stroke death rates of New Castle County closely resemble those of the entire state most likely because there is more of a representative sample of blacks in New Castle than in the other two counties.

Figure 5.7
Stroke Death Rates by Race
Sussex County 1982-2002



Source: Delaware Division of Public Health

Figure 5.8
Stroke Death Black/White Disparity Ratio
Sussex County 1982-2002



Source: Delaware Division of Public Health

Sussex County has shown the most dramatic improvements of all three counties with stroke death rates for blacks. In 1982-86 Sussex had the largest difference in the counties with 50 more black stroke deaths than whites per 100,000. By 1998-2002 they are almost even in the number of deaths per 100,000. The black/white disparity ratio also does a good job of showing the lengths to which Sussex has gone to improve the disparity between races in stroke deaths. There were times where the black/white disparity ratio was higher than two and it is now very close to being even at one.

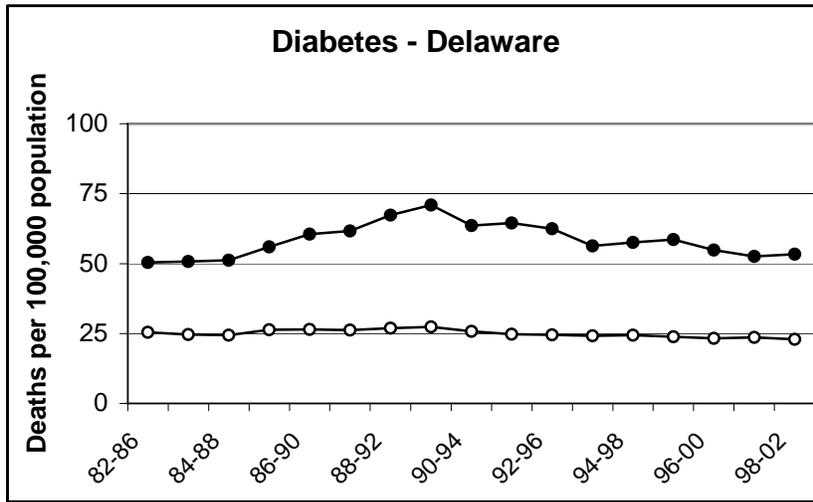
Diabetes

Between 1984 and 1989, there was a sharp increase in the amount of deaths attributed to diabetes for blacks in Delaware, while whites showed little or no change. This caused an increase in the black/white disparity ratio, which is still very high. There was no change in the disparity ratio from 1997 to 2002 with both years at 2.33, meaning Delaware blacks are more than twice as likely to die of diabetes as Delaware whites.

The Delaware disparity ratio is higher than the U.S. disparity ratio of 2.14. This is especially concerning because of the lack of improvement in the amount of deaths for both blacks and whites. While there was a significant jump in the mid to late eighties, Delaware blacks are dying of diabetes at the same rates they were 20 years ago.

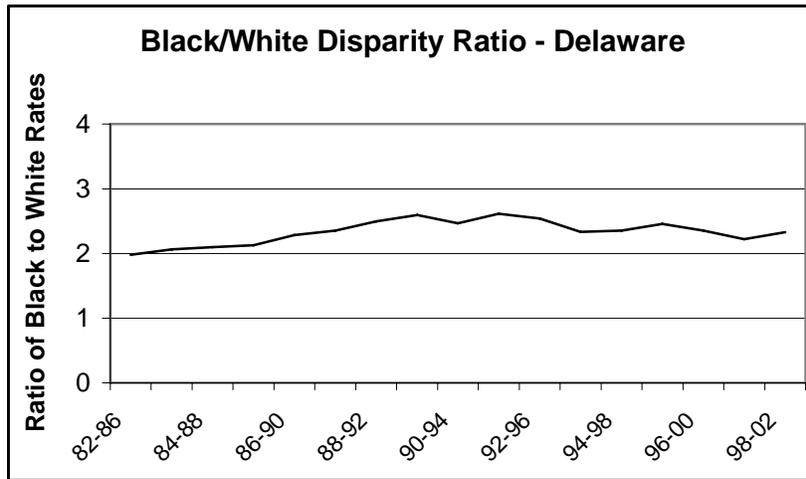
Kent County experienced the same jump in diabetes deaths that the state did but has shown gradual improvement in the black/white disparity ratio. New Castle County has also had sporadic highs and lows in both deaths and the disparity ratio but has leveled off since 1997. Sussex County has had very little success in controlling the diabetes rates of blacks with increasing death rates and increasing disparity ratios.

Figure 6.1
Diabetes Death Rates by Race
Delaware 1982-2002



Source: Delaware Division of Public Health

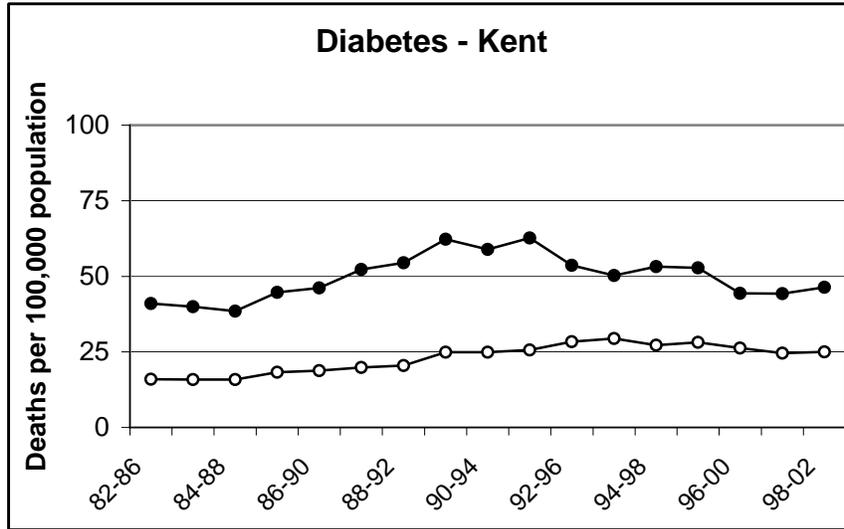
Figure 6.2
Diabetes Death Black/White Disparity Ratio
Delaware 1982-2002



Source: Delaware Division of Public Health

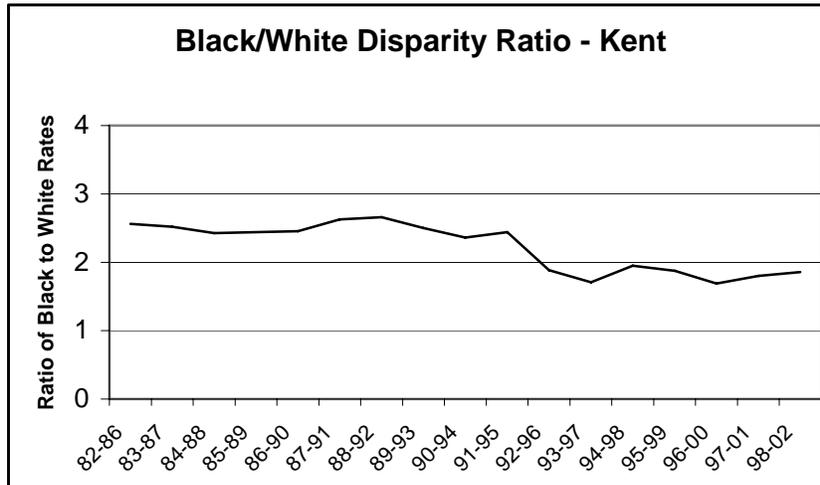
While death rates for whites have remained around 25 per 100,000 for the last twenty years, death rates for blacks have not improved at all. In fact there was a sharp increase in Diabetes deaths from 1985-89 to 1993-97 in blacks and has since come back down to the previous rate around 50 deaths per 100,000. Because of the higher rate of diabetes deaths for blacks, they are more than twice as likely as whites to die from diabetes, as stated in the black/white disparity ratio. There have been slight ups and downs in the ratio but it has consistently been double that of whites.

Figure 6.3
Diabetes Death Rates by Race
Kent County 1982-2002



Source: Delaware Division of Public Health

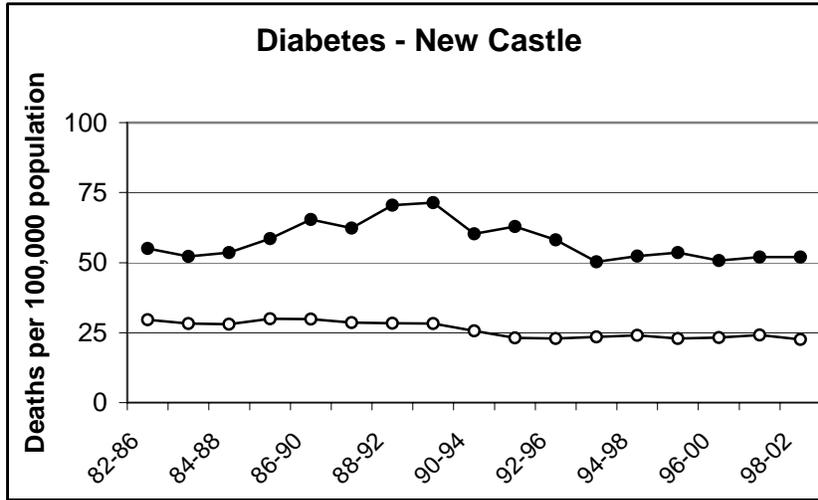
Figure 6.4
Diabetes Death Black/White Disparity Ratio
Kent County 1982-2002



Source: Delaware Division of Public Health

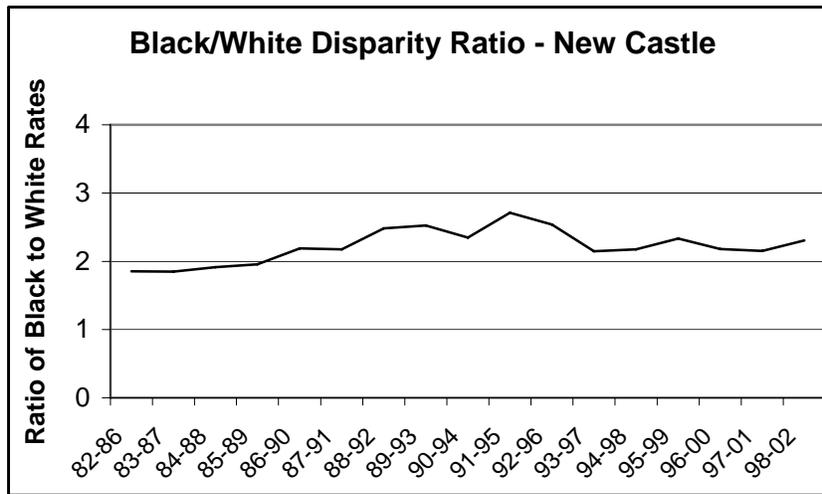
The death rate from diabetes for both blacks and whites was at its lowest in 1982-86 and has risen steadily. Even when the diabetes death rate for blacks was at its lowest in 1982-86, blacks were still 2.5 times more likely than whites to die from diabetes. Despite the increases of death from diabetes for blacks, the black/white disparity ratio slowly decreased until it settled at blacks being twice as likely as whites to die from diabetes.

Figure 6.5
Diabetes Death Rates by Race
New Castle County 1982-2002



Source: Delaware Division of Public Health

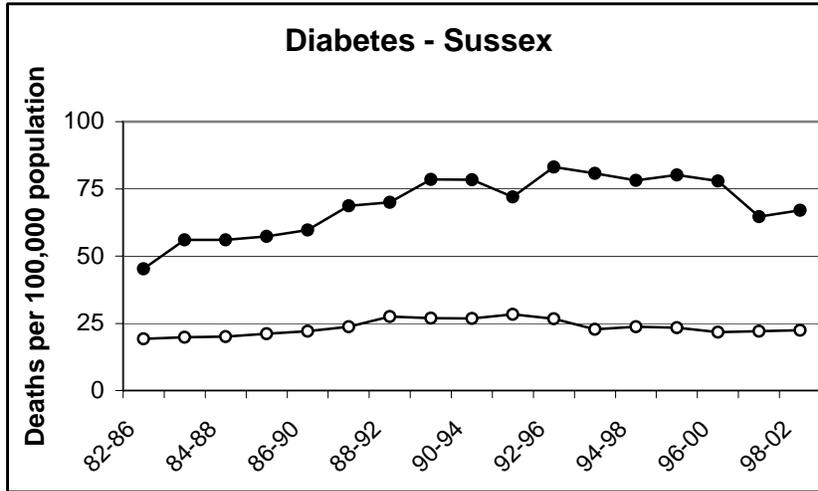
Figure 6.6
Diabetes Death Black/White Disparity Ratio
New Castle County 1982-2002



Source: Delaware Division of Public Health

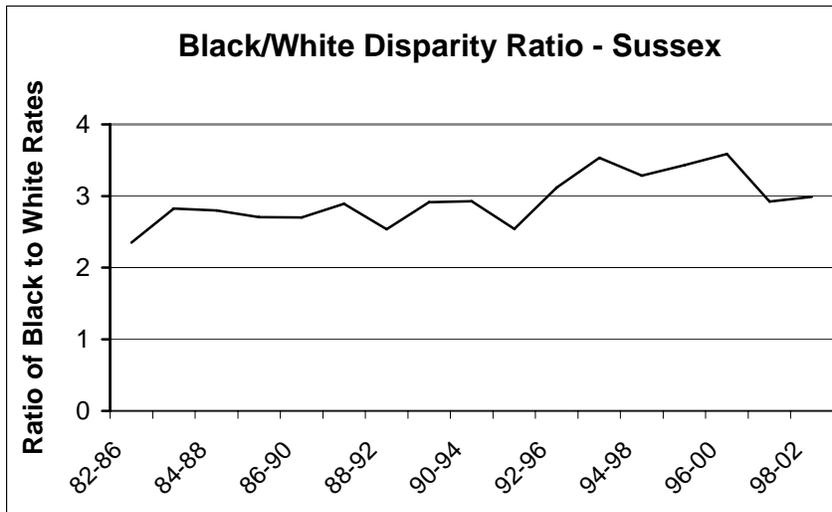
While diabetes death rates were consistent for whites during the twenty years, blacks experienced ups and downs during the first fifteen years. Because diabetes rates of death flattened for blacks in the previous five years, they have not made any gains in the black/white disparity ratio and have even lost ground in the previous year. Again, the death rates of New Castle closely mirror those of the state, most likely because of the more diverse population that is more representative of the state.

Figure 6.7
Diabetes Death Rates by Race
Sussex County 1982-2002



Source: Delaware Division of Public Health

Figure 6.8
Diabetes Death Black/White Disparity Ratio
Sussex County 1982-2002



Source: Delaware Division of Public Health

Like Kent County, Sussex was at its lowest diabetes death rates from 1982-86 and has steadily increased for blacks ever since. At this point the black/white disparity ratio shows that blacks in Sussex County are three times more likely to die from diabetes than whites. The diabetes rate of death for whites has consistently hovered around 25 per 100,000 while about 75 blacks per 100,000 are dying from diabetes. The death rate for blacks in Sussex is about 25 deaths higher per 100,000 than the state average for blacks.

