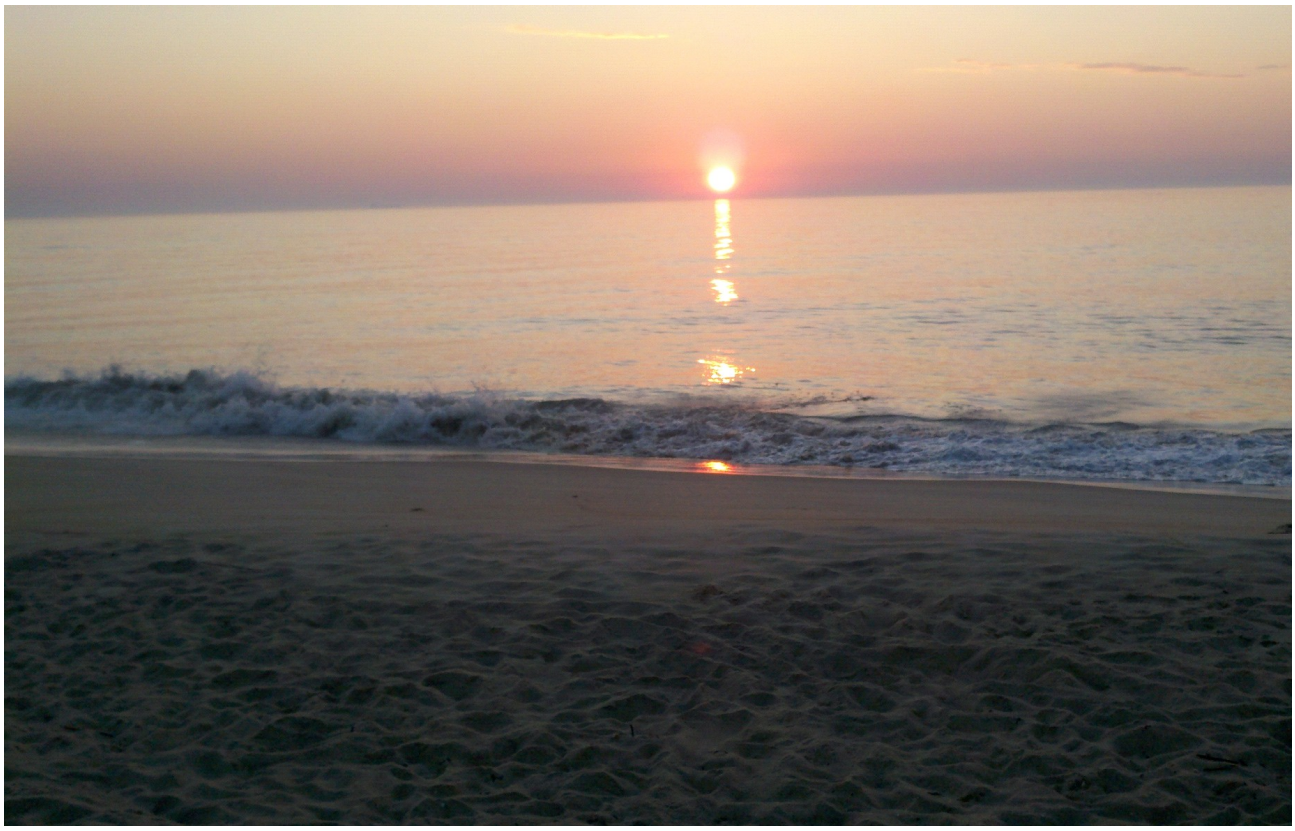
DELAWARE VITAL STATISTICS SUMMARY REPORT 2009



DELAWARE HEALTH AND SOCIAL SERVICES
Division of Public Health

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Fall, 2011

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Selected Characteristics: Delaware Vital Statistics Annual Report, 2009

Population	Number*	Percent
Delaware	885,131	100.0%
Kent	157,740	17.8%
New Castle	534,636	60.4%
Sussex	192,755	21.8%

Marriages	Number*	5-yr Rate[1]
Delaware	4,772	5.7
Kent	930	6.4
New Castle	2,491	5.0
Sussex	1,351	7.4

Divorces	Number*	5-yr Rate[1]
Delaware	3,169	3.7
Kent	694	4.6
New Castle	1,795	3.4
Sussex	680	3.8

Live Births	Number*	5-yr Rate[2]
Delaware	11,369	67.6
Kent	2,258	69.1
New Castle	6,794	64.3
Sussex	2,317	78.1
Births to Teenagers (15-19)		
White	580	34.6
Black	474	63.8
Delaware	1,067	41.6
Kent	206	42.7
New Castle	602	36.3
Sussex	259	58.6
Race	**Number***	**Percent**
White	7,573	66.6%
Black	3,178	28.0%
Hispanic Origin[4]	1,659	14.6%
Marital Status		
Married	5,935	52.2%
Single	5,434	47.8%
Births to Single Mothers[3]		
White	3,046	40.2%
Black	2,283	71.8%
Hispanic Origin[4]	1,078	65.0%
Low Birth Weight (<2500 gms)		
All Races	978	8.6%
White	509	6.7%
Black	418	13.2%
Hispanic Origin[4]	101	6.1%

First Trimester Care	Number*	Percent
White	5,789	76.4%
Black	2,246	70.7%
Hispanic Origin[4]	917	55.3%
Delaware	8,519	74.9%
Kent	1,611	71.3%
New Castle	5,507	81.1%
Sussex	1,401	60.5%

Fetal Deaths	Number*	Percent
Delaware	66	100.0%
Kent	7	10.6%
New Castle	45	68.2%
Sussex	14	21.2%
Race		
White	35	53.0%
Black	28	42.4%
Hispanic Origin[4]	9	13.6%

Infant Mortality	Number*	5-yr Rate[5]
Delaware	91	8.3
Kent	18	7.1
New Castle	57	9.0
Sussex	16	7.2
Race		
White	30	5.7
Black	54	15.6
Hispanic Origin[4]	8	7.5

Mortality	Number*	Adj. Rate[6]
Delaware	7,498	730.3
Kent	1,379	866.7
New Castle	4,100	723.5
Sussex	2,019	680.7
Race and Gender		
White Males	3,012	837.3
White Females	3,101	602.3
Black Males	652	1027.5
Black Females	618	713.7
Leading Causes of Death	**Number***	**Percent**
Malignant neoplasms	1,801	24.0%
Diseases of heart	1,784	23.8%
Chronic lower respiratory diseases	429	5.7%
Cerebrovascular diseases	412	5.5%
Dementia	404	5.4%

SUMMARY

Notes:

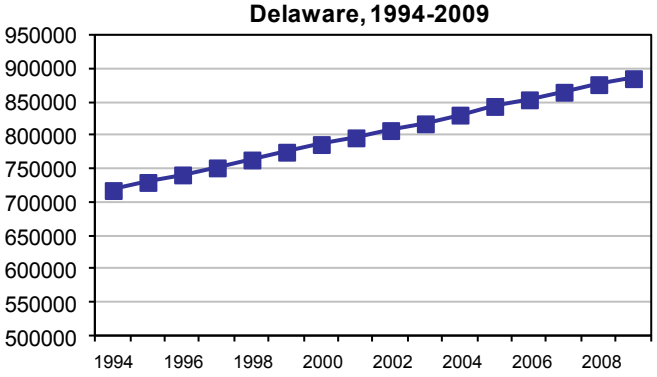
* Numbers are for 2009.

1. The 5-year rate is per 1,000 population and refers to the period 2005-2009.
2. The 5-year rate refers to total live births per 1,000 women 15-44 years of age during the 2005-2009 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 2009.
5. The 5-year (2005-2009) infant mortality rates represent the number of deaths to children under one year of age per 1,000 live births.
6. The 2009 mortality rates (deaths per 100,000 population) for Delaware and counties are age-adjusted to the 2000 U.S. population.

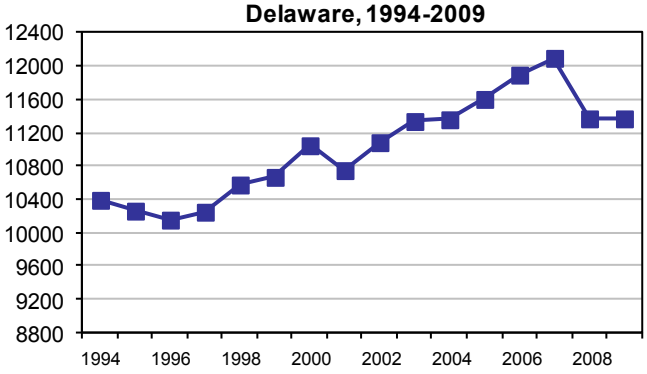
Source: **Delaware Health Statistics Center**

2009 DELAWARE VITAL STATISTICS

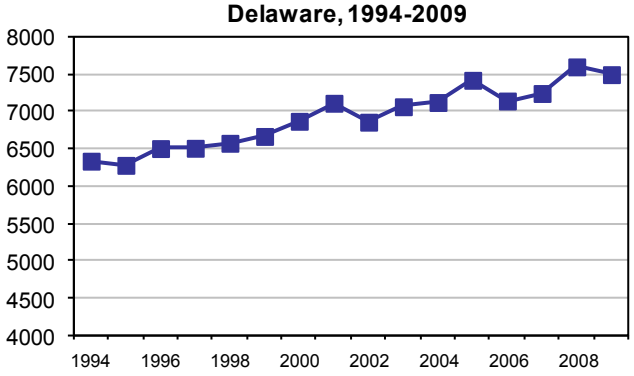
Population
Delaware, 1994-2009



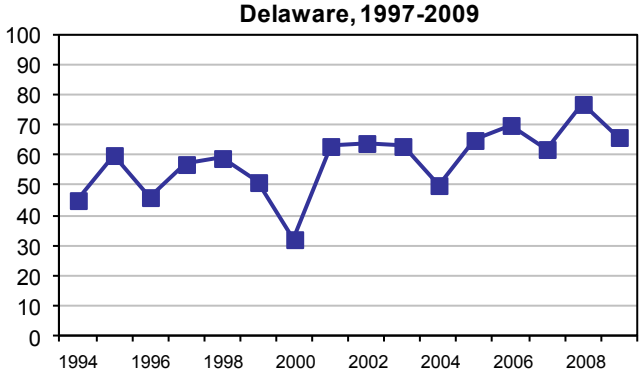
Live Births
Delaware, 1994-2009



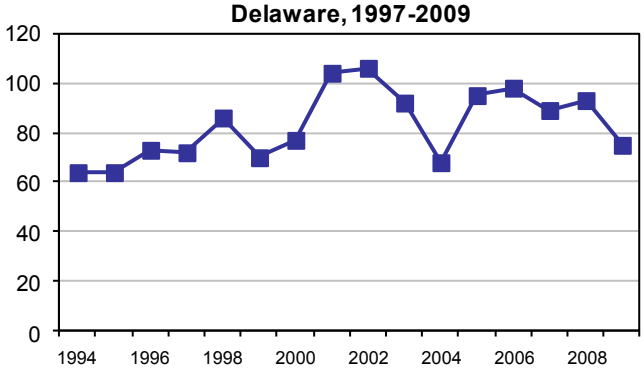
Deaths
Delaware, 1994-2009



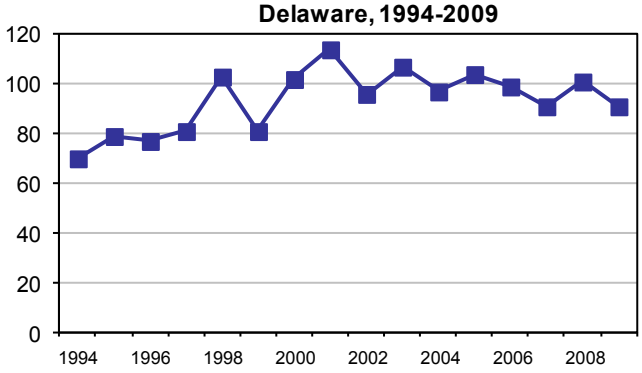
Fetal Deaths
Delaware, 1997-2009



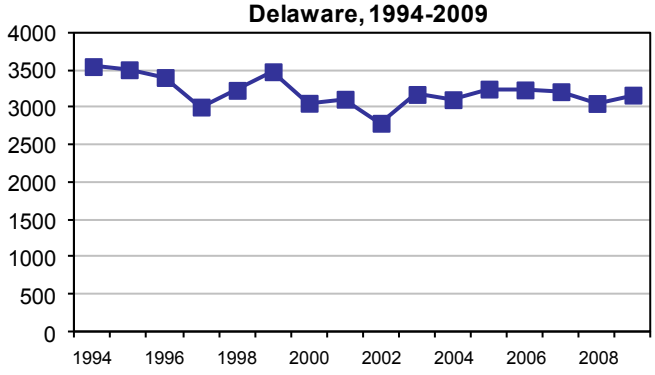
Perinatal Deaths
Delaware, 1997-2009



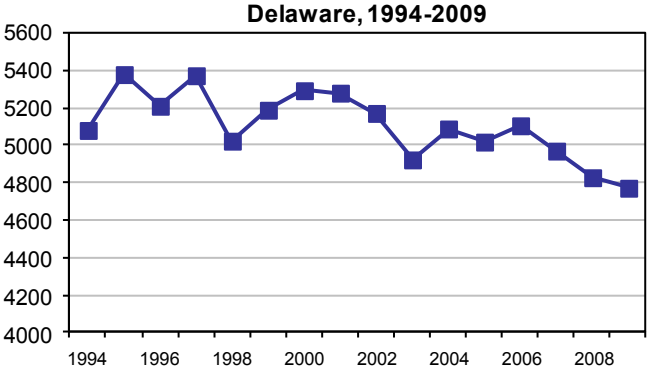
Infant (< 1 year of age) Deaths
Delaware, 1994-2009



Divorces
Delaware, 1994-2009



Marriages
Delaware, 1994-2009



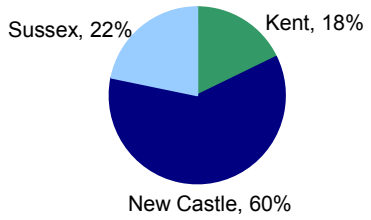
POPULATION

Delaware's three counties continued their increasing population trend, though they grew at different rates. Between 2000 and 2009, county populations grew annually by 2.7 percent for Kent, 0.7 percent for New Castle, and 2.5 percent for Sussex. Delaware's statewide increase was 1.4 percent.

