

DELAWARE VITAL STATISTICS SUMMARY REPORT, 2008



Photo courtesy of the Delaware Tourism Office



DELAWARE HEALTH AND SOCIAL SERVICES
Division of Public Health

Fall 2010
Delaware Health Statistics Center

This report was prepared by
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Fall, 2010

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Delaware Department of Health and Social Services, Division of Public Health: 2010

Selected Characteristics: Delaware Vital Statistics Annual Report, 2008

Population	Number*	Percent	First Trimester Care	Number*	Percent
Delaware	871,630	100.0%	White	5,332	65.2%
Kent	155,142	17.8%	Black	1,918	59.0%
New Castle	528,536	60.6%	Hispanic	832	45.1%
Sussex	187,952	21.6%	Delaware	7,614	63.4%
			Kent	1,488	64.9%
			New Castle	4,818	66.6%
			Sussex	1,308	52.5%
Marriages	Number*	5-yr Rate ¹	Reported Pregnancies	Number*	5-yr Rate ⁵
Delaware	4,828	5.9	Delaware	15,400	87.5
Kent	984	6.7	Kent	2,925	87.6
New Castle	2,429	5.1	New Castle	9,382	85.6
Sussex	1,415	7.5	Sussex	3,093	94.6
Divorces	Number*	5-yr Rate ¹	Pregnancy Outcomes	Number*	Percent
Delaware	3,057	3.7	Live Births	12,016	78.0%
Kent	704	4.8	Fetal Deaths	77	0.5%
New Castle	1,753	3.4	Induced Terminations (ITOP)	3,307	21.5%
Sussex	600	3.9			
Live Births	Number*	5-yr Rate ²	ITOP by Place of Residence		
Delaware	12,016	67.9	Delaware	3,307	71.8%
Kent	2,294	69.0	Kent	611	18.5%
New Castle	7,229	64.8	New Castle	2,105	63.7%
Sussex	2,493	78.4	Sussex	591	17.9%
			Other States	1,296	28.2%
Births to Teenagers (15-19)			Infant Mortality	Number*	5-yr Rate ⁶
White	701	35.2	Delaware	101	8.4
Black	512	66.4	White	49	6.1
Delaware	1,229	43.1	Black	52	15.3
Kent	234	44.3	Hispanic	15	7.7
New Castle	678	37.7			
Sussex	317	60.3			
Race	Number*	Percent	Mortality	Number*	Adj. Rate ⁷
White	8,172	68.0%	Delaware	7,602	762.4
Black	3,251	27.1%	Kent	1,367	883.4
Hispanic Origin ⁴	1,846	15.4%	New Castle	4,290	772.3
			Sussex	1,945	692.7
Marital Status			Race and Gender		
Married	6,247	52.0%	White Males	3,108	881.8
Single	5,769	48.0%	White Females	3,201	632.1
Births to Single Mothers³			Black Males	608	1031.8
White	3,335	40.8%	Black Females	609	739.6
Black	2,360	72.6%			
Hispanic	1,199	65.0%	Leading Causes of Death		
Low Birth Weight (<2500 gms)					
All Races	1,021	8.5%			
White	563	6.9%	Malignant neoplasms	1,903	25.0%
Black	414	12.7%	Diseases of heart	1,769	23.3%
Hispanic	131	7.1%	Chronic lower respiratory diseases	470	6.2%
			Dementia	374	4.9%
			Cerebrovascular diseases	363	4.8%

Notes:

* Numbers are for 2008.

1. The 5-year rate is per 1,000 population and refers to the period 2004-2008.

2. The 5-year rate refers to total live births per 1,000 women 15-44 years of age during the 2004-2008 period.

3. Percentages for births to single mothers are based on total births for the race-group.

4. People of Hispanic origin may be of any race. The percentage is based on total resident births for 2008.

5. The 5-year pregnancy rate represents the number of reported pregnancies per 1,000 women 15-44 years of age for 2004-2008.

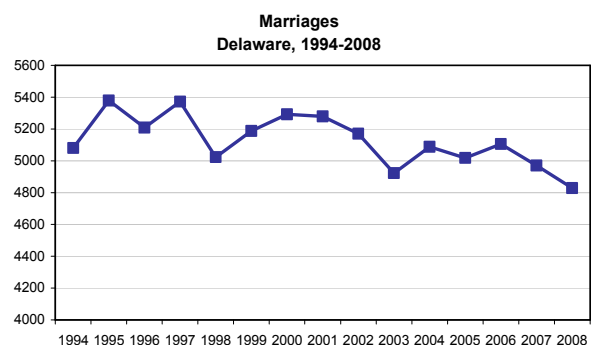
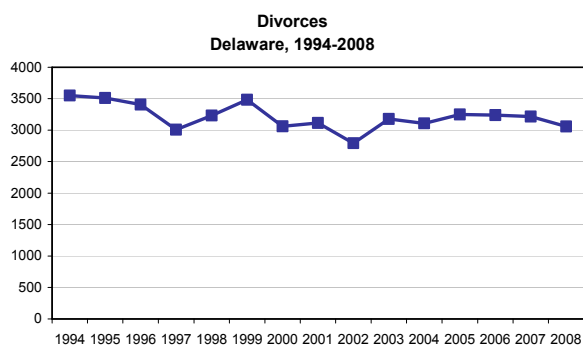
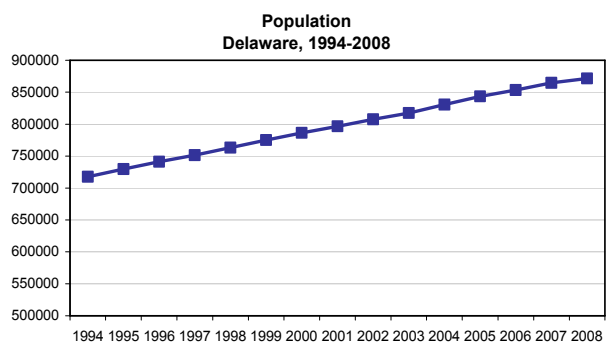
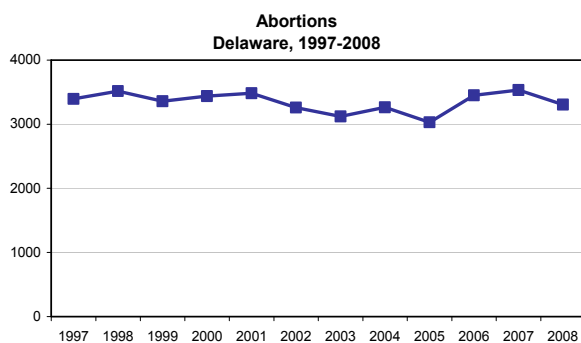
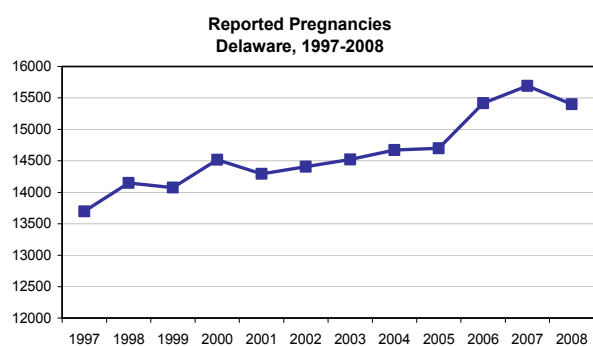
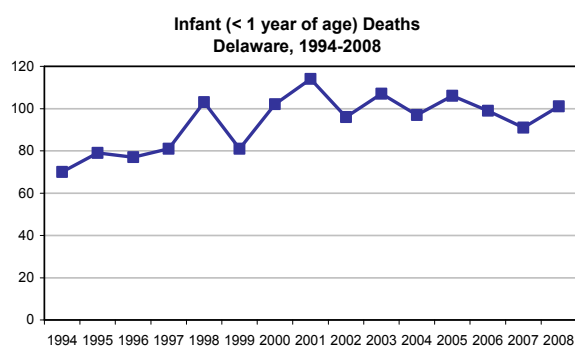
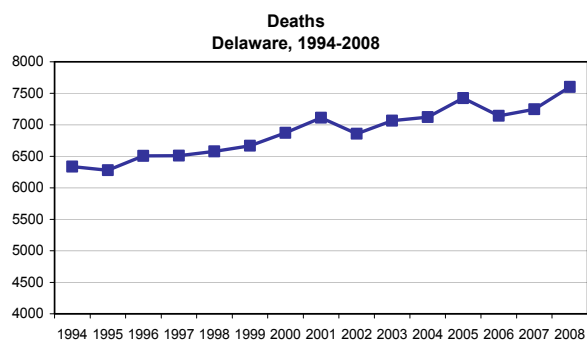
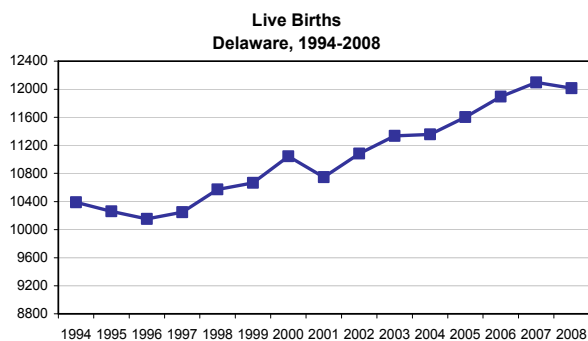
6. The 5-year (2004-2008) infant mortality rates represent the number of deaths to children under one year of age per 1,000 live births.

7. The 2008 mortality rates (deaths per 100,000 population) for Delaware and counties are age-adjusted to the 2000 U.S. population.

SUMMARY

Source: Delaware Health Statistics Center

2008 DELAWARE VITAL STATISTICS



Source: Delaware Health Statistics Center

POPULATION

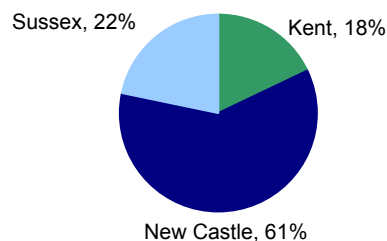
Delaware's three counties continued their increasing population trend, though they grew at different rates. Between 2000 to 2008, county populations grew annually by 2.8 percent for Kent, 0.7 percent for New Castle, and 2.4 percent for Sussex. The overall increase for Delaware was 1.4 percent.

While Sussex County had the highest percentage of residents 65 years of age and older among the three counties (21.1% in 2008) more than half of the state's total 65+ population resided in New Castle County (see Table A-2).

In 2008, more than half of Delaware's 65 and older population resided in New Castle County. However, residents 65 and older represented a much larger proportion of the Sussex County population, where 1 in 5 residents was 65 or older, versus New Castle and Kent counties, where approximately 1 in 8 residents was 65 or older.

Over half of Delaware's population resides in New Castle County.

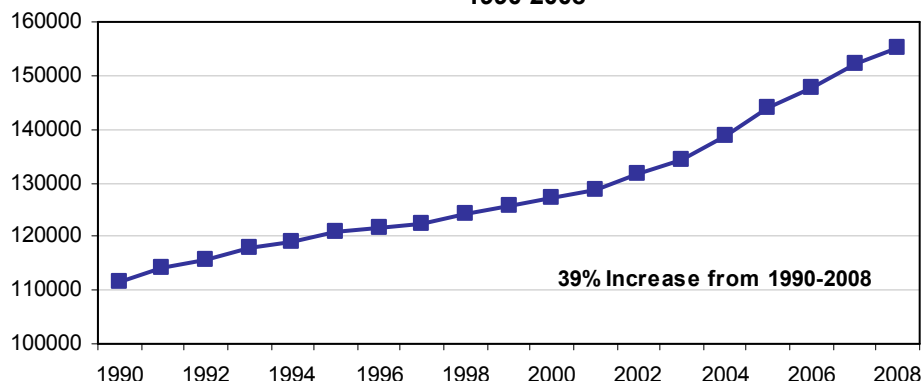
Percent of Population by County Delaware, 2008



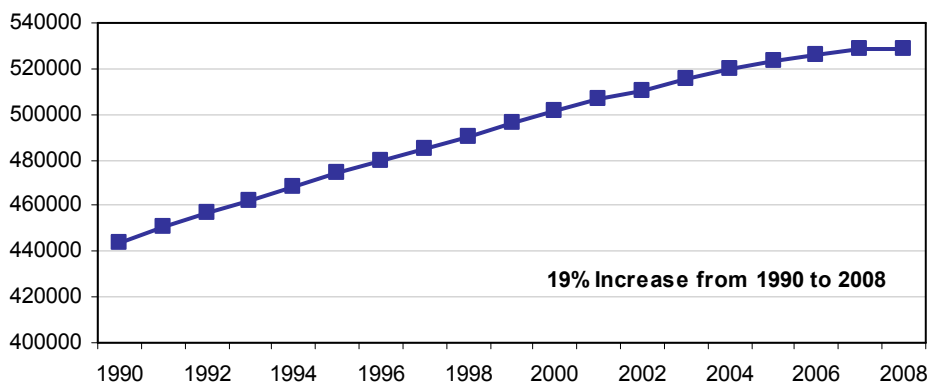
Source: Delaware Health Statistics Center

Delaware Resident Population by County, 1990-2008

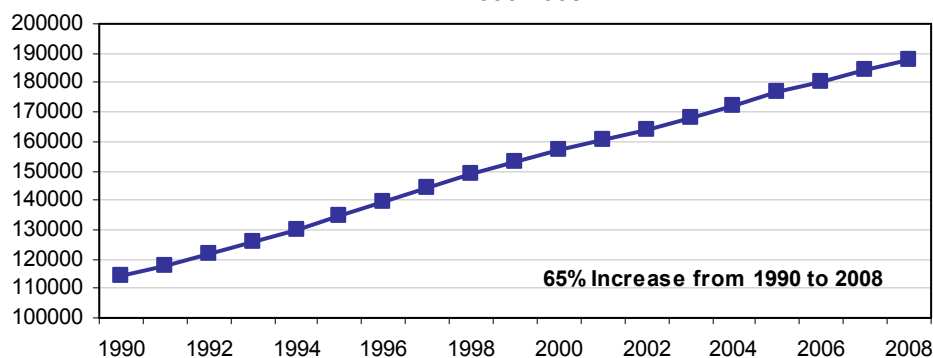
Kent County Population 1990-2008



New Castle County Population 1990-2008



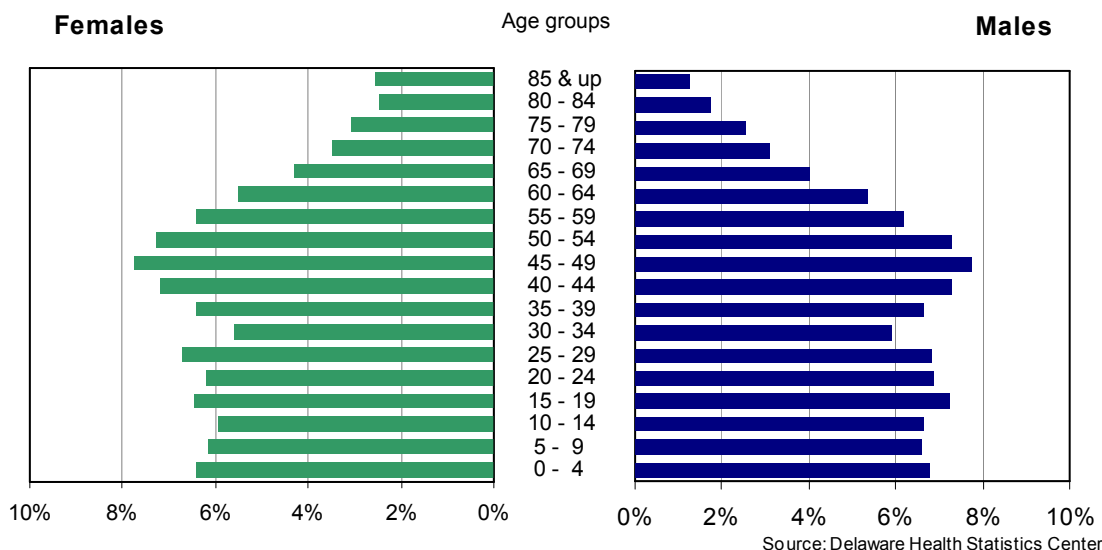
Sussex County Population 1990-2008



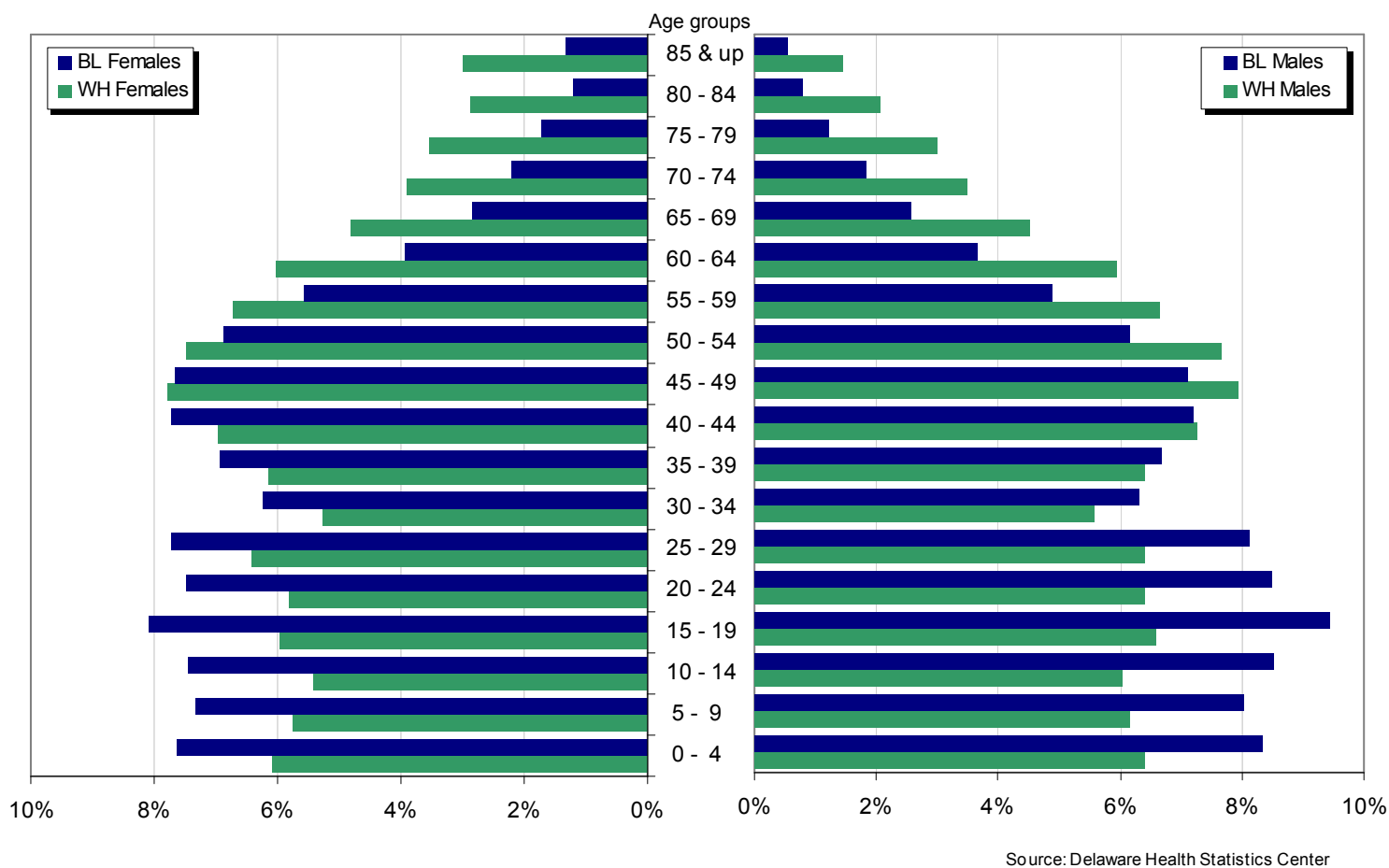
Source: Delaware Health Statistics Center

POPULATION

Just over 50 percent of Delaware's population was female in 2008. Females made up a greater proportion of the older age groups, which reflects the longer female life expectancy. Delaware females born in 2008 could expect to live an average of 80.8 years, versus males, who could expect to live 75.7 years.



When the population was broken down by race, the higher proportion of females in the older age groups appeared in the black population as well. However, both black males and females had a greater percentage of their population in the 0-39 year age range than whites; in the 45 and above age range, whites made up a greater proportion of the population.



MARRIAGE AND DIVORCE

There were 4828 marriages and 3,057 divorces in Delaware in 2008 (see Tables B-1 and B-11).

Marriage

Male

Youngest: 17
Oldest: 93

Female

Youngest: 17
Oldest: 83

Marriage with the greatest age difference between bride and groom: 46 years
Most popular month to get married: June (see Table B-9).