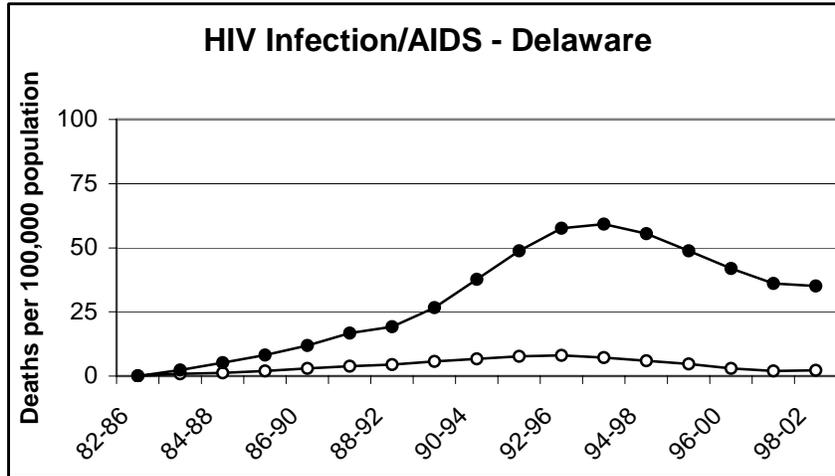
HIV Infection/AIDS

Delaware blacks had gradual increases in the HIV Infection/AIDS, which then led to sharp increases until 1997, when the death rates started to decrease. Whites maintained significantly lower levels of deaths than blacks, which led to large increases in the black/white ratio in Delaware. The disparity ratio in 2002 at 15.56 is almost double the 1997 ratio (8.23) despite the decreases in death rates for blacks in the last five years.

Delaware's disparity ratio is significantly higher than the U.S. disparity ratio at 8.65. This high ratio is most likely attributed to the very low death rate of Delaware whites coupled with extremely high death rates for Delaware blacks.

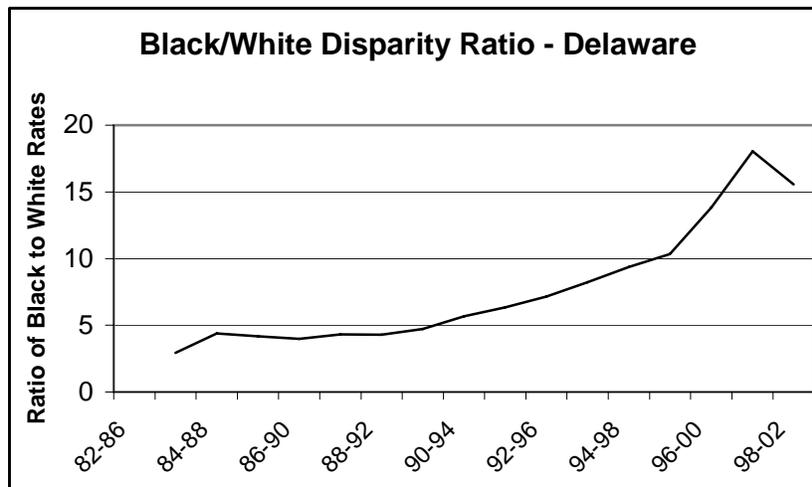
Kent County had a disparity ratio around 5 until 1992 but then saw sharp increases that are consistent with the rates for the entire state. New Castle County showed large increases that mirrored the states but did have higher death rates than Delaware. Compared to the rest of Delaware, Sussex had significantly lower death rates for both whites and blacks, which led to lower disparity rates than the other counties.

Figure 7.1
HIV Infection/AIDS Death Rates by Race
Delaware 1982-2002



Source: Delaware Division of Public Health

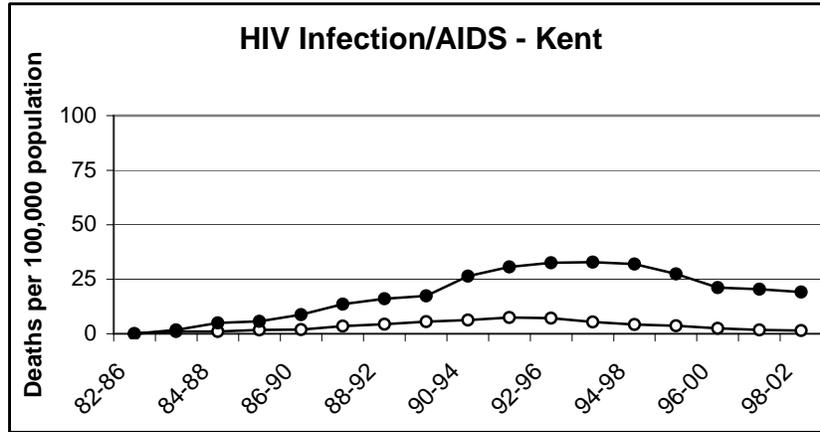
Figure 7.2
HIV Infection/AIDS Death Black/White Disparity Ratio
Delaware 1982-2002



Source: Delaware Division of Public Health

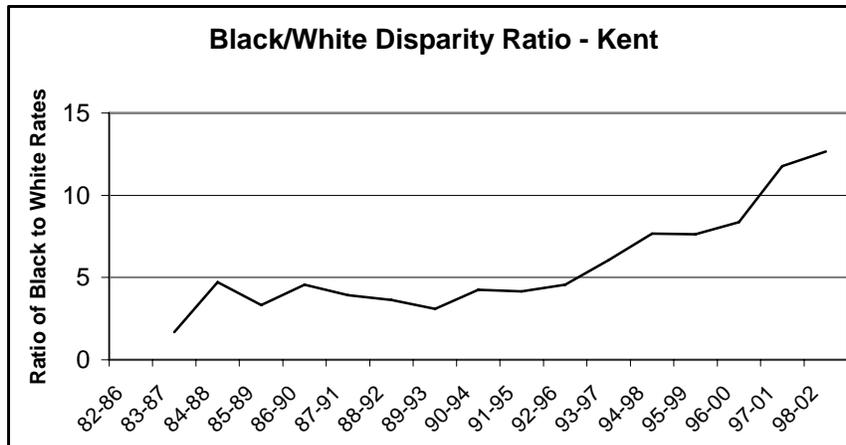
Measurable death rates for HIV Infection/AIDS did not start until 1984-88. Since that point Delaware saw a steep increase of HIV Infection/AIDS death rates in blacks and saw only a marginal increase in the white population. The HIV Infection /AIDS rates peaked in 1993-97 for blacks and since have steadily declined. However, the black/white disparity ratio has continued to climb since 1984-88 and has since peaked at a ratio of fifteen, meaning that blacks are fifteen times more likely than whites to die from HIV Infection/AIDS in Delaware. The deaths per 100,000 for whites in Delaware have never been over 10 per year, which is a likely explanation for the high ratio.

Figure 7.3
HIV Infection/AIDS Death Rates by Race
Kent County 1982-2002



Source: Delaware Division of Public Health

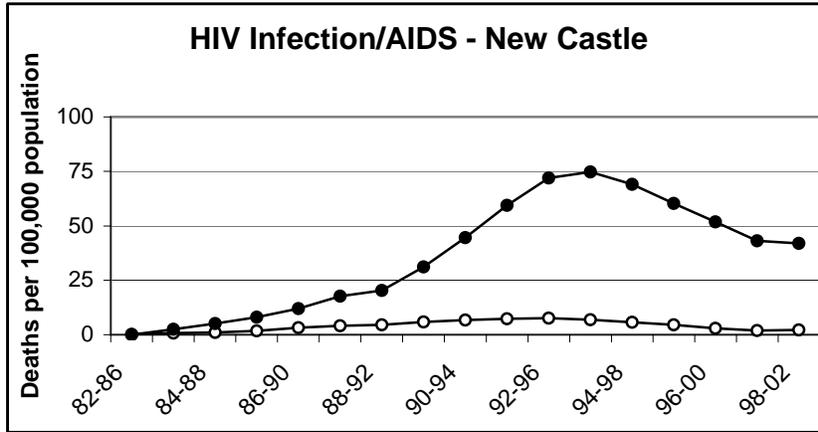
Figure 7.4
HIV Infection/AIDS Death Black/White Disparity Ratio
Kent County 1982-2002



Source: Delaware Division of Public Health

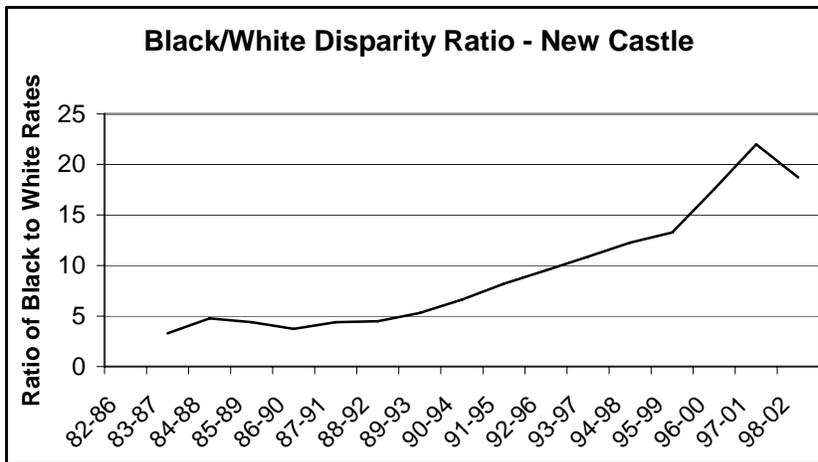
Starting in 1985-89, there started to grow a measurable difference between the black and white death rates from HIV Infection/AIDS in Kent County. Since then, there has been a steady increase in the black/white disparity ratio, which is now around 13 for Kent. Whites maintained a fairly low level of HIV Infection/AIDS deaths and closely resembled the death rates of the state, while black HIV Infection/AIDS deaths gradually increased until around 1993-97 also mirroring the state. The very low number of HIV Infection/AIDS deaths for whites most likely explains the large black/white disparity ratio.

Figure 7.5
HIV Infection/AIDS Death Rates by Race
New Castle County 1982-2002



Source: Delaware Division of Public Health

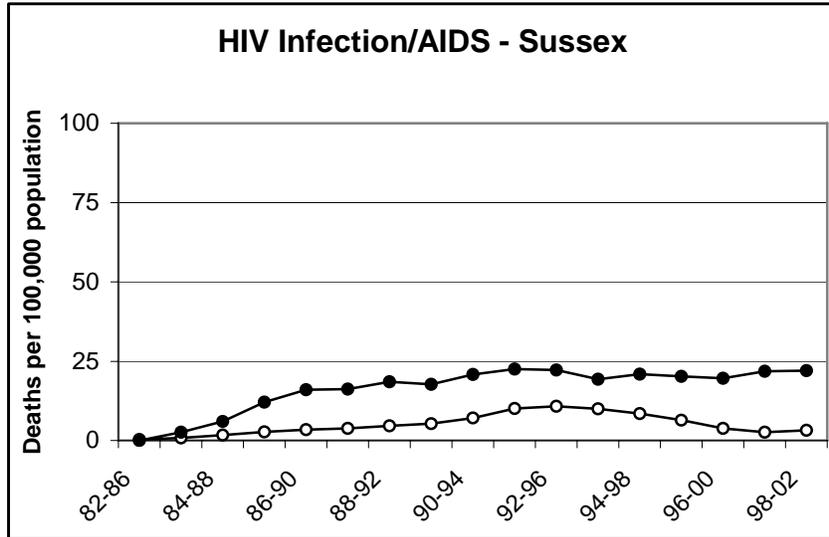
Figure 7.6
HIV Infection/AIDS Death Black/White Disparity Ratio
New Castle County 1982-2002



Source: Delaware Division of Public Health

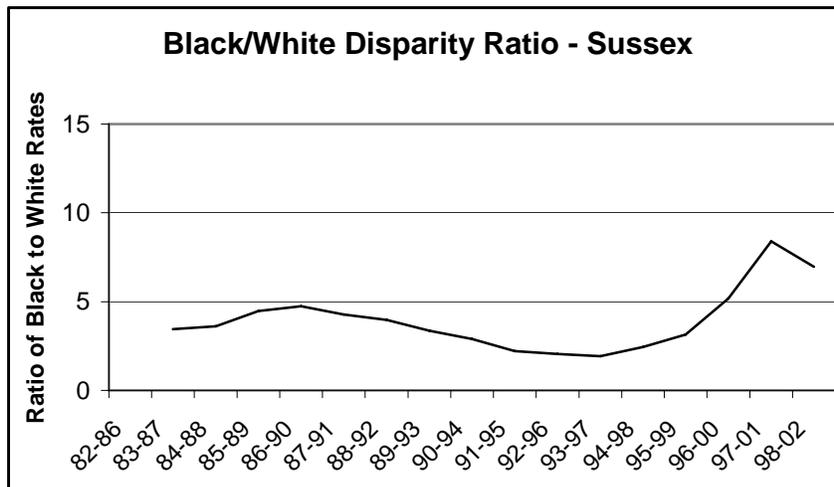
Similar to Delaware and Kent County, New Castle County blacks started to show increases in the HIV Infection/AIDS in 1985-89 and rapidly increased until 1993-97, reaching 75 deaths per 100,000 New Castle blacks. The number of black deaths from HIV Infection/AIDS has slowly started to decrease but so has the number of white deaths. Because of this, the black/white disparity ratio rapidly increased to levels that are above 20. While the black/white disparity ratio has been extremely high, blacks have started to show some signs of improving by decreasing from 21.9 in 97-01 to 18.7 in 98-02.

Figure 7.7
HIV Infection/AIDS Death Rates by Race
Sussex County 1982-2002



Source: Delaware Division of Public Health

Figure 7.8
HIV Infection/AIDS Death Black/White Disparity Ratio
Sussex County 1982-2002



Source: Delaware Division of Public Health

Unlike the rest of the state, Sussex showed only gradual increases in HIV Infection/AIDS death rates for blacks. The death rates for whites were similar to that of the rest of the state, never reaching above 10 per 100,000. Since 1991-95 blacks have hovered around 25 deaths per 100,000, while whites have shown a steady decline in the HIV Infection/AIDS deaths per 100,000. Because of the slight decline in deaths for whites, the black/white disparity ratio is still significantly higher but has started to decrease since 1997-2001.

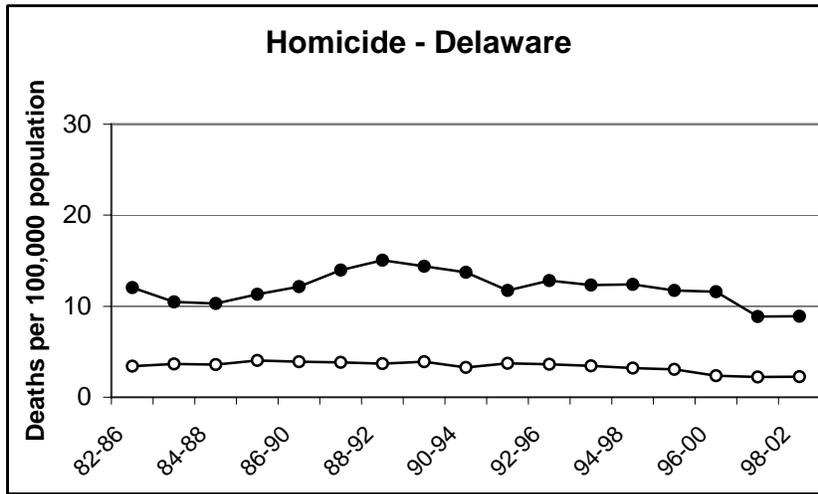
Homicide

Delaware whites have had slightly declining homicide death rates since 1995, while Delaware blacks have shown more steady declines since 1992. This had little effect on the black/white disparity ratio as it has moved up and down, never deviating too far from a ratio of 4. While Delaware blacks have made some significant gains, the very low rate of white homicides keeps the disparity ratio fairly high. The disparity ratio has actually increased since 1997 from 3.56 to 3.94 in 2002.

Despite increases in the disparity ratio, Delaware is well below the national black/white disparity ratio at 5.67. Even with Delaware's high violent crime rate, the disparity ratio is consistently lower than the national average disparity ratio.