In 2009, 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 total population resides in New Castle County.

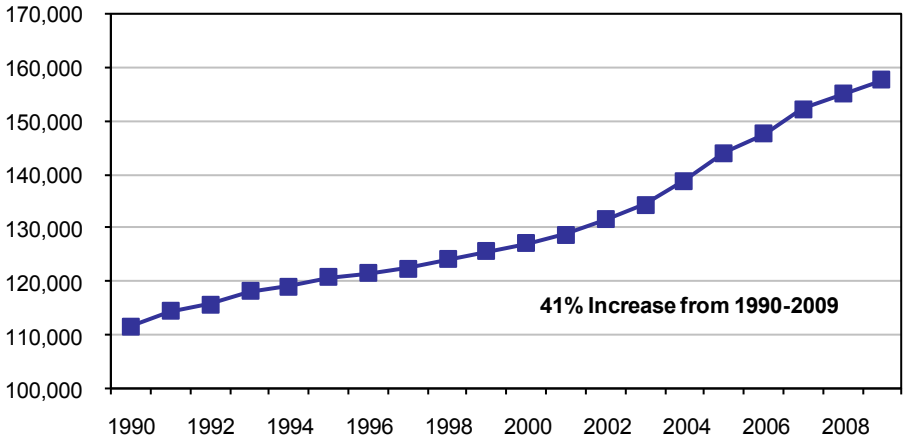
Percent of Population by County Delaware, 2009



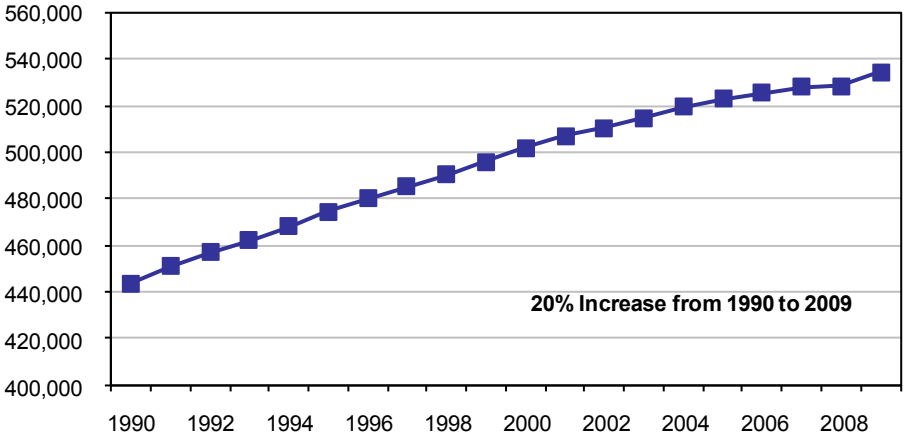
Source: Delaware Health Statistics Center

Delaware Resident Population by County, 1990-2009

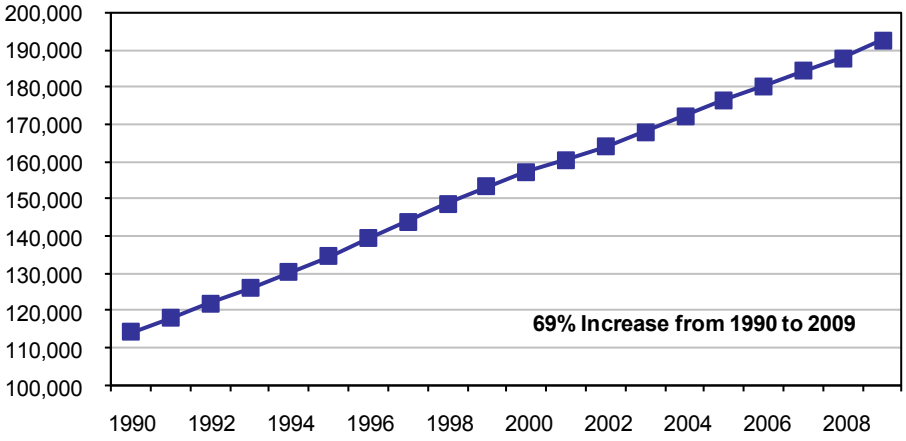
Kent County Population 1990-2009



New Castle County Population 1990-2009



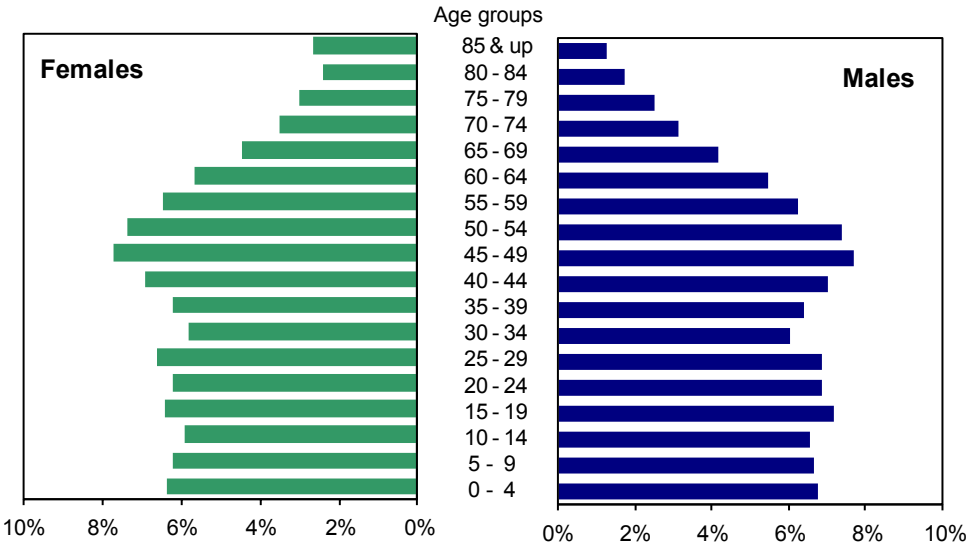
Sussex County Population 1990-2009



Source: Delaware Health Statistics Center

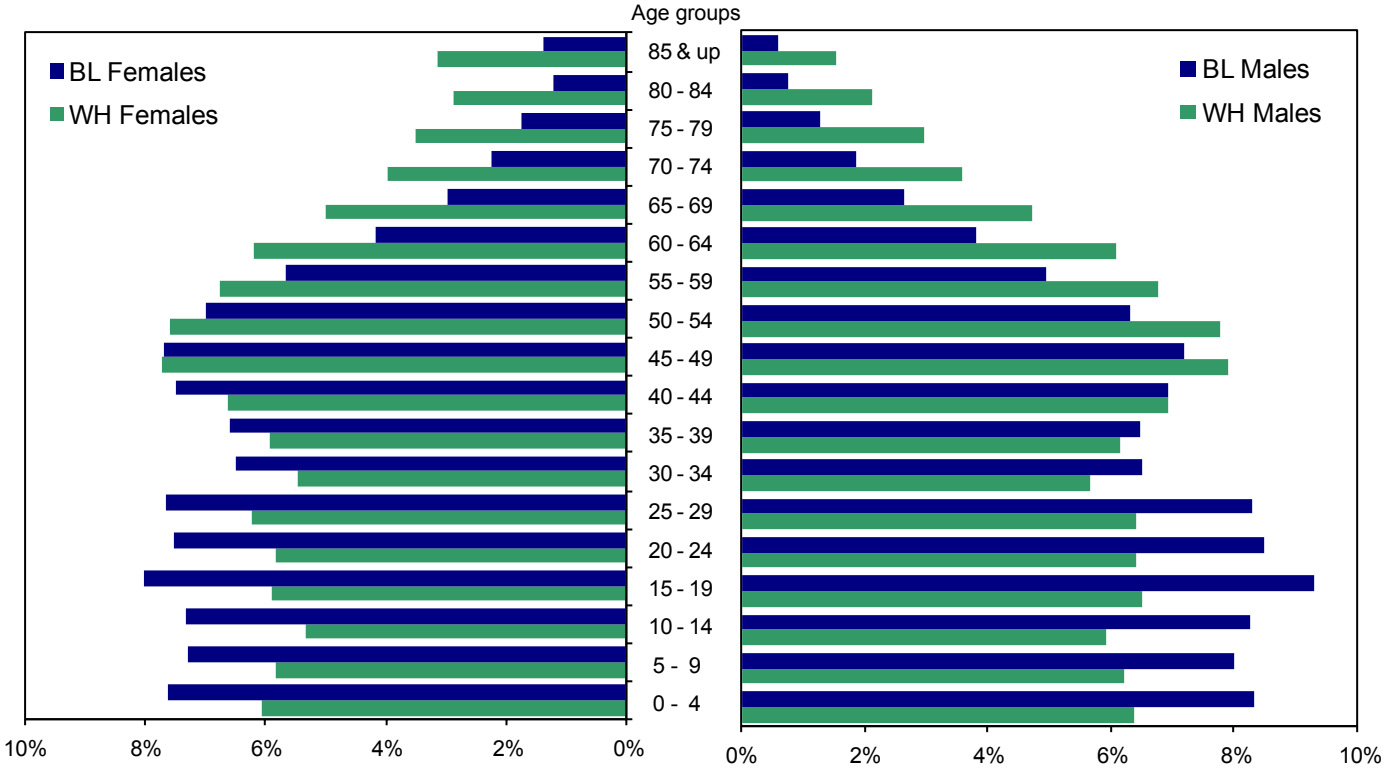
POPULATION

In 2009, just over 50 percent of Delaware's population was female. Females made up a greater proportion of the older age groups, which reflects the longer female life expectancy. Delaware females born in 2009 could expect to live an average of 81.4 years, versus males, who could expect to live 76.3 years.



Source: Delaware Health Statistics Center

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.



Source: Delaware Health Statistics Center

MARRIAGE AND DIVORCE

There were 4,772 marriages and 3,169 divorces in Delaware in 2009 (see Tables B-1 and B-11). Over half of all divorces in 2009 were of marriages that lasted less than 10 years.

Marriage

Male		**Female**	
Youngest:	16	Youngest:	16
Oldest:	91	Oldest:	82

Marriage with the greatest age difference between bride and groom: 34 years.
Most popular month to get married: September (see Table B-9).

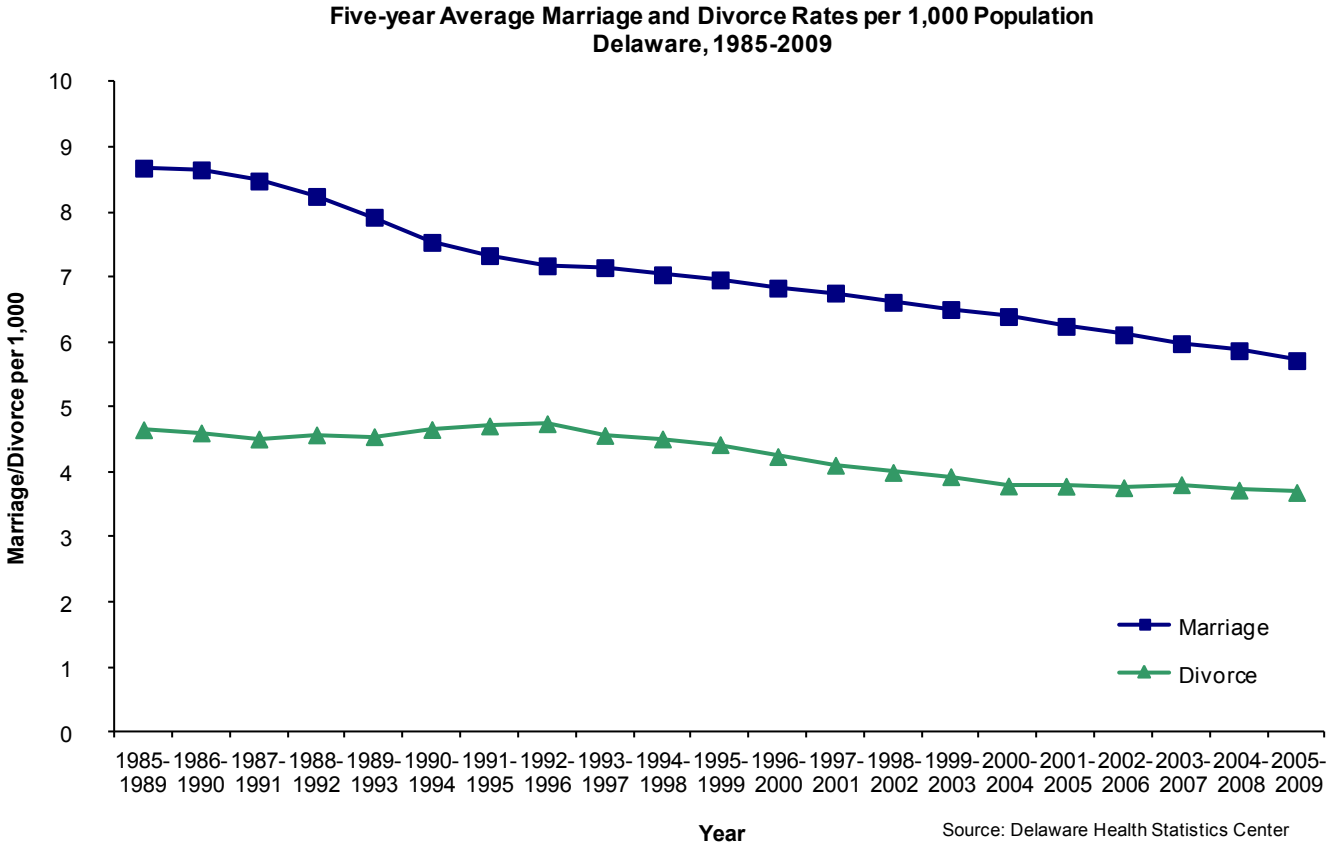
Divorce

Male		**Female**	
Youngest:	20	Youngest:	17
Oldest:	96	Oldest:	83

Shortest duration of marriage: 5 days.
Longest duration of marriage: 49 years.
Median duration of marriage: 8.4 years (see Table B-16).
Total children under 18 years of age: 2,563 (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 34 percent, from 8.7 to 5.7 marriages per 1,000 population in 2005-2009.