Divorce

Male

Youngest: 18
Oldest: 90

Female

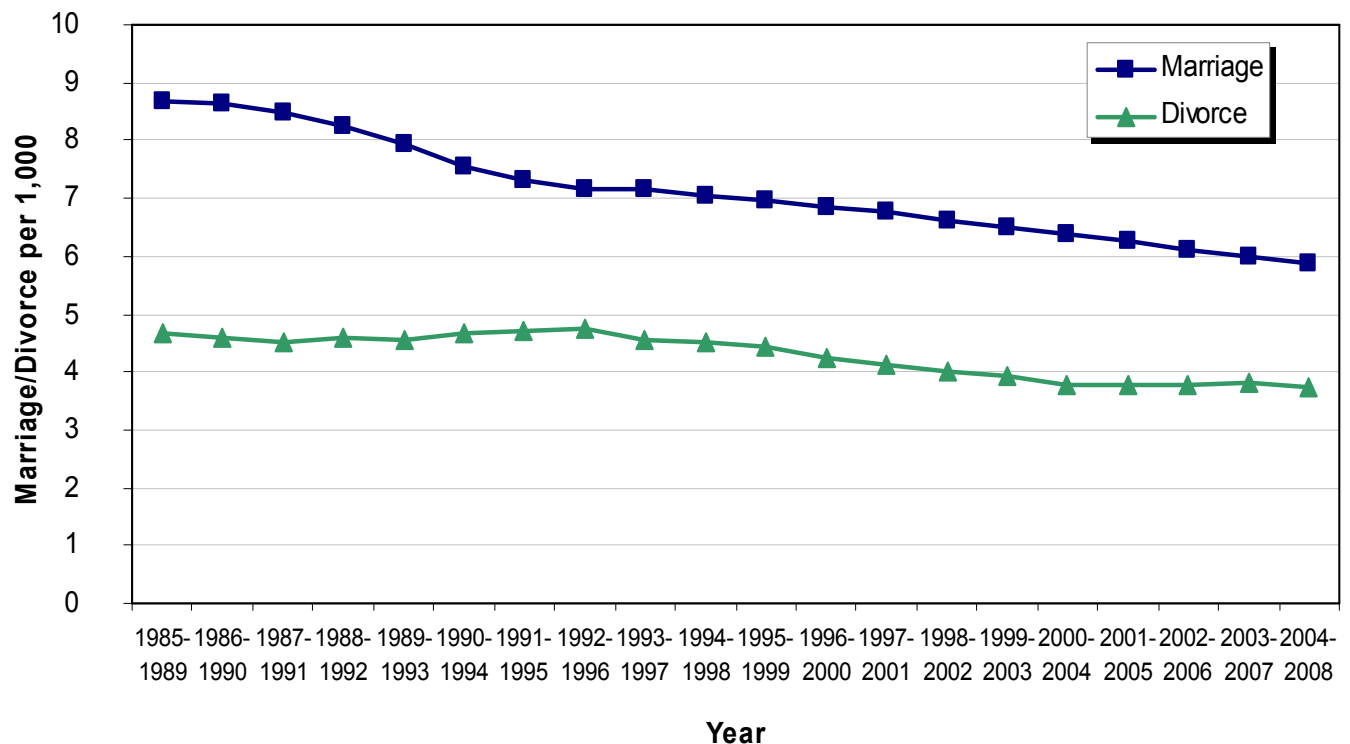
Youngest: 17
Oldest: 86

Shortest duration of marriage: 25 days
Longest duration of marriage: 56 years
Median duration of marriage: 8.4 years (see Table B-16).
Total children under 18 years of age: 2660 (see Table B-18).

The five-year average marriage rate changed very little from 1982-1986 to 1986-1990. Since that time, marriage rates have decreased 32 percent, from 8.7 to 5.9 marriages per 1,000 population in 2004-2008.

Divorce rates remained fairly stable from 1984-1988 to 1992-1996. From 1992-1996 to 2004-2008, divorce rates declined 21 percent from 4.7 to 3.7 divorces per 1,000 population.

**Five-year Average Marriage and Divorce Rates per 1,000 Population
Delaware, 1985-2008**



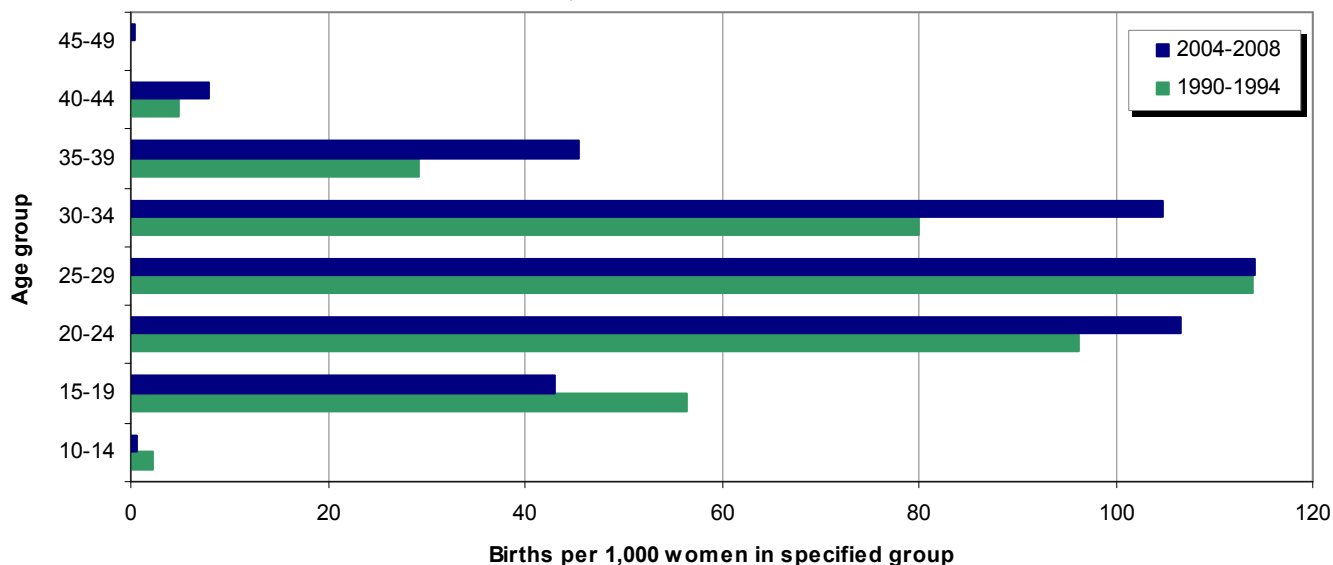
Source: Delaware Health Statistics Center

LIVE BIRTHS

In 2008, there were 12,541 births in Delaware, 11,493 were to Delaware residents and 1,048 were to non-residents. Additionally, 523 births to Delaware residents occurred out of state, for a total of 12,016 Delaware resident births, 81 fewer than in 2007.

In 2004-2008, Delaware's general fertility rate was 67.9 live births per 1,000 females aged 15-44 years, 3.8 percent higher than in 1990-1994. Between 1990-1994 and 2004-2008, teen birth rates decreased, while rates for women ages 20-24 rose 10 percent and those ages 25-29 remained stable. Rates for women 30 and older increased significantly, with the greatest change occurring in the oldest age groups.

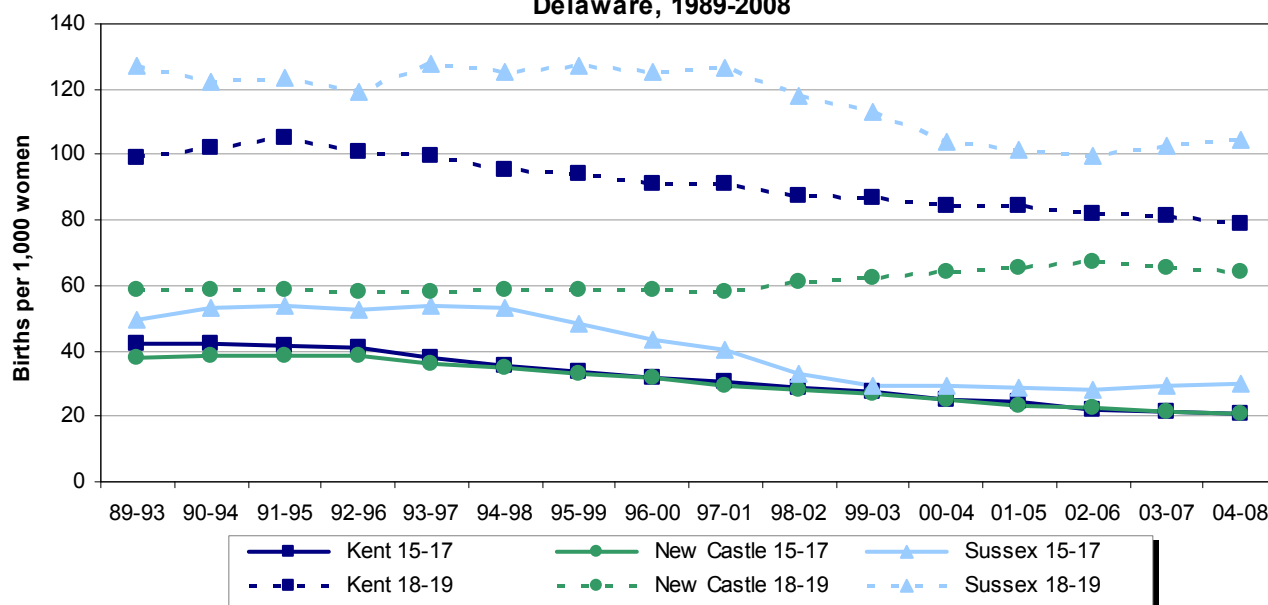
**Five-year Average Live Birth Rates by Age of Mother
Delaware, 1990-1994 and 2004-2008**



Source: Delaware Health Statistics Center

Most recently, birth rates for teens 15-17 and 18-19 remained relatively stable. Rates for teens in both age groups were higher in Sussex County than in Kent and New Castle counties, and ranged from 33 to 63 percent higher.

**Five-year Teen Live Birth Rates by County and Age Group
Delaware, 1989-2008**

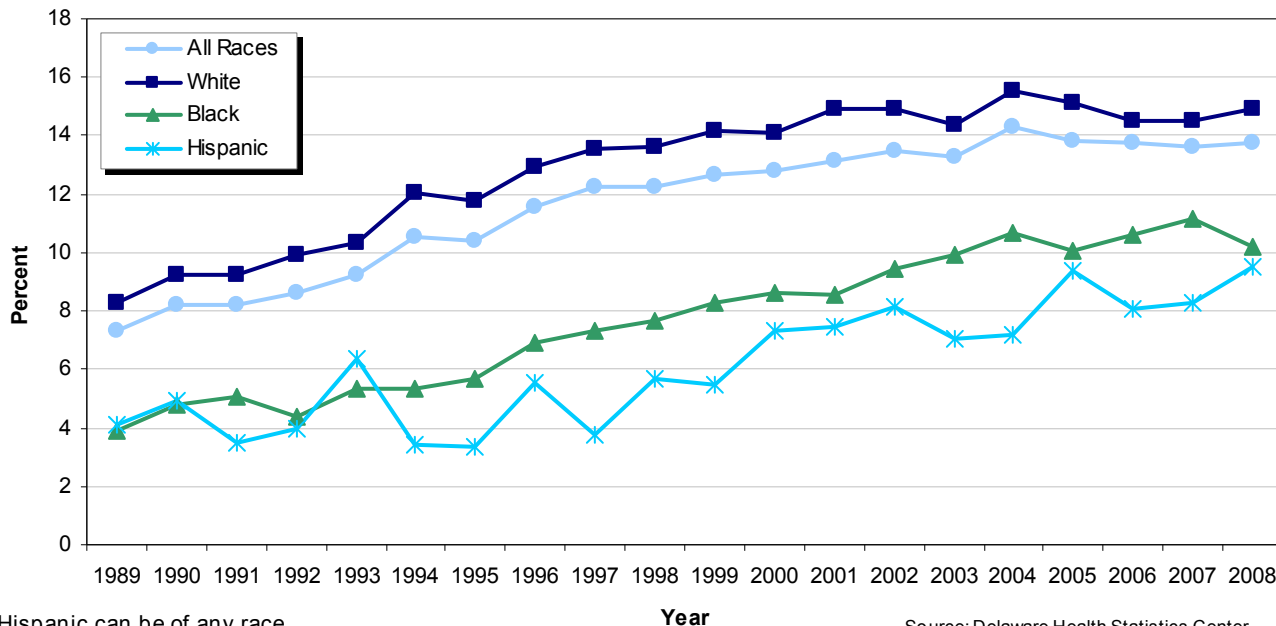


Source: Delaware Health Statistics Center

LIVE BIRTHS

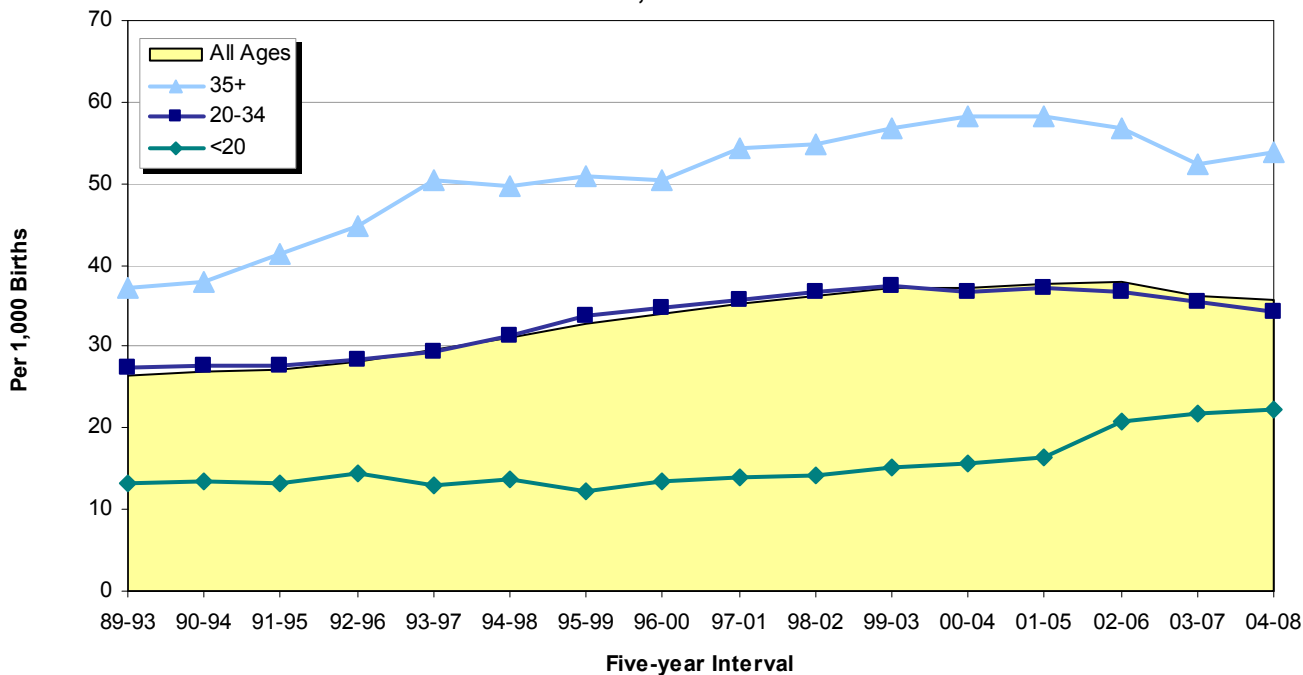
The proportion of births to women 35 and older has increased 88 percent since 1989, though there has been little change in the most recent five years. This early increase was apparent in births to white, black and Hispanic women.

Annual Percent of Live Births to Women 35 or Older by Race and Hispanic Origin*
Delaware, 1989-2008



Overall, the rate of plural births increased 35 percent between 1989-1993 and 2004-2008, and the impact of mother's age on the plural birth rate became more pronounced. In 2004-2008, older mothers (35+) had the highest plural birth rates, at 54 twins per 1000 births, more than double that of mothers under 20, and 57 percent higher than mothers 20-34.

Five-year Average Plural Birth Rate by Age of Mother
Delaware, 1989-2008

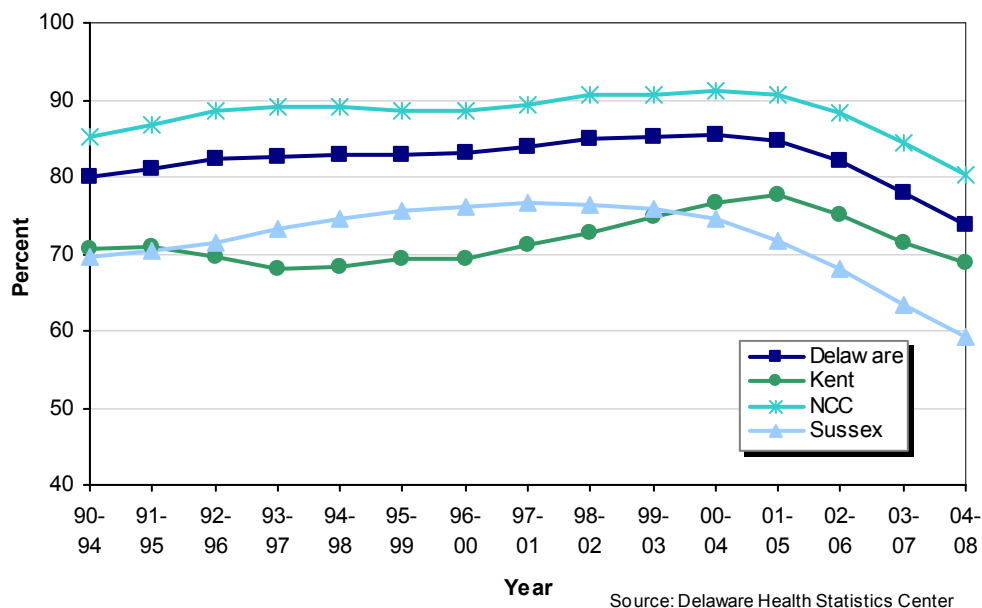


LIVE BIRTHS

After increasing steadily through the 1990s and then leveling off between 1998-2002 to 2001-2005, first trimester prenatal care attainment in Delaware decreased for the third consecutive time period, to 74 percent in 2004-2008.

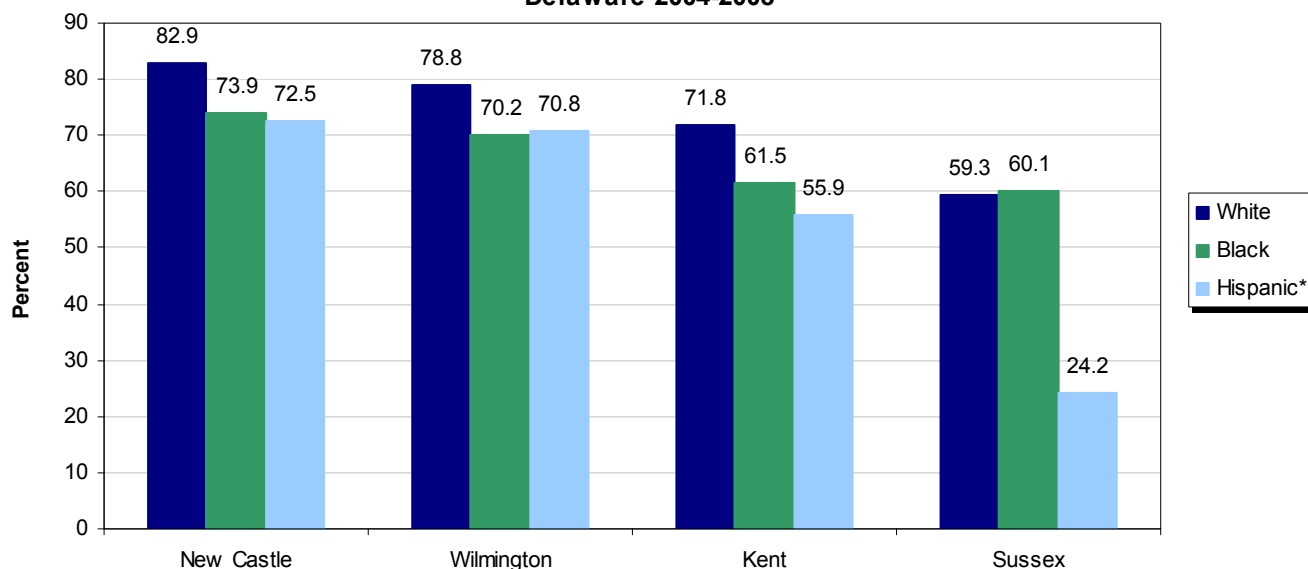
Since 2001-2005, each of the three counties and Wilmington experienced decreases in the percentage of mothers receiving prenatal care in the first trimester, though in Sussex County the decline had begun in 1998-2002. In 2004-2008, prenatal care attainment in the first trimester ranged from 59.3 percent in Sussex County to 80.2 percent in New Castle County.

Five-Year Average Percentage of Births to Mothers Beginning Prenatal Care in the First Trimester Delaware and Counties, 1990-2008



The graph below illustrates how the percentages of prenatal care differ between the counties and their racial and ethnic groups. New Castle County had the highest rates of women receiving prenatal care in the first trimester, regardless of race; isolating Wilmington produced similar results. Not only did Sussex County have the lowest percentage of mothers receiving prenatal care in the first trimester, but it also had the greatest difference between Hispanic mothers and white and black mothers.