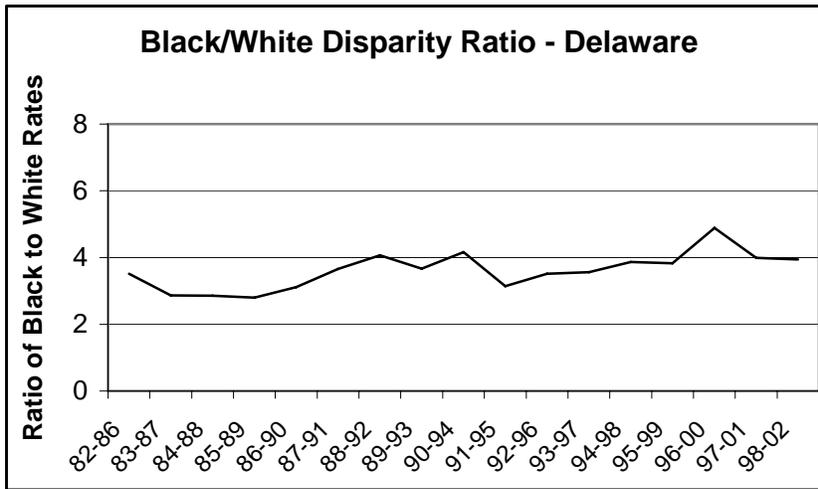
Kent County has had a very low black/white disparity ratio for the last twenty years and posted a ratio less than 1 in 2002, meaning whites are more likely to die from homicide than blacks. New Castle County posted similar disparity ratios to the state, with up and down numbers that linger around 4. While Sussex County's disparity ratio has shown little improvement, there has been drastic improvement in the death rate of blacks in the county.

Figure 8.1
Homicide Rates by Race
Delaware 1982-2002



Source: Delaware Division of Public Health

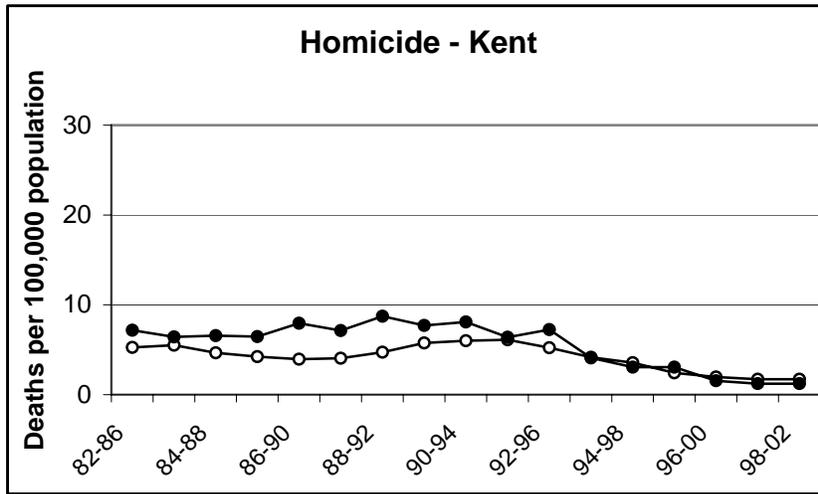
Figure 8.2
Homicide Black/White Disparity Ratio
Delaware 1982-2002



Source: Delaware Division of Public Health

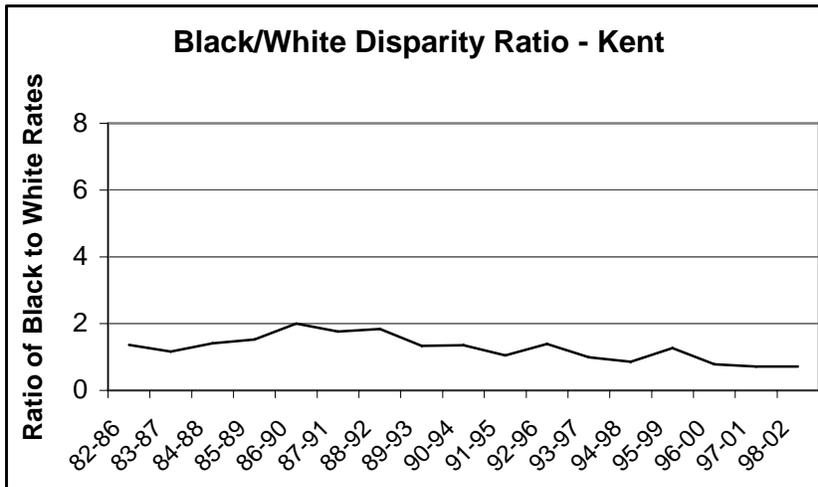
Since 1982-86 homicide death rates for whites have remained fairly constant in Delaware staying between 2.3 and 4.0 per 100,000. The number of black homicides has been up and down for the past twenty years with the rate leveling out slightly fewer than 10 deaths per 100,000. The black/white disparity ratio for Delaware has fluctuated due to the inconsistency of the black homicides year to year but has leveled out with blacks being about four times more likely to die from homicide than whites.

Figure 8.3
Homicide Rates by Race
Kent County 1982-2002



Source: Delaware Division of Public Health

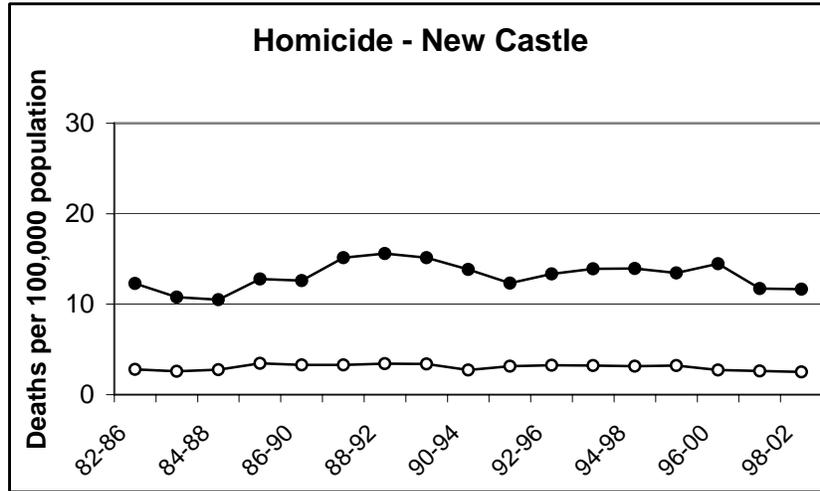
Figure 8.4
Homicide Black/White Disparity Ratio
Kent County 1982-2002



Source: Delaware Division of Public Health

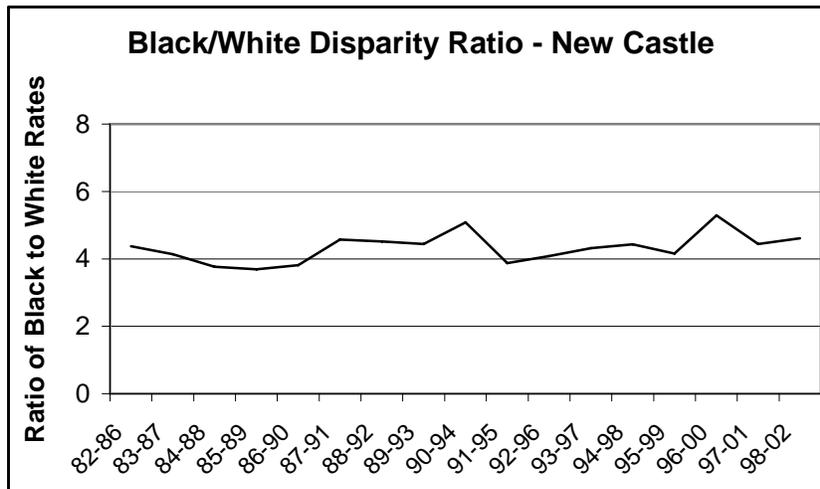
Despite the discouraging rates for the state, Kent County has shown very encouraging homicide death rates with very low levels for both blacks and whites. Around 1988-92 blacks started to decrease the amount of homicide deaths in Kent County until they were virtually even with whites. In fact the black/white disparity ratio is actually below one, showing that more whites die from homicides in Kent County than Blacks per 100,000. It is important to note that both homicide death rates are below 2 per 100,000.

Figure 8.5
Homicide Rates by Race
New Castle County 1982-2002



Source: Delaware Division of Public Health

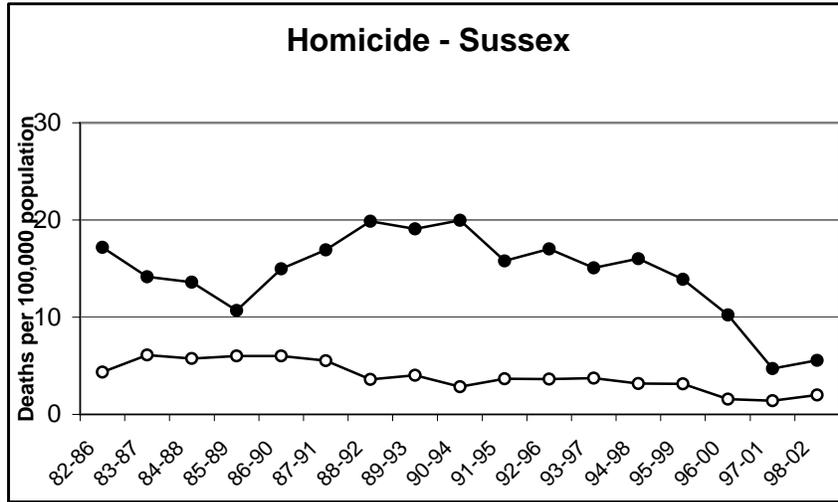
Figure 8.6
Homicide Black/White Disparity Ratio
New Castle County 1982-2002



Source: Delaware Division of Public Health

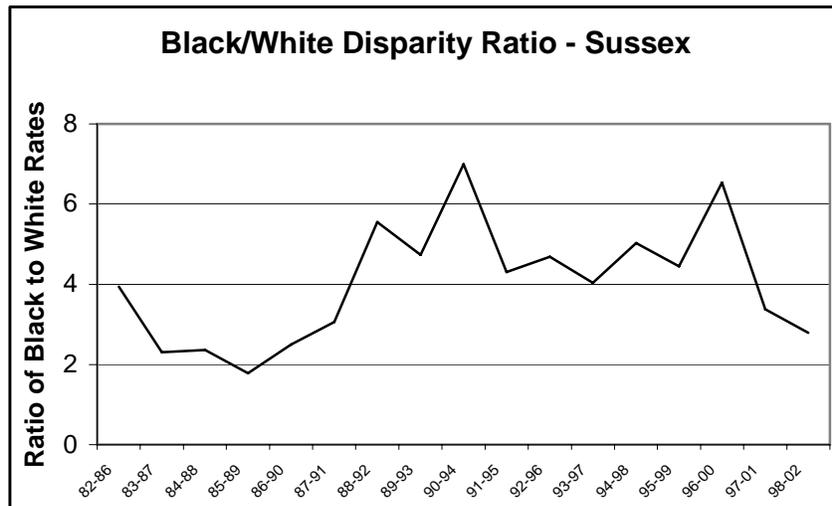
While the rate of death from homicide for whites has remained stable for the past twenty years in New Castle County, the homicide death rate for blacks has moved both up and down but never dipping below 10 deaths per 100,000. Because of the slight ups and downs, the black/white disparity ratio also has shown peaks and valleys until finally settling at blacks being four times more likely in New Castle County to die from homicide than whites.

Figure 8.7
Homicide Rates by Race
Sussex County 1982-2002



Source: Delaware Division of Public Health

Figure 8.8
Homicide Black/White Disparity Ratio
Sussex County 1982-2002



Source: Delaware Division of Public Health

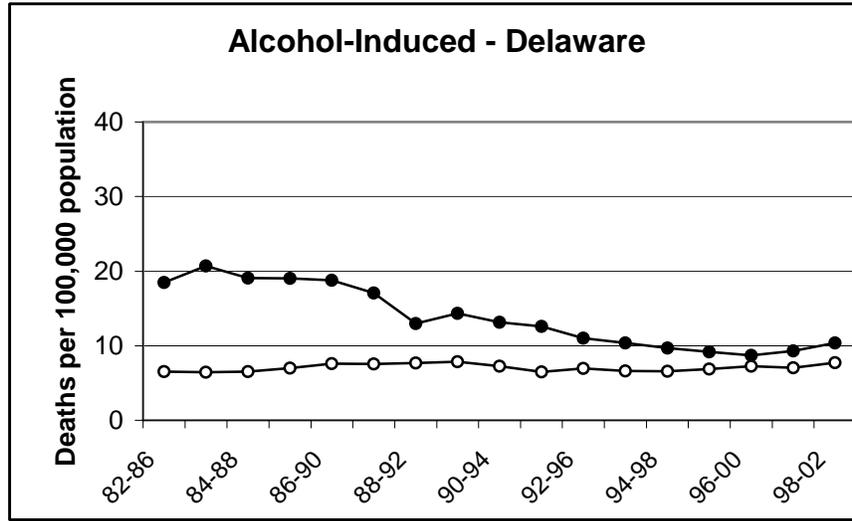
Like previous death rate models for Sussex, the homicide rate for blacks is sporadic and shows dramatic increases and decreases. Also holding to form, the white homicide rate in Sussex remained consistently low compared to blacks. The death rates of blacks coupled with the consistent death rates of whites created an erratic black/white disparity ratio over the last thirteen years. Although there have been dramatic improvements in the last five years, both the homicide rates and black/white disparity ratio have decreased dramatically in Sussex County.

Alcohol-Induced Deaths

Delaware blacks made steady progress from 1983 to 1989 in the amount of alcohol-induced deaths, while white deaths gradually increased over the last twenty years. The black/white ratio for alcohol-induced deaths in Delaware was slightly over 3 in 1983 but since has shown a steady improvement to a ratio that is currently around 1. This is characterized by the improvements of the 1997 black/white ratio of 1.57 and the 2002 ratio of 1.34.

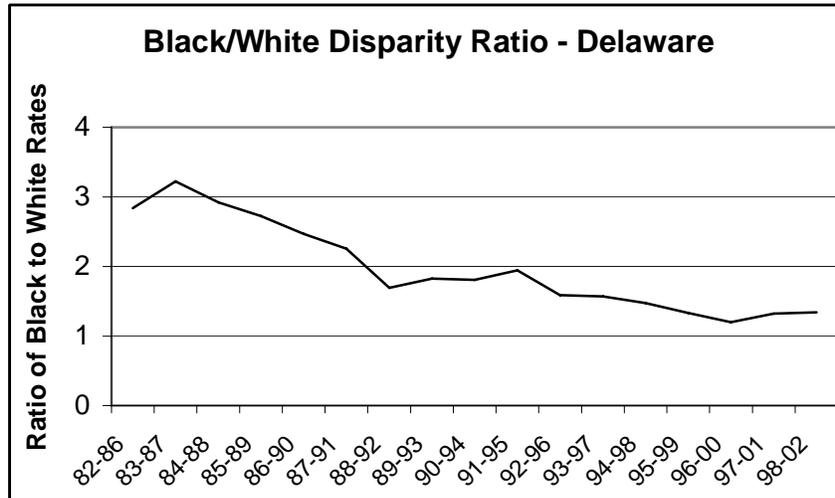
Kent County has had vast improvements in both the death rates and the black/white disparity ratio since 1994. Previous to 1994, the black/white disparity ratio lingered around 2.5 but has since declined dramatically to a ratio that is below 1. Again, New Castle County had a similar pattern to Delaware, with sharp declines starting in 1989 in both alcohol-induced death rates and black/white disparity ratio. Sussex County had large increases from 1984 to 1990 in black alcohol-induced deaths but has since declined dramatically to levels comparable to whites in the county.