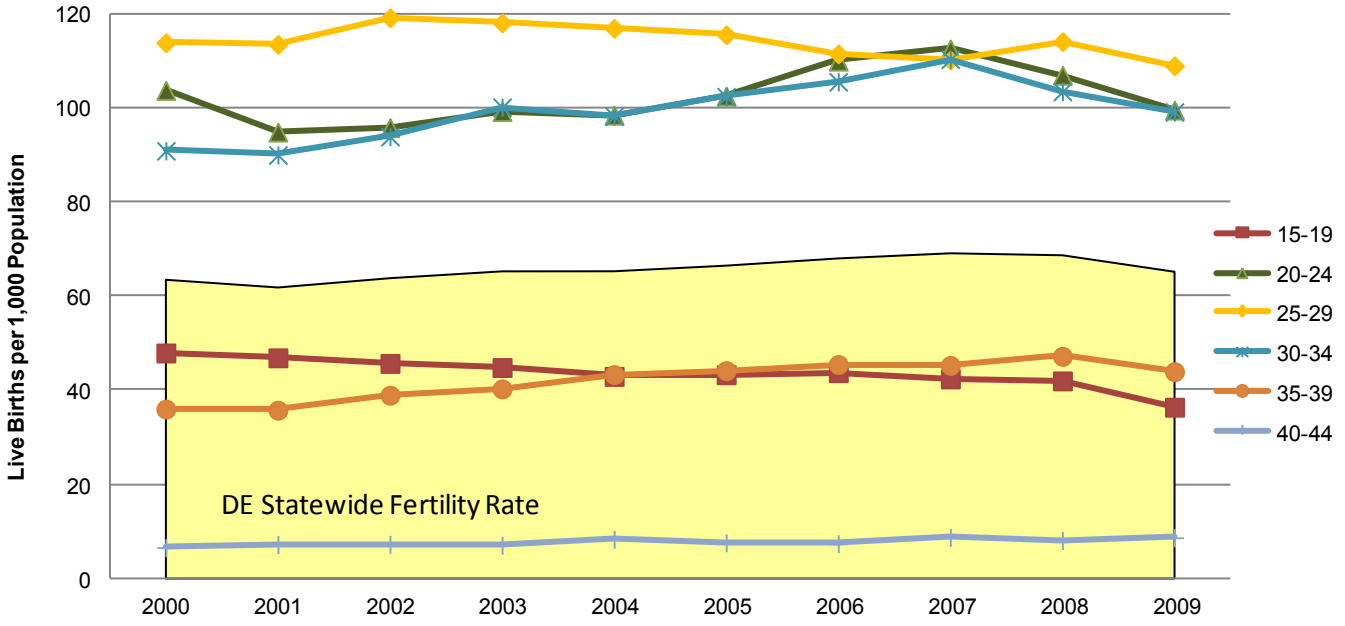
Divorce rates remained fairly stable between 1984-1988 and 1992-1996. From 1992-1996 to 2000-2004, divorce rates declined 20 percent; since then rates have remained stable.



In 2009, there were 11,989 births in Delaware, 10,982 were to Delaware residents and 1,007 were to non-residents. Additionally, 387 births to Delaware residents occurred out of state, for a total of 11,369 Delaware resident births, 647 fewer than in 2008.

The recent national declines in general fertility and live birth rates were also apparent in Delaware statistics. From 2007 to 2009, the general fertility rate (number of births per 1,000 women aged 15-44 years) declined from a high of 69.2 to 65.3 births per 1,000 women aged 15-44. The largest decline was seen in the birth rate of teens (15-19 years), women ages 20-24, and women ages 30-34; birth rates for all three groups decreased by 10 percent or more. Recent changes in the birth rates of women 35 and older were not significant and did not reduce the considerable increases gained through the 1990s and mid-2000s.

Annual Fertility and Age-Specific Live Birth Rates
Delaware, 2000-2009



Source: Delaware Health Statistics Center

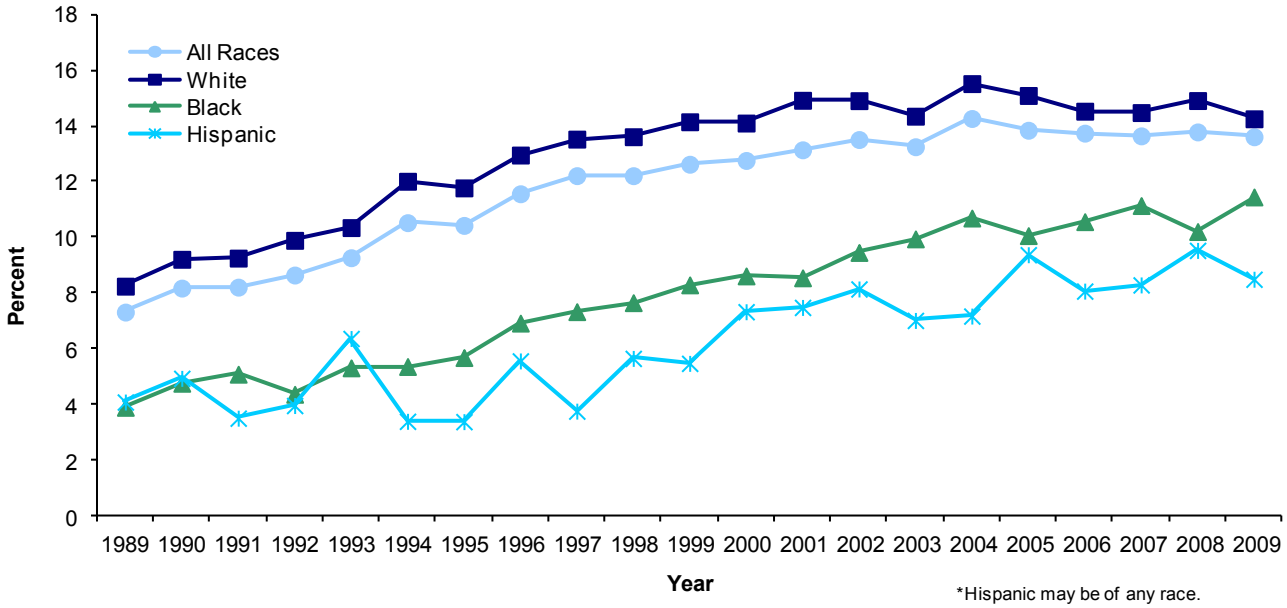
The 2007 to 2009 decline seen in teens aged 15-19 was apparent in both the 15-17 and 18-19 age groups, whose birth rates declined by 19 and 14 percent respectively. Birth rates for teens in both age groups were highest in Sussex County.

The general fertility rate for white women also decreased, though general fertility rates for black women demonstrated no significant change between 2007 and 2009.

To view long-term birth rate trends by more detailed age and race categories, see Tables C-5 through C-8 in the Live Births section of the annual report.

Between 1989 and 2004, the percentage of births to women 35 and older exhibited a clear upward trend that has since stabilized. In 2009, 13.6 percent of all births were to women 35 and older, versus 7.3 percent of all births in 1989.

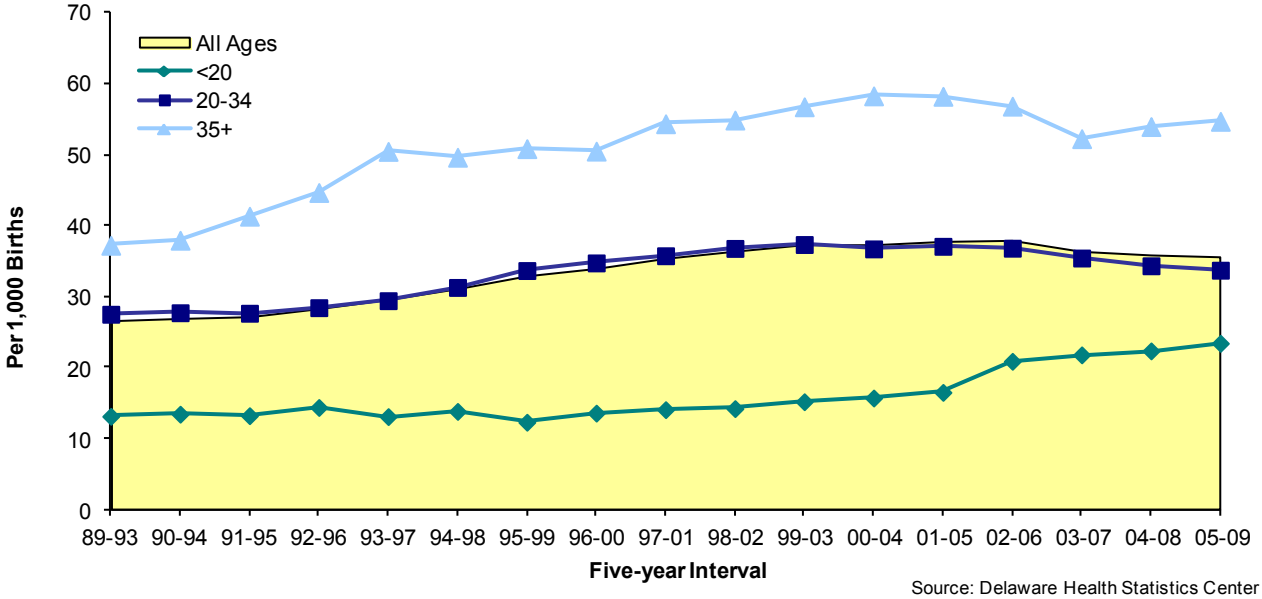
Annual Percent of Live Births to Women 35 or Older by Race and Hispanic Origin*
Delaware, 1989-2009



*Hispanic may be of any race.
Source: Delaware Health Statistics Center

For mothers of all ages, the rate of plural births increased 34 percent between 1989-1993 and 2005-2009. In 2005-2009, older mothers (35+) had the highest plural birth rates, at 55 multiples per 1,000 births, more than double that of mothers under 20, and 62 percent higher than mothers 20-34.

Five-year Average Plural Birth Rate by Age of Mother
Delaware, 1989-2009



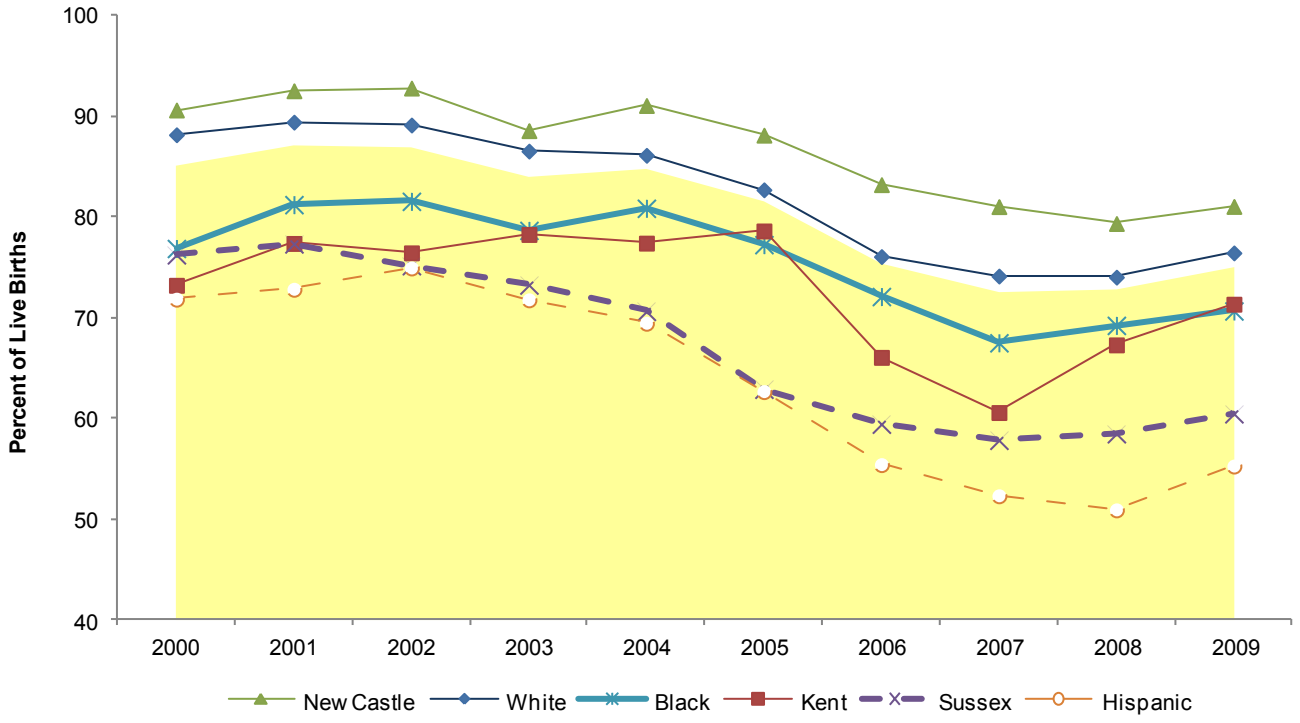
Source: Delaware Health Statistics Center

Delaware's implementation of the 2003 revision of the US Standard birth certificate occurred in 2006. The new format affected the collection of certain maternal and infant data, including the timing of prenatal care (PNC). On a national scale, the changes in reporting of PNC attainment resulted in lower estimates of first trimester PNC attainment, which the National Center for Health Statistics attributed to changes in the data collection methodology rather than a true decrease.

The graph below shows a decrease in the percent of first trimester PNC attainment in Delaware as well. Though some of the decrease may be attributable to the modified birth certificate format, Delaware's decline began before implementation of the new certificate, and in many cases, continued in the following years, indicative of a true declining trend.

The decrease was most pronounced in mothers of Hispanic origin (regardless of residence), and mothers residing in Sussex County. In Sussex County percentages of first trimester PNC attainment began decreasing in 2002 and continued through 2007. Hispanic mothers also demonstrated a declining trend prior to, and following, the change in data collection, declining from 74.9 in 2002 to 50.9 percent in 2008.