Five-Year Average Percentage of Mothers Receiving PNC in First Trimester by County and Race Delaware 2004-2008

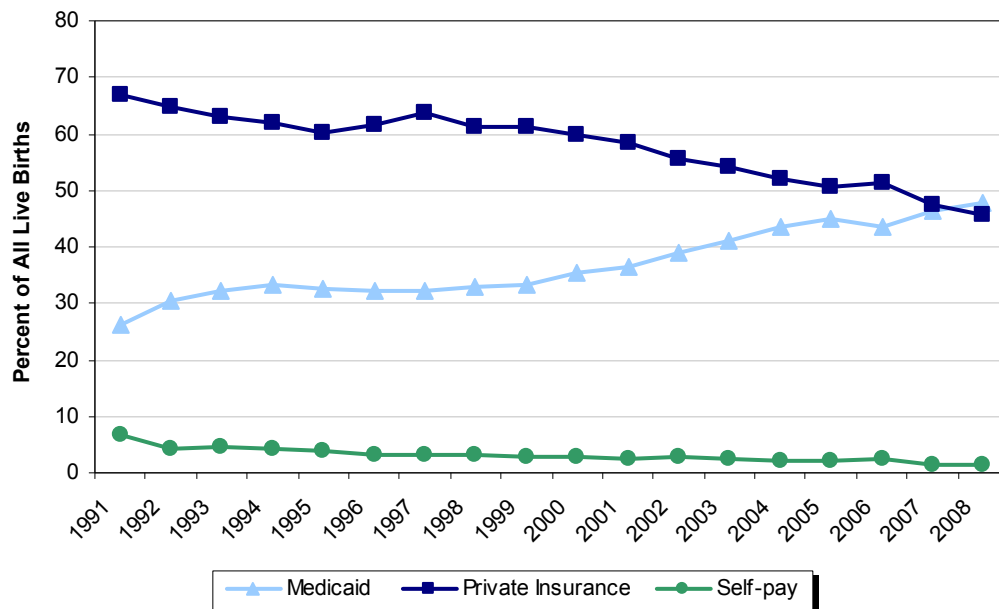


LIVE BIRTHS

In 2008, 93 percent of live births had either private insurance or Medicaid listed as the primary source of payment; the remaining 7 percent were split between other government coverage and self-pay.

- Medicaid was the primary source of payment for the majority of mothers under 20, covering 80 percent of both black and white mothers, and 81 percent of mothers of other races.
- Among women of all ages, Medicaid covered nearly two-thirds of all deliveries for black mothers.

**Percent of Births by Source of Payment for Delivery
Delaware, 1991-2008**

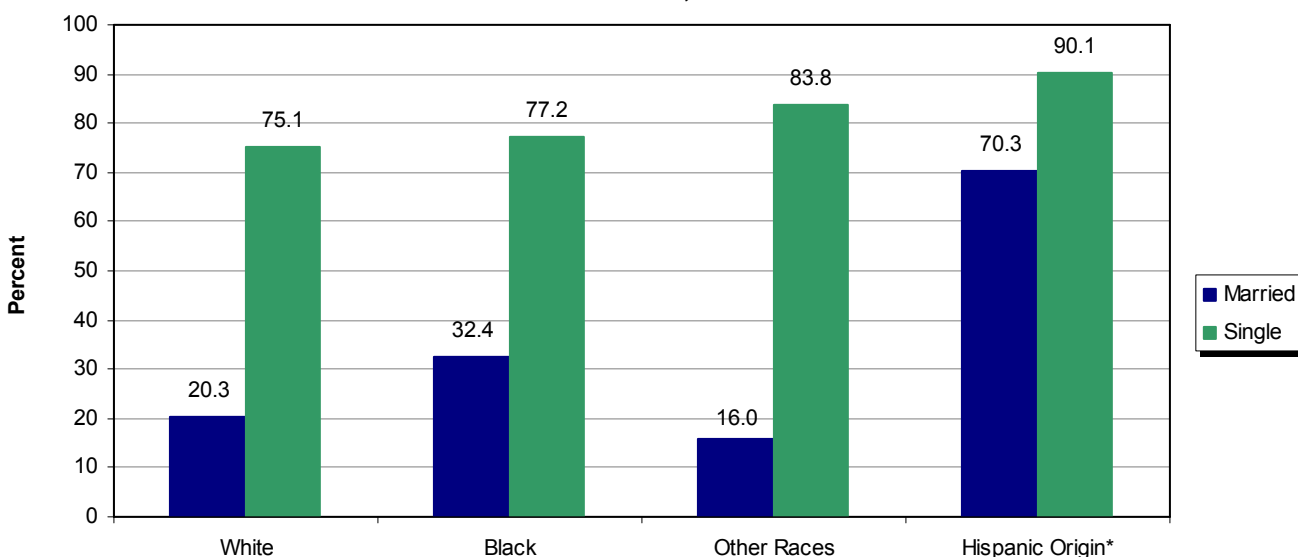


Source: Delaware Health Statistics Center

Marital status has a tremendous effect on the use of Medicaid as the primary source of payment for delivery:

- 20.3 percent of white married women used Medicaid as their primary source of payment, but that number more than tripled, to 75.1 percent, for single white women.
- 32.4 percent of black married women used Medicaid as their primary source of payment, but that number more than doubled, to 77.2 percent, for single black women.
- 70.3 percent of Hispanic married women used Medicaid as their primary source of payment; that number increased to 90.1 percent for single Hispanic women.
- 16.0 percent of married women of other races used Medicaid as their primary source of payment, but that number was five times higher, at 83.8 percent, if the mother was single.

**Percent of Births by Race, Hispanic Origin, Marital Status,
and Medicaid as Primary Source of Payment
Delaware, 2008**



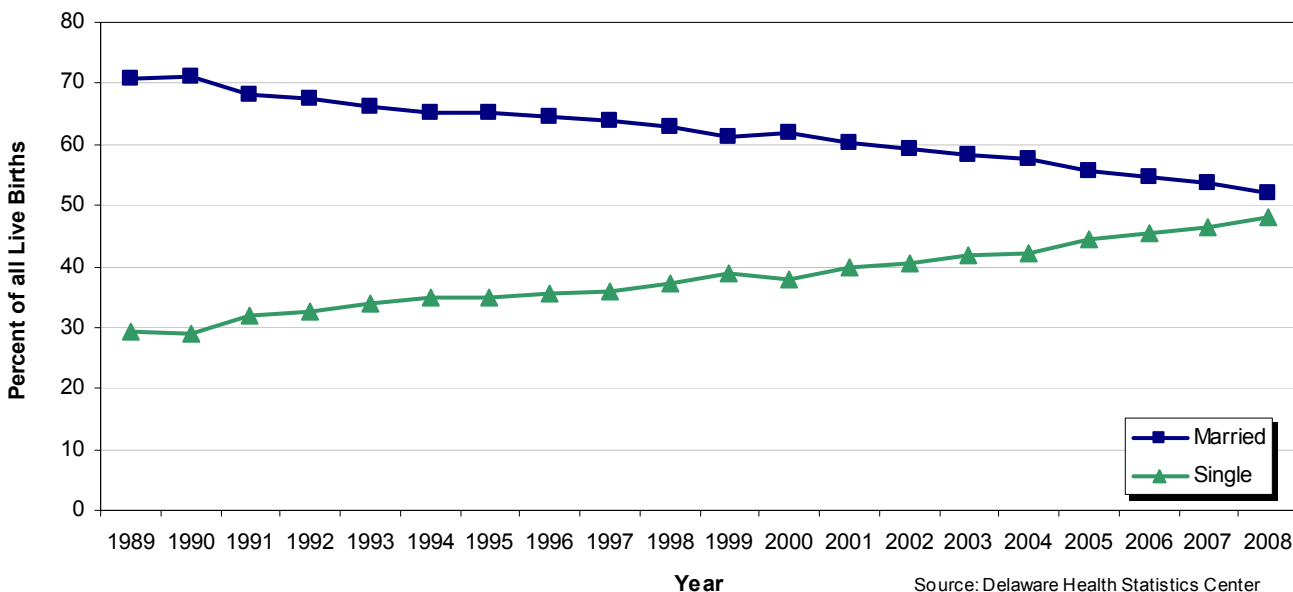
*Hispanic can be of any race

Source: Delaware Health Statistics Center

LIVE BIRTHS

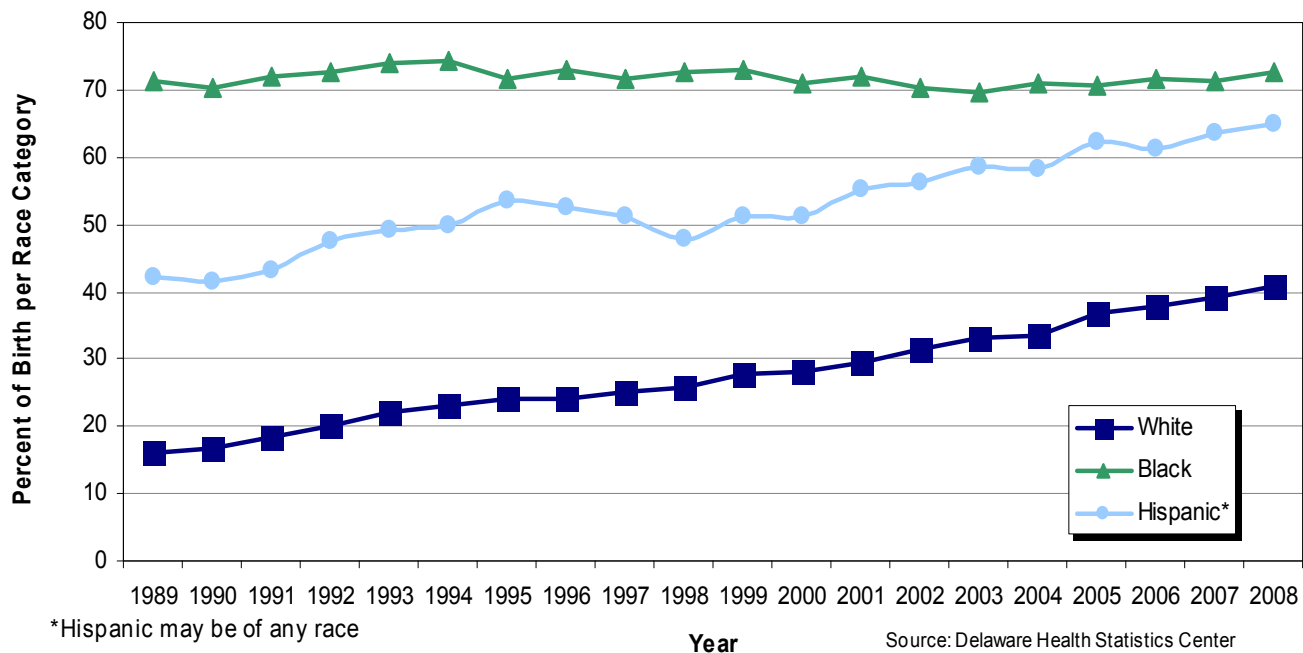
The percent of births to unmarried women rose again in 2008, to 48 percent of all births. The steadily increasing trend began in 1991, when 31.8 percent of all births were to unmarried women.

**Annual Percent of Births by Mother's Marital Status
Delaware, 1989-2008**



However, this shift in the distribution of mother's marital status was only apparent in births to white and Hispanic women, whose percentage of births to unmarried women increased from 16 percent to 41 percent, and 42 percent to 65 percent from 1989 to 2008. During this same time period, the percent of births to unmarried black women has remained stable, at approximately 72 percent.

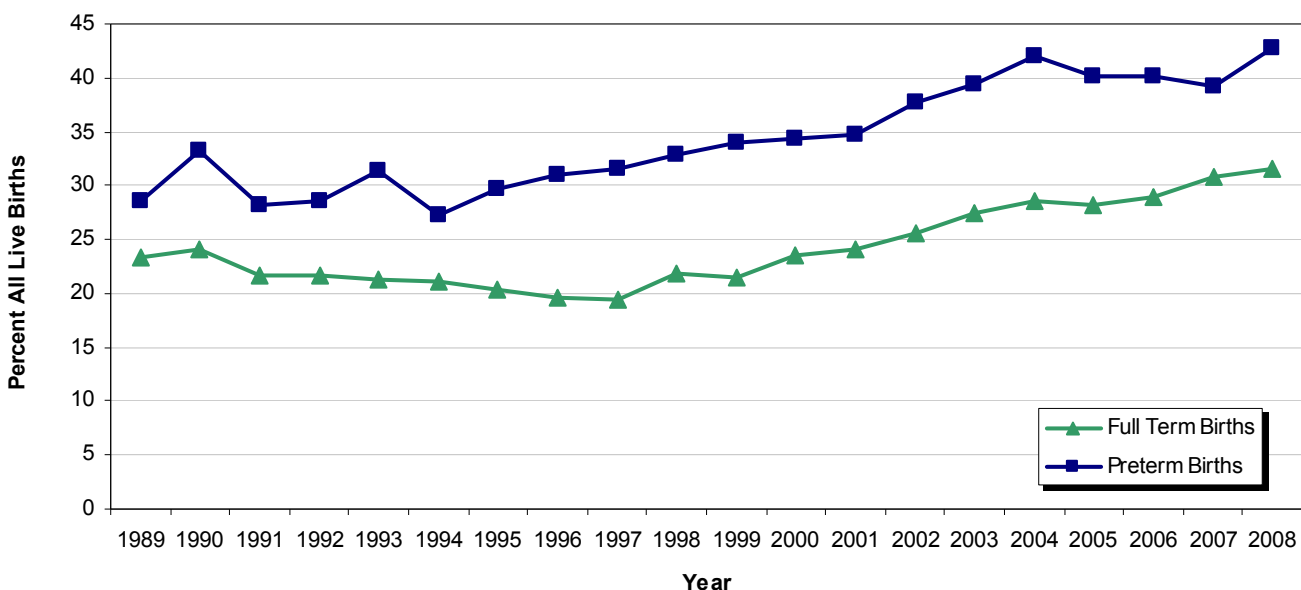
**Percent of Live Births to Unmarried Women by Race and Ethnicity
Delaware, 1989-2008**



LIVE BIRTHS

From 1997 to 2008, the rate of cesarean deliveries increased 57 percent, to 33 per 100 live births. Both preterm and term births demonstrated increasing trends in cesarean deliveries during this same period; although the cesarean section rate for term (37+ weeks of gestation) births rose 62 percent, to 32, the c-section rate for preterm (<37 weeks gestation) births remained significantly higher, at 42.7 per 100 live births.

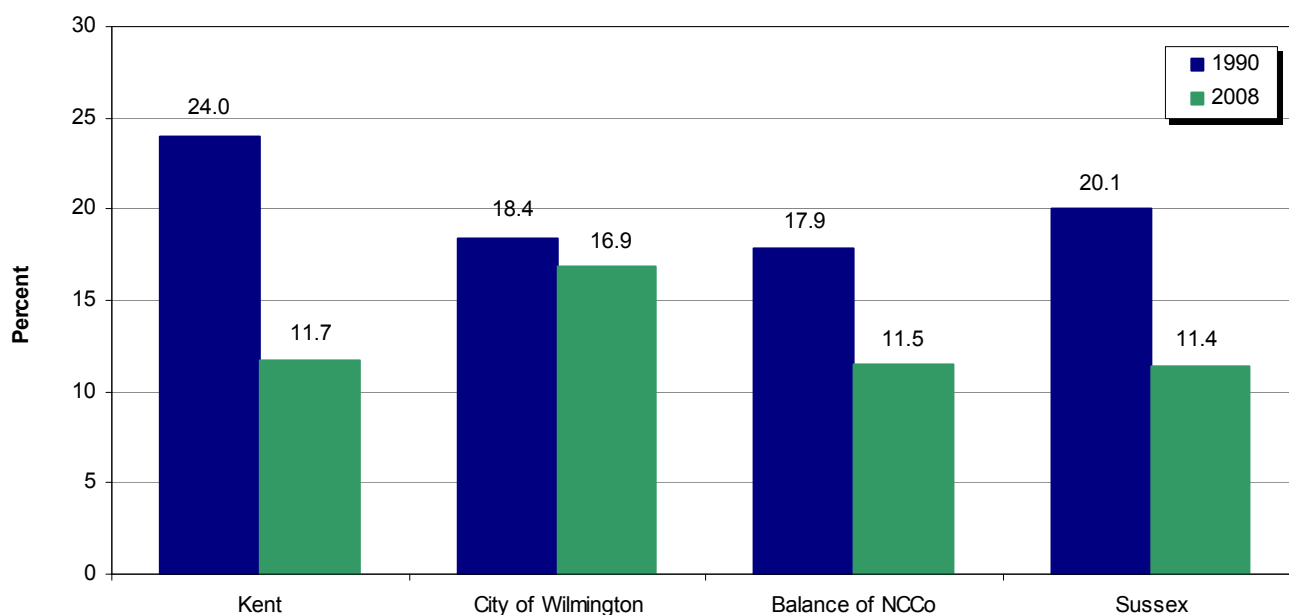
**Annual Percent of Live Births by Gestational Category
and Delivery by Cesarean Section
Delaware, 1989-2008**



Source: Delaware Health Statistics Center

From 1990 to 2008, the percentage of Delaware mothers who used tobacco while pregnant decreased in the three counties and in the city of Wilmington. In 2008, the city of Wilmington had the highest percentage of mothers who smoked while pregnant (16.9).

**Percent of Mothers who Smoked while Pregnant
Delaware Counties and City of Wilmington, 1990 and 2008**



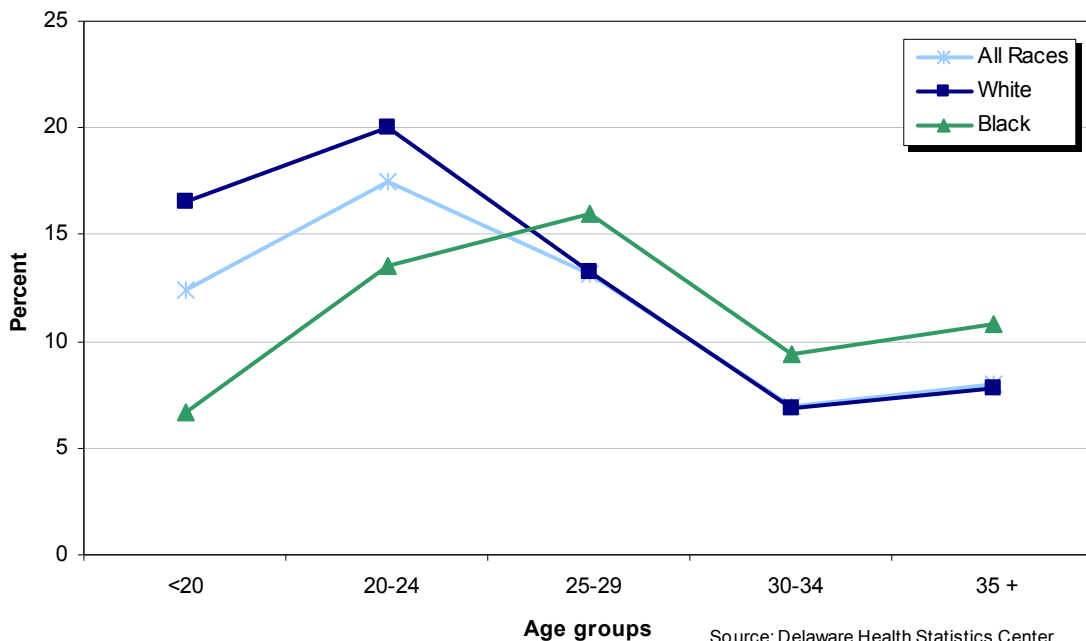
Source: Delaware Health Statistics Center

LIVE BIRTHS

The largest percent of mothers who smoked while pregnant were white mothers in 20-24 age group.

In the under 20 and 20-24 age groups, white mothers were more likely than black mothers to smoke while pregnant. In the 25 and older age groups, black mothers were more likely to smoke while pregnant.

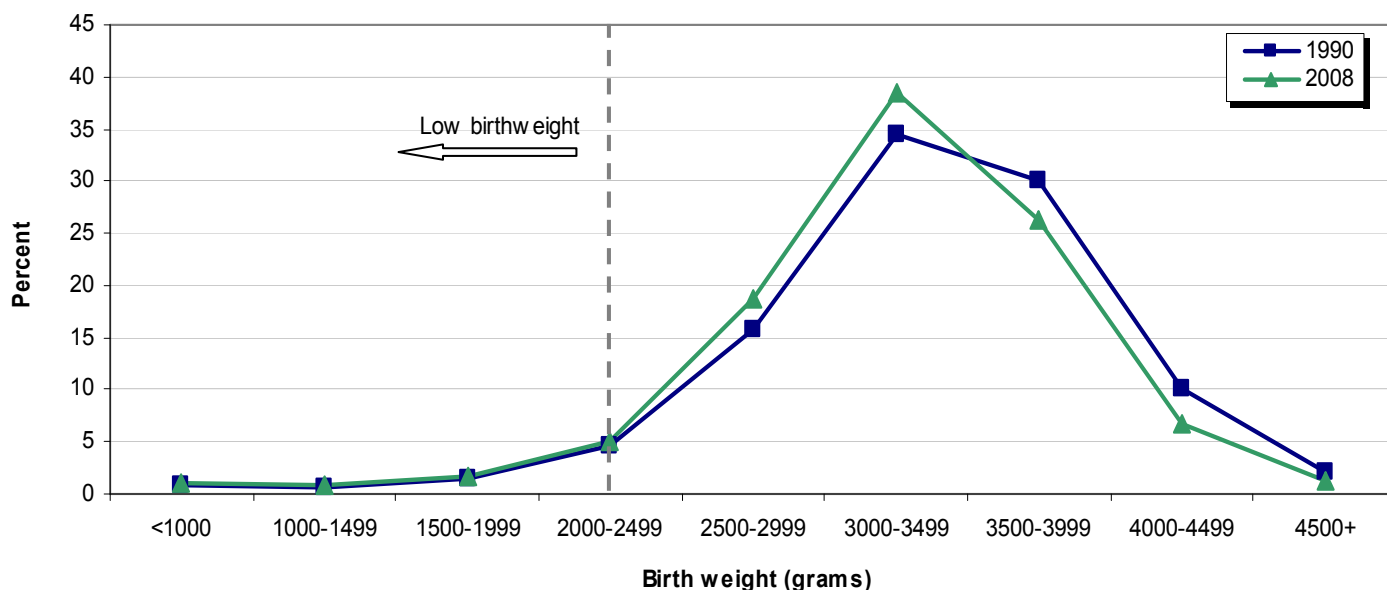
**Percent of Mothers who Smoked While Pregnant by Age Group and Race
Delaware, 2008**



In 2008, 13.2 percent of Delaware women who smoked while pregnant gave birth to low birthweight babies (< 2500 grams), versus the significantly lower percentage (7.8) of non-smokers who gave birth to low birthweight babies.