Figure 9.1
Alcohol-Induced Death Rates by Race
Delaware 1982-2002



Source: Delaware Division of Public Health

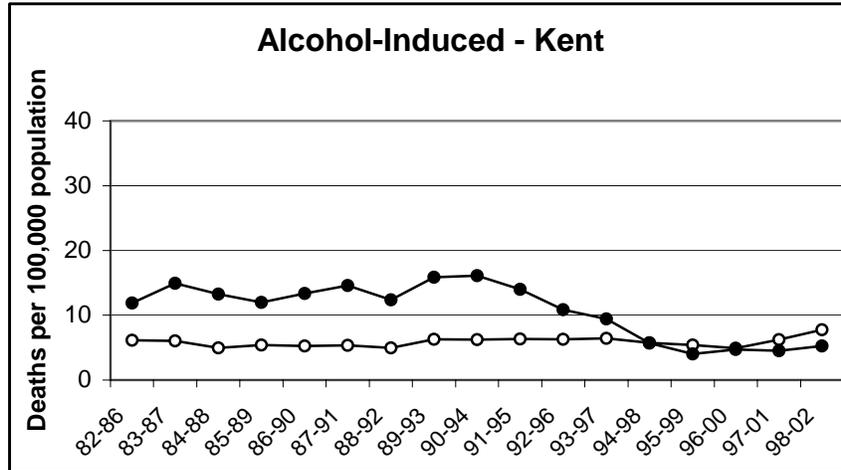
Figure 9.2
Alcohol-Induced Death Black/White Disparity Ratio
Delaware 1982-2002



Source: Delaware Division of Public Health

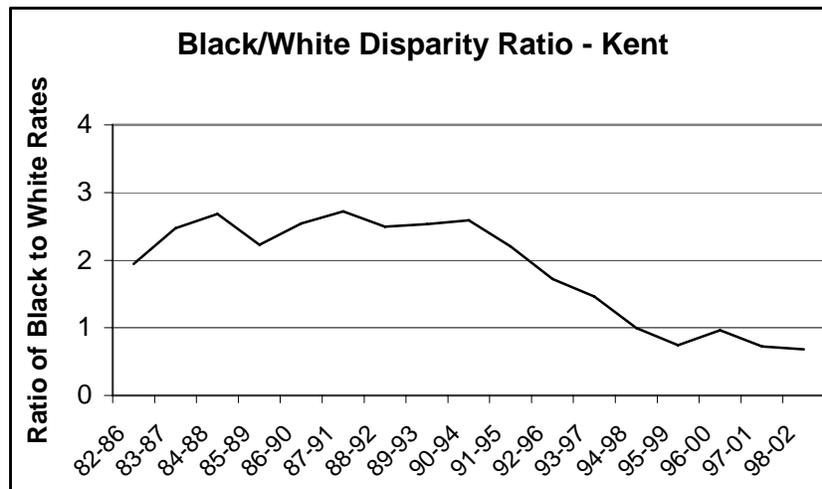
In 1982-86 blacks were about three times more likely in Delaware to die from an alcohol-induced incident than whites. For the next twenty years, the death rate for whites had little variance, while the death rate for blacks made steady improvements. This was also reflected in the black/white disparity ratio with a gradual decline to the present day number, which has dropped to about 1.34. In the past two years, there has been a slight increase in alcohol-induced deaths of both blacks and whites.

Figure 9.3
Alcohol-Induced Death Rates by Race
Kent County 1982-2002



Source: Delaware Division of Public Health

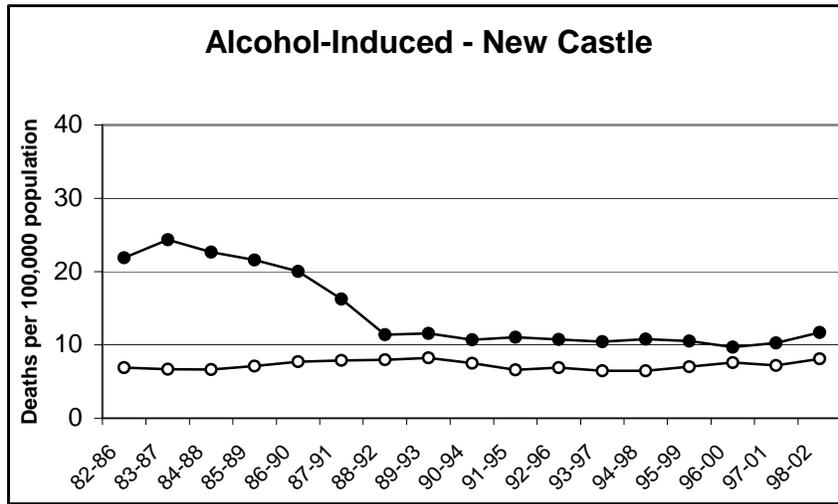
Figure 9.4
Alcohol-Induced Death Black/White Disparity Ratio
Kent County 1982-2002



Source: Delaware Division of Public Health

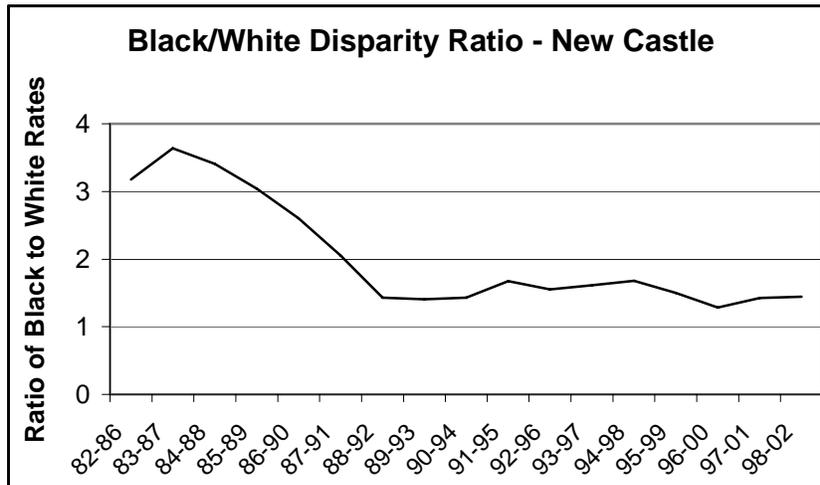
From 1982-86 to 1991-95 Kent County showed up and down alcohol-induced death rates for blacks while showing very consistent death rates for whites. After 1991-95 there was a sharp decrease in the alcohol-induced death rates for blacks, which actually dropped below white death rates in 1995-99 and continues to do so currently. While the black/white disparity ratio was quite high for Kent, it has now dropped to below one, meaning that more whites per 100,000 die from alcohol-induced deaths than blacks.

Figure 9.5
Alcohol-Induced Death Rates by Race
New Castle County 1982-2002



Source: Delaware Division of Public Health

Figure 9.6
Alcohol-Induced Death Black/White Disparity Ratio
New Castle County 1982-2002



Source: Delaware Division of Public Health

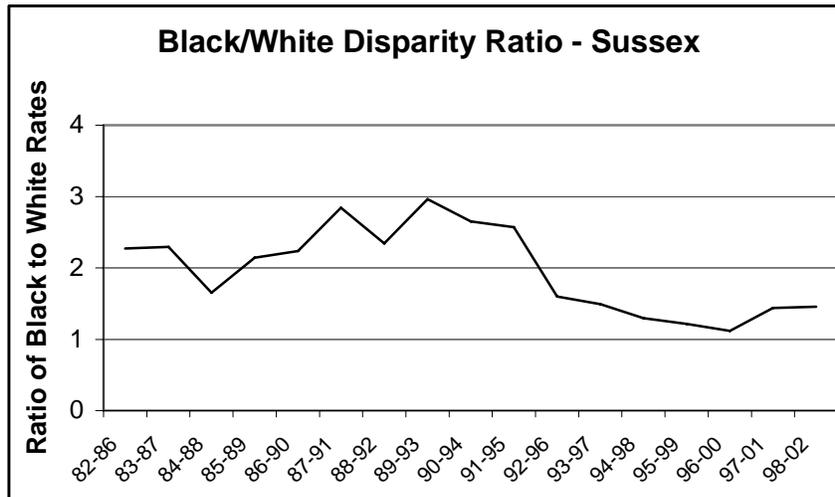
In 1982-86 blacks were far more likely than whites to die from alcohol-induced incidents. After 1983-87 there was a steady decrease in the death rate of blacks that lasted until 1989-93, which greatly reduced the amount of alcohol-induced deaths per 100,000. This same sharp decline is illustrated in the black/white disparity ratio with a sharp decline in the first ten years and a plateau around 1.5. Throughout the twenty years on the graph, whites maintained a consistent level at slightly fewer than ten deaths per 100,000.

Figure 9.7
Alcohol-Induced Death Rates by Race
Sussex County 1982-2002



Source: Delaware Division of Public Health

Figure 9.8
Alcohol-Induced Death Black/White Disparity Ratio
Sussex County 1982-2002



Source: Delaware Division of Public Health

From 1984-88 to 1990-94, blacks showed increasing rates of alcohol-induced deaths, but those numbers started to gradually decrease to the levels comparable to those of whites in Sussex County around 1991-1995. Because of the sporadic numbers in Sussex County, the black/white disparity ratio was very dynamic year to year until gradually leveling off around 1.5 in 1998-2002. As with most charts, the death rate for whites remained fairly consistent for the length of the twenty years, while the death rates for blacks were increasing and decreasing dramatically during the first 13 years on the chart.

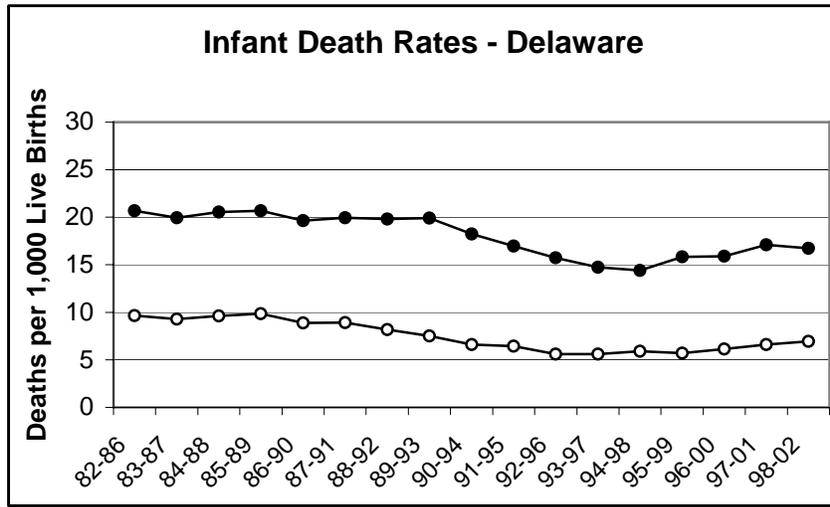
Infant Deaths

Delaware saw declining infant death rates from 1993 to 1998 for both whites and blacks followed by minor increases in the last five years. Black and white infant death rates mirrored each other so there was very little change in the black/white disparity ratio in the last 20 years. There has been a slim decrease in the black/white disparity ratio from 1997 at 2.63 to 2002 at 2.41.

However, Delaware is slightly below the national black/white disparity ratio, which is 2.48. This may be due to fewer births in the state, which could skew the death rates for the entire state.

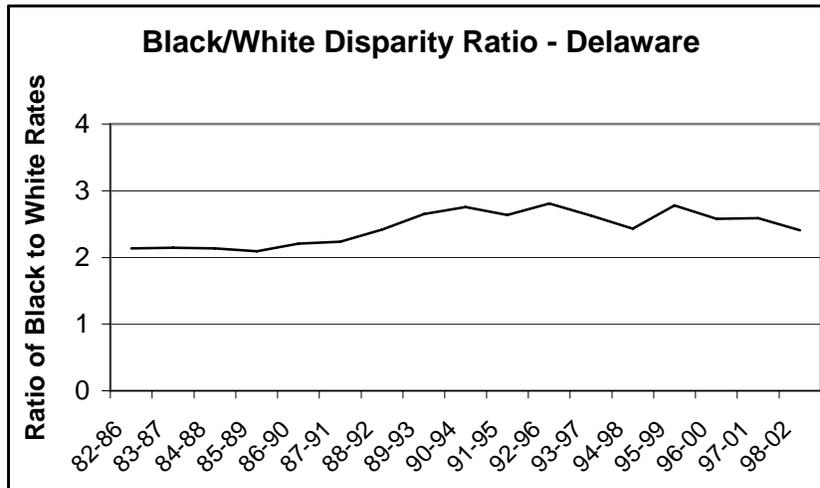
Kent County has seen increases in the infant death rate from 1983 to 1989, which was followed by steady improvements in the last 10 years with the exception of the most recent time-period, 98-02. These steady improvements in the death rates have led to a solid decline in the black/white disparity ratio in the county. New Castle County saw decreases in the death rate from 1982 to 1995 but has since seen minor increases in the last five years. Sussex County has also seen decreases from 1982 to 1995 but has recently seen increases in the infant death rate. Due to the recent increases in the death rate, the black/white disparity ratio has also seen increases.

Figure 10.1
Infant Death Rates by Race
Delaware 1982-2002



Source: Delaware Division of Public Health

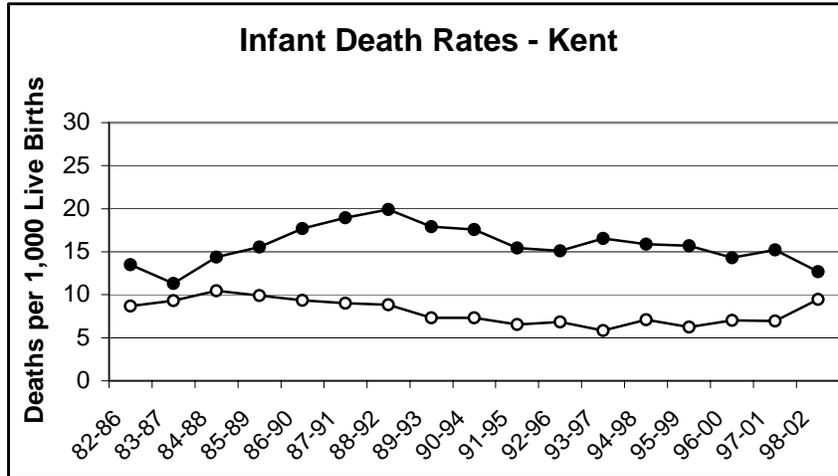
Figure 10.2
Infant Death Black/White Disparity Ratio
Delaware 1982-2002



Source: Delaware Division of Public Health

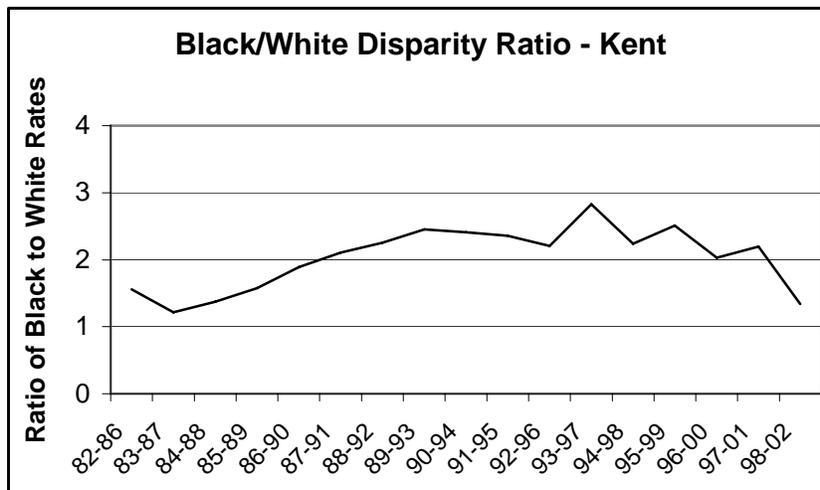
For the past 20 years, blacks have had infant death rates that were at least twice that of whites in Delaware. From 1982-86 to 1993-97 blacks and whites showed steady improvement towards reducing infant death rates. But since 1994-98, white rates have started to increase with black rates also increasing since 1995-1999. As mentioned previously, the black/white disparity ratio has remained well above two. While Delaware blacks remained much higher in the deaths per 100,000, the changes in yearly death rates closely mirrored each other.