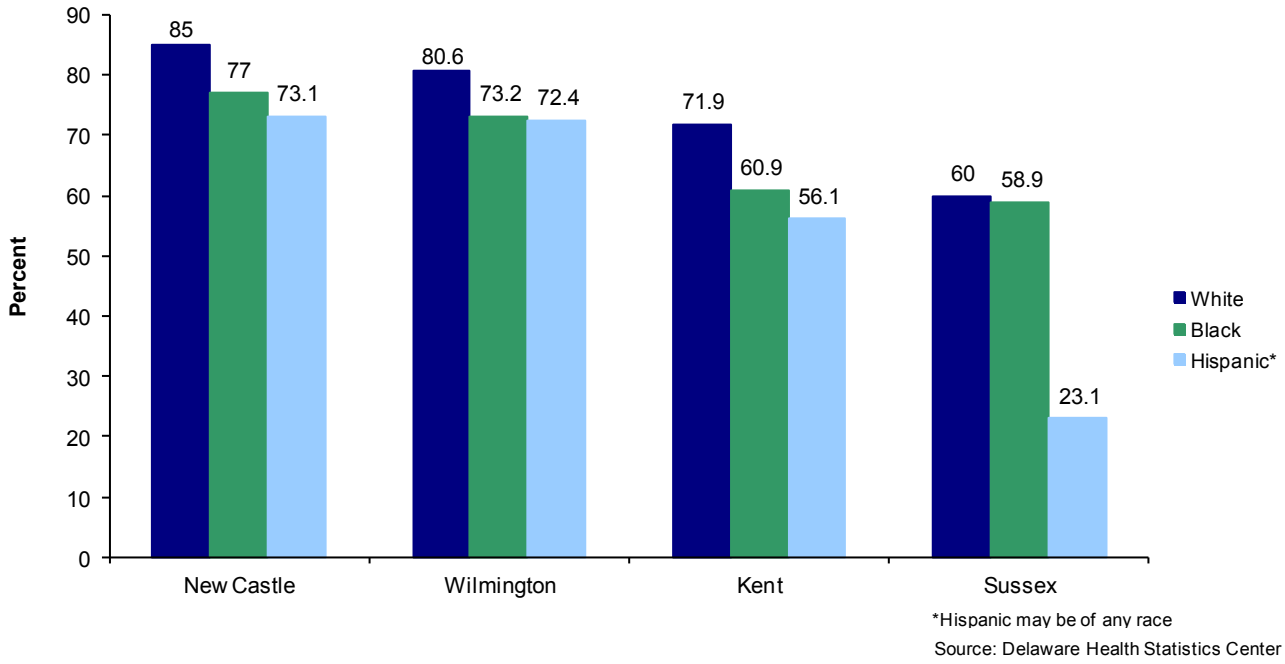
Annual Percent of Births to Mothers Attaining Prenatal Care in the First Trimester by Geography, Race, and Hispanic Origin Delaware 2000 - 2009



Hispanic may be of any race.
Source: Delaware Health Statistics Center

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



*Hispanic may be of any race

Source: Delaware Health Statistics Center

Older mothers were more likely to obtain PNC in their first trimester and the proportion rose with each increase in age group. In 2005-2009, 82 percent of mothers 35 and older obtained PNC in the first trimester, versus 61 percent of mother under 20.

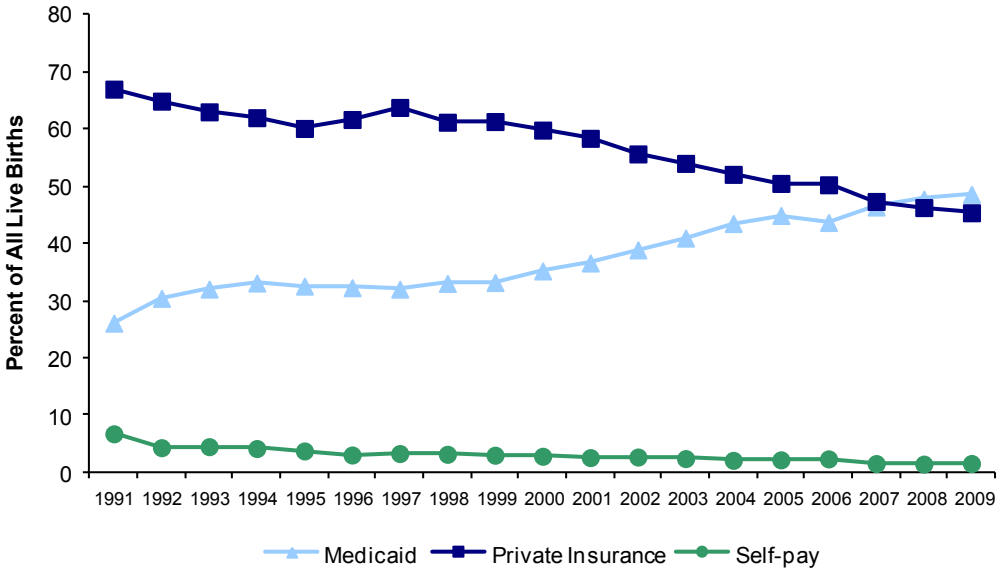
Married mothers were more likely than single moms to obtain PNC in the first trimester (83 versus 66 percent in 2005-2009).

Mothers with private insurance were more likely to receive PNC in first trimester than mothers who had Medicaid or who had no insurance.

In 2009, 94 percent of live births had either private insurance or Medicaid listed as the primary source of payment; the remaining 6 percent were split between other government coverage and self-pay.

- For only the second time, Medicaid paid for more births than private insurance.
- Medicaid was the primary source of payment for the majority of mothers under 20, covering 80 percent of both black and white mothers, and 77 percent of mothers of other races.

Percent of Births by Source of Payment for Delivery
Delaware, 1991-2009

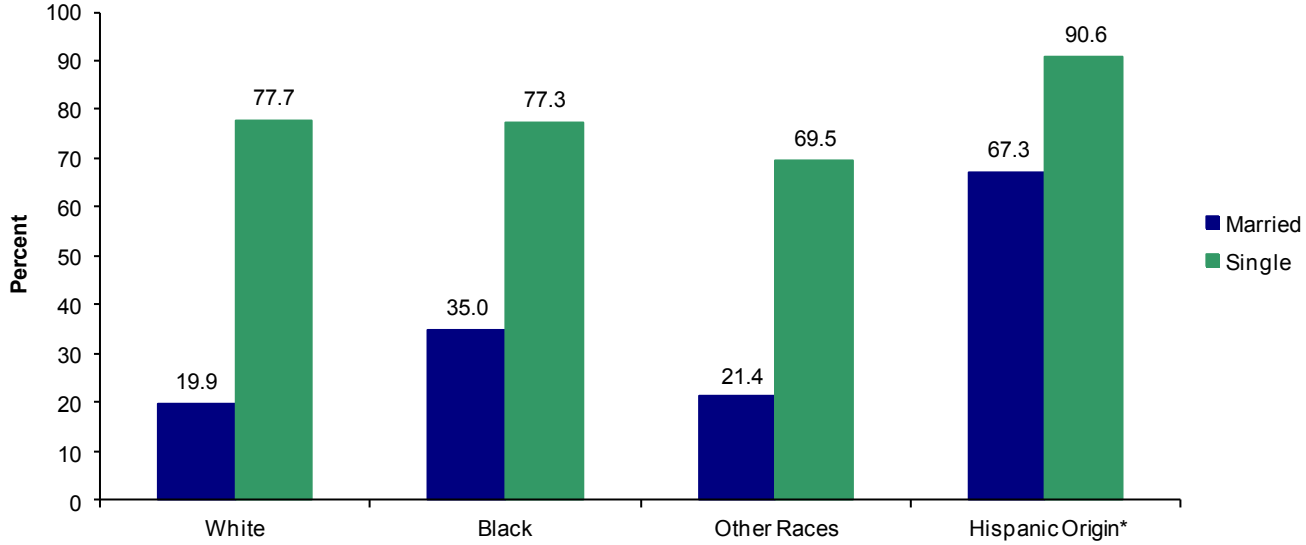


Source: Delaware Health Statistics Center

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

- 19.9 percent of white married women used Medicaid as their primary source of payment, but that number more than tripled, to 77.7 percent, for single white women.
- 35 percent of black married women used Medicaid as their primary source of payment, but that number more than doubled, to 77.3 percent, for single black women.
- 67.3 percent of Hispanic married women used Medicaid as their primary source of payment; that number increased to 90.6 percent for single Hispanic women.
- 21.4 percent of married women of other races used Medicaid as their primary source of payment, but that number was three times higher, at 69.5 percent, if the mother was single.

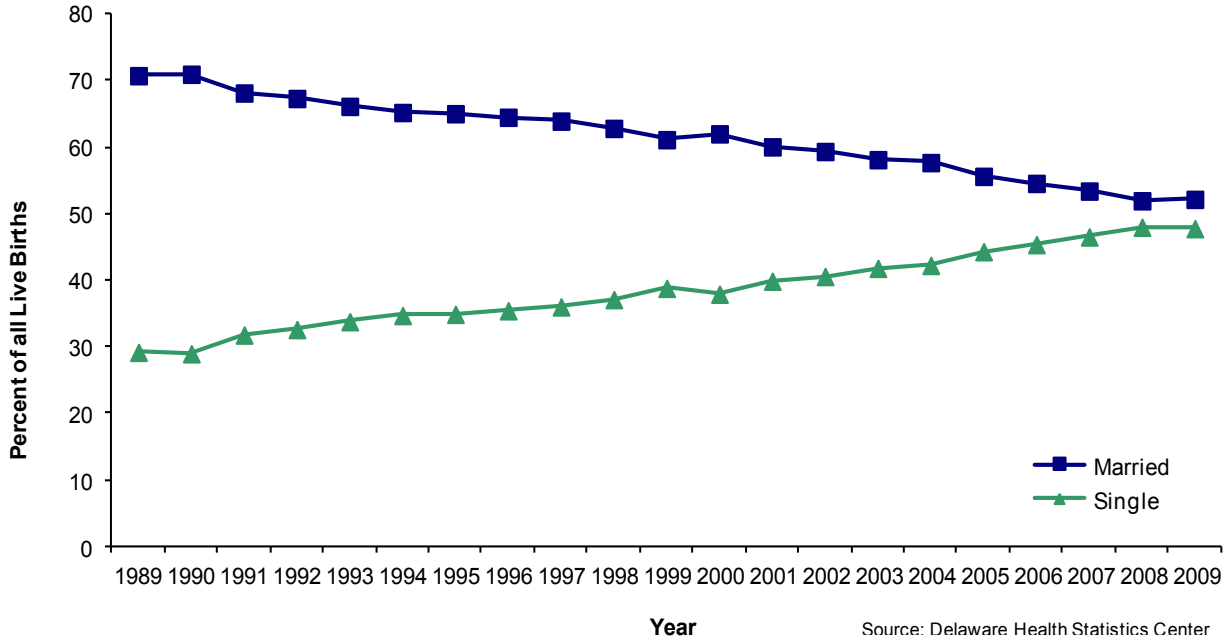
Percent of Births by Race, Hispanic Origin, Marital Status, and Medicaid as Primary Source of Payment
Delaware, 2009



*Hispanic may be of any race.
Source: Delaware Health Statistics Center

From 1991 to 2008, the percent of births to unmarried women increased from 32 to 48 percent of all births. Though fewer infants were born to single mothers in 2009, the percentage remained the same.

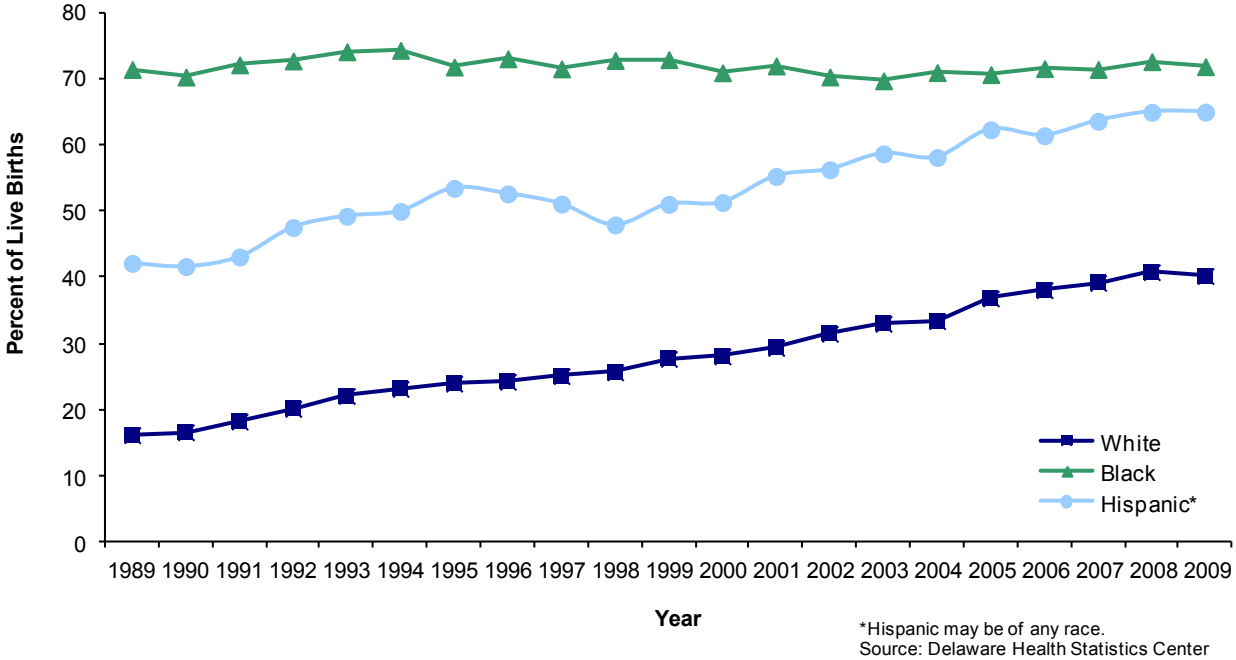
Annual Percent of Births by Mother's Marital Status
Delaware, 1989-2009



Source: Delaware Health Statistics Center

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 to 40 percent, and 42 to 65 percent from 1989 to 2009. During the same time period, the percent of births to unmarried black women remained stable, at approximately 72 percent.