The percent distribution of births by birthweight did not differ significantly between 1990 and 2008. The greatest percentage of births fell within the 3000 to 3499 gram range.

**Percent Distribution of Births by Birthweight
Delaware, 1990 and 2008**

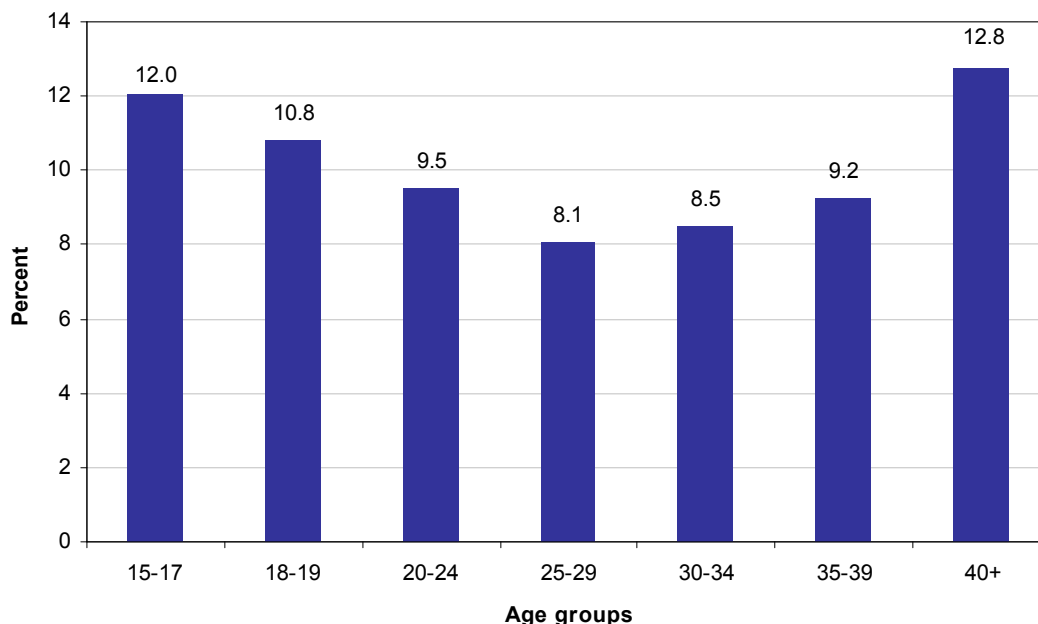


LIVE BIRTHS

From 2003-2007 to 2004-2008, the five-year percent of low birthweight (LBW) births and very low low birthweight (VLBW) births remained relatively stable at 9.1 and 2.0, respectively.

Percentages of LBW births were greatest for mothers in the 40 and older age groups (12.8 percent).

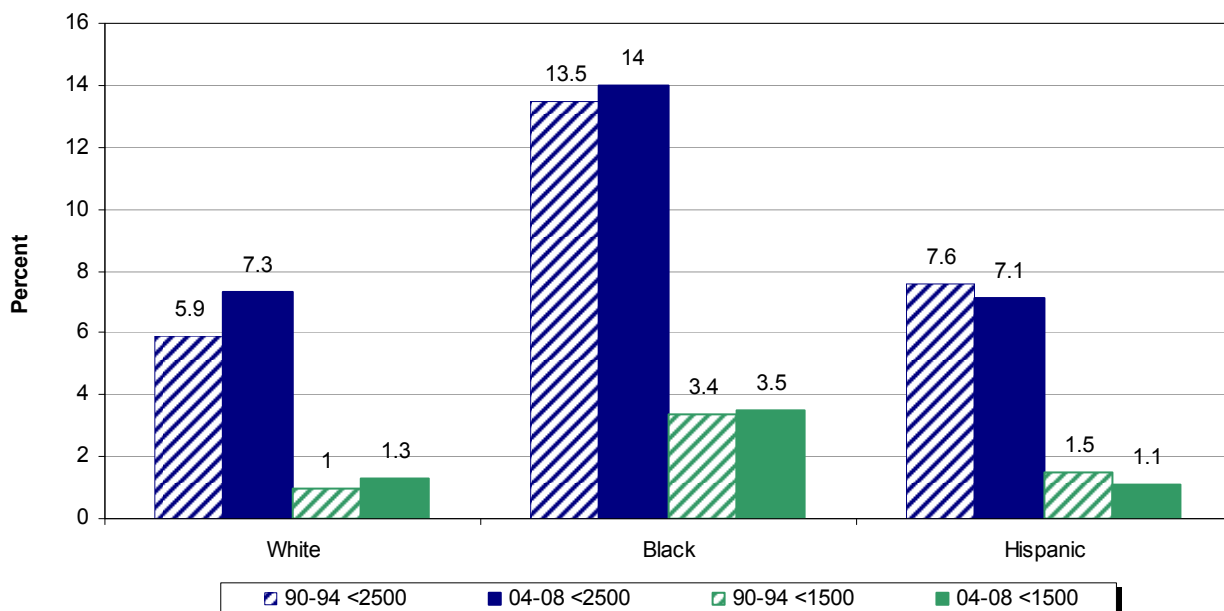
Five-year Percent of Low Birthweight Births (<2500 grams) by Mother's Age Delaware, 2004-2008



Source: Delaware Health Statistics Center

Among mothers of all ages, black mothers had the highest percentage of LBW and VLBW births, at 14.0 percent and 3.5 percent respectively. Between 1990-1994 and 2004-2008, the percentage of black and white infants born at low birthweight increased. During the same time period, the percentage of LBW births to Hispanic women decreased.

Five-year Average Percent of Low (<2500 grams) and Very Low Birthweight Births (<1500 grams) by Race and Hispanic Origin Delaware, 1990-1994 and 2004-2008

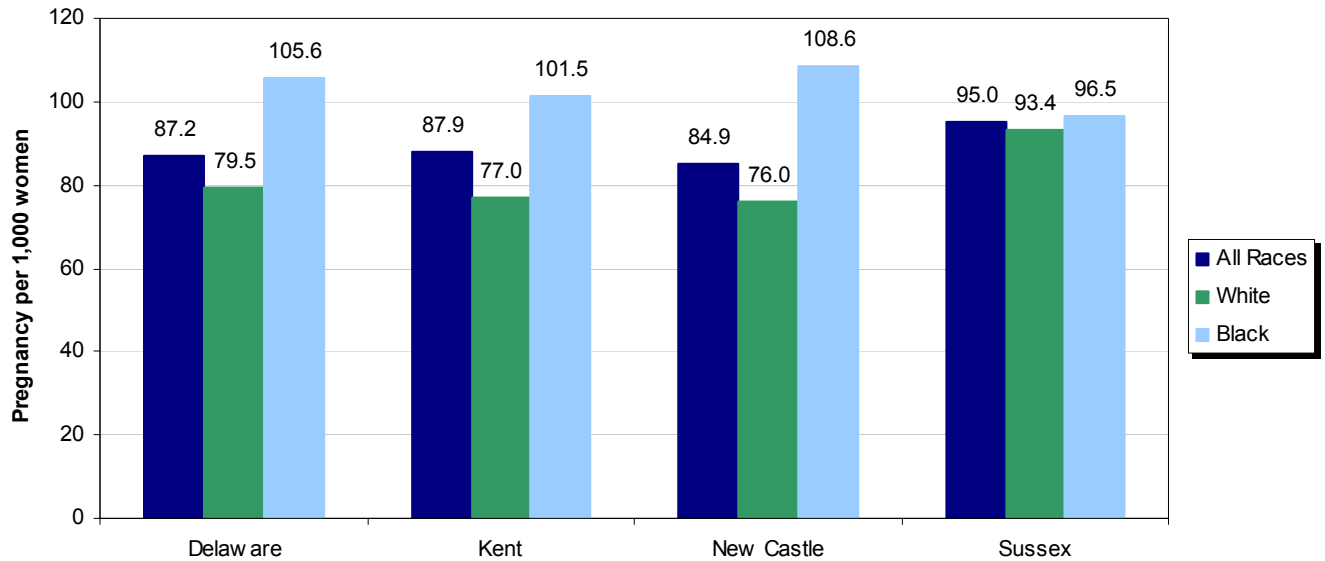


Source: Delaware Health Statistics Center

REPORTED PREGNANCIES

At 87 reported pregnancies per 1,000 women ages 15-44, the 2004-2008 rate of reported pregnancies continued its slight upward trend. Although pregnancy rates of black mothers were significantly higher than those of white mothers in every county, New Castle County's difference between white (76) and black (108.6) was the largest.

**Five-year Average Rate of Reported Pregnancies by Race
Delaware and Counties, 2004-2008**

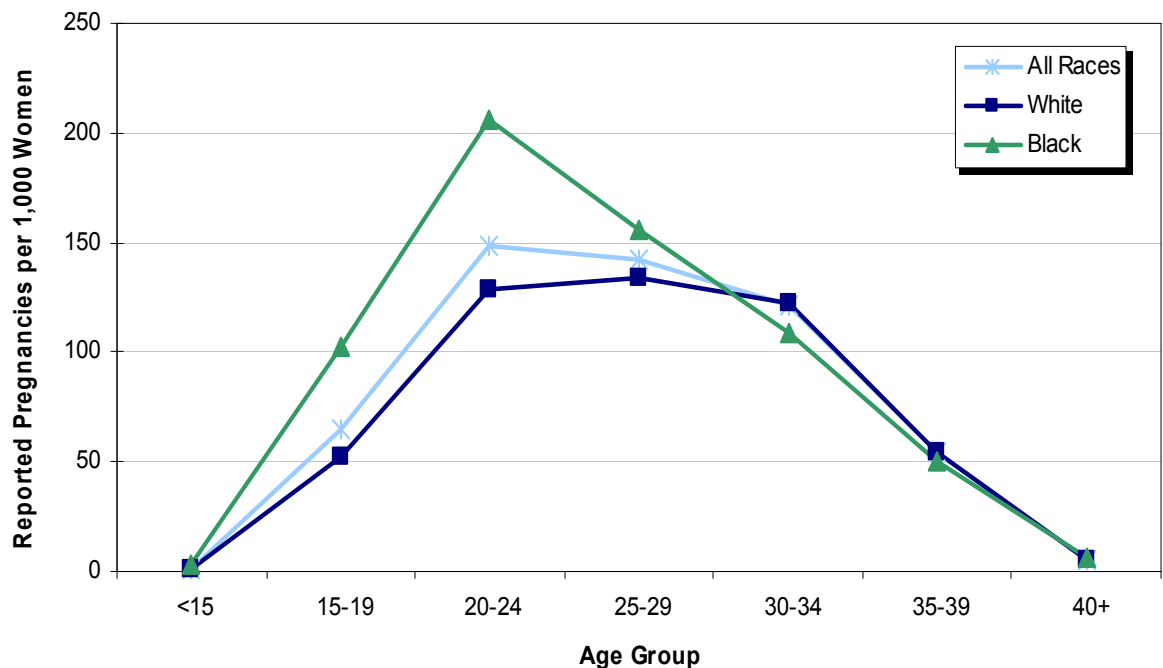


Source: Delaware Health Statistics Center

Overall, the 20-24 year age group had the highest pregnancy rate, with 148 pregnancies per 1,000 women in 2004-2008.

For all of the age groups under 30, black women had higher pregnancy rates than white women; for the 30-34 and 35-39 age groups, white women had higher pregnancy rates.

**Five-year Average Rate of Reported Pregnancies by Age and Race
Delaware, 2004-2008**

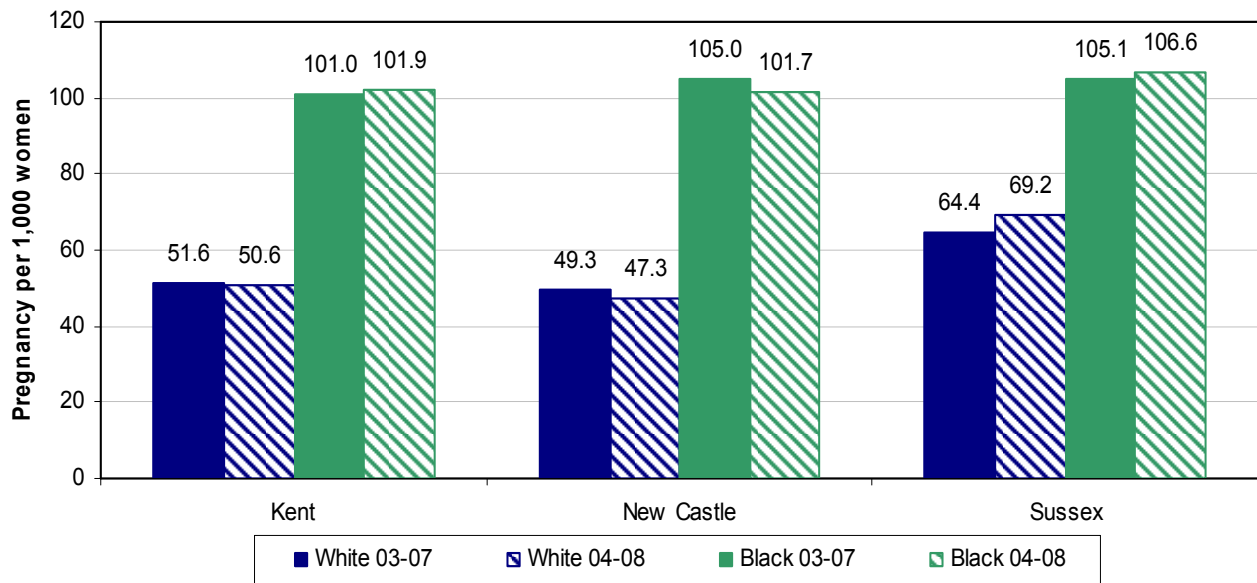


Source: Delaware Health Statistics Center

REPORTED PREGNANCIES

White teen (15-19) pregnancy rates in Sussex County rose 7.4 percent from 2003-2007 to 2004-2008; teen pregnancy rates for all other race and county groups declined or remained relatively stable. With the exception of Sussex County, where white teen pregnancy rates were the highest, black teen pregnancy rates were nearly twice that of white teens.

**Five-year Average Teenage (15-19) Pregnancy Rates by County and Race
Delaware, 2003-2007 and 2004-2008**



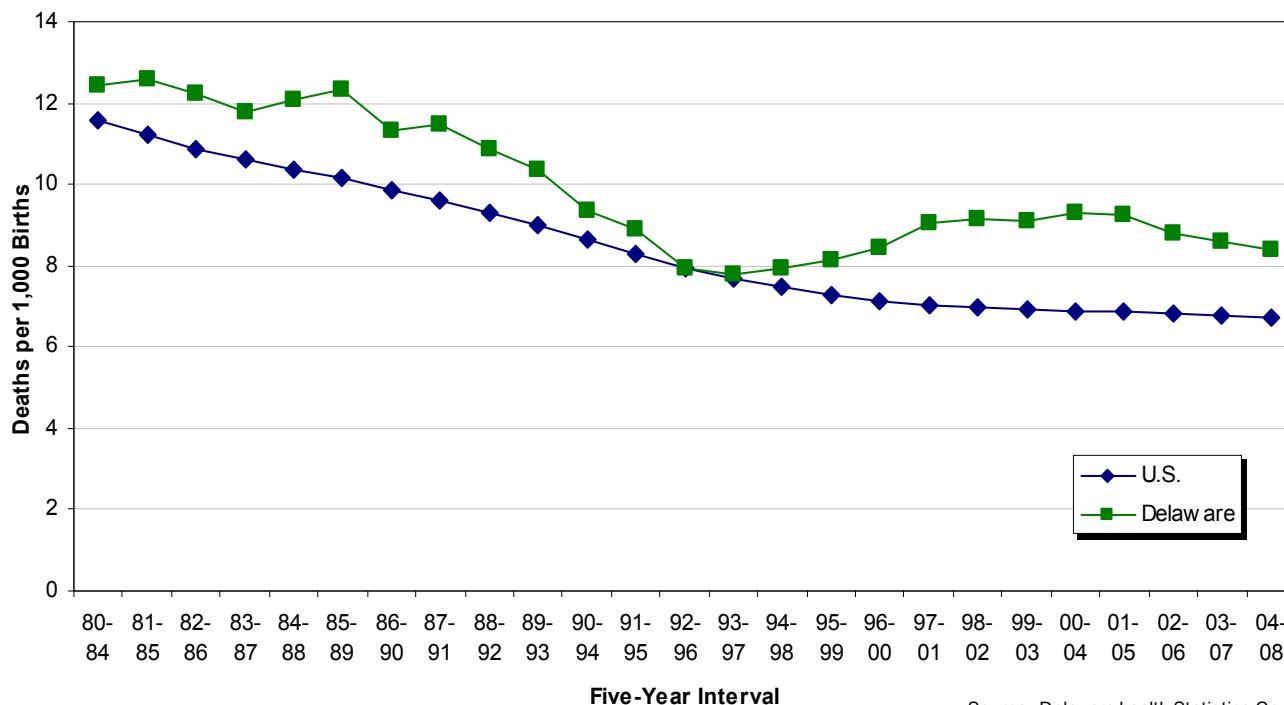
Source: Delaware Health Statistics Center

- The five-year average (2004-2008) pregnancy rate for 15-17 year olds was lowest in Kent County, with 31.9 pregnancies per 1,000 females, followed by New Castle County, with a rate of 36.6, and Sussex County, with a rate of 40.7 (see Table D-8). For New Castle County, the 2004-2008 rate was lower than the 2003-2007 rates; the rates for Kent and Sussex Counties remained stable.
- The five-year average (2004-2008) pregnancy rate for 18-19 year olds was lowest in New Castle County (101.4 pregnancies per 1,000 females), and highest in Sussex County (130.7). See Table D-8.
- In 2008, there were 4,603 abortions performed in Delaware, 3,307 to Delaware residents and 1,296 to non-residents.
- Over half of all pregnancies to females under 15 ended in termination.
 - ⇒ 60 percent of pregnancies to white females under 15, and 48 percent of pregnancies to black females under 15 ended in terminations.
- Married women undergo significantly fewer terminations than their single counterparts.
 - ⇒ 3.9 percent of pregnancies to white married women ended in termination and 10.3 percent of pregnancies to black married women ended in termination.
 - ⇒ When the women were unmarried, these numbers increased to 31.1 and 36.2 percent respectively.
- There were 77 fetal deaths of Delaware residents in 2008.
- There were 12,016 live births to Delaware residents in 2008.

INFANT MORTALITY

Delaware's infant mortality rate (IMR) decreased for the third consecutive time period. From its 2000-2004 peak of 9.3, it declined 10 percent to 8.4 infant deaths per 1000 live births in 2004-2008. At 6.7, the U.S. rate remained significantly lower than the Delaware rate.

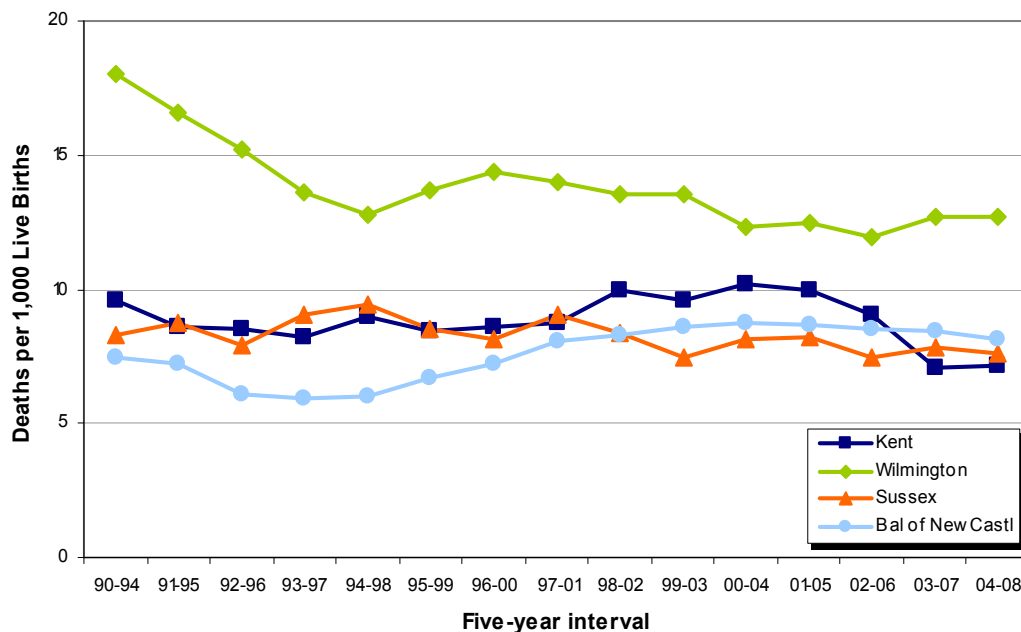
**Five-year Average Infant Mortality Rates
Delaware and U.S., 1980-2008**



Source: Delaware health Statistics Center

Between 2003-2007 and 2004-2008, IMRs for each of Delaware's counties decreased slightly or remained stable. Overall, IMRs for the city of Wilmington were unchanged, while those for the balance of New Castle County experienced a small decline.