Figure 10.3
Infant Death Rates by Race
Kent County 1982-2002



Source: Delaware Division of Public Health

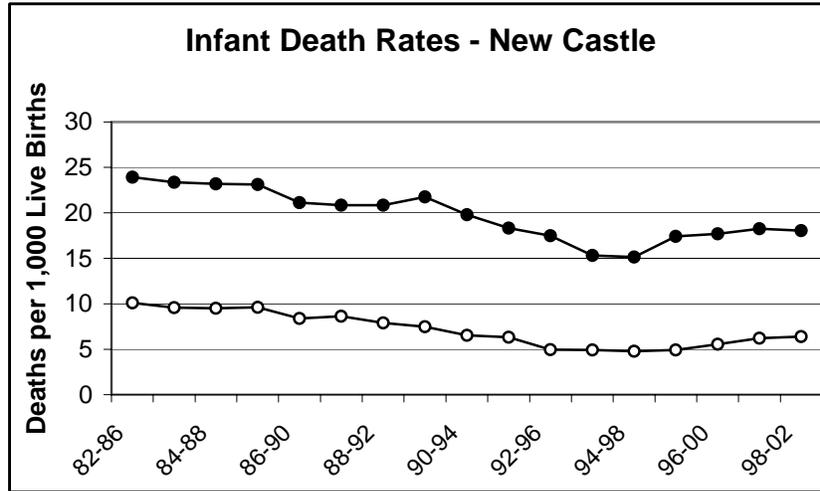
Figure 10.4
Infant Death Black/White Disparity Ratio
Kent County 1982-2002



Source: Delaware Division of Public Health

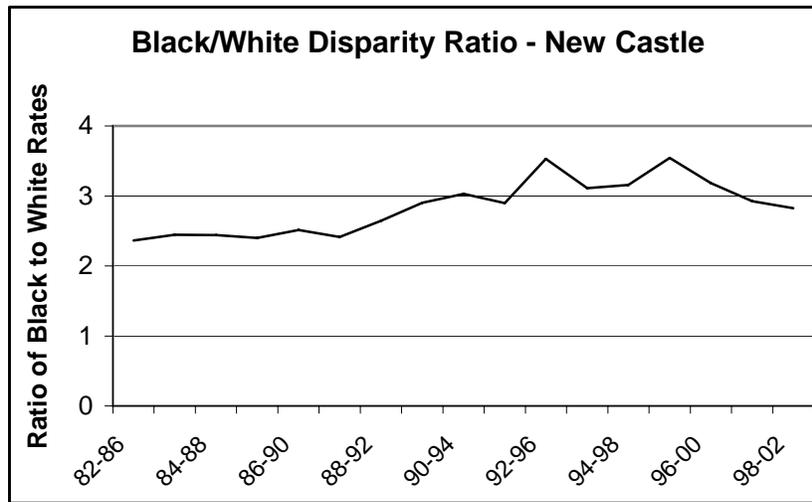
Unlike the entire state, infant death rates for blacks and whites do not mirror each other in Kent County. While for the greater part of the last twenty years blacks have seriously lagged behind whites in infant death rates, they recently started to close the gap due to a gradual decline in infant death rates for blacks and a continuing increase in infant death rates for whites. While the black/white disparity ratio hovered around two or higher for most of the twenty years, there has been a sharp decrease in the rate, which now is around 1.25.

Figure 10.5
Infant Death Rates by Race
New Castle County 1982-2002



Source: Delaware Division of Public Health

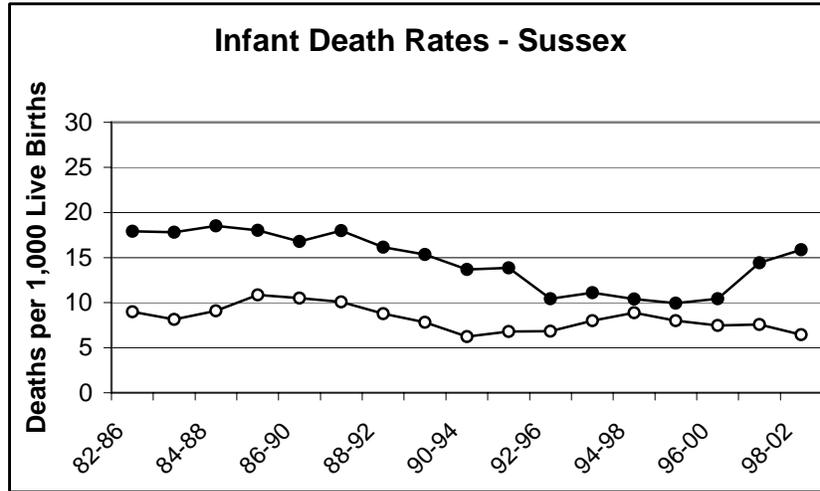
Figure 10.6
Infant Death Black/White Disparity Ratio
New Castle County 1982-2002



Source: Delaware Division of Public Health

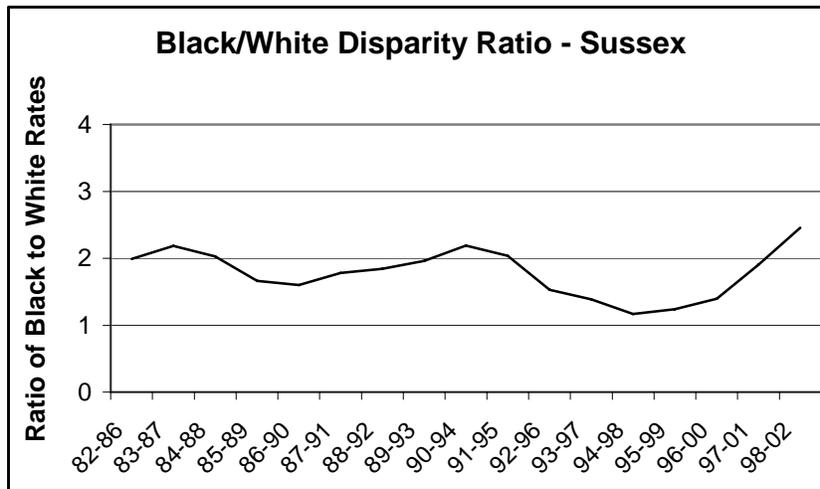
Similar to other death rates, New Castle County closely mirrors Delaware in regard to infant death rates with a steady decline in deaths per 100,000 from 1982-86 to 1994-1998 and a gradual increase starting in 1995-99 that is still continuing. Similar to the state, the changes in death rates for blacks and whites closely parallel each other but with blacks having higher rates. The black/white disparity ratio for infant death is highest in New Castle with a rate of death for blacks that is almost three times that of whites.

Figure 10.7
Infant Death Rates by Race
Sussex County 1982-2002



Source: Delaware Division of Public Health

Figure 10.8
Infant Death Black/White Disparity Ratio
Sussex County 1982-2002



Source: Delaware Division of Public Health

From 1982-86 to 1996-2000 blacks made considerable decreases in infant death rates, but they have started to sharply increase in the last two years. Whites have remained fairly consistent with death rates between 6 to 11 deaths per 100,000. Blacks had nearly closed the disparity gap in Sussex County until the sharp increases of the last two years. This is reflected in the black/white disparity ratio with a sharp increase in the last two years to a rate that is two and a half times higher for blacks than whites.

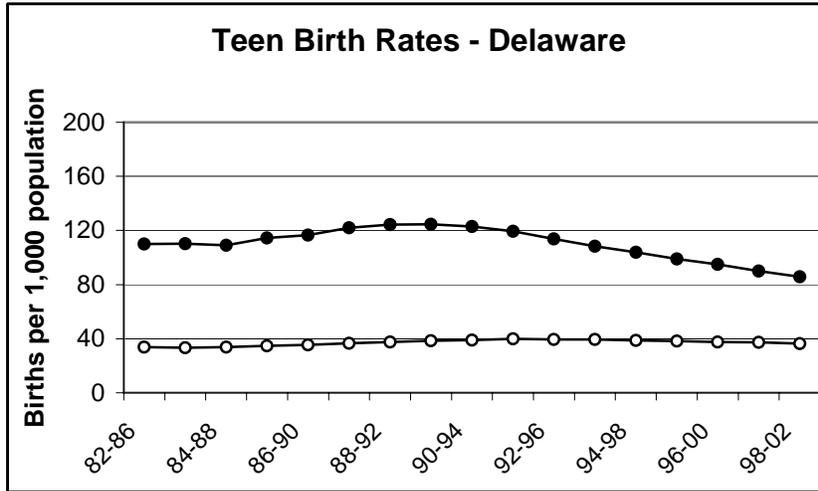
Births to Teens

Delaware blacks showed steady declines in the teenage birth rate from 1994 to 2002, while whites had fairly stagnant birth rates. Due to the declining black teenage births and sluggish birth rates of whites, there has been a steadily declining black/white disparity ratio for the past 10 years in Delaware. This gradual decrease is characterized in a comparison of 1993-97 at 2.74 to 2002 at 2.35.

The US disparity ratio is smaller than the Delaware rate at 1.86. While Delaware is trailing the national average, it has been making steady progress in the last ten years and has shown no signs of stopping.

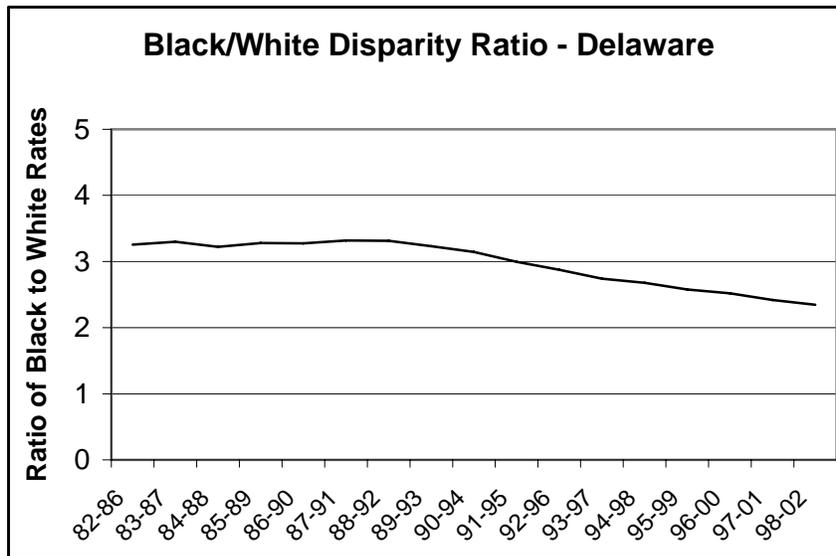
Kent County blacks had increases in the teenage birth rate from 1983 to 1990, but has since shown decreases, while whites have shown little change in their teenage birth rate. Because of the declining birth rates of blacks and stagnant rates of whites, there has been a declining black/white disparity ratio in Kent County. New Castle County has had declining teen birth rates for blacks since 1992, which has led to a lower black/white disparity ratio. Sussex County has seen decreases in black teenage birth rates and whites have seen increases in teenage birth rates, resulting in a declining black/white disparity ratio over the last 20 years.

Figure 11.1
Teen Birth Rates by Race
Delaware 1982-2002



Source: Delaware Division of Public Health

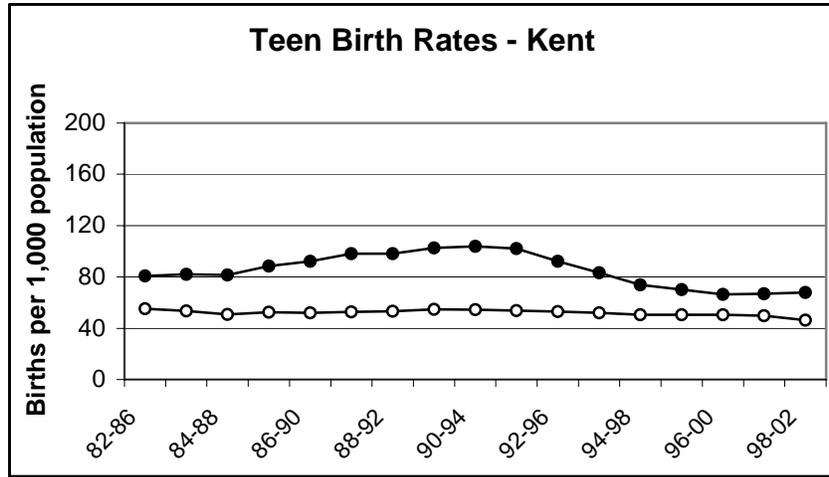
Figure 11.2
Teen Birth Black/White Disparity Ratio
Delaware 1982-2002



Source: Delaware Division of Public Health

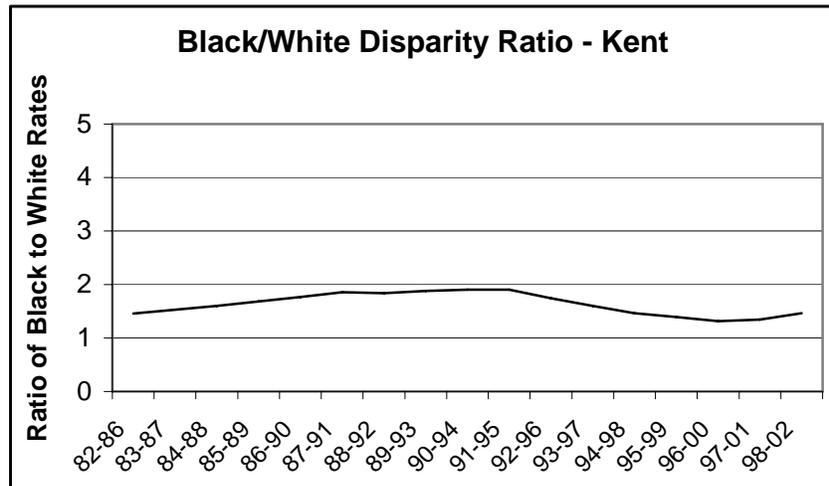
In 1982-86 teen birth rates for blacks were triple that of whites in the state of Delaware and continued to increase gradually over the next seven years. Rates started to decline in 1990-94 and have continued to do so presently. Whites have maintained stable teen birth rates for the past twenty years in Delaware with about forty births per one thousand teenage girls. The black/white disparity ratio showed only slight reductions from just over 3 twenty years ago to a ratio of 2.35 currently.