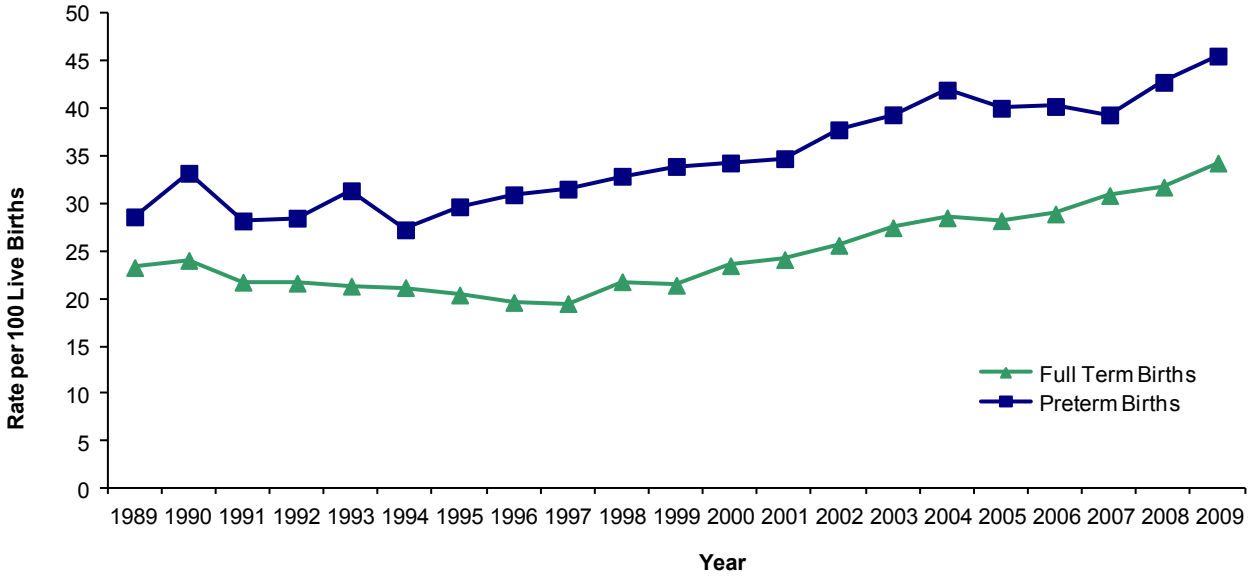
Percent of Live Births to Unmarried Women by Race and Ethnicity
Delaware, 1989-2009



*Hispanic may be of any race.
Source: Delaware Health Statistics Center

From 1997 to 2009, the rate of cesarean deliveries increased 71 percent, to 36 per 100 live births. This increasing trend was apparent in both preterm (<37 weeks gestation) and term (37+ weeks gestation) births. Although term births demonstrated a greater increase in rates between 1997 and 2009, the c-section rate for preterm births remained significantly higher at 45.6 per 100 preterm births, versus 34.3 per 100 term births.

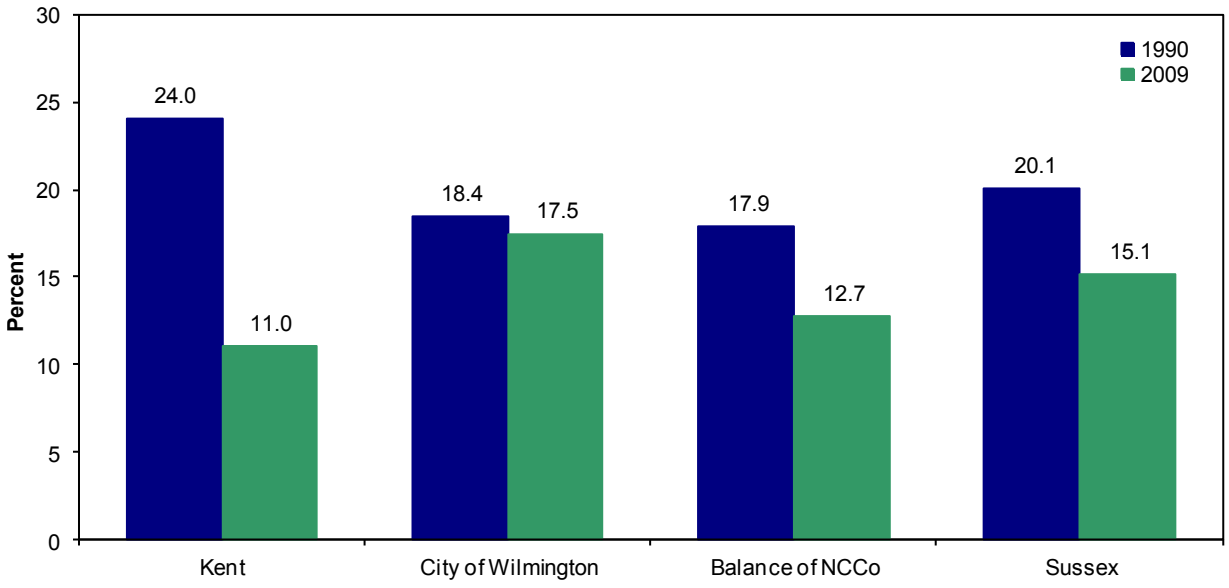
Annual Rate of Cesarean Deliveries by Gestational Category
Delaware, 1989-2009



Source: Delaware Health Statistics Center

From 1990 to 2009, the percentage of Delaware mothers who used tobacco while pregnant decreased in the three counties and in the city of Wilmington. In 2009, the city of Wilmington had the highest percentage of mothers who smoked while pregnant (17.5).

Percent of Mothers who Smoked while Pregnant
Delaware Counties and City of Wilmington, 1990 and 2009

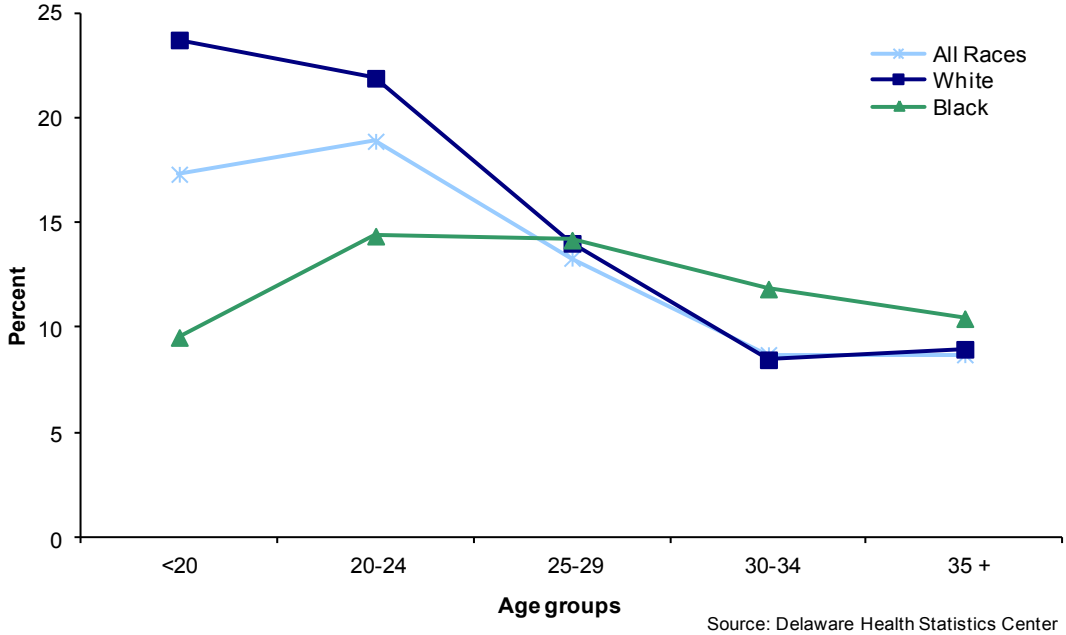


Source: Delaware Health Statistics Center

The largest percent of mothers who smoked while pregnant were white mothers under 20.

In the under 20 and 20-24 age groups, white mothers were more likely than black mothers to smoke while pregnant. In the 30 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, 2009

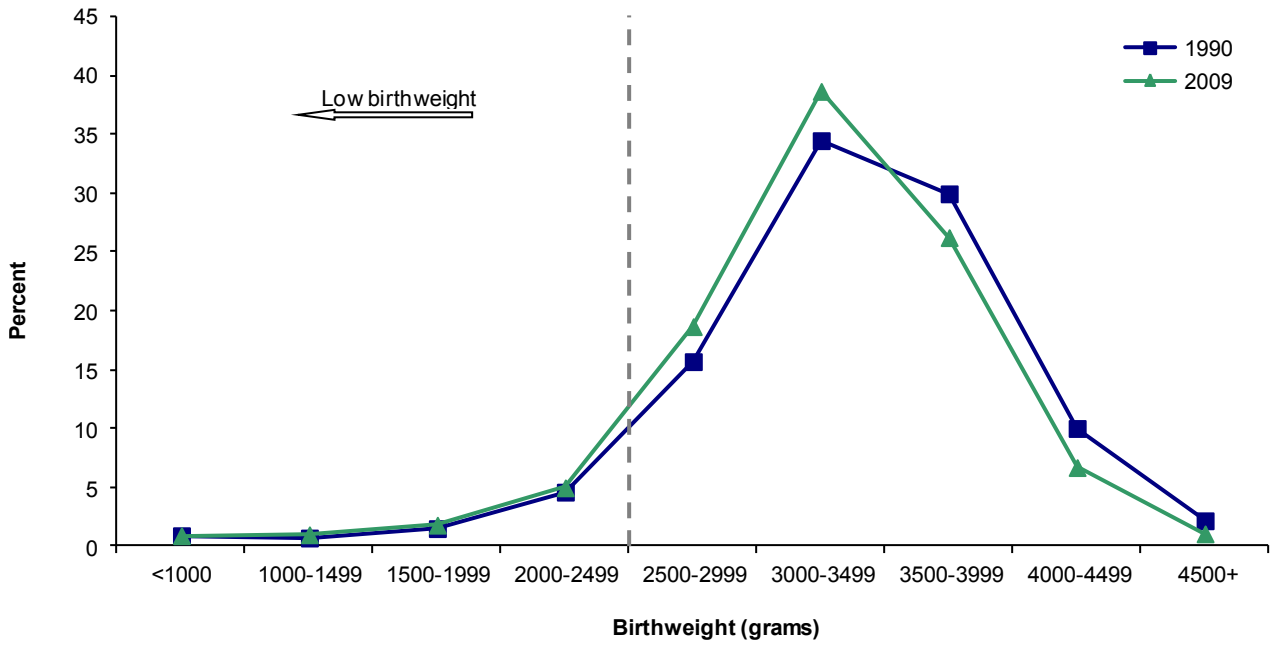


Source: Delaware Health Statistics Center

In 2009, 13.8 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 2009. The greatest percentage of births fell within the 3,000 to 3,499 gram range.

Percent Distribution of Births by Birthweight
Delaware, 1990 and 2009

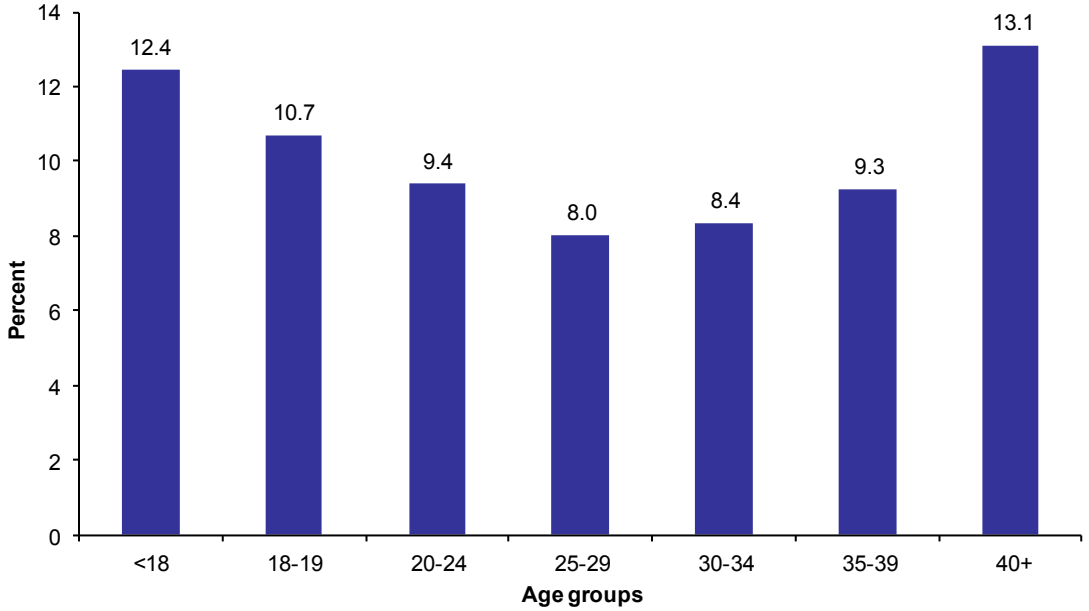


Source: Delaware Health Statistics Center

From 2004-2008 to 2005-2009, the five-year percent of low birthweight (LBW) births and very low birthweight (VLBW) births remained relatively stable at 9.0 and 2.0, respectively.

The percent of LBW births was greatest for mothers in the 40 and older age group (13.1 percent).