**Five-year Average Infant Mortality Rates
Delaware Counties and City of Wilmington, Delaware, 1990-2008**

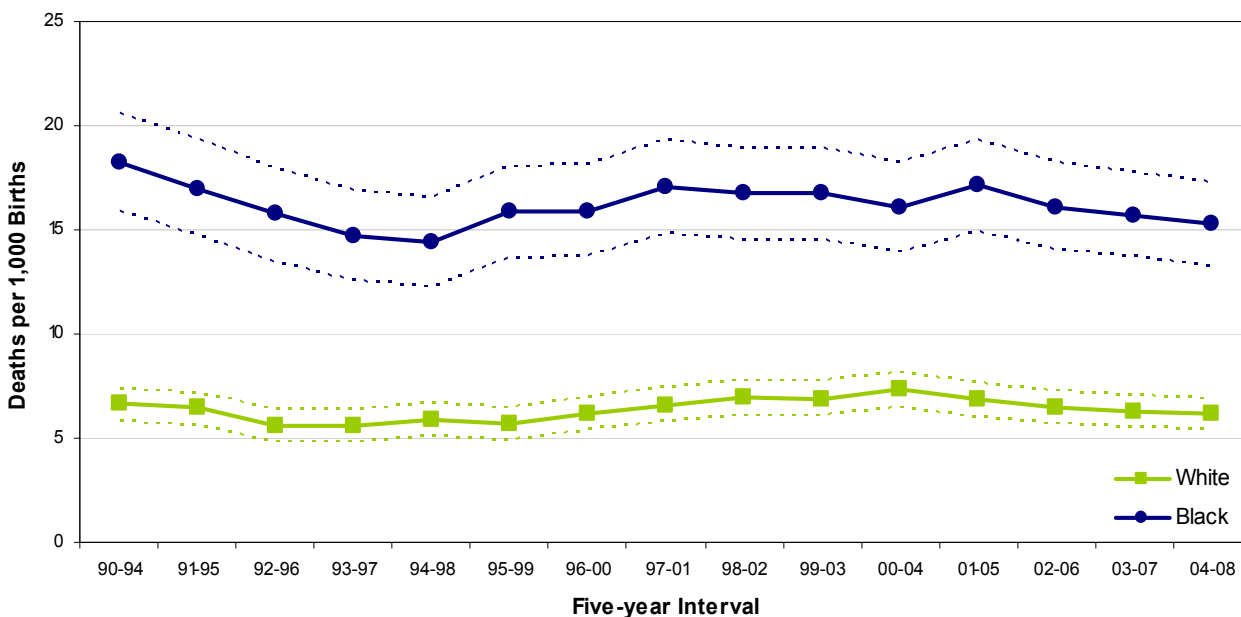


Source: Delaware health Statistics Center

INFANT MORTALITY

As shown in the graph below, black infants experienced significantly higher mortality rates than white infants, and from 1990-1994 to 2004-2008, black IMRs were anywhere from 2.2 to 2.8 times that of white IMRs.

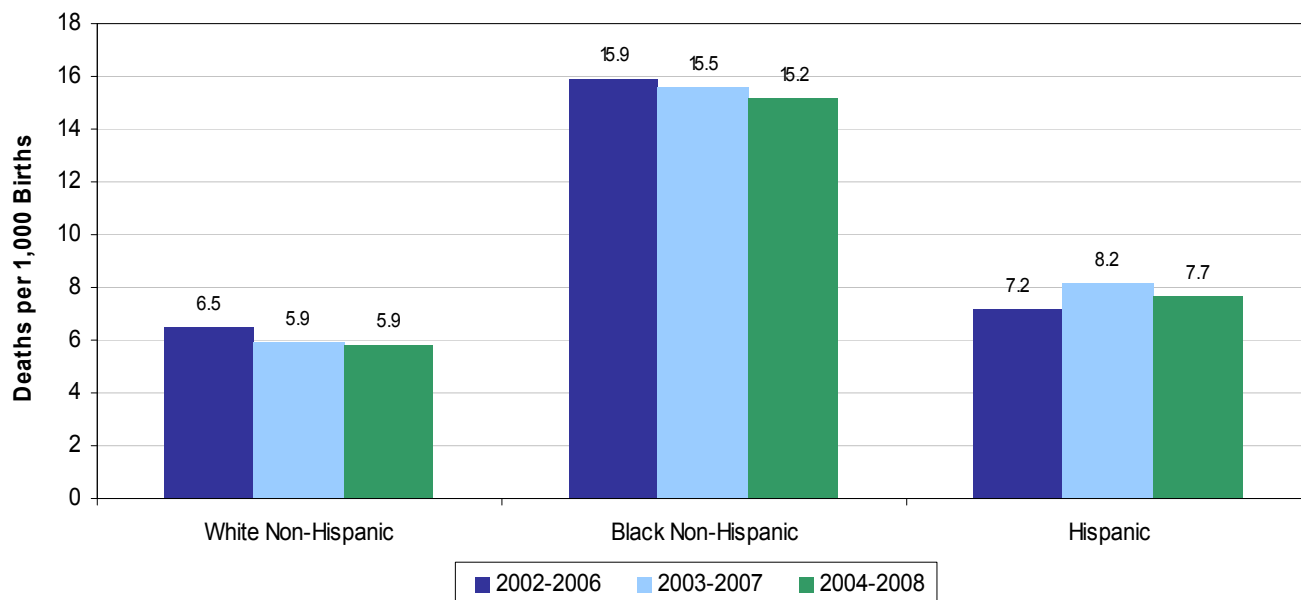
Five-year Average Black and White Infant Mortality Rates with Confidence Intervals
Delaware, 1990-2008



Source: Delaware health Statistics Center

Significant disparities existed between black non-Hispanic IMRs and each of the two other groups, white non-Hispanic and Hispanic. Black non-Hispanics had the highest IMRs in all three time periods, and their rate of 15.1 deaths per 1,000 live births in 2004-2008, was 2.6 times the white non-Hispanic rate of 5.9 and nearly twice the Hispanic rate of 7.7.

Five-year Average Infant Mortality Rates by Race and Hispanic Origin
Delaware, 2002-2008



Source: Delaware health Statistics Center

INFANT MORTALITY

Not only did IMRs vary between counties, but also between races within each county. Black IMRs were consistently higher than white IMRs in all three counties, for every time period. To gauge the disparity between black and white IMRs, disparity ratios¹ were used.

However, as is shown in the graphs to the right, both the disparity ratio and the rates should be considered when examining the issue of infant mortality.

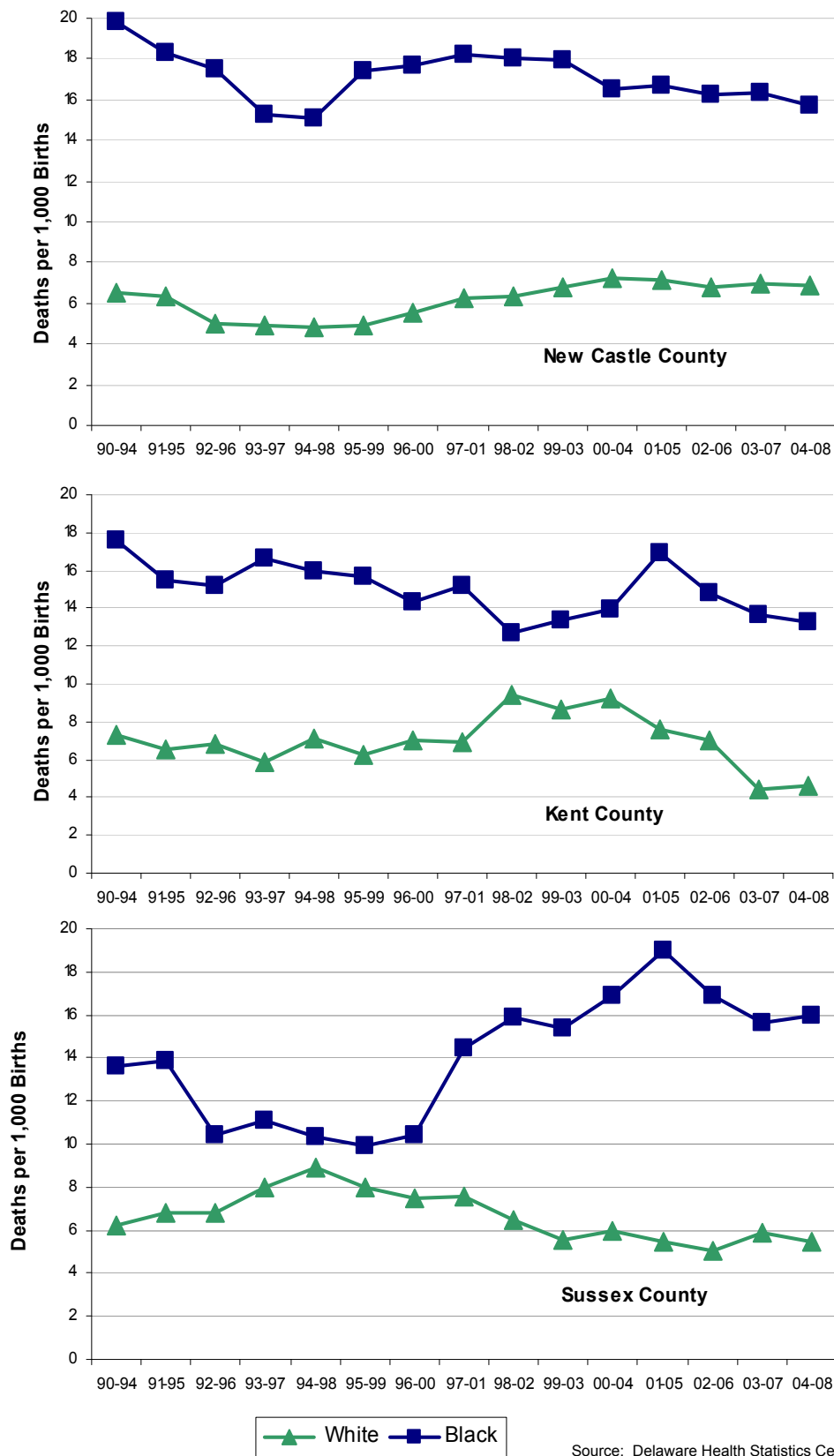
In New Castle County, rates for both races changed very little from 2003-2007 to 2004-2008, and the disparity ratio remained stable at 2.3.

Black and white IMRs remained relatively stable in Kent County; likewise, the disparity ratio changed very little, moving from 3.1 to 2.9.

Sussex County's disparity ratio widened to 2.9 due to a slight decrease in the white IMR and a small increase in the black IMR.

Of the three counties, Sussex had the highest single IMR (15.9 infant deaths per 1,000 live births to black mothers), while Kent had the lowest (4.6 infant deaths per 1,000 live births to white mothers).

Five-year Average Infant Mortality Rates by Race
Delaware Counties, 1990-2008



Source: Delaware Health Statistics Center

1. Disparity ratios were calculated by dividing the black IMR by the white IMR; the resulting number demonstrated the magnitude of difference between black and white.

INFANT MORTALITY- Leading Cause of Death

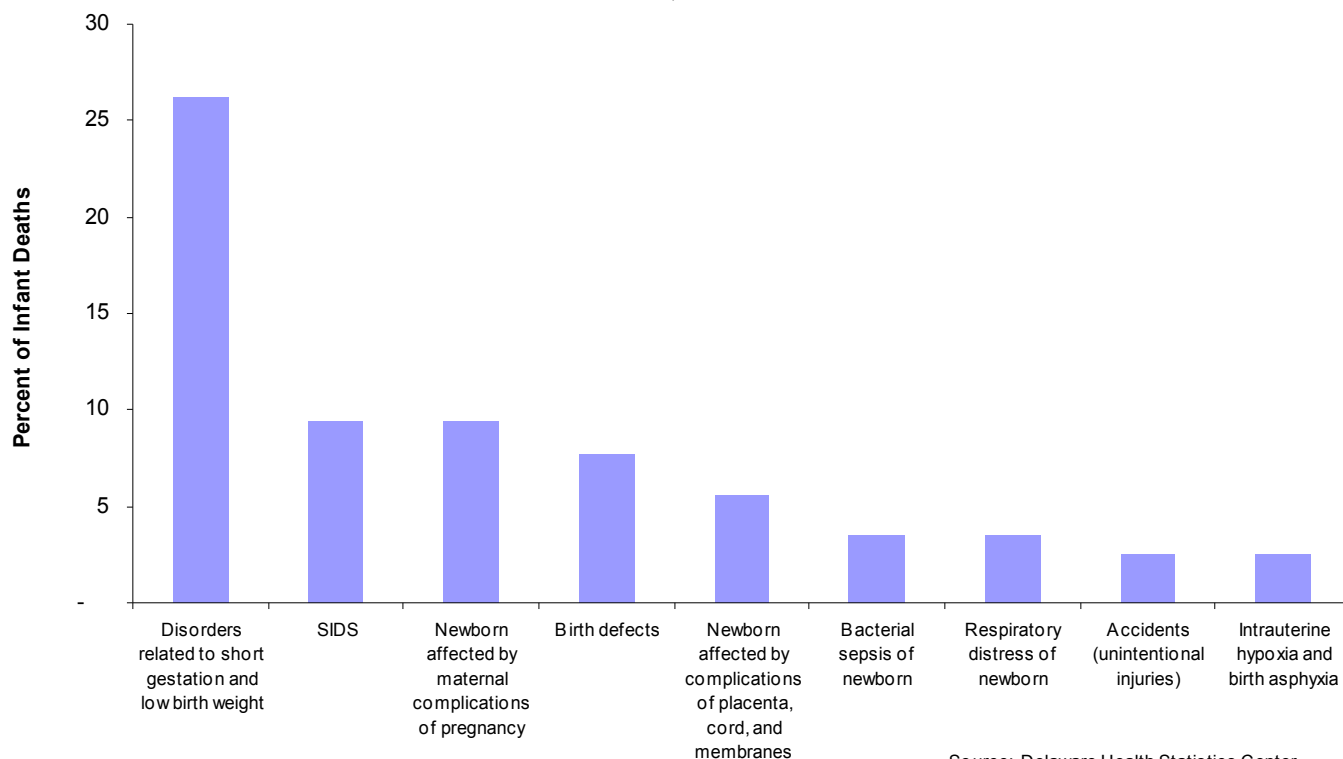
In 2004-2008 the three leading causes of infant death were:

- Disorders related to short gestation and fetal malnutrition (prematurity and low birthweight), which accounted for 24.1 percent of infant deaths,
- Congenital anomalies (birth defects), which accounted for 13.2 percent of infant deaths, and
- Sudden infant death syndrome (SIDS), which accounted for 8.9 percent of infant deaths.

Shown in the graphs below and on the following page are the most frequent causes of death by race. Disorders related to short gestation and low birthweight was the most frequent cause of death for both black and white infants.

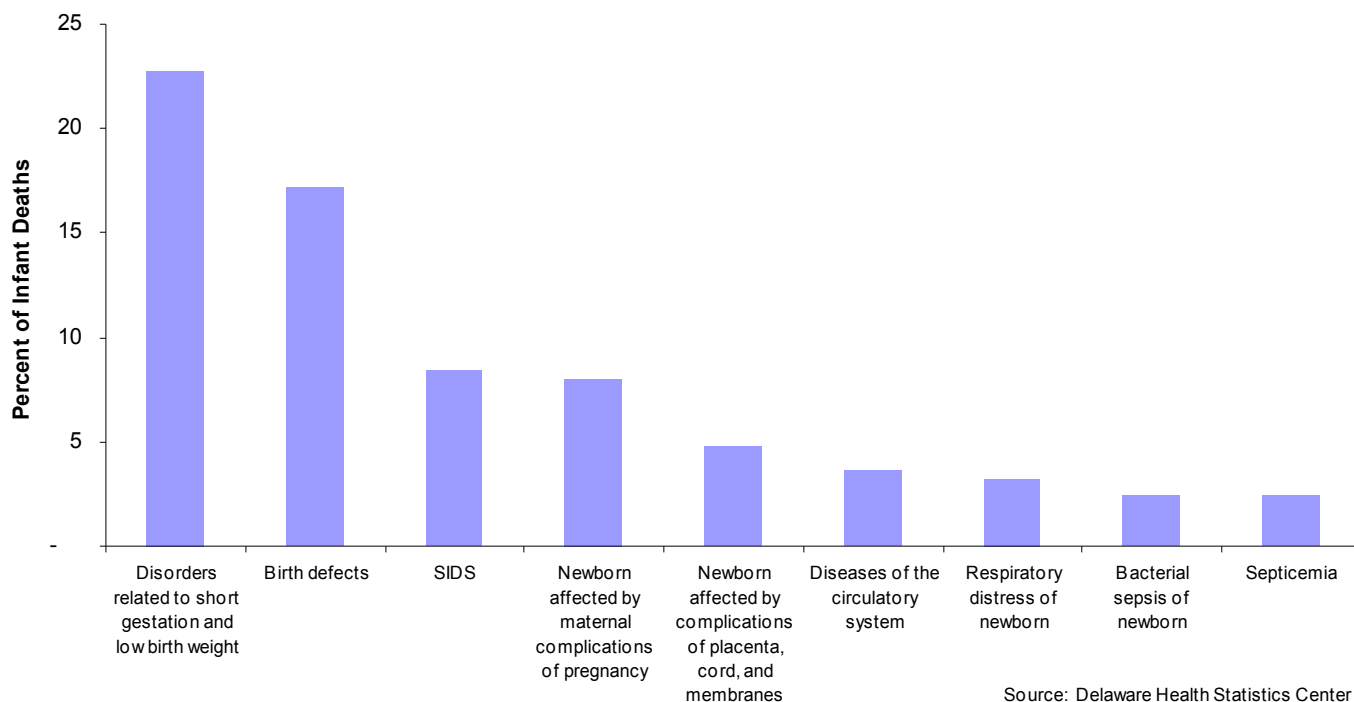
Though the proportions of deaths by race were similar for many of the causes of death, a notable exception was birth defects. While birth defects were responsible for 17.2 percent of all white infant deaths, they accounted for only 7.7 percent of black infant deaths.

**Most Frequent Causes of Black Infant Death
Delaware, 2004-2008**



INFANT MORTALITY- Leading Cause of Death

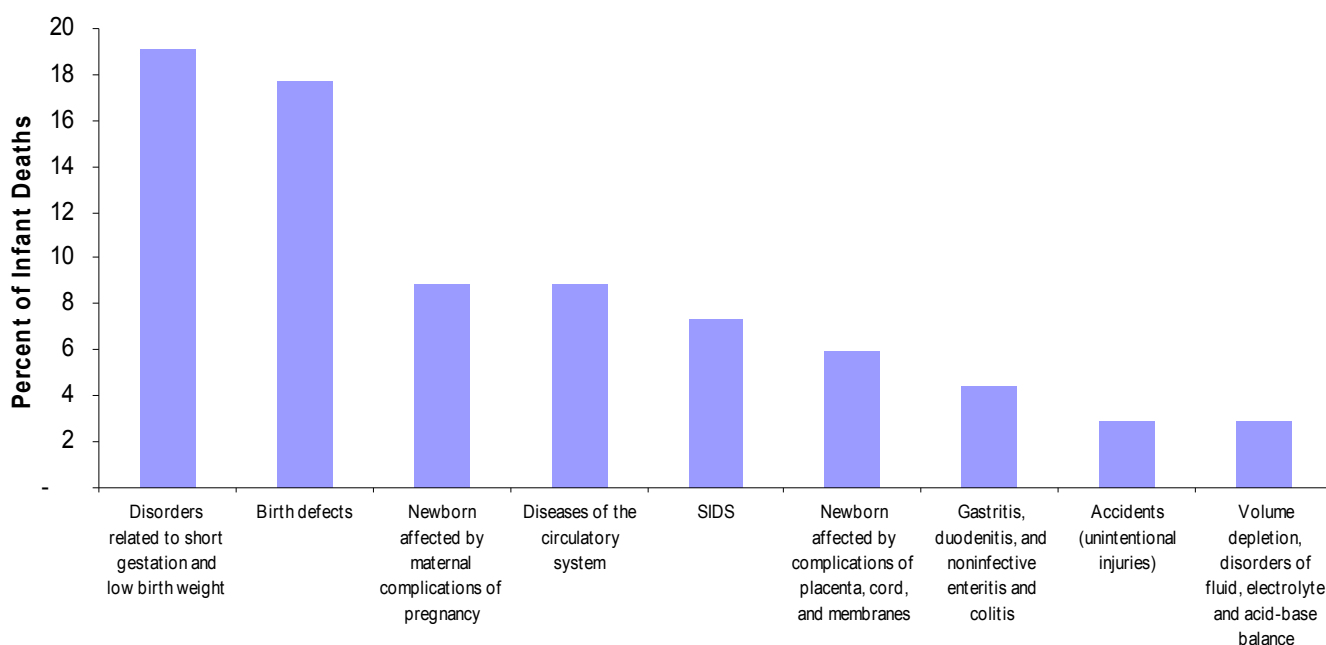
**Most Frequent Causes of White Infant Death
Delaware, 2004-2008**



In the 1989-1993 time period, Hispanics accounted for 3.6 percent of all live births and 3.4 percent of infant deaths, since that time the proportion of births to Hispanic mothers has been increasing. In the most recent five year period, 2004-2008, 15.1 percent of all live births were to Hispanic mothers, and 13.8 percent of all infant deaths were of Hispanic origin.