Figure 11.3
Teen Birth Rates by Race
Kent County 1982-2002



Source: Delaware Division of Public Health

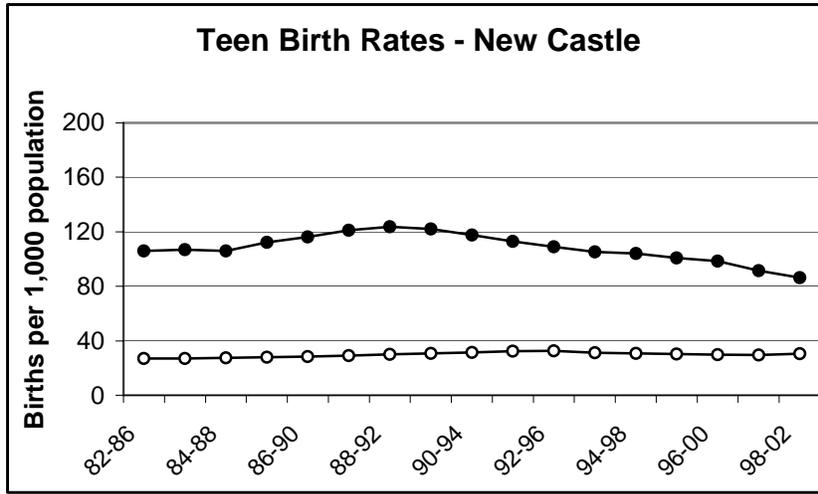
Figure 11.4
Teen Birth Black/White Disparity Ratio
Kent County 1982-2002



Source: Delaware Division of Public Health

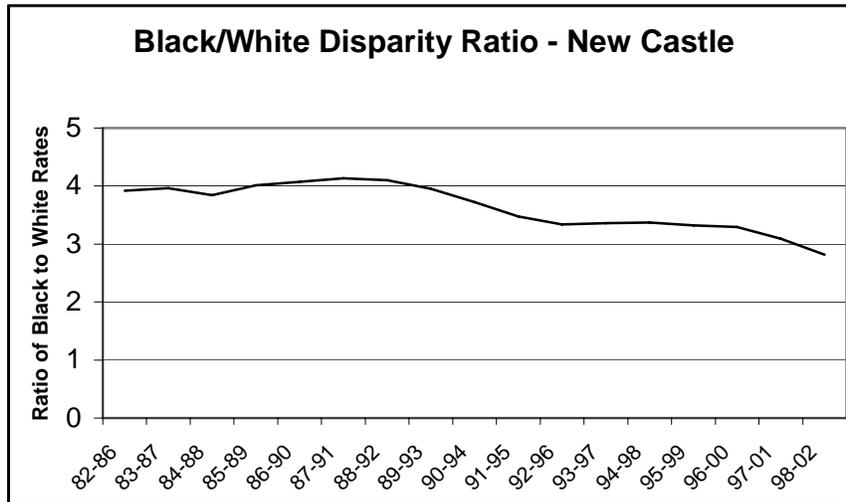
From 1984-88 to 1990-94 Kent County blacks were burdened with increasing rates of teen births but started to show steady decreases in the teen birth rates around 1991-95. Whites showed little or no improvement in the teen birth rates for the last twenty years, hovering over 50 per 1000 teen girls. Blacks were able to make significant gains in the black/white disparity ratio because of the reduction of black teen birth rates and the stagnant teen birth rate for whites.

Figure 11.5
Teen Birth Rates by Race
New Castle County 1982-2002



Source: Delaware Division of Public Health

Figure 11.6
Teen Birth Black/White Disparity Ratio
New Castle County 1982-2002



Source: Delaware Division of Public Health

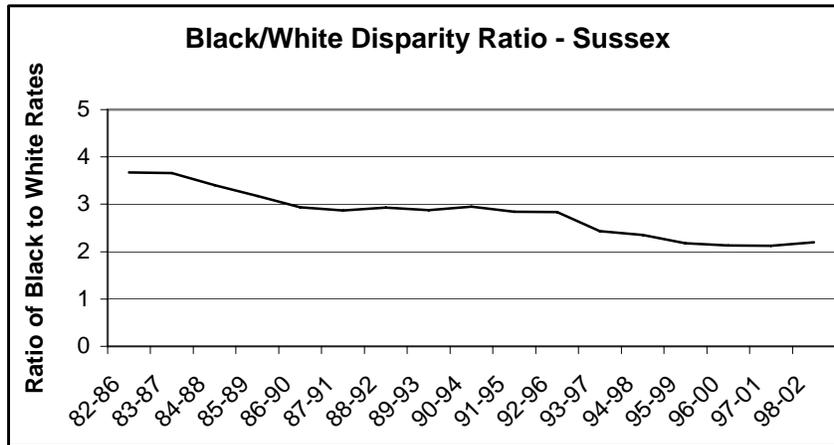
From 1982-86 to 1988-92 New Castle County had increases in the teen birth rate for blacks but showed steady improvement in the last ten years reducing the rate by one-third. Whites maintained a level that averaged around 30 teen births and showed very little change over the twenty years. The black/white disparity ratio shows that in 1982-86 New Castle County had the worst disparity between blacks and whites in Delaware and while they have improved recently, they still have the worst ratio in the state.

Figure 11.7
Teen Birth Rates by Race
Sussex County 1982-2002



Source: Delaware Division of Public Health

Figure 11.8
Teen Birth Black/White Disparity Ratio
Sussex County 1982-2002



Source: Delaware Division of Public Health

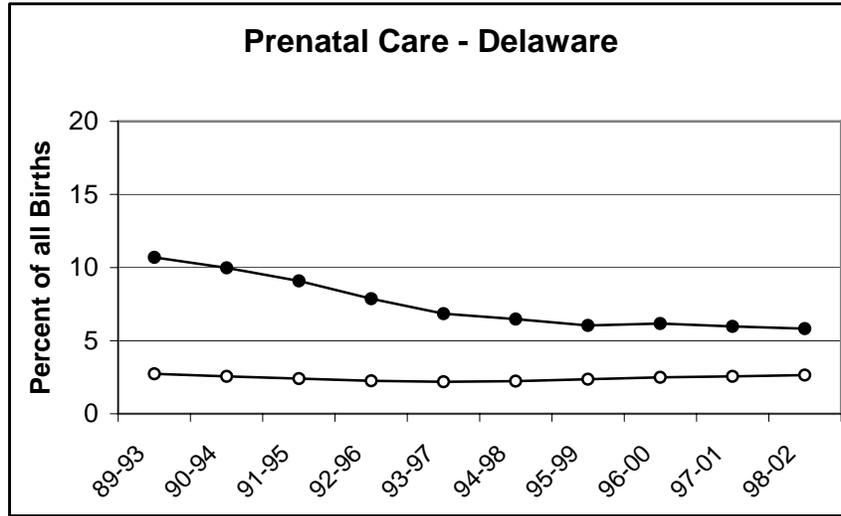
In 1982-86 Sussex County had the worst teen birth rates for blacks in Delaware with rates higher at 159 per 1000 teens. Whites in Sussex County have also struggled in the past with increasing teen birth rates from 1982-86 to 1992-96 but have since started to slowly reduce their rates also. Because of high rates for whites and declining rates for blacks, the black/white disparity ratio is only around two where it could be much higher because of the quantity of black teen births.

Late or No Prenatal Care

Prenatal data has only been kept in Delaware for the last ten years, so the trends are very limited. Since 1993 Delaware blacks have greatly reduced the number of births with little or no prenatal care, while whites showed very little change. Blacks saw the greatest decreases from 1993-1997 where the percentage was cut in half. Because of the improvements by blacks and little change made by whites, the black/white disparity ratio was greatly reduced in a short period of time. This is highlighted by the significant differences between 1997 at 3.11 and 2002 at 2.19.

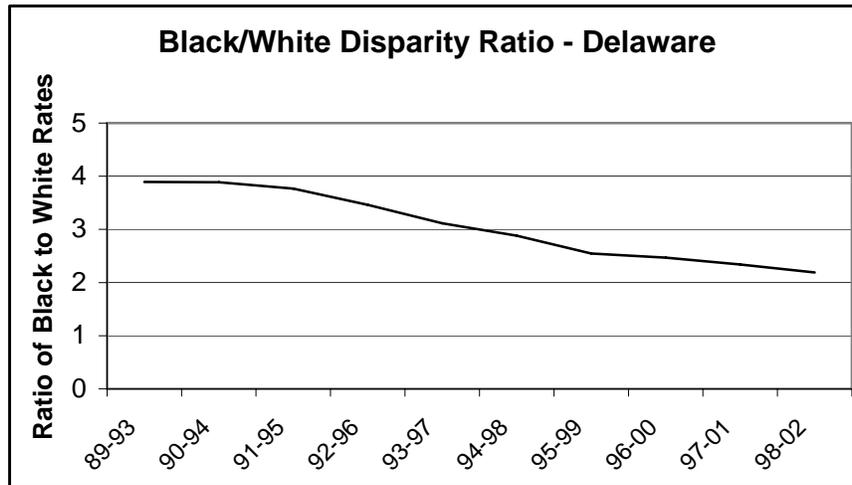
Kent County blacks showed some improvement from 1993 to 1997 but then saw rates increase in the last five years. Whites showed increases for the last ten years, resulting in a declining black/white disparity ratio, despite the rising prenatal rates. New Castle County is similar to the state with large improvements for blacks from 1993 to 1997 followed by more gradual improvements for the next five years. This also led to a diminishing disparity ratio for New Castle. Sussex County blacks had the highest rate of births with little or no prenatal care in the state in 1993 but have since shown large declines, giving them a rate comparable to the rest of the state.

Figure 12.1
Percentage of Late or No Prenatal Care by Race
Delaware 1989-2002



Source: Delaware Division of Public Health

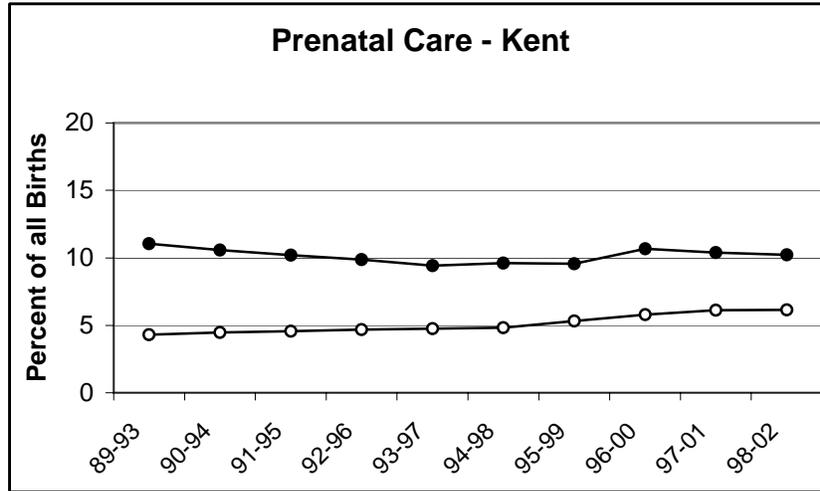
Figure 12.2
Late or No Prenatal Care Black/White Disparity Ratio
Delaware 1989-2002



Source: Delaware Division of Public Health

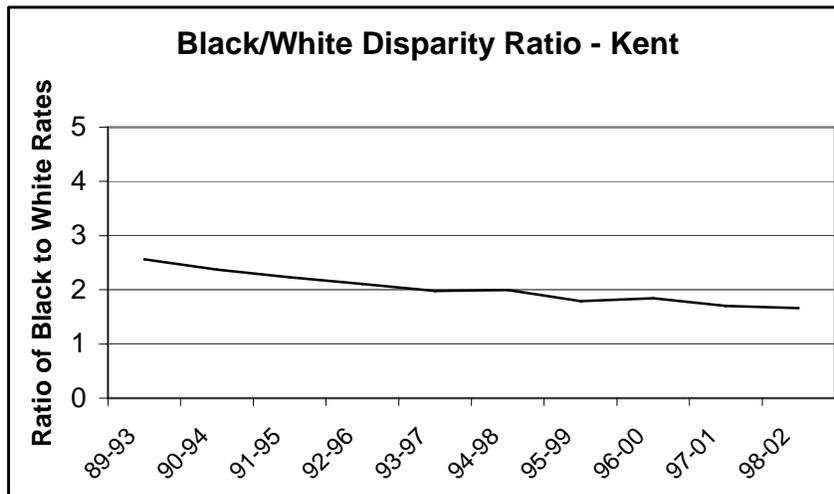
From 1989-93 to 1994-98 there was a steady decline in the percentage of births with little or no prenatal care in Delaware for blacks that has since plateaued from 1995 to the present. Whites remained at consistent levels that were well below the percentages of blacks. In 1989-93 blacks had a disparity ratio that showed blacks as being four times more likely than whites as having a birth with little or no prenatal care. The current level has since been lowered to just about twice the rate of whites and has been steadily falling for the last thirteen years.

Figure 12.3
Percentage of Late or No Prenatal Care by Race
Kent County 1989-2002



Source: Delaware Division of Public Health

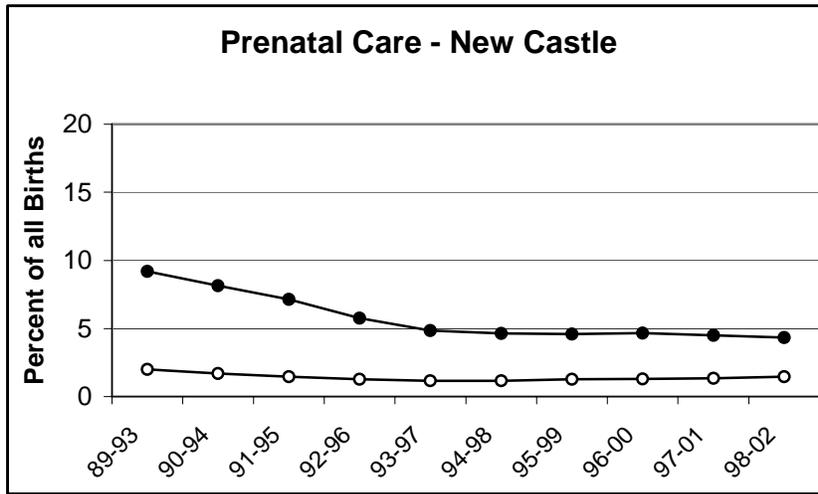
Figure 12.4
Late or No Prenatal Care Black/White Disparity Ratio
Kent County 1989-2002



Source: Delaware Division of Public Health

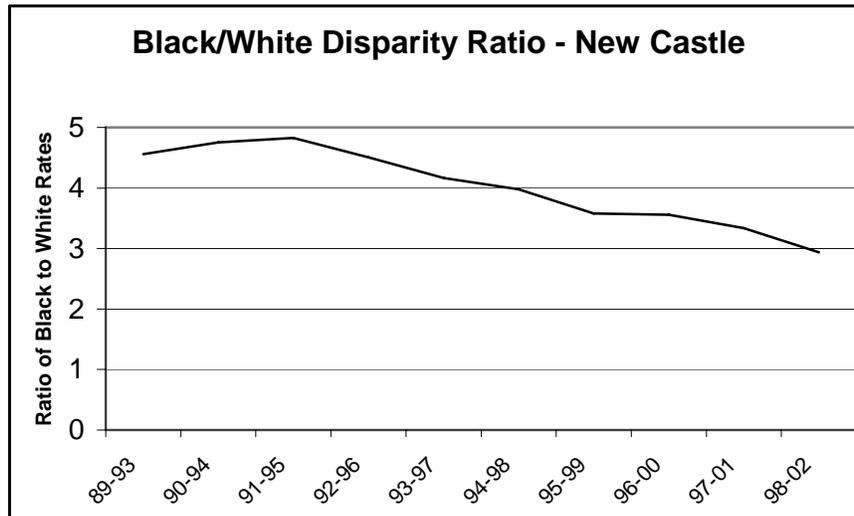
Blacks in Kent County have had little if any success in lowering the percentage of births with little or no prenatal care over the last thirteen years. Whites have also struggled with lowering the percentage of births with little or no prenatal care and in fact have increased their percentage over the last five years. Despite the lagging numbers for Kent County blacks, there has been a steady decline in the black/white disparity ratio. This has more to do with the increasing percentages for whites and less to do with great advances for Kent County blacks.