Five-year Percent of Low Birthweight Births (<2500 grams) by Mother's Age
Delaware, 2005-2009

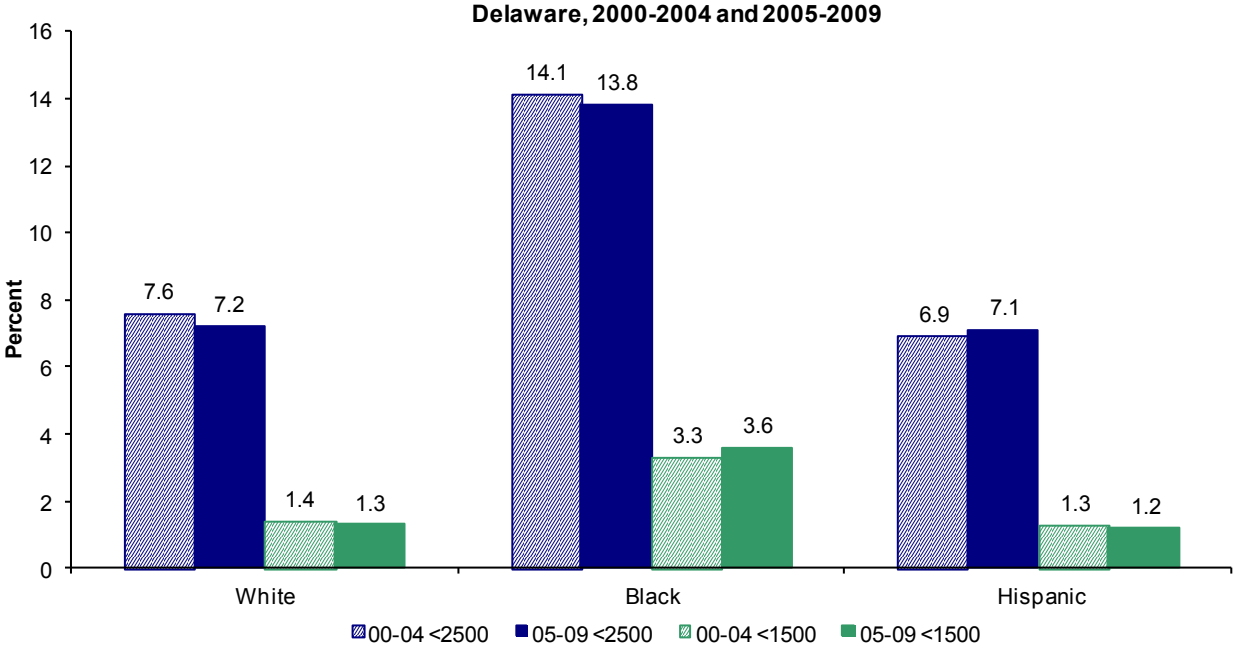


Source: Delaware Health Statistics Center

Among mothers of all ages, black mothers had the highest percentage of LBW and VLBW births, at 13.8 percent and 3.6 percent respectively.

Between 2000-2004 and 2005-2009, the percent of white infants born at low birthweight declined, while the percentages of black and Hispanic infants born at LBW remained stable.

Five-year Average Percent of LBW (<2500 grams) and VLBW (<1500 grams) Births by Race and Hispanic Origin
Delaware, 2000-2004 and 2005-2009

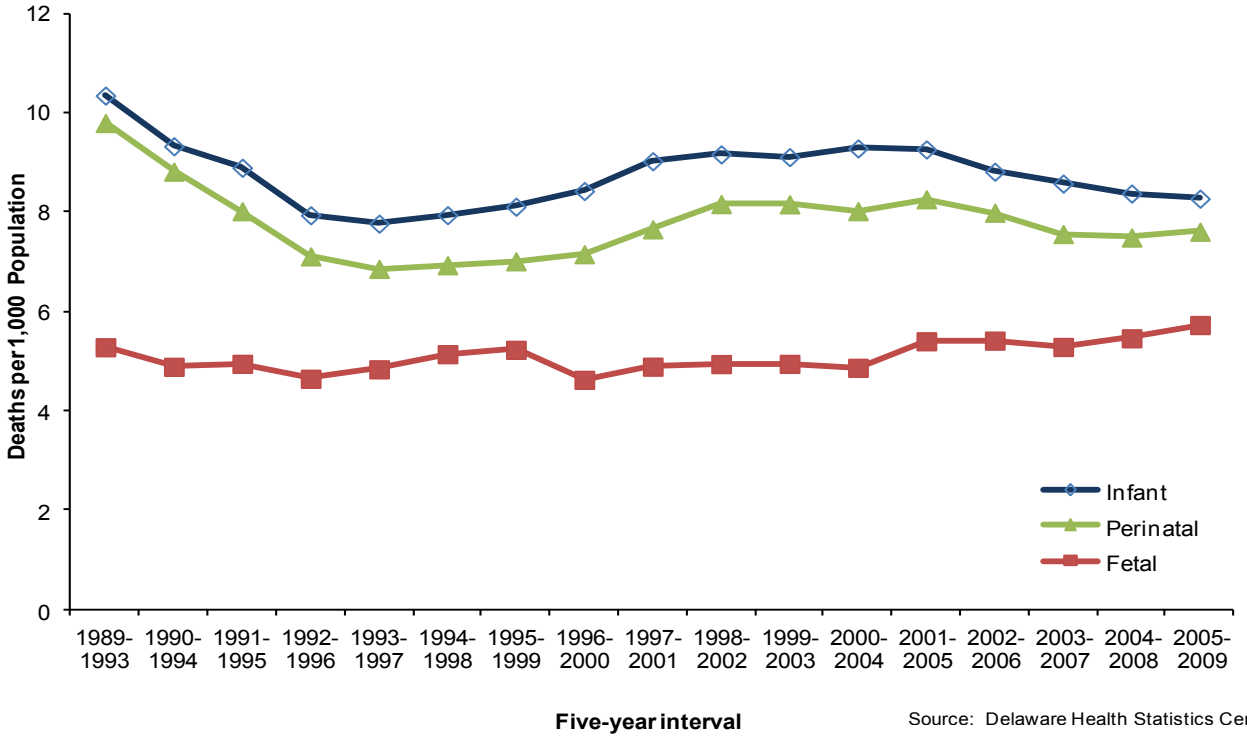


*Hispanic may be of any race.
Source: Delaware Health Statistics Center

Fetal And Perinatal Deaths

Perinatal mortality refers to deaths occurring in the period around delivery, and includes late fetal deaths (>28 weeks gestation) and early infant deaths (<7 days of age). Perinatal mortality trends paralleled those of infant mortality, decreasing from 1989-1993 to their lowest level in 1993-1997, and then increasing through 2001-2005, after which they began a gradual decrease through 2005-2009.

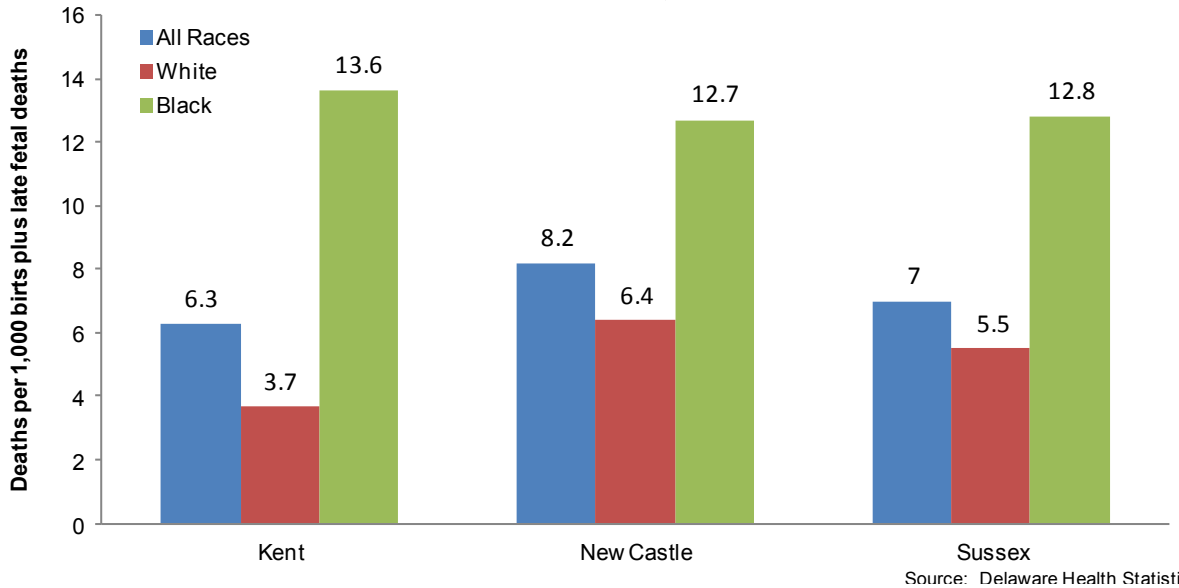
Five-year Fetal, Perinatal, and Infant Mortality Rates
Delaware, 1989-2009



Source: Delaware Health Statistics Center

Like infant mortality rates, perinatal mortality rates for black women were substantially higher than the perinatal mortality rates for white women, regardless of county. In Kent County, the perinatal mortality rate for black women was four times that of white women.

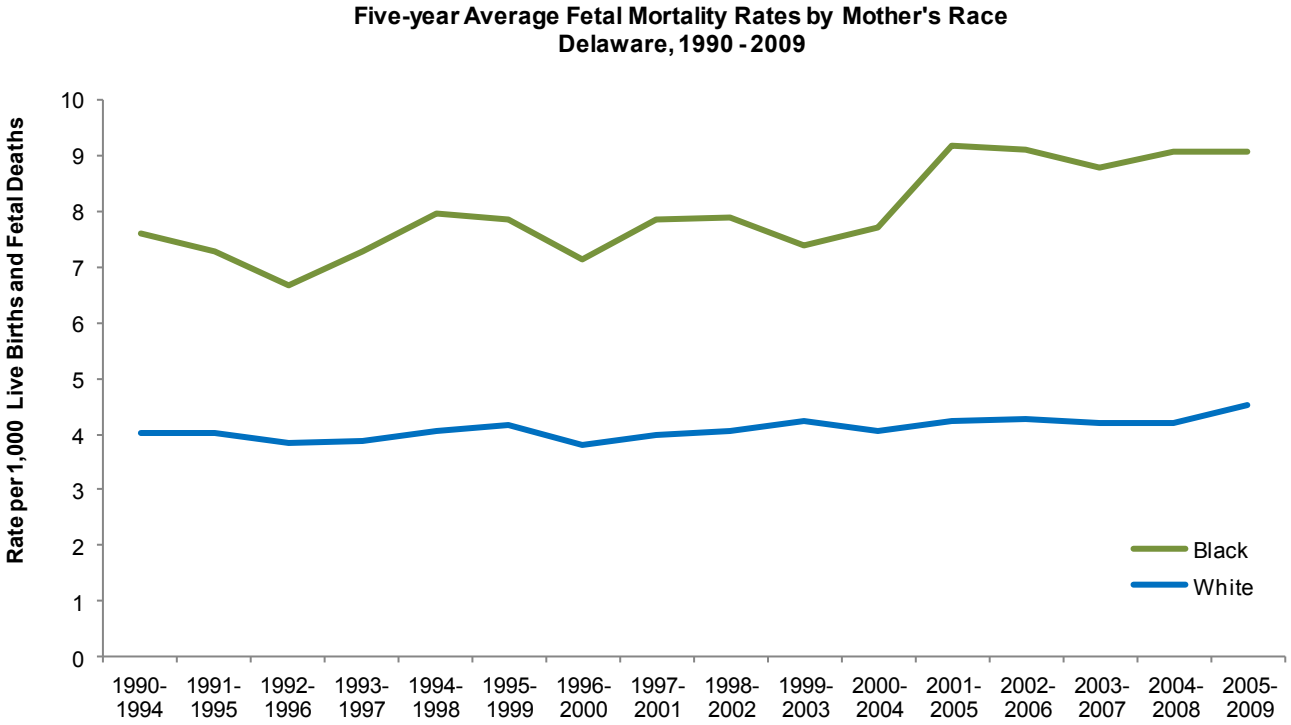
Five-year Average Perinatal Mortality Rates by Race
Delaware Counties, 1989-2009



Source: Delaware Health Statistics Center

Fetal And Perinatal Deaths

In 2009, there were 66 reported fetal deaths in Delaware. In 2005-2009, the fetal mortality rate was 5.7 fetal deaths per 1,000 live births and fetal deaths. Fetal mortality rates for black women have been consistently higher than the rates for white women, and in 2005-2009 they were double the rate of white women (9.1 versus 4.5).

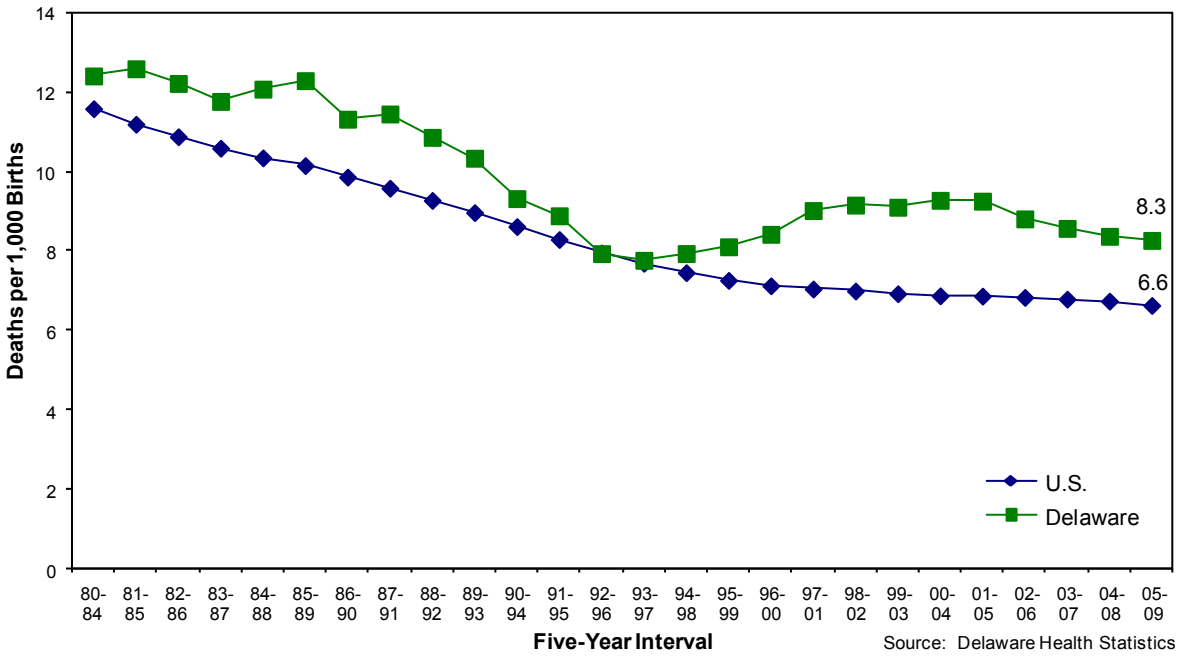


Source: Delaware Health Statistics Center

INFANT MORTALITY

Though Delaware's infant mortality rate (IMR) remained stable between 2004-2008 and 2005-2009, it has declined 11 percent from its 2000-2004 peak of 9.3, to 8.3 infant deaths per 1000 live births in 2005-2009. At 6.6, the U.S. rate remained significantly lower than the Delaware rate.