The leading cause of death for infants of Hispanic origin was disorders related to short gestation and low birthweight, followed by birth defects.

**Most Frequent Causes of Hispanic Infant Death
Delaware, 2004-2008**

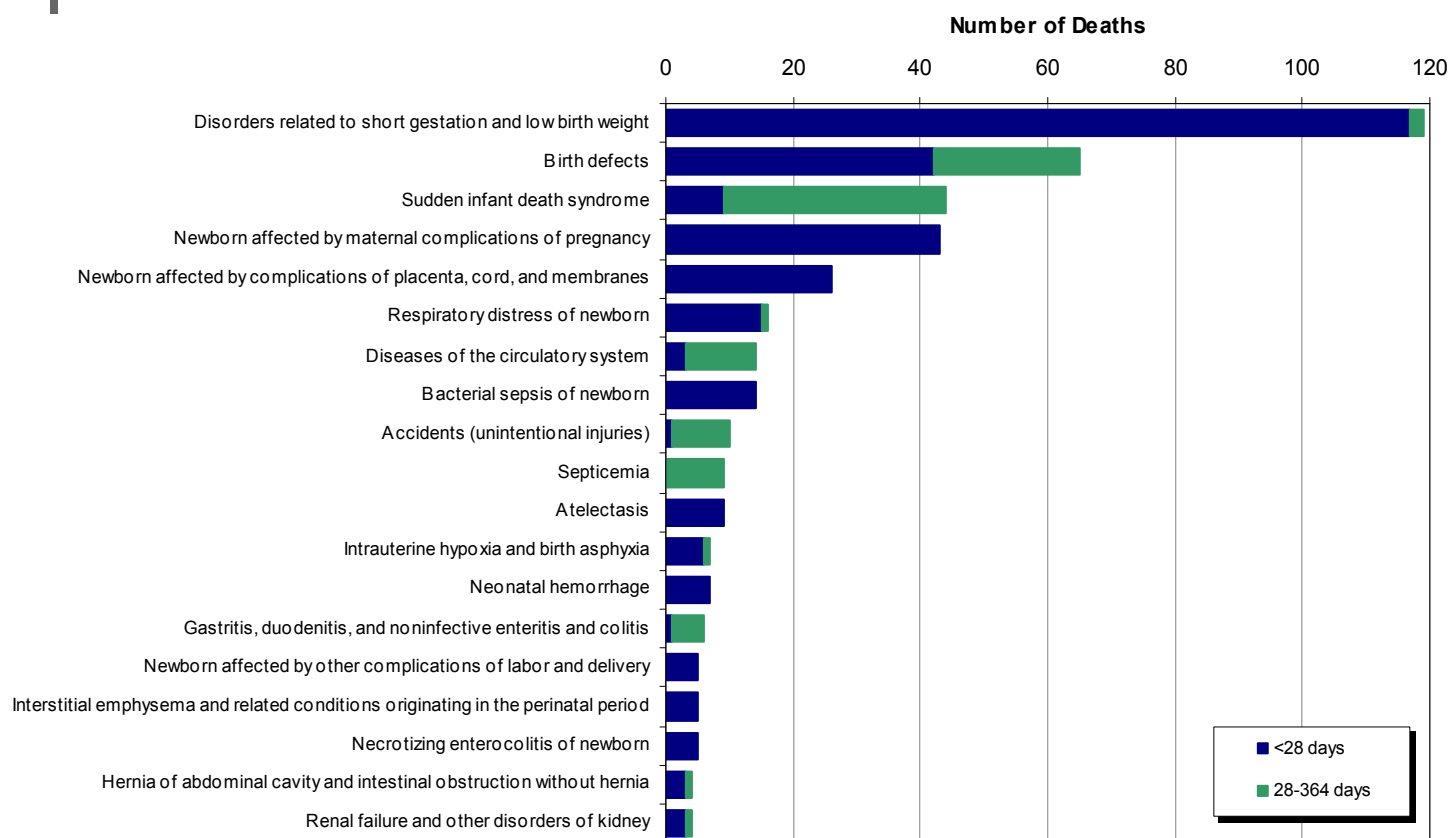


INFANT MORTALITY - Leading Cause of Death

Ninety-four percent of all infant deaths occurred within the first six months of life, 70 percent of all infant deaths occurred within the first 28 days of life, and 41 percent occurred within 24 hours of birth.

The graph below displays deaths by specific cause and the infant's age classification at death, neonatal (<28 days) or postneonatal (28-364 days).

**Most Frequent Causes of Infant Death
Delaware, 2004-2008**



Source: Delaware Health Statistics Center

- Disorders related to short gestation and fetal malnutrition accounted for the greatest number of infant deaths in 2004-2008; all but two of these deaths occurred in the neonatal period.
- Sudden infant death syndrome (SIDS) was the only one of the top five causes of death that had the majority of deaths occurring in the postneonatal period, with a mean age at death of 83 days.

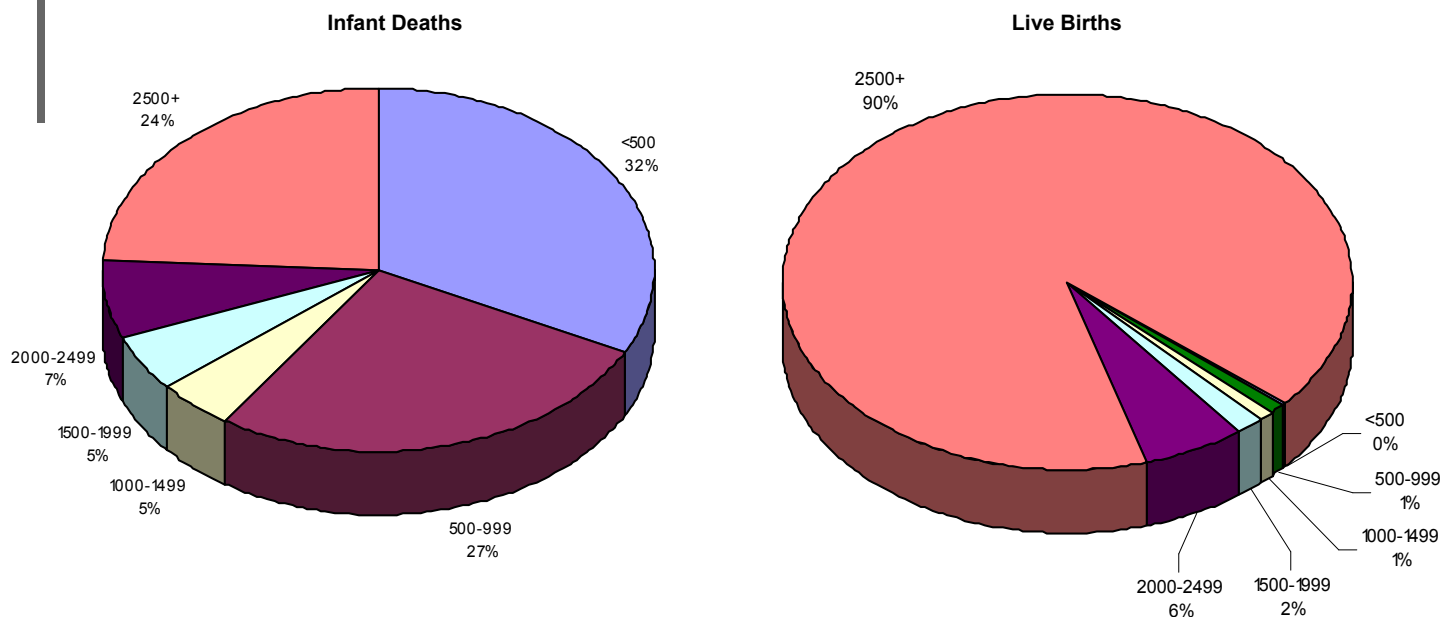
⇒ 43 percent of the SIDS deaths were associated with co-sleeping with adults and/or sleeping on soft surfaces, such as couches and adult beds.

⇒ During that same time period, there were 13 additional infant deaths, coded under a different cause of death, that were associated with co-sleeping and/or sleeping on a soft surface. In total, 6.5 percent of all infant deaths in 2004-2008 were associated with co-sleeping and/or sleeping on a soft surface.

INFANT MORTALITY - Live Birth Cohort

Just over 1 percent of all live births were infants weighing less than 1000 grams, but they accounted for over half (58.9 percent) of all infant deaths in 2003-2007. In total, 9.3 percent of all live births in 2003-2007 were infants of low birthweight (under 2500 grams) and 75.2 percent of infant deaths were low birthweight.

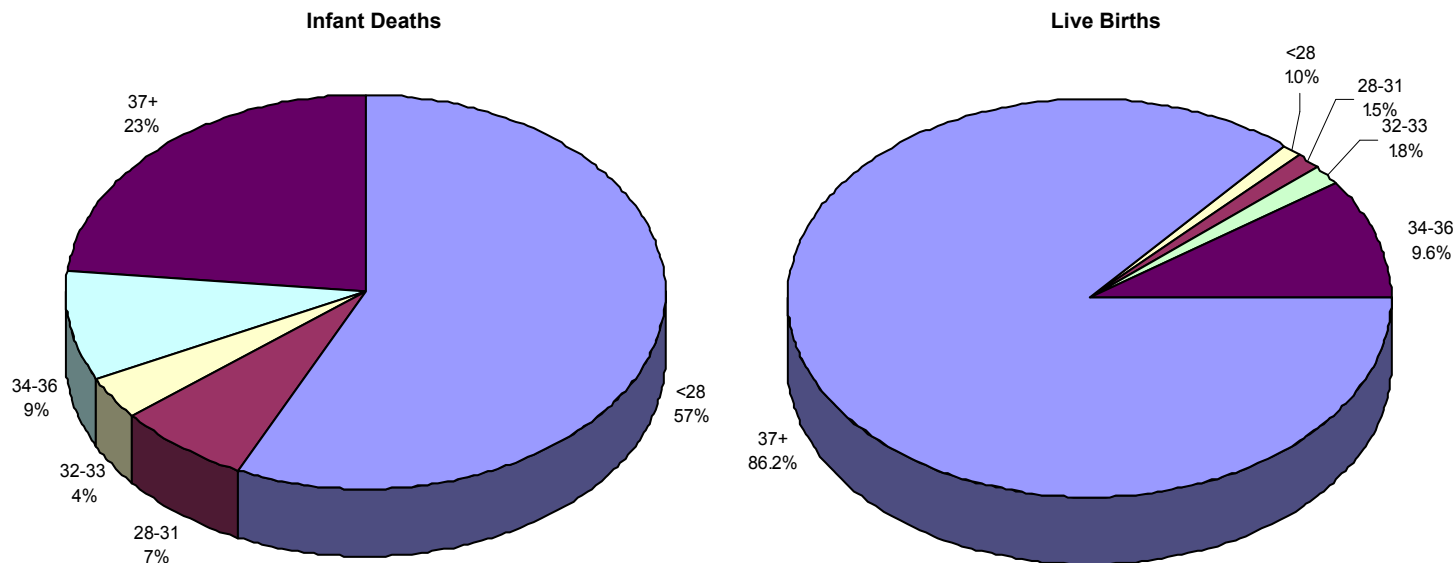
Distribution by Birthweight, Delaware Live Birth Cohort, 2003-2007



Source: Delaware Health Statistics Center

One percent of live births in 2003-2007 were less than 28 weeks gestation at birth, but they accounted for 57 percent of all infant deaths. In total, 13.8 percent of all live births in 2003-2007 were born preterm (<37 weeks of gestation) and 76.2 percent of infant deaths were born preterm.

Distribution by Gestation, Delaware Live Birth Cohort, 2003-2007



Source: Delaware Health Statistics Center

INFANT MORTALITY - Live Birth Cohort

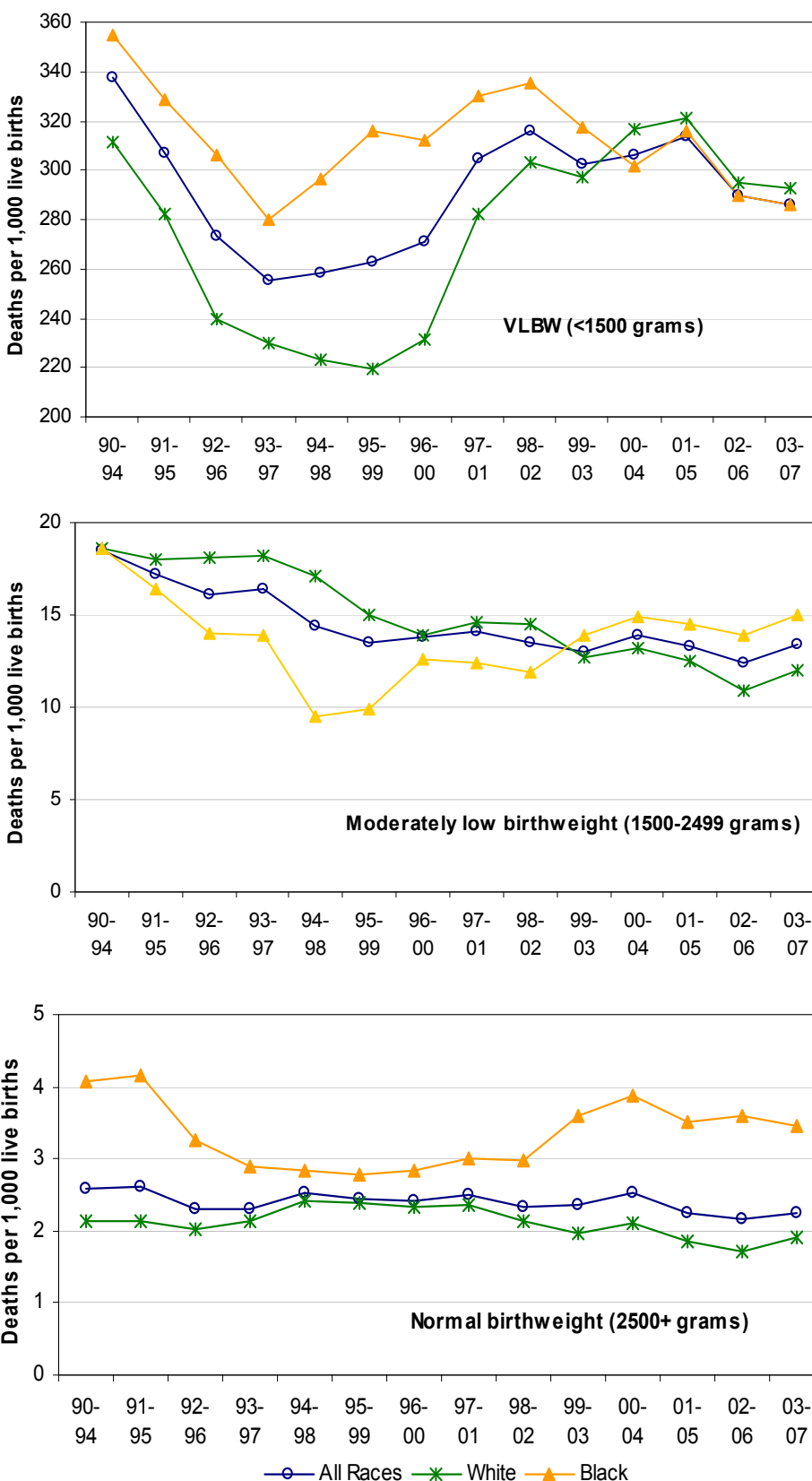
Birthweight and gestation are considered to be the most important predictors of infant health and mortality risk. Infants born too small or too early have a much greater risk of mortality than those who reach a normal birthweight (2500+ grams) or full-term gestation (37+ weeks).

IMRs for very low birthweight (VLBW) infants demonstrated no significant change from 2002-2006 to 2003-2007. Overall, IMRs declined 9.5 percent between 1998-2002 and 2003-2007, with most of the decrease occurring in the black infant mortality rates. By 2003-2007, IMRs for white and black VLBW infants were 293 and 286 infant deaths per 1,000 live births.

Though IMRs of moderately low birthweight infants of both races exhibited slight upward movement from 2002-2006 to 2003-2007; between 1998-2002 and 2003-2007, IMRs for black moderately low birthweight infants increased 26 percent, while those of white moderately low birthweight infants decreased 17 percent.

Most recently, IMRs for normal birthweight infants remained stable, though the overall change from 1998-2002 to 2003-2007 differed by race, with white IMRs decreasing by 11 percent and black IMRs increasing by 16 percent. In 2003-2007, the black IMR for normal birthweight infants was nearly double that of whites (3.5 vs. 1.9).

**Five-year Average Infant Mortality Rate by Birthweight and Race
Delaware, 1990-2007 Live Birth Cohort**

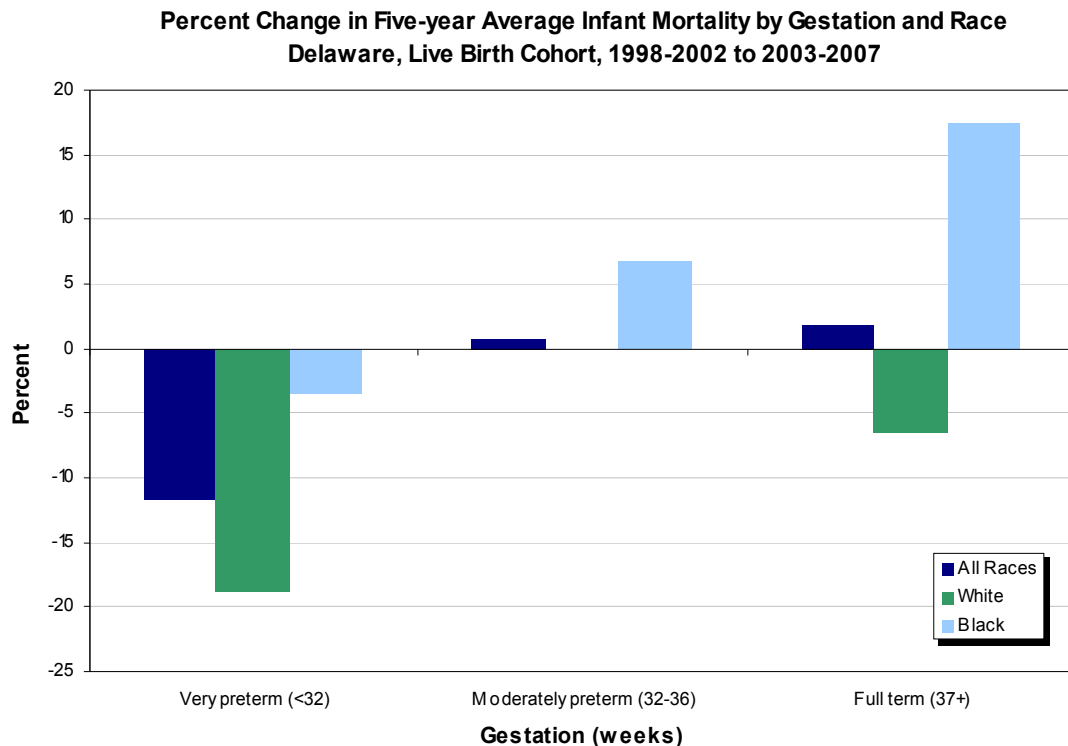


Source: Delaware Health Statistics Center

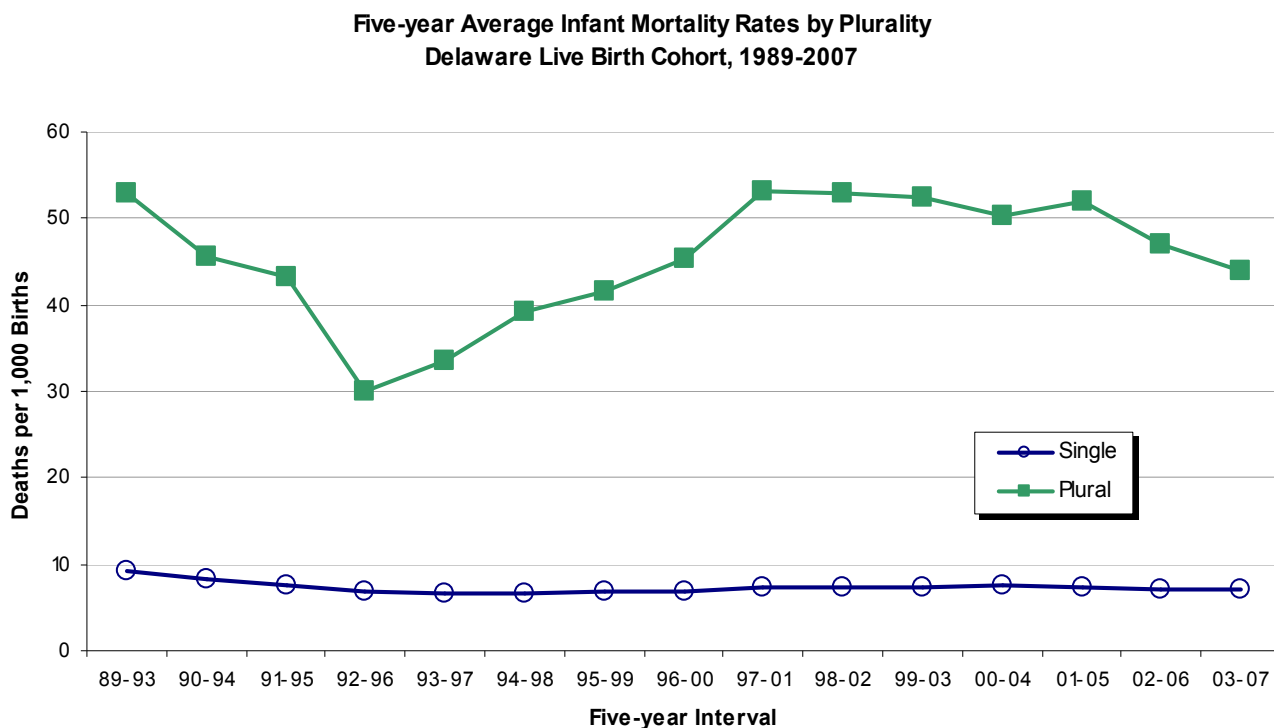
INFANT MORTALITY - Live Birth Cohort

The change in IMRs by gestation and race for moderately premature (32-36 weeks) and full-term (37+ weeks) infants followed a pattern similar to that of moderately low and normal birthweight infants.