Figure 12.5
Percentage of Late or No Prenatal Care by Race
New Castle County 1989-2002



Source: Delaware Division of Public Health

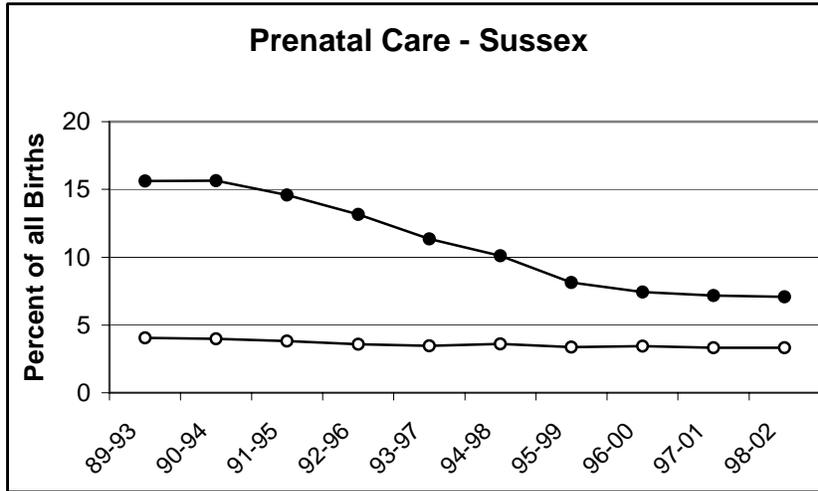
Figure 12.6
Late or No Prenatal Care Black/White Disparity Ratio
New Castle County 1989-2002



Source: Delaware Division of Public Health

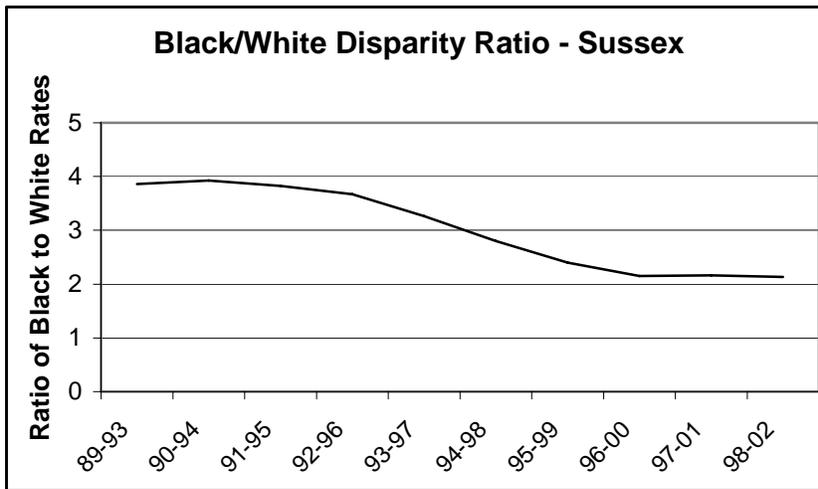
From 1989-93 to 1993-97 blacks showed considerable progress in reducing the percentage of births with little or no prenatal care in New Castle County. Throughout the past thirteen years, whites have maintained the same level of around one to two percent of births with little or no prenatal care in New Castle County. The black/white disparity ratio has shown a steady decline in New Castle County but is still relatively high with a rate for blacks that is three times that of whites. It is important to note that the rates for both blacks and whites are the lowest in the entire state in New Castle County.

Figure 12.7
Percentage of Late or No Prenatal Care by Race
Sussex County 1989-2002



Source: Delaware Division of Public Health

Figure 12.8
Late or No Prenatal Care Black/White Disparity Ratio
Sussex County 1989-2002



Source: Delaware Division of Public Health

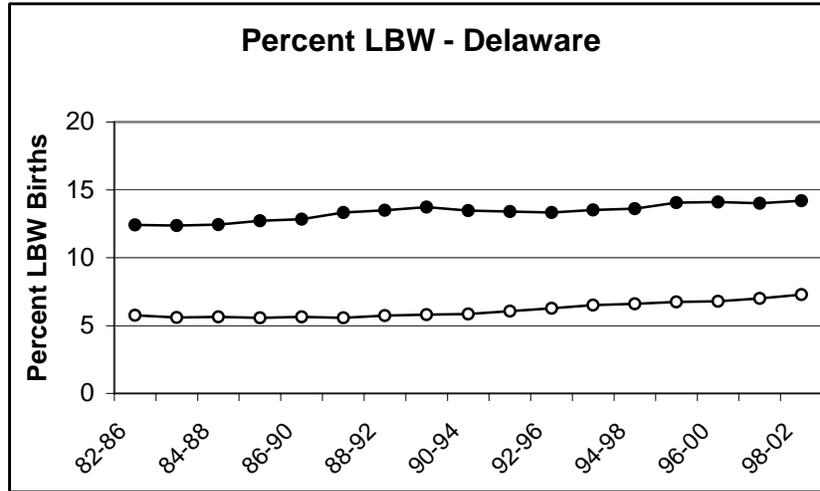
In 1989-93 Sussex County blacks had the highest percentage of births with little or no prenatal care in Delaware but have since made sharp decreases in the previously high percentages. Whites maintained a level just fewer than four percent for the past thirteen years. Because of the sharp decreases in the percentage of births with little or no prenatal care for Sussex County blacks, there was also a decrease in the black/white disparity ratio, which currently shows blacks as being twice as likely as whites of having no or very little prenatal care.

Low Birth Weight Births

Delaware has seen increases for blacks and whites in the percentage of low birth weight births for the last twenty years. While both blacks and whites have been gradually increasing, whites have increased slightly more leading to a minor decline in the black/white disparity ratio. This is an example of why it is important to put improvements in the black/white disparity ratio into perspective because while blacks have made progress in the disparity ratio, they have made very little progress in regard to the actual health indicator.

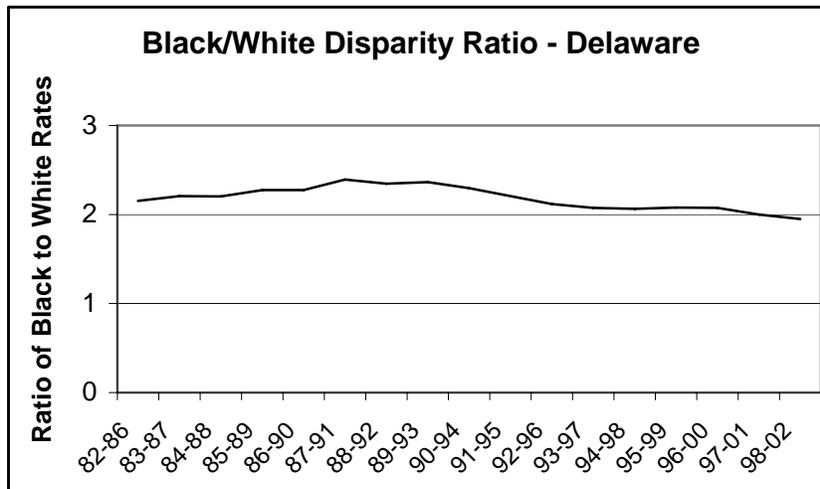
Kent County has seen increasing black percentages of low birth weight births, while whites have seen little change in the last twenty years. This has led to a small increase in the disparity ratio for the last ten years with the exception of 1998-02, the most recent year. New Castle County blacks have maintained a much higher percentage than whites but have had few changes in the last twenty years, while whites have started to increase their percentages. The increasing percentages for whites have caused a decline in the disparity ratio, despite the lack of change for New Castle blacks. Sussex County has seen little or no change for both races, leading to a fairly inactive black/white disparity ratio.

Figure 13.1
Percentage of Low Birth Weight Births by Race
Delaware 1982-2002



Source: Delaware Division of Public Health

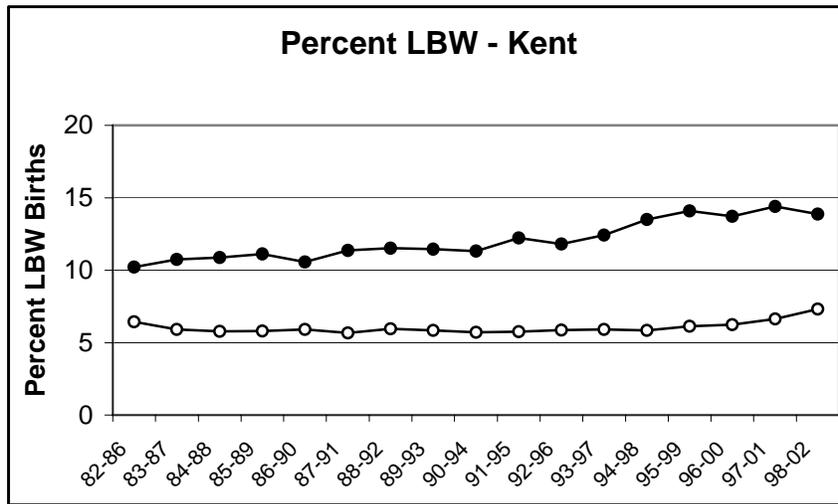
Figure 13.2
Low Birth Weight Black/White Disparity Ratio
Delaware 1982-2002



Source: Delaware Division of Public Health

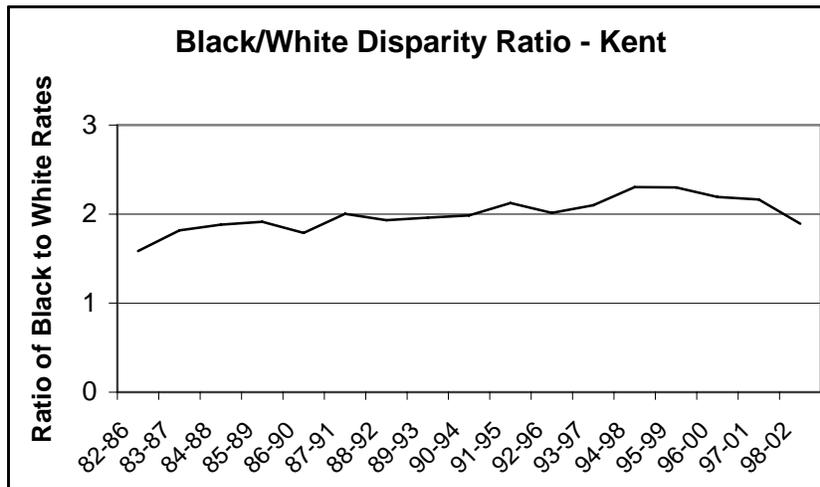
Both blacks and whites have shown measured increases in the percent of low birth weight births in Delaware for the past twenty years. While blacks have shown a steady climb, whites have shown increases that started in 1988-92 and continue to 1998-2002. The black/white disparity ratio has consistently shown blacks as being twice as likely as whites of having a low birth weight baby. Blacks have started to close on the disparity gap despite the increasing numbers because of the surging low birth weight births for whites in Delaware.

Figure 13.3
Percentage of Low Birth Weight Births by Race
Kent County 1982-2002



Source: Delaware Division of Public Health

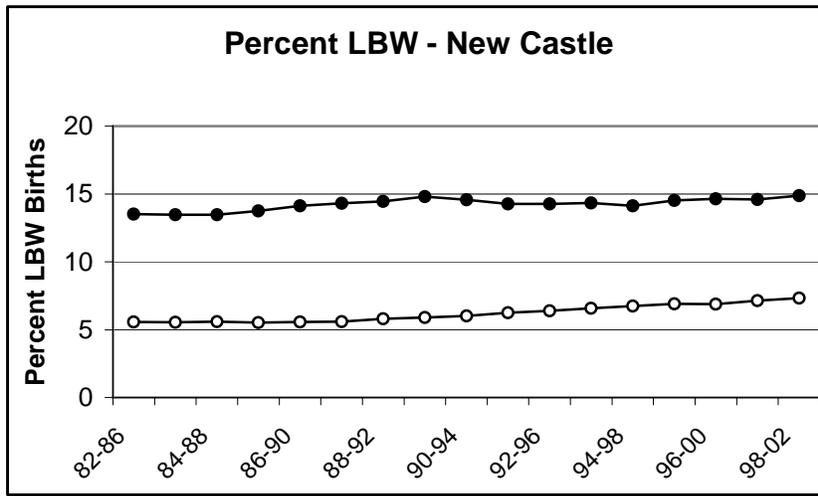
Figure 13.4
Low Birth Weight Black/White Disparity Ratio
Kent County 1982-2002



Source: Delaware Division of Public Health

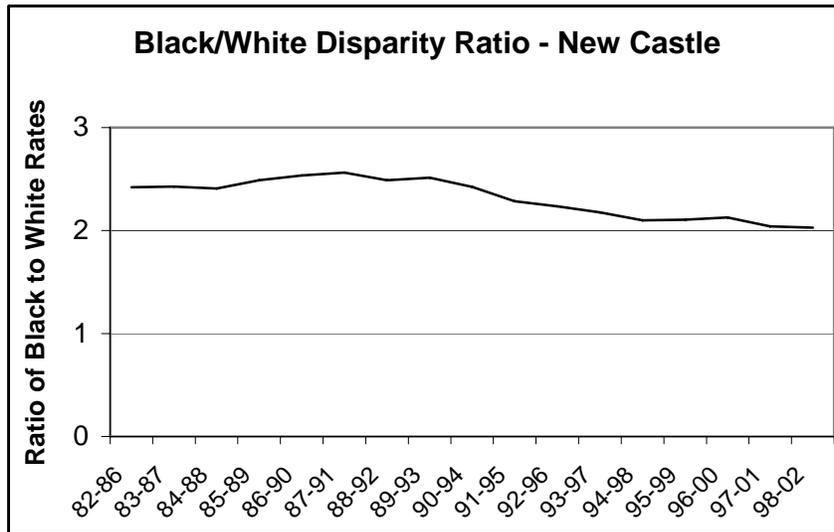
Kent County blacks have shown steady increases for the last twenty years in low birth weight births. Whites have only recently started to see increases in the amount of low birth weight births starting in 1995-99, and this trend continues with the latest data. Coupled with the steady increases in LBW's for blacks and a stagnant growth in LBW's for whites, the black/white disparity ratio has increased for most of the last twenty years and only recently has started to dip slightly.

Figure 13.5
Percentage of Low Birth Weight Births by Race
New Castle County 1982-2002



Source: Delaware Division of Public Health

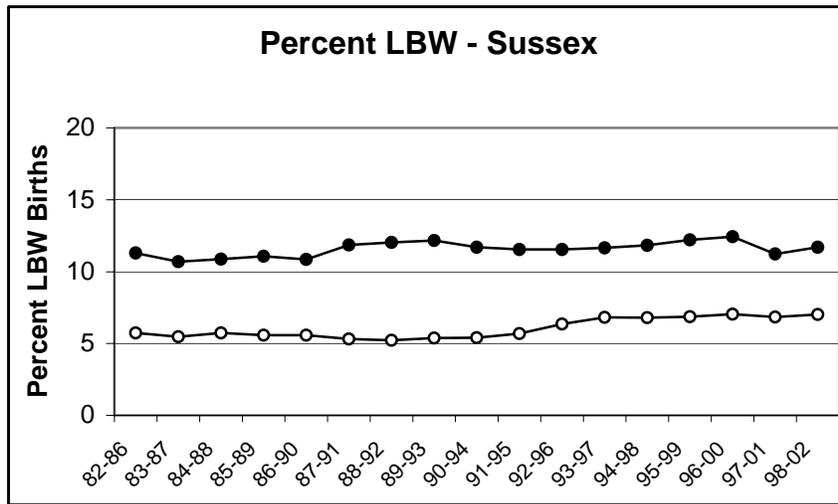
Figure 13.6
Low Birth Weight Black/White Disparity Ratio
New Castle County 1982-2002



Source: Delaware Division of Public Health

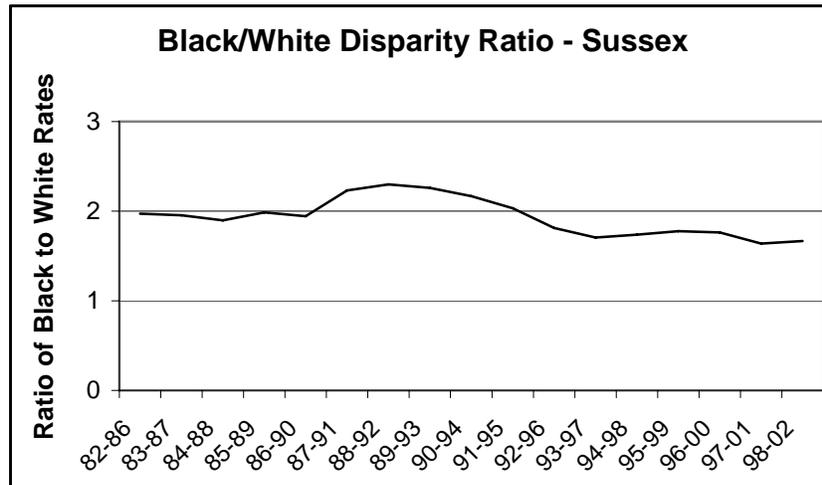
Both blacks and whites had a gradual increase in the percentage of low birth weight births. Both rates of growth were very slow but they were consistent in growth for the entire twenty years. Much like the state, the percent of white low birth weight births is growing slightly faster than blacks, so the black/white disparity ratio has slowly been declining, despite the increasing percentages.