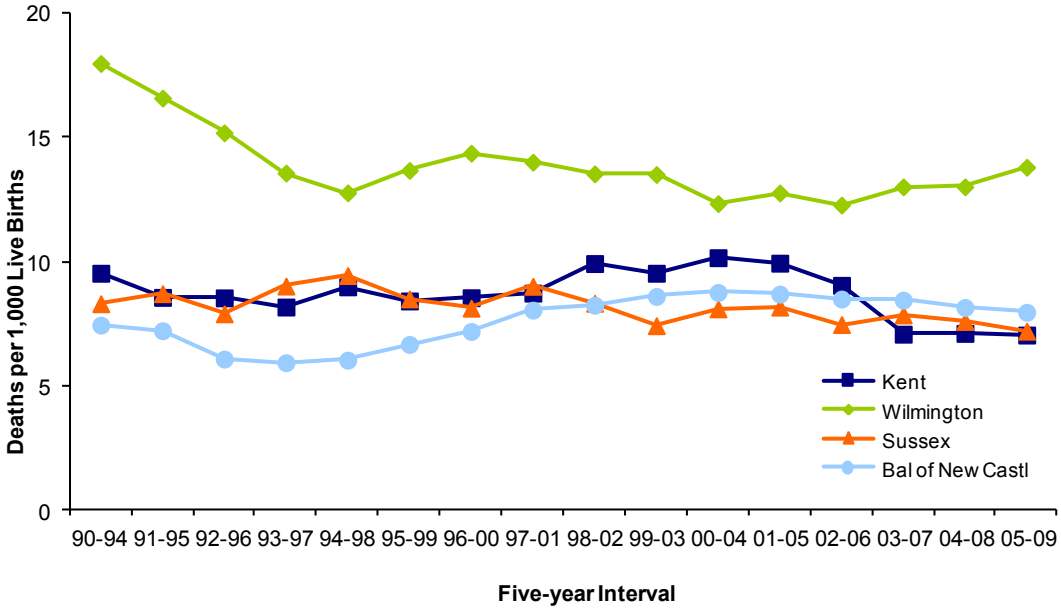
Five-year Average Infant Mortality Rates
Delaware and U.S., 1989 - 2009



Source: Delaware Health Statistics Center

As IMRs for New Castle and Kent Counties changed little between 2004-2008 and 2005-2009, IMRs remained highest in New Castle County (9.0) and lowest in Kent County (7.1). The IMR in Sussex County decreased from 7.6 to 7.2. New Castle County's relative stability masked the rate fluctuations of Wilmington and the balance of New Castle County; Wilmington's IMR rose slightly as the balance of New Castle County's IMR moved downward.

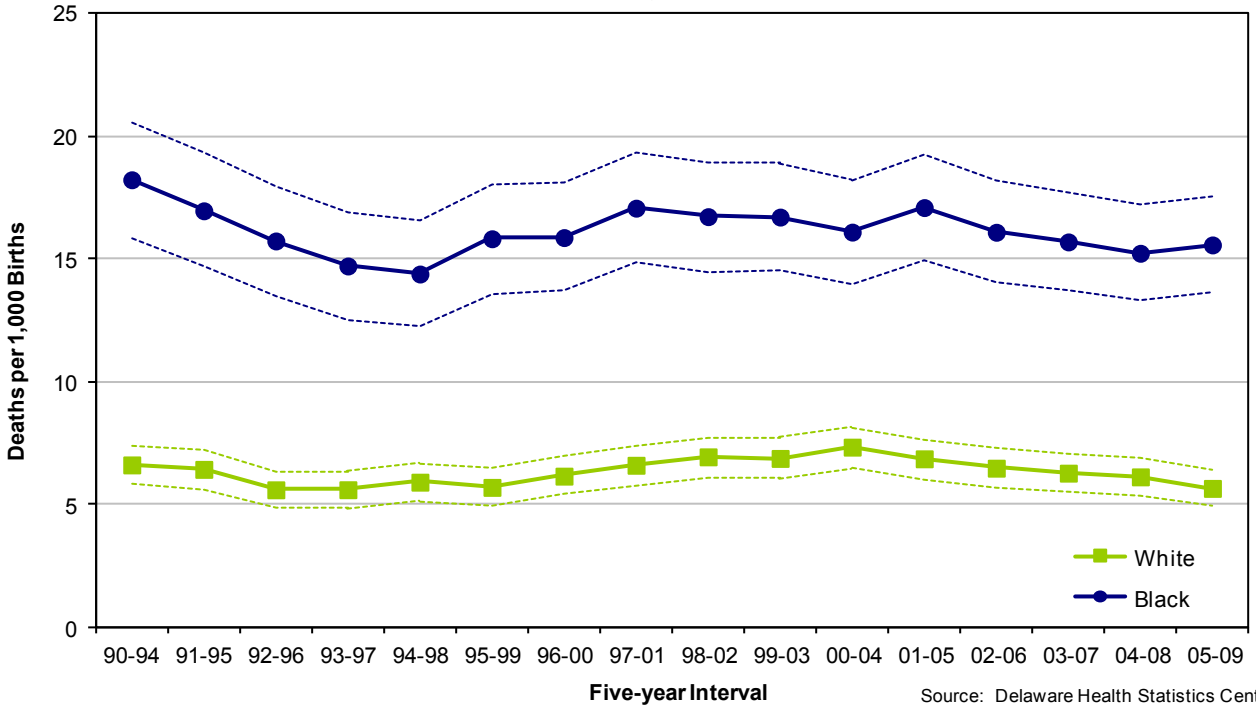
Five-year Average Infant Mortality Rates
Delaware Counties and City of Wilmington, Delaware, 1990-2009



Source: Delaware Health Statistics Center

As shown in the graph below, black infants experienced significantly higher mortality rates than white infants, and from 1990-1994 to 2005-2009, black IMRs were anywhere from 2.2 to 2.8 times that of white IMRs.

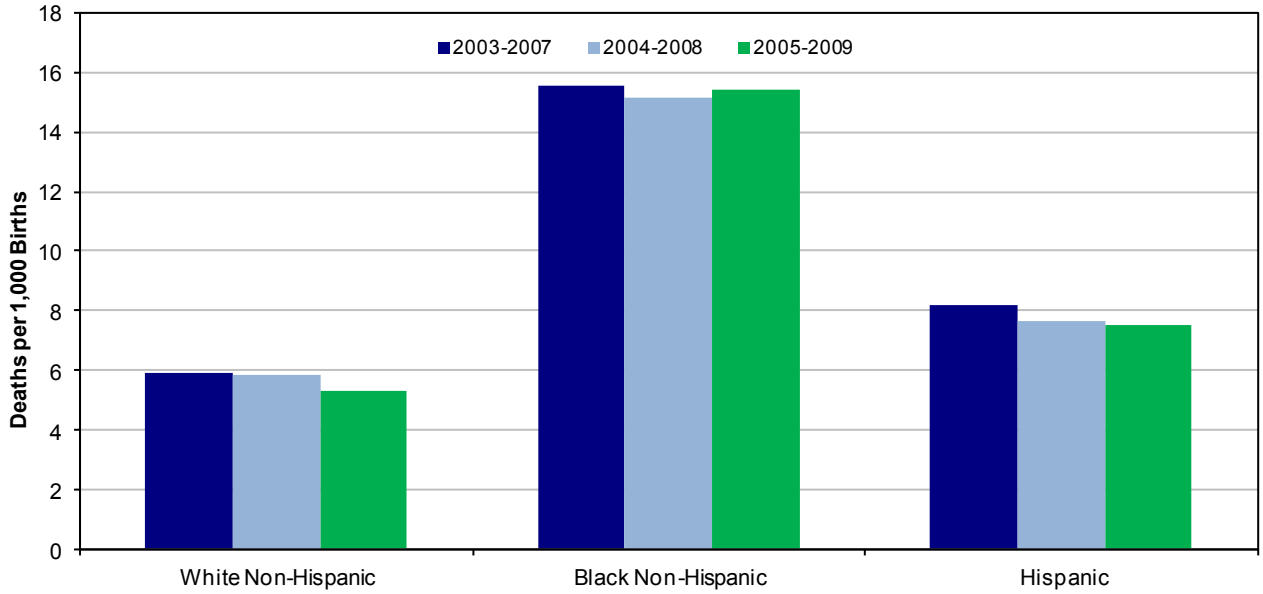
Five-year Average Black and White Infant Mortality Rates with Confidence Intervals
Delaware, 1990-2008



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 15.4 deaths per 1,000 live births in 2005-2009 was nearly 3 times the white non-Hispanic rate of 5.3 and twice the Hispanic rate of 7.5.

Five-year Average Infant Mortality Rates by Race and Hispanic Origin
Delaware, 2003-2009



Source: Delaware Health Statistics Center

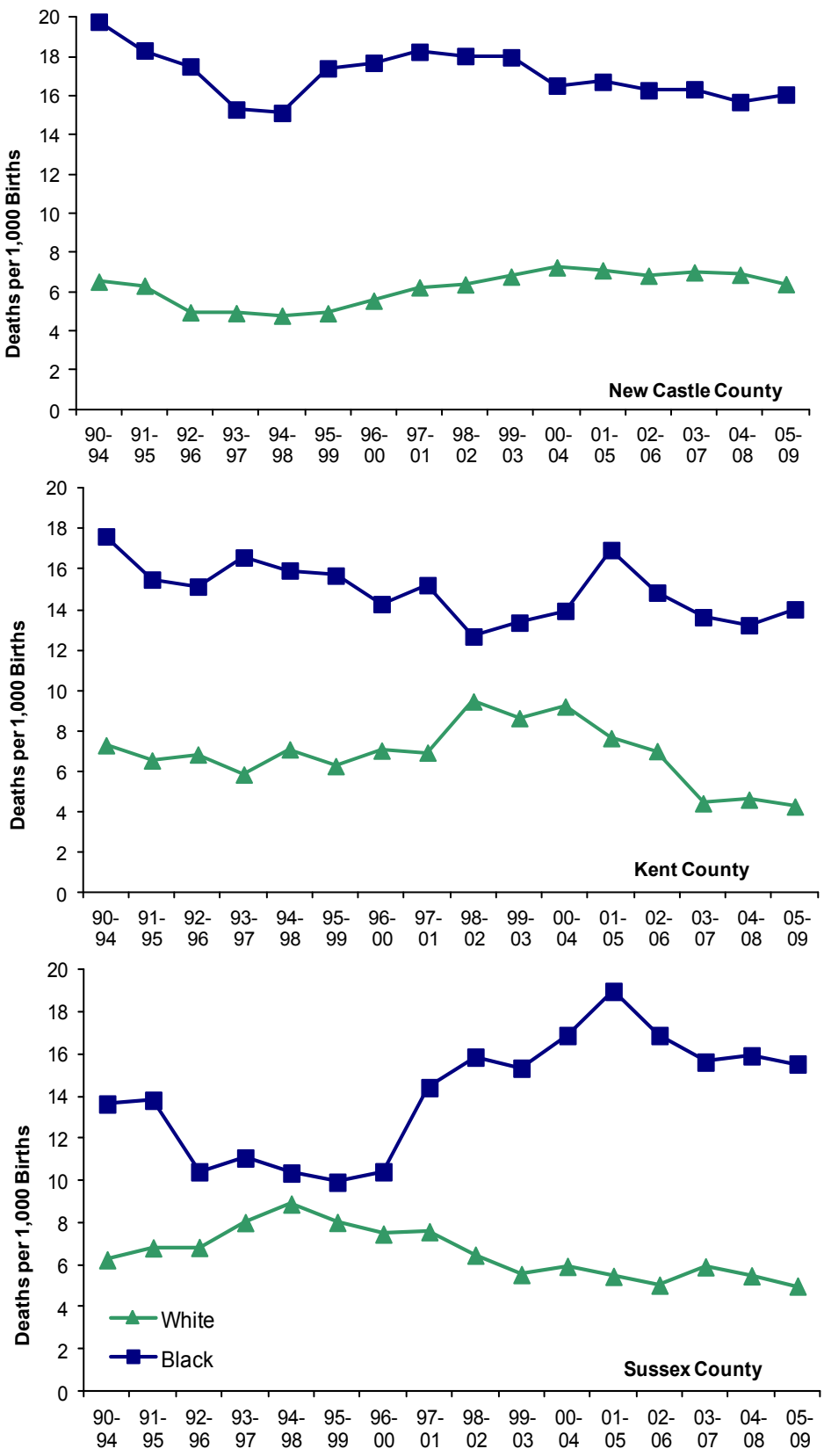
Black IMRs were consistently higher than white IMRs in all three counties, for every time period. Disparity ratios[1] were used to gauge the disparity between black and white IMRs. However, as is shown in the graphs to the right, both the disparity ratio and the rates should be considered when examining differences in infant mortality.

Though Kent County had the lowest IMRs for both black and white infants (14.0 and 4.3), it also had the largest black/white disparity ratio; black infants died at a rate 3.3 times that of white infants.

In contrast, New Castle County had the highest IMRs for both black and white infants (16.1 and 6.4), and had the narrowest disparity ratio, at 2.5.

Though both black and white IMRs in Sussex County experienced downward movement from 2004-2008 to 2005-2009, the decrease in white IMRs was larger (an 8.9 percent decline versus 2.4 percent), which widened the disparity ratio to 3.1.