IMRs for very preterm infants of both races declined, though white rates dropped 19 percent while black rates decreased only 3.5 percent.



From 1992-1996 to 1997-2001, IMRs for plural births increased 77 percent, to 53.1 deaths per 1000 live births; during the same time, IMRs for singleton births increased by 4 percent. Since then, plural IMRs have decreased a total of 17.3 percent, with most of that occurring in the most recent time period. IMRs for singleton births remained stable. In 2003-2007, the infant mortality rate for plural births was 6 times that of singleton births (44 vs. 7.2).

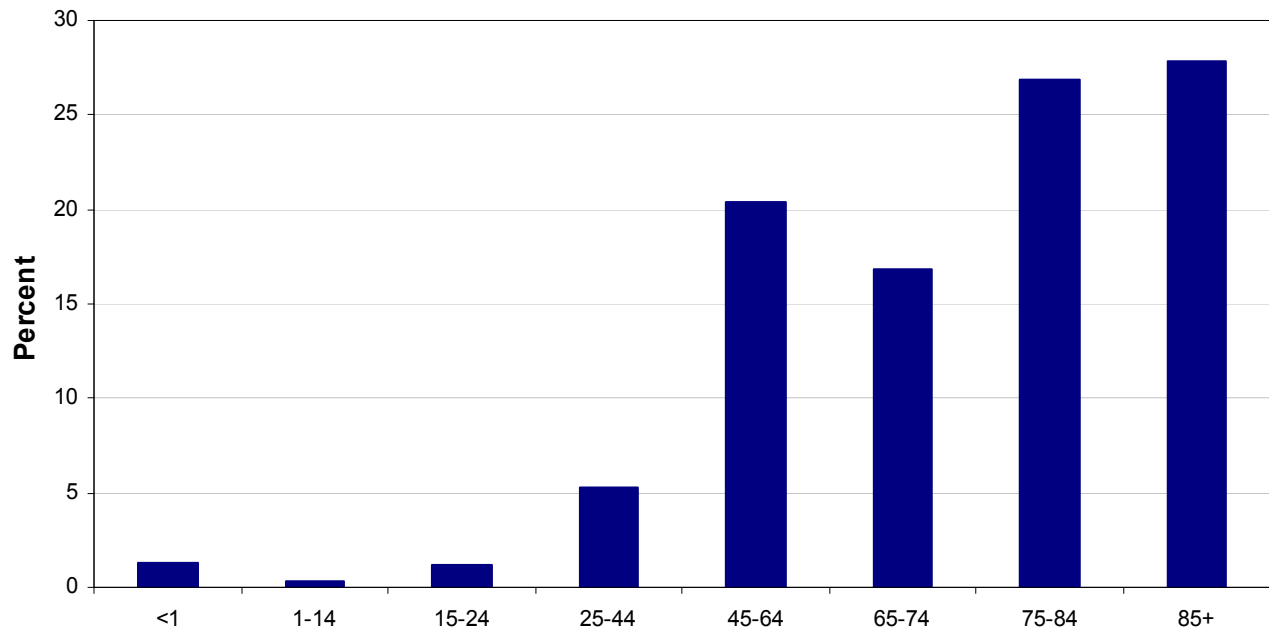


MORTALITY

More Delaware residents died in 2008 than in 2007. A total of 7,602 residents died, 101 of which were children under the age of 1. Deaths were split almost equally between males and females. Cancer and heart disease were the most common causes of death, accounting for 48 percent of all deaths in 2008.

- Just over 28 percent of the Delawareans who died in 2008 were 85 or older. Deaths to those 75 and older accounted for more than half of all deaths.

**Percent of Deaths by Age
Delaware, 2008**



Source: Delaware Health Statistics Center

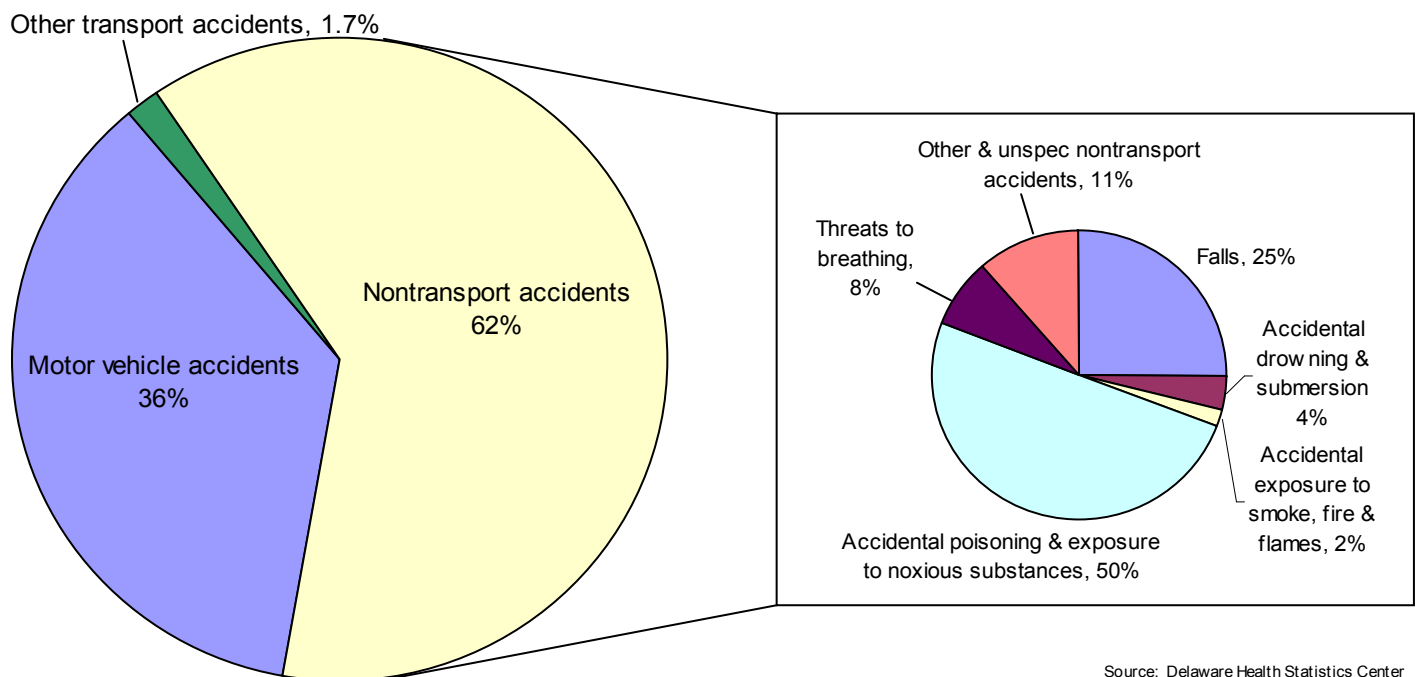
- A Delaware resident born in 2008 could expect to live an average of 78.3 years.
- Life expectancy at birth varied by race and sex; white females had the highest life expectancy (81.4) while black males had the lowest (72.7).
- In 1989, 80 percent of Delaware decedents were buried and 15 percent were cremated, by 2008 the distribution had shifted: 59 percent of decedents were buried and 37 percent were cremated.
- In 2008, the ten leading causes of death for residents of all ages were almost identical to the top 10 in 2007, with the main difference being movement among the rankings.

Rank	Leading Cause of Death	Number
1	Malignant neoplasms	1903
2	Diseases of heart	1769
3	Chronic lower respiratory diseases	470
4	Dementia	374
5	Cerebrovascular diseases	363
6	Accidents (unintentional injuries)	351
7	Diabetes mellitus	217
8	Alzheimer's disease	203
9	Nephritis, nephrotic syndrome & nephrosis	187
10	Septicemia	138

MORTALITY

- There were 351 deaths due to accidents in 2008, 36 percent of which were due to motor vehicle accidents and 62 percent of which were due to non-transport accidents. Fifty percent of the 218 non-transport accidents were caused by unintentional poisonings; the majority (88 percent) of unintentional poisonings were drug poisonings.
- Overall, unintentional poisonings were second only to motor vehicle injuries as the leading cause of unintentional injury deaths in 2008.
 - For white females, poisonings caused the most unintentional injuries, followed by motor vehicle accidents. For white males, and blacks of both sexes, motor vehicle accidents caused the most unintentional injuries.

Accidental Causes of Death by Specific Cause of Injury Delaware, 2008

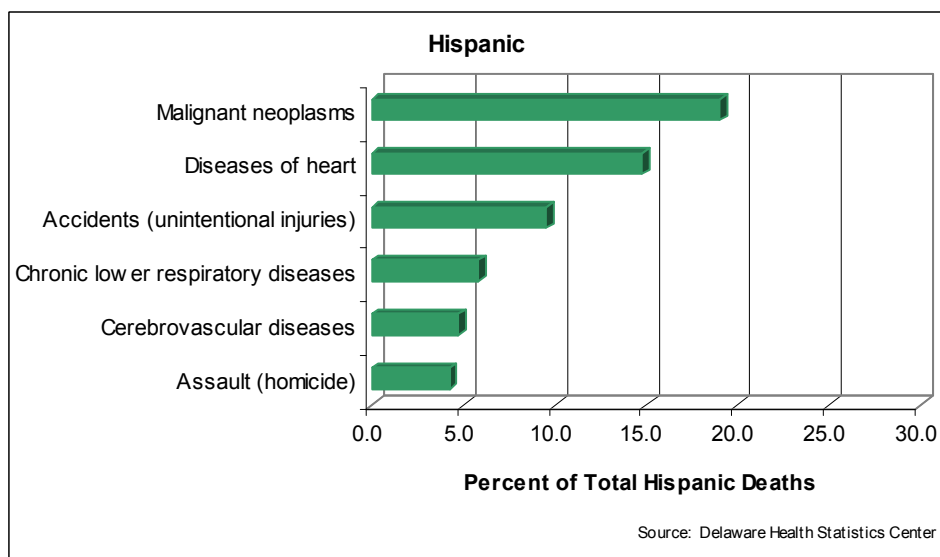
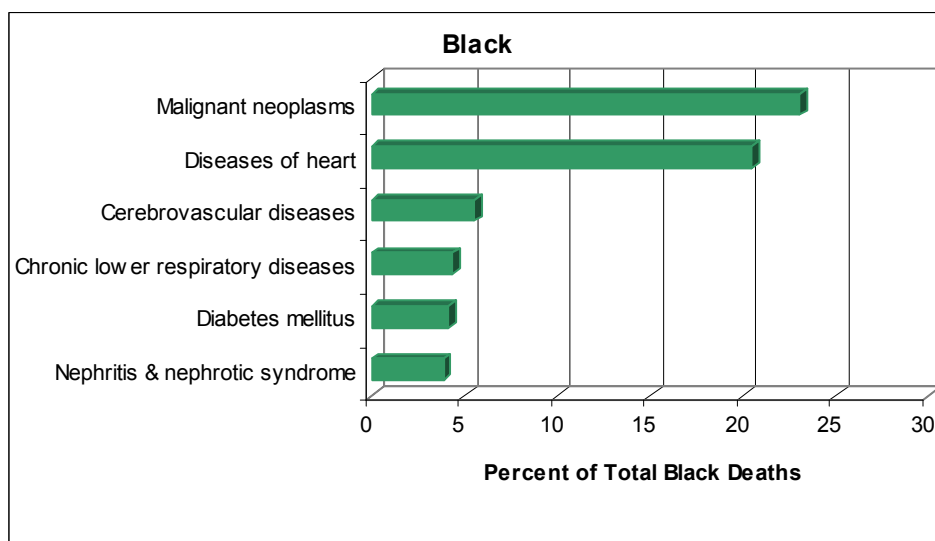
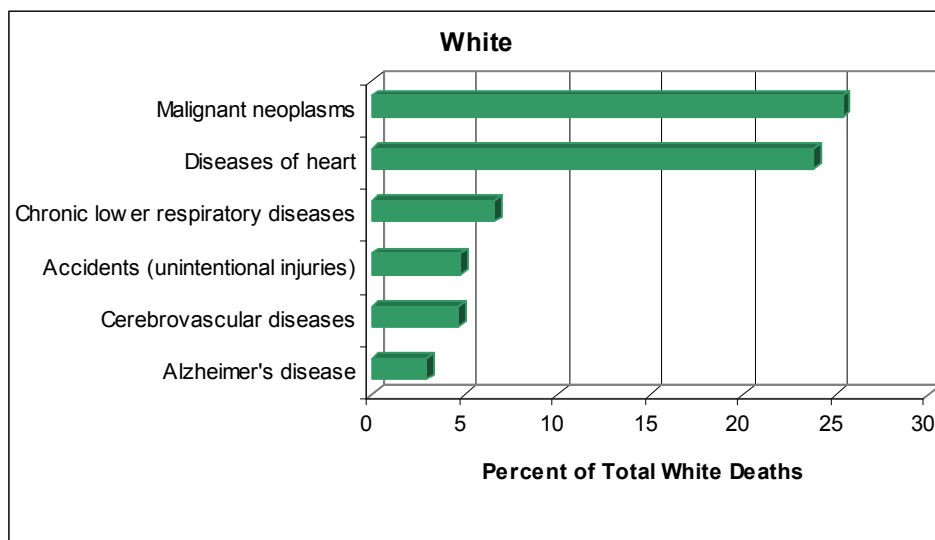


- From 2004-2008, accidents were the number one cause of death for people 1-44 years of age, and were responsible for nearly half of all deaths for people 15-24 years of age. For those ages 15-24, accidents, homicides, and suicides were the three most frequent causes of death (See Table F-11).

MORTALITY

The leading causes of death varied by race and ethnic group. The top six leading causes of death for white, black, and Hispanic Delawareans are shown below.

Leading Causes of Death by Race, Delaware, 2008

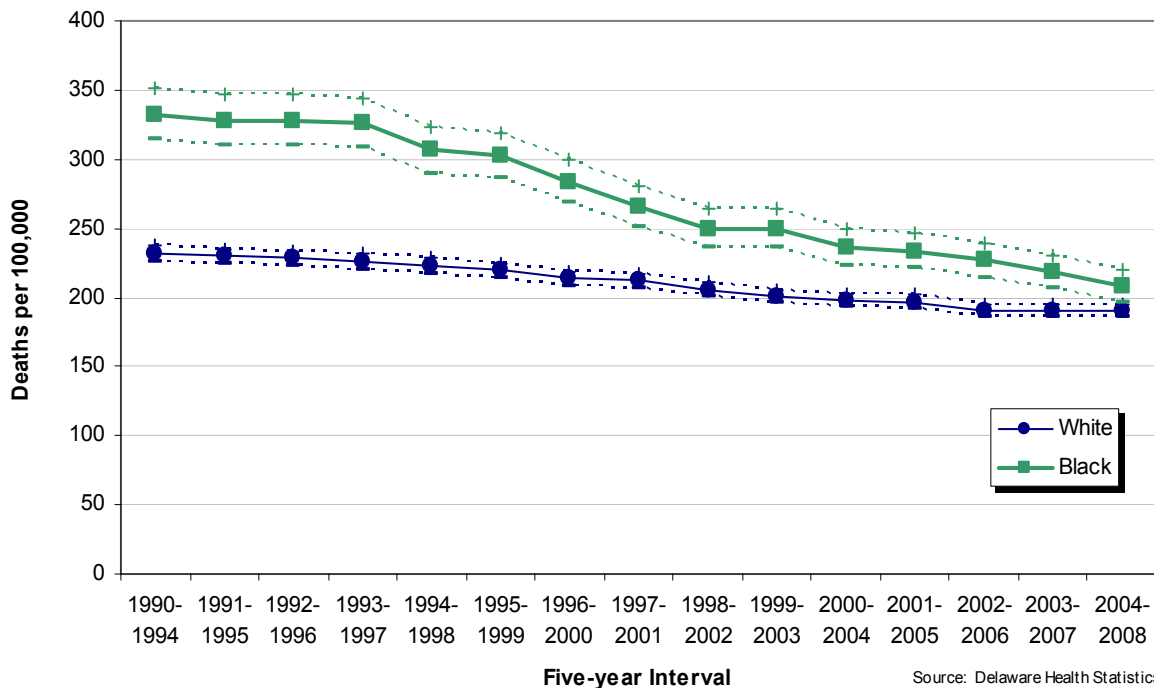


MORTALITY

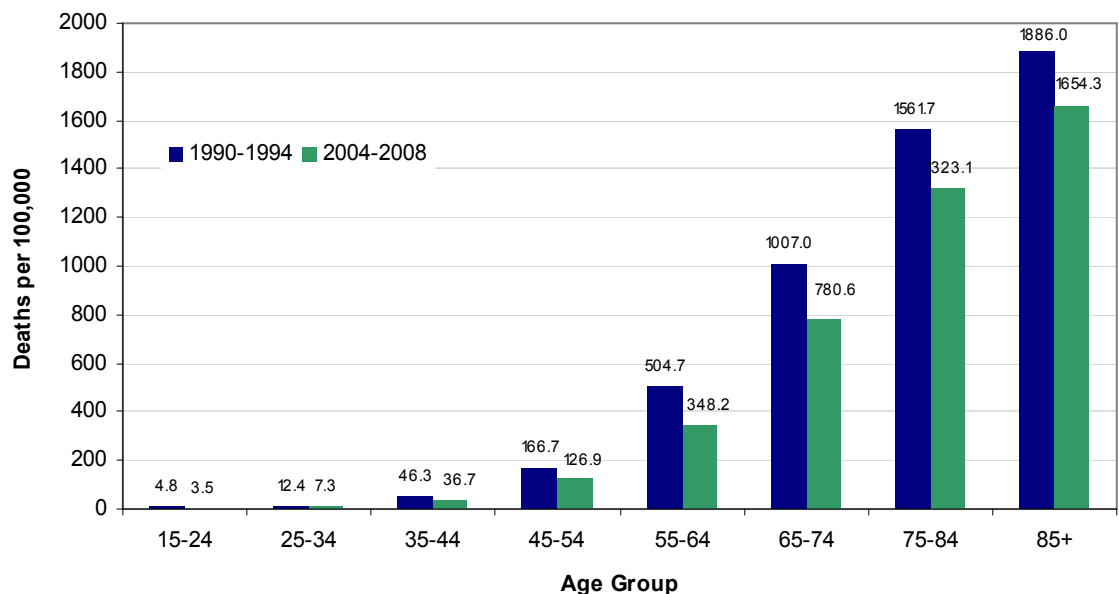
Cancer mortality rates have been decreasing in all three counties since the early 1990s, though most recently Kent County rates have leveled off. In 2004-2008, the 5-year age-adjusted cancer mortality rates ranged from 185 in Sussex County to 212.5 deaths per 100,000 population in Kent County. Age-adjusted cancer mortality rates in Kent County were significantly higher than the Delaware rate of 192.

Cancer mortality rates for black and white decedents have been decreasing since the early nineties, and while the gap between black and white has been narrowing, black cancer mortality rates in 2004-2008 remained significantly higher than the white rates.