Figure 13.7
Percentage of Low Birth Weight Births by Race
Sussex County 1982-2002



Source: Delaware Division of Public Health

Figure 13.8
Low Birth Weight Black/White Disparity Ratio
Sussex County 1982-2002



Source: Delaware Division of Public Health

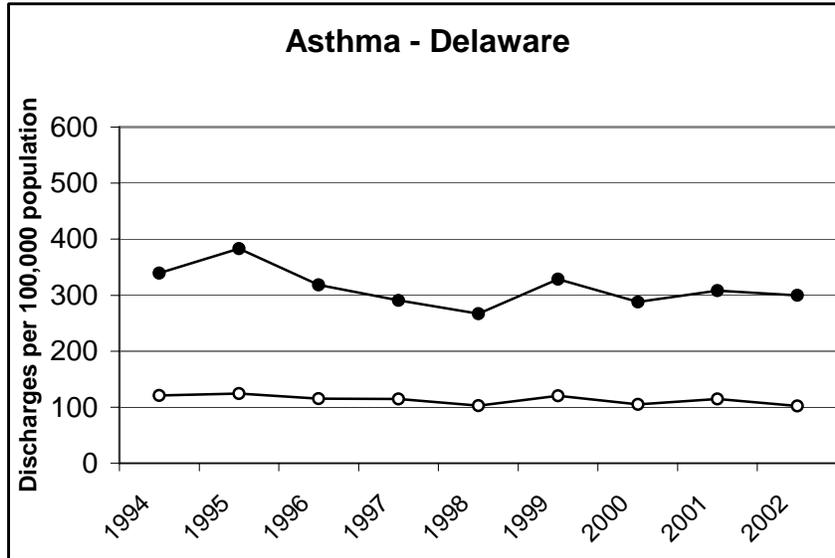
Sussex County blacks have had little long-term increases in the low birth weight births while whites have shown slight increases in the last ten years. Blacks have shown up and down percentages in the last twenty years but have deviated very little overall. The black/white disparity ratio has consistently been around two for the previous twenty years with minor changes in the last ten years.

Asthma Hospitalization

Delaware blacks showed improvement in asthma hospitalizations from 1995 to 1998 but since have shown inconsistent rates. Whites have maintained fairly stable ratings for the past 9 years. Because the changes that were made by Delaware blacks were not very big, the black/white disparity ratio did not deviate far from the 2.75-3.10 range, which is very high and could be linked to environmental exposures. There has been an increase in the black/white disparity ratio from 1997 at 2.53 to 2002 at 2.93.

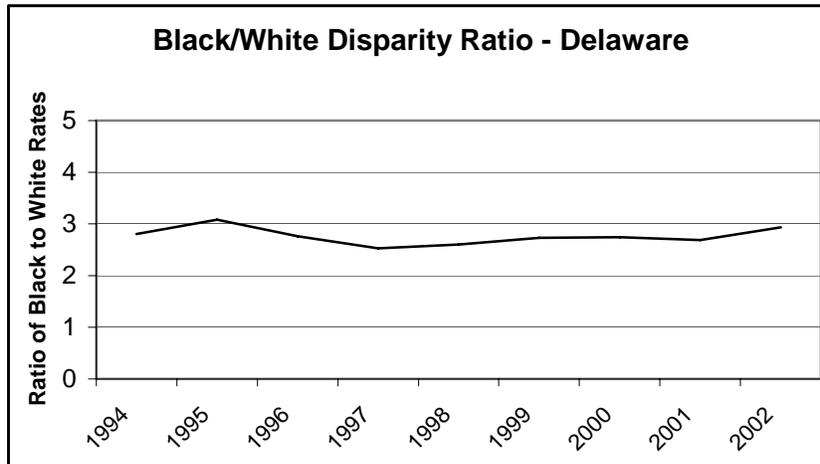
Kent County blacks and whites have shown very little movement in their hospitalization rates, which has led to very little movement of the black/white disparity ratio over the last nine years. New Castle County blacks made progress from 1994 to 1997, followed by a leveling off in 1998 through 2002. Despite these improvements, the black/white disparity ratio has been very sporadic in the last five years for New Castle. Sussex County also saw improvements in hospitalization rates for blacks that led to small improvements in the disparity ratio.

Figure 14.1
Asthma Hospitalization Rates by Race
Delaware 1994-2002



Source: Delaware Division of Public Health

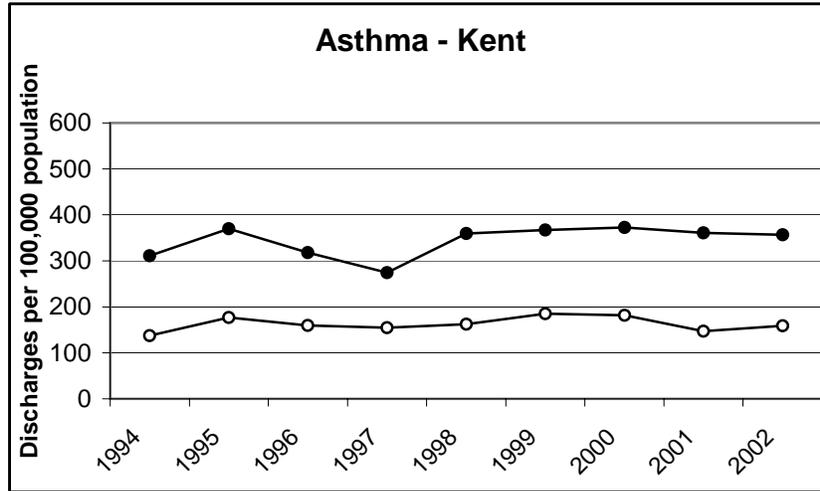
Figure 14.2
Asthma Hospitalization Black/White Disparity Ratio
Delaware 1994-2002



Source: Delaware Division of Public Health

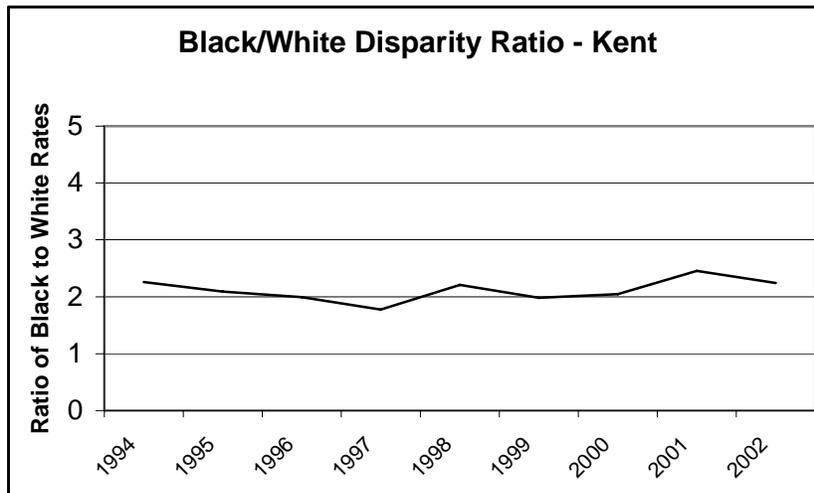
Blacks in Delaware have shown very little progress in reducing the asthma hospitalization rates per 100,000. Whites have also shown very little progress in reducing the asthma hospitalization rates, but whites maintain levels that are significantly lower than blacks. Over the last nine years blacks have shown both progress and recoil with asthma rates but still maintain about 300 asthma hospitalizations per 100,000. The black/white disparity ratio has also shown very little change over the past nine years and blacks are still at a rate of asthma hospitalization that is three times that of whites.

Figure 14.3
Asthma Hospitalization Rates by Race
Kent County 1994-2002



Source: Delaware Division of Public Health

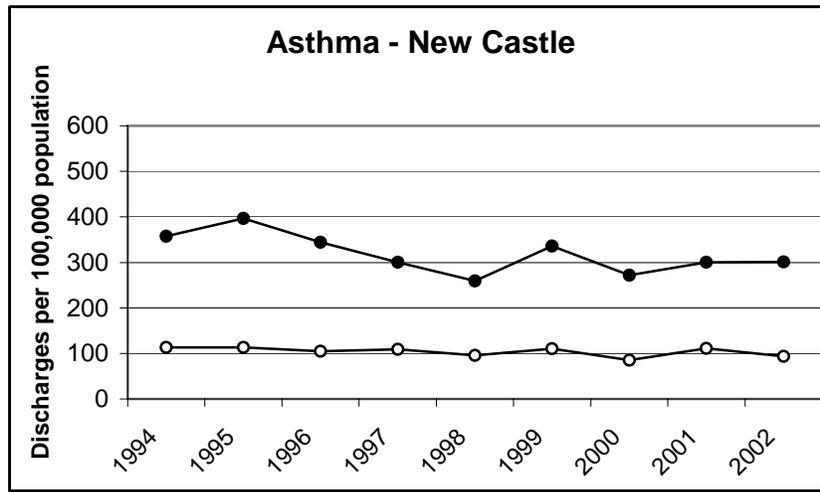
Figure 14.4
Asthma Hospitalization Black/White Disparity Ratio
Kent County 1994-2002



Source: Delaware Division of Public Health

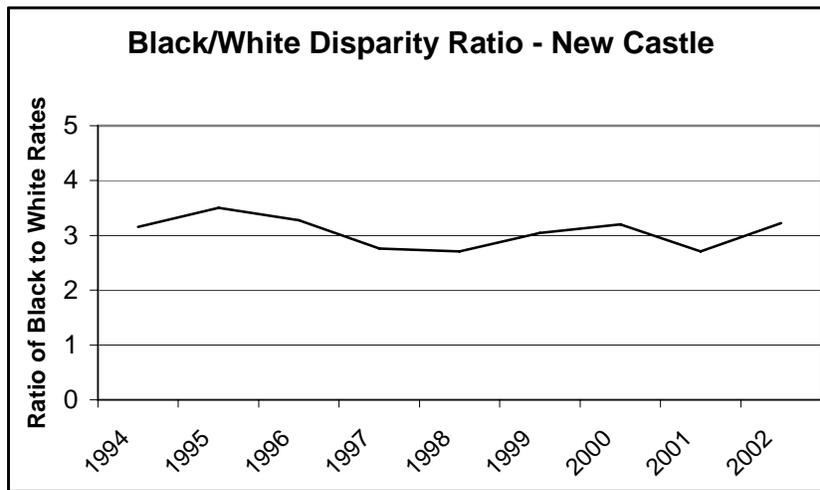
While blacks showed a two-year decline in the asthma hospitalization rates that ended in 1997, they are back to rates that are higher than the rates taken at the beginning of 1994. Whites had little change in the asthma hospitalization rates but have shown slight improvement over the last two years. The black/white disparity ratio has shown up and down movements over the last nine years but has remained at a rate that is around three.

Figure 14.5
Asthma Hospitalization Rates by Race
New Castle County 1994-2002



Source: Delaware Division of Public Health

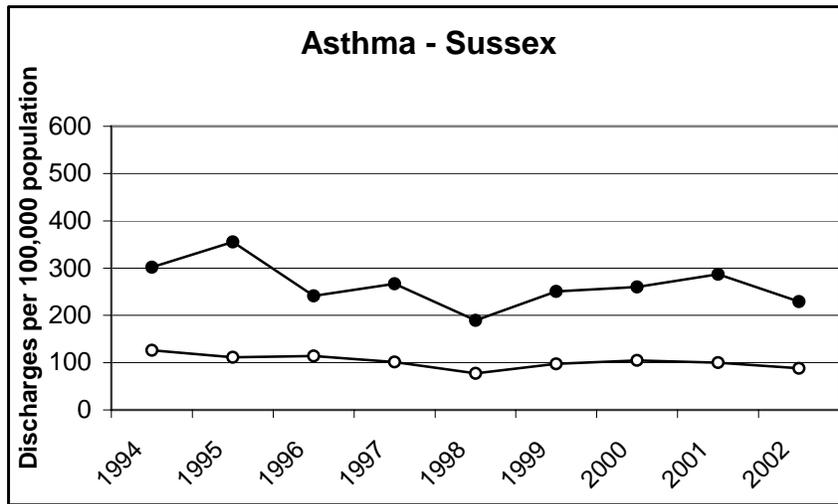
Figure 14.6
Asthma Hospitalization Black/White Disparity Ratio
New Castle County 1994-2002



Source: Delaware Division of Public Health

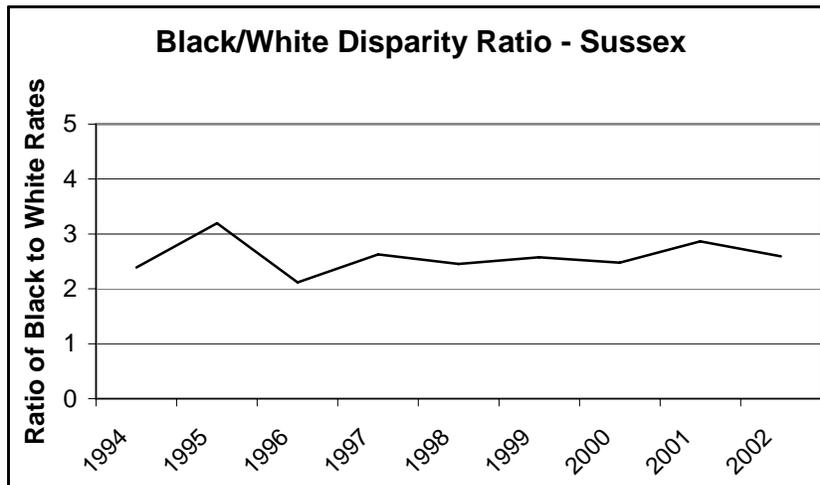
From 1995 to 1998, New Castle County blacks made firm progress towards lowering the asthma hospitalization rates and closing the gap between whites and blacks. But after a brief increase in the hospitalization rates, there has been a leveling off of progress. Whites maintained stability in the asthma hospitalization rates by staying around 100 hospitalizations per 100,000 throughout the nine years. The black/white disparity ratio showed some small decreases during the brief reductions for blacks but has since been around a ratio of three.

Figure 14.7
Asthma Hospitalization Rates by Race
Sussex County 1994-2002



Source: Delaware Division of Public Health

Figure 14.8
Asthma Hospitalization Black/White Disparity Ratio
Sussex County 1994-2002



Source: Delaware Division of Public Health

Sussex County also showed some progress in reducing the asthma hospitalization rates for blacks but the rates have shown some inconsistency in the past nine years. Blacks have reduced the amount of asthma hospitalizations from 300 to 200 per 100,000 in the past nine years, which can be considered fairly significant. Whites have shown slight decreases in the hospitalization rates but overall have made very little progress in the past nine years. Despite the decreases in the hospitalization rates for blacks, there was very little progress in the black/white disparity ratio, which continues to remain just under three.