Five-year Age-Adjusted Cancer Mortality Rates by Race
Delaware, 1990-2008



Five-year Average Age-Specific Cancer Mortality Rates
Delaware, 1990-1994 and 2004-2008



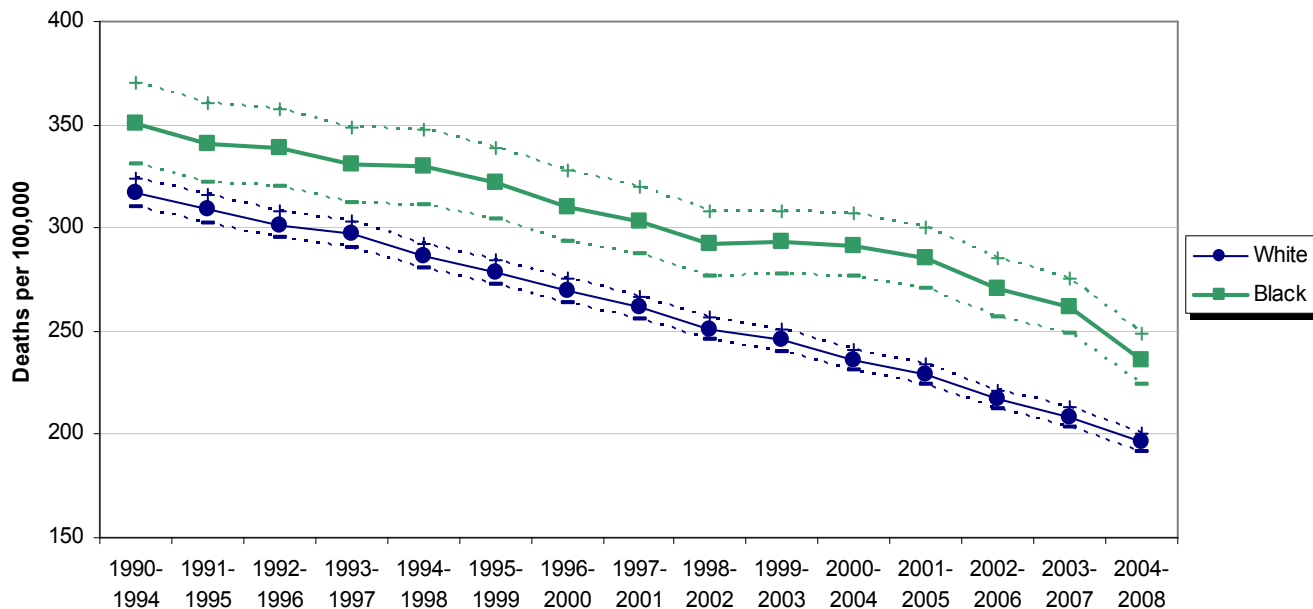
The same decreases seen in the age-adjusted mortality rates of both blacks and whites were reflected in the age-specific rates as well.

Cancer mortality rates for all age groups 15 and higher declined between 1990-1994 and 2004-2008. The 25-34 age group experienced the largest decrease.

MORTALITY

Heart disease remained the most common cause of death for both black and white Delawareans in 2004-2008. Both black and white heart disease mortality rates have declined significantly since 1990-1994; overall, black rates declined 33 percent while white rates declined 38 percent.

**Five-year Age-Adjusted Heart Disease Mortality Rates by Race
Delaware, 1990-2008**

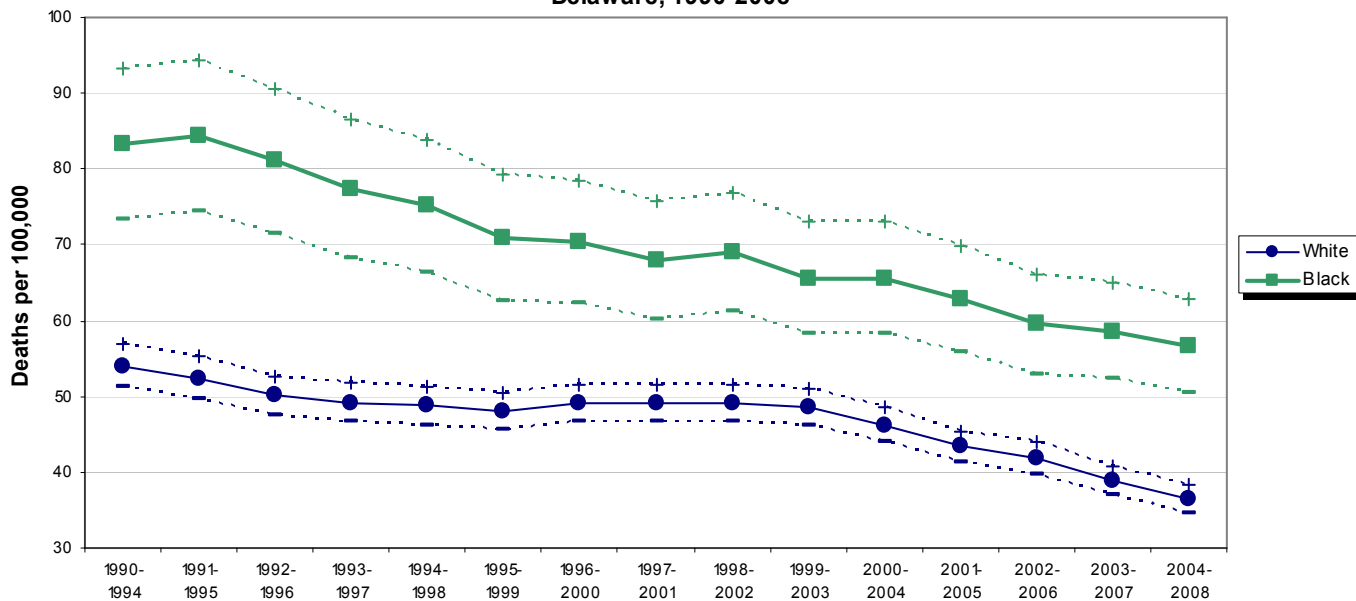


Five-year Interval

Source: Delaware Health Statistics Center

Stroke mortality rates for both races continued their downward trends, with white rates declining 33 percent and black rates declining 32 percent between 1990-1994 and 2004-2008. Due to the similar decreases in their rates, black rates in 2004-2008 remained approximately 55 percent higher than white rates.

**Five-year Age-Adjusted Stroke Mortality Rates by Race
Delaware, 1990-2008**

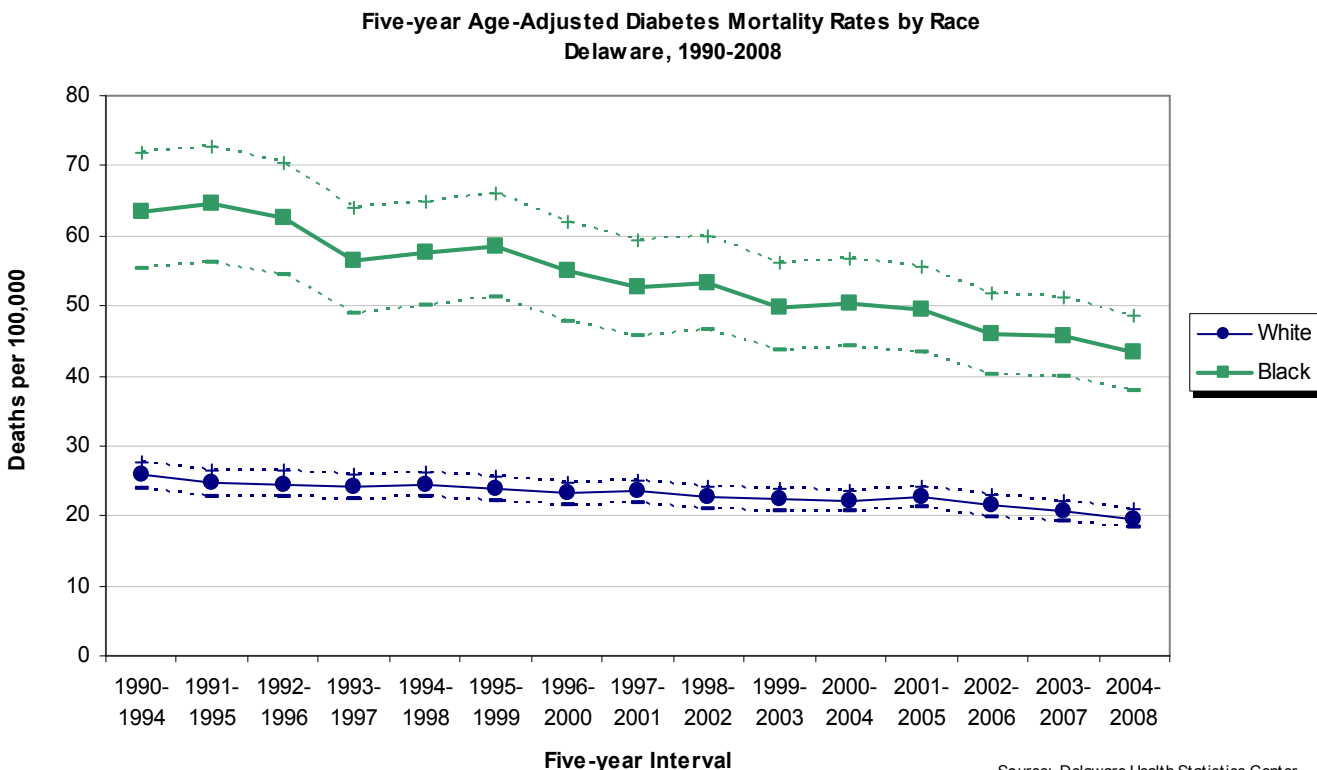


Five-year Interval

Source: Delaware Health Statistics Center

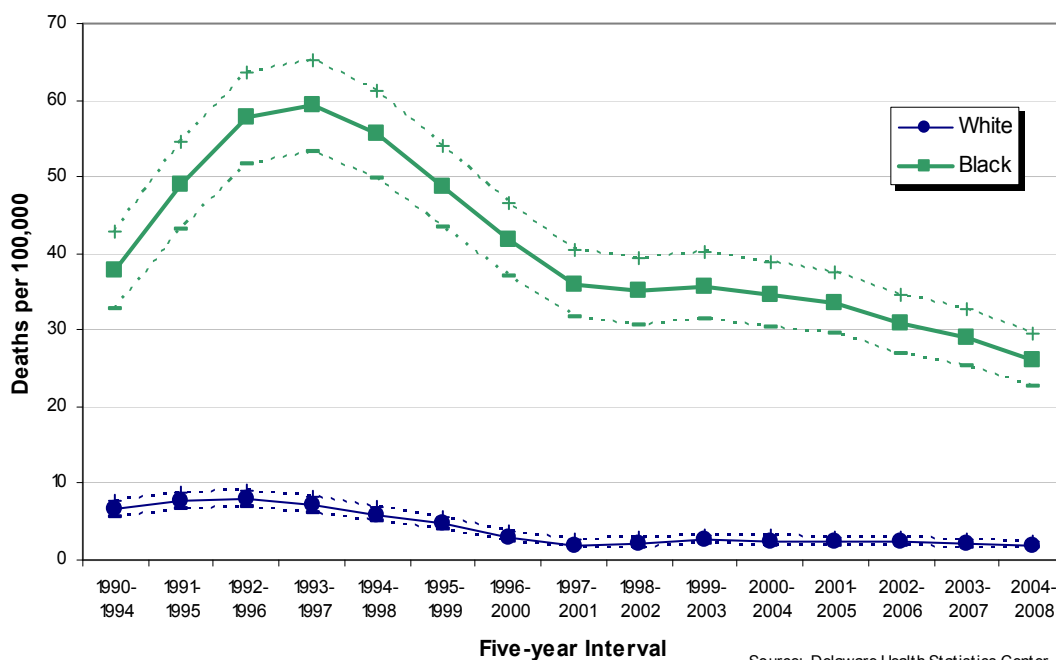
MORTALITY

Though black mortality rates for Diabetes have been declining since 1990-1994, they remained more than twice that of whites in 2004-2008.



HIV/AIDS mortality has disproportionately affected Delaware's black population. Despite the black HIV/AIDS mortality rate decreasing significantly since its 1993-1997 peak, the 2004-2008 mortality rate of 26.1 deaths per 100,000 was more than 13 times the white rate. Though they made up only 21 percent of the total Delaware population in 2004-2008, blacks accounted for 78 percent of all deaths due to HIV/AIDS.

**Five-year Age-Adjusted HIV/AIDS Mortality Rates by Race
Delaware, 1990-2008**



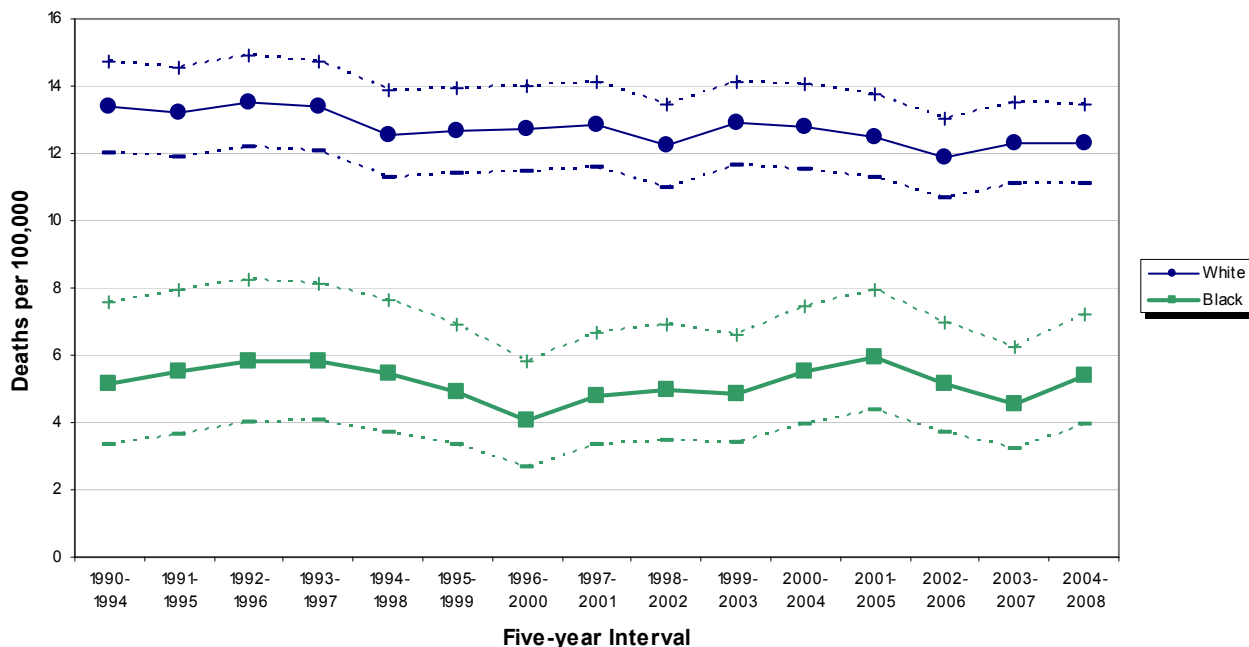
In 2004-2008, HIV was the fifth leading cause of death for black Delawareans; it ranked sixth for black males and fifth for black females.

For black females ages 25-44 it was the most common cause of death.

MORTALITY

Suicide mortality trends for both black and white populations remained fairly stable from 1990-1994 to 2004-2008, with the white rate (12.3) more than double that of the black rate (5.4).

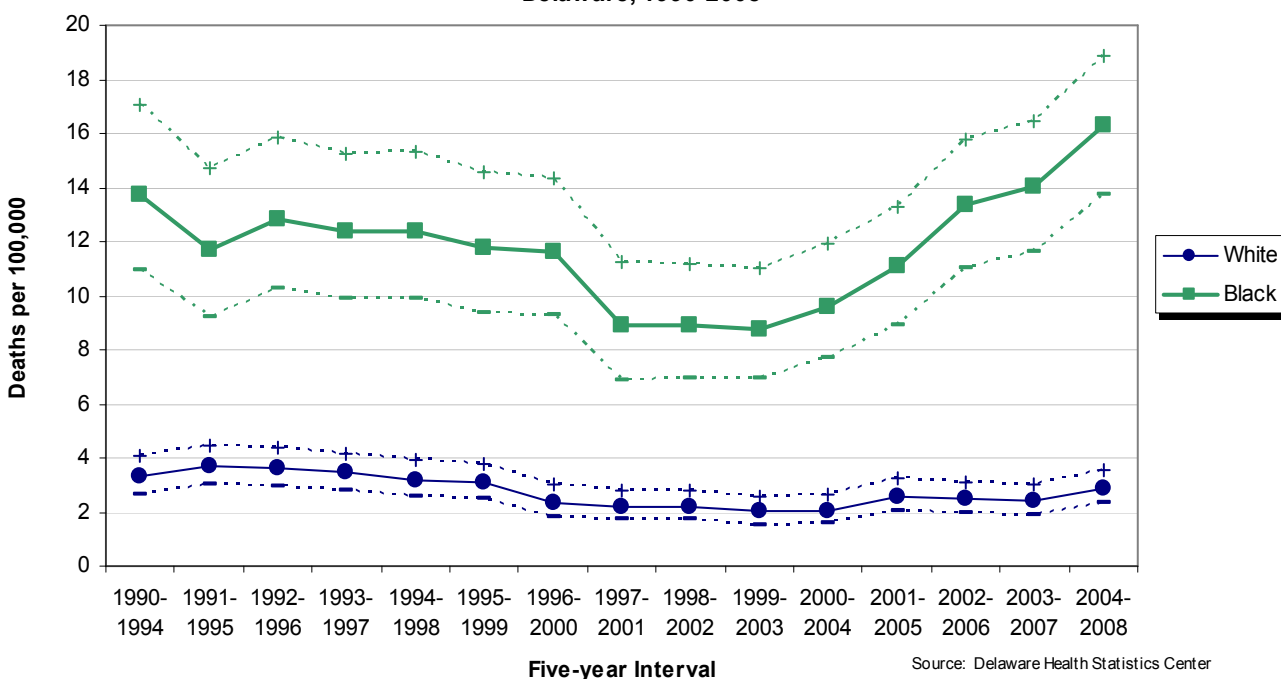
**Five-year Age-Adjusted Suicide Mortality Rates by Race
Delaware, 1990-2008**



Source: Delaware Health Statistics Center

After declining throughout most of the 90s and reaching their lowest point in 1999-2003, homicide mortality rates have risen 70 percent. The majority of the increase was accounted for by the 86 percent increase in black homicide mortality rates; white homicide mortality rates rose 44 percent during the same time period. In 2004-2008, the black homicide mortality rate was 16.3 and the white rate was 2.9 deaths per 100,000 population.

**Five-year Age-Adjusted Homicide Mortality Rates by Race
Delaware, 1990-2008**

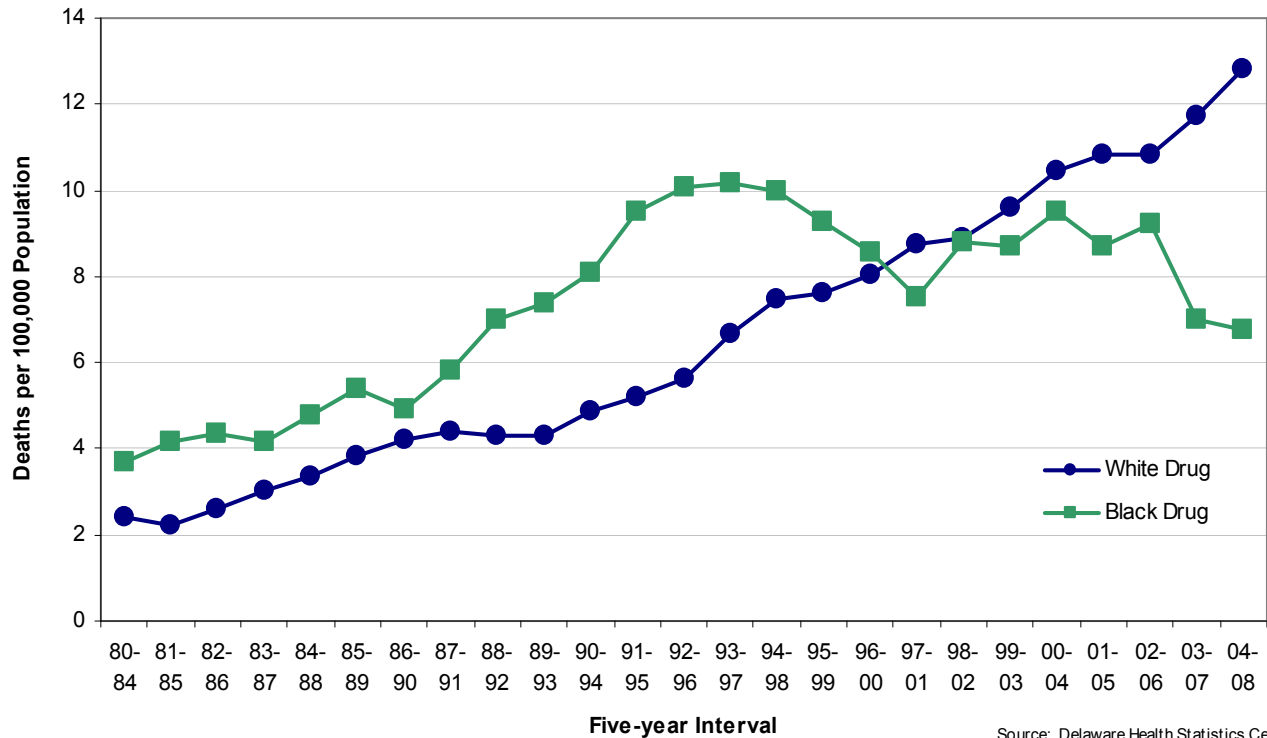


Source: Delaware Health Statistics Center

MORTALITY

Though black mortality rates for drug-induced deaths were historically higher than white rates, in 1994-1998 they began a four year decline that moved them just below white rates in 1997-2001. Since then, white mortality rates have remained higher and continued to rise; by 2004-2008, the white rate (12.8) was 89 percent higher than the black rate (6.8).

**Five-year Age-adjusted Mortality Rates for Drug-Induced Deaths by Race
Delaware, 1980-2008**



**Distribution of Drug-induced Deaths by Race, Sex, and Age Group
Delaware, 2004-2008**

Over 53 percent of all drug-induced deaths in 2004-2008 were white males. Of all the race-age groups, white males ages 25-34 were responsible for the single largest proportion (17 percent) of drug-induced deaths.