Five-year Average Infant Mortality Rates by Race and County
Delaware, 1990-2009



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 Causes of Death

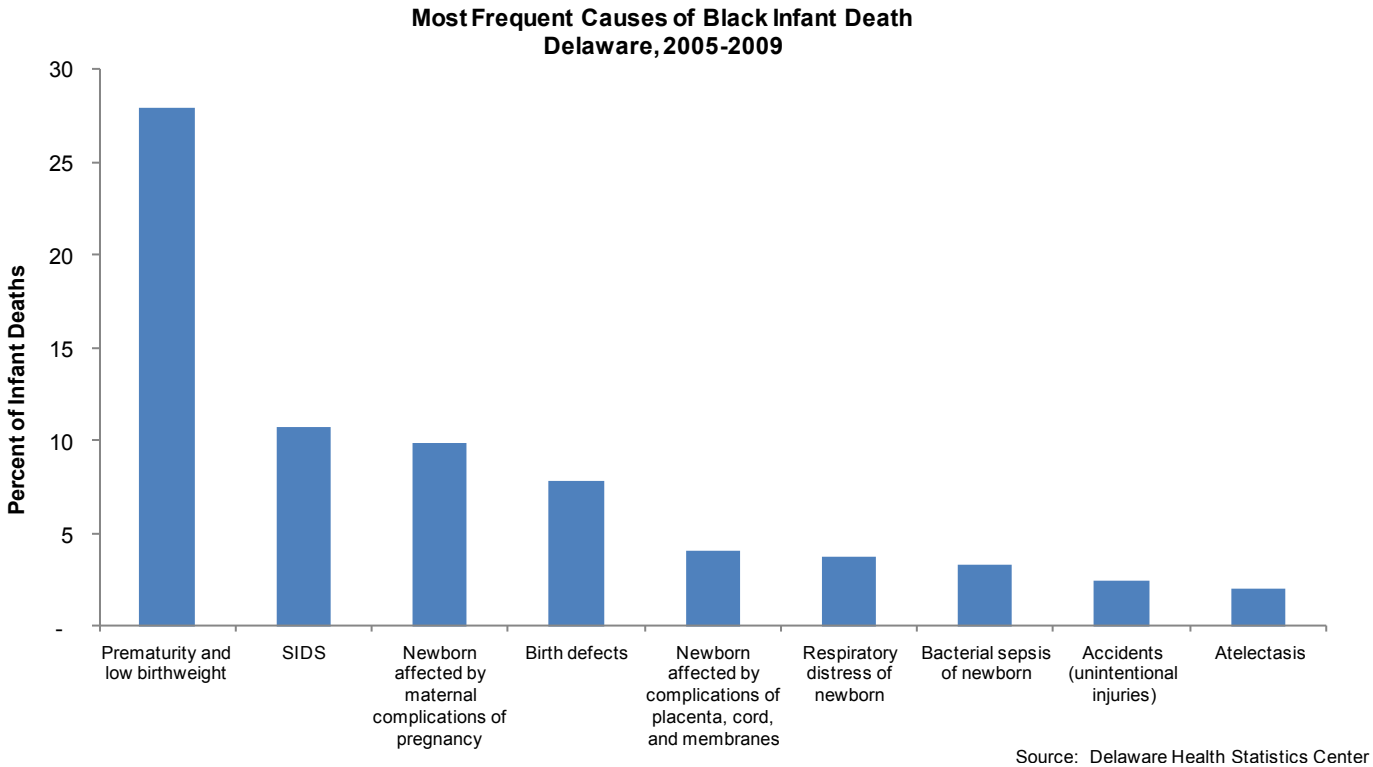
In 2005-2009 the five leading causes of infant death were:

- Disorders related to short gestation and fetal malnutrition (prematurity and low birthweight), which accounted for 24.8 percent of infant deaths,
- Congenital anomalies (birth defects), which accounted for 12.7 percent of infant deaths,
- Newborn affected by maternal complications of pregnancy, which accounted for 9.8 percent of infant deaths. Of the 48 deaths attributed to this cause, 46 were due to the newborn being affected by incompetent cervix and premature rupture of membranes,
- Sudden infant death syndrome (SIDS) accounted for 8 percent, and
- Newborn affected by complications of placenta, cord, and membranes (4.5 percent).

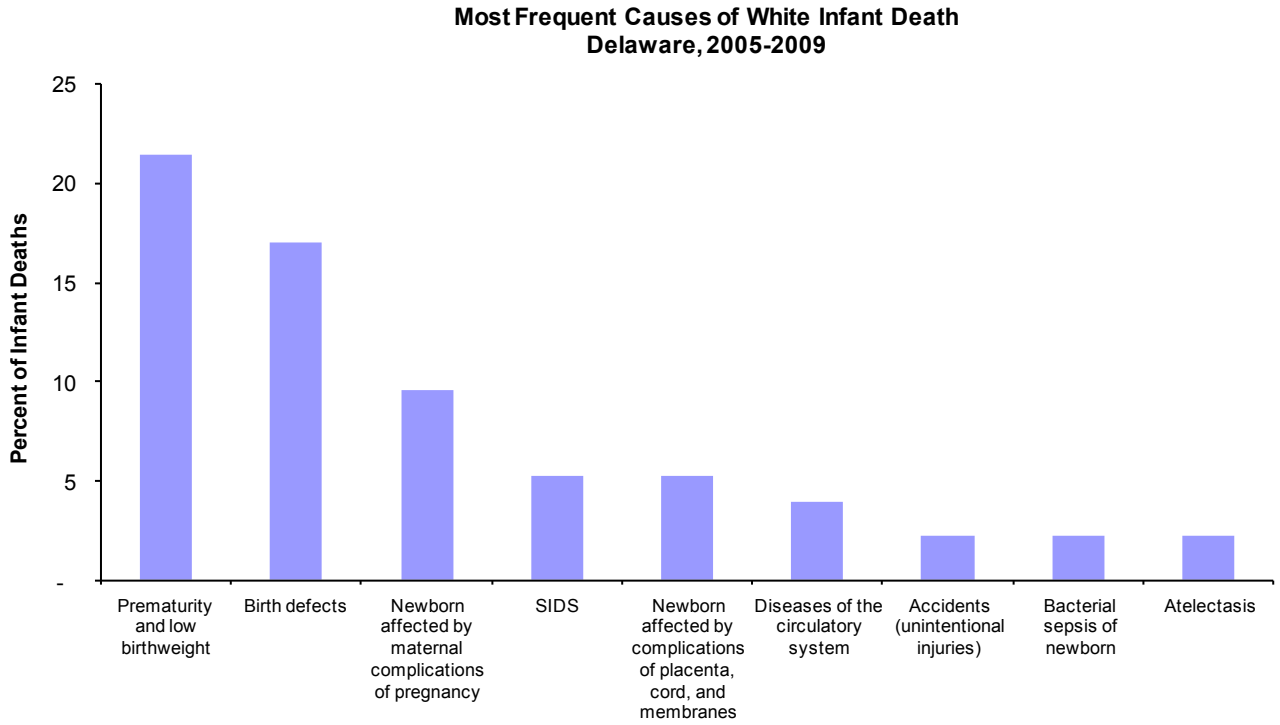
In sum, the five most common causes of infant death accounted for 60 percent, or 292 of the 488 total infant deaths.

The most frequent causes of death by race are shown in the graphs below and on the following page. Disorders related to short gestation and low birthweight and newborn affected by maternal complications of pregnancy were listed in the top three most frequent causes of death for both black and white infants.

Though the proportions of deaths by race were similar for many of the causes of death, notable exceptions were birth defects and SIDS. While birth defects were responsible for 17 percent of all white infant deaths, they accounted for only 7.8 percent of black infant deaths. Conversely, infant deaths due to SIDS accounted for a larger percentage of black infant deaths than white infant deaths (10.7 versus 5.2 percent)



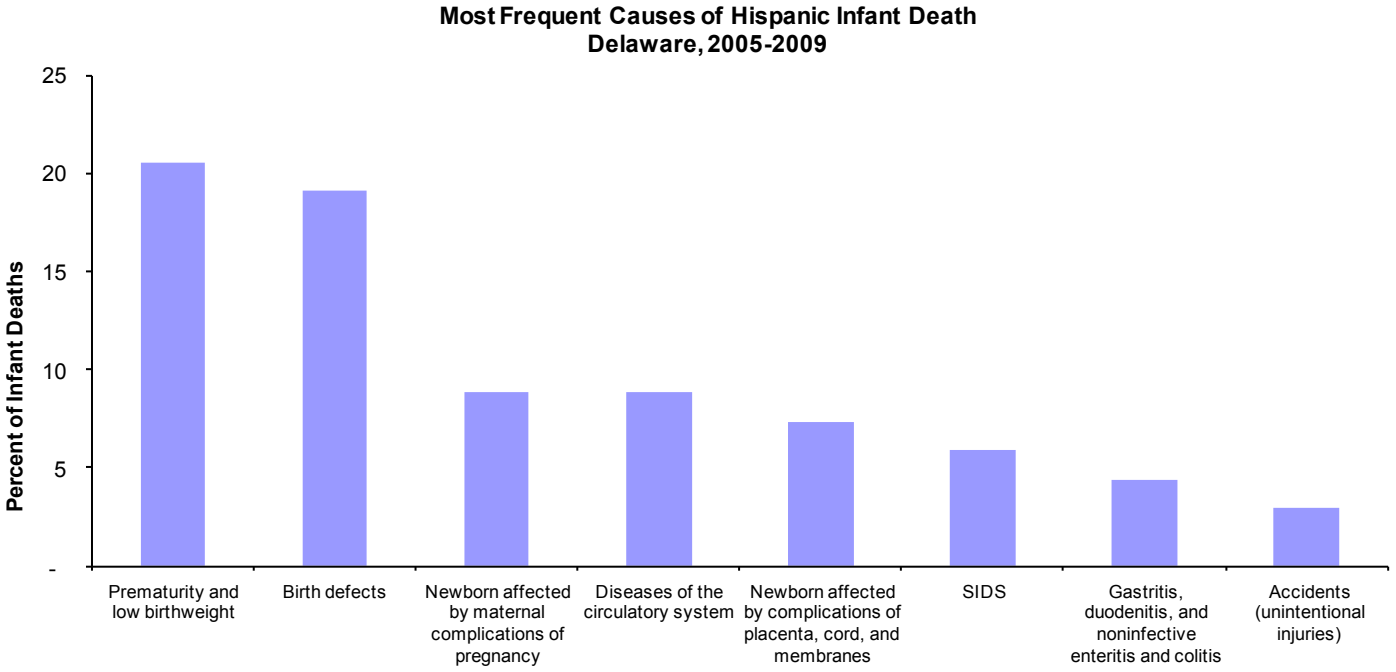
Source: Delaware Health Statistics Center



Source: Delaware Health Statistics Center

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, 2005-2009, 15.3 percent of all live births were to Hispanic mothers, and 13.9 percent of all infant deaths were of Hispanic origin.

Two causes of death accounted for the greatest number of Hispanic infant deaths: disorders related to short gestation and low birthweight and birth defects.

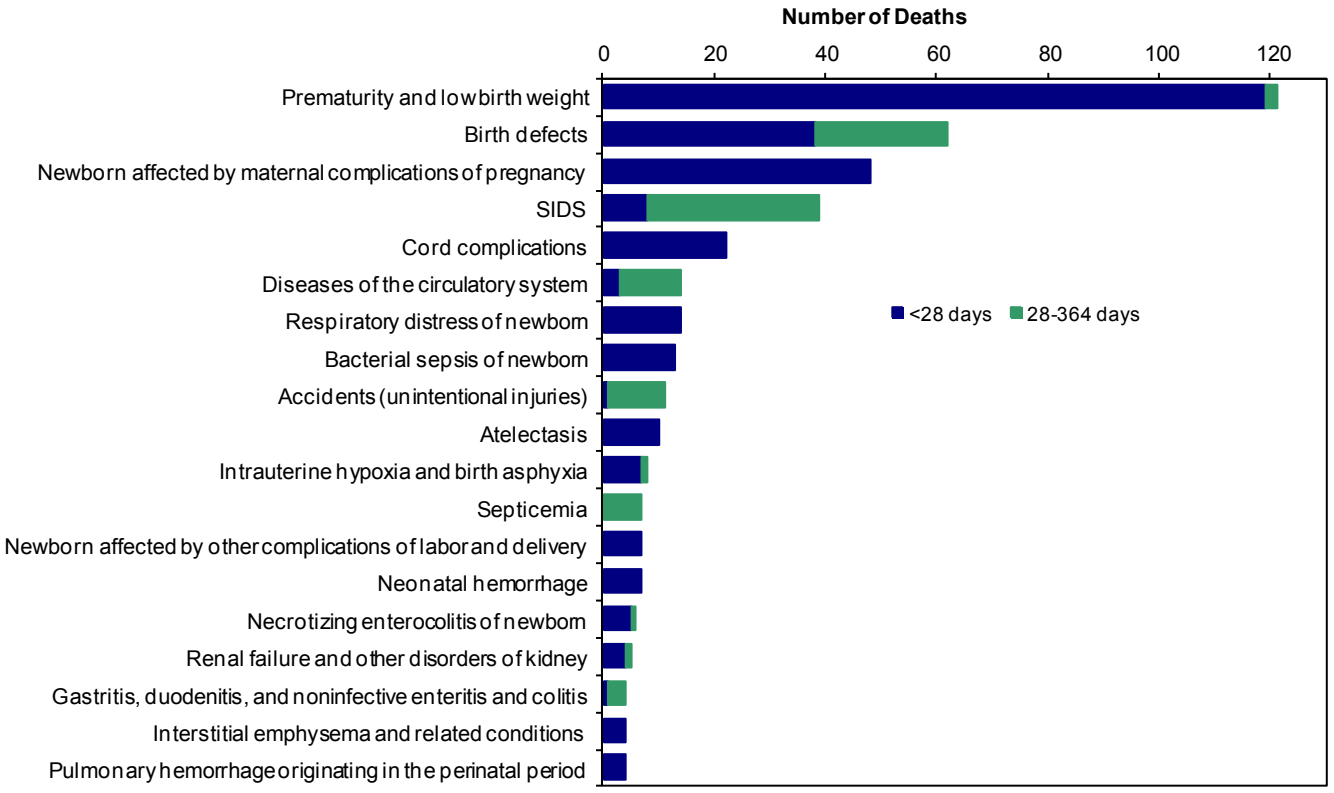


Source: Delaware Health Statistics Center

Approximately 93 percent of all infant deaths occurred within the first six months of life, 72 percent of all infant deaths occurred within the first 28 days of life, and 43 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 by Infant's Age Group
Delaware, 2005-2009



Source: Delaware Health Statistics Center

- Prematurity and low birthweight accounted for the greatest number of infant deaths in 2005-2009; all but two of these deaths occurred in the neonatal period.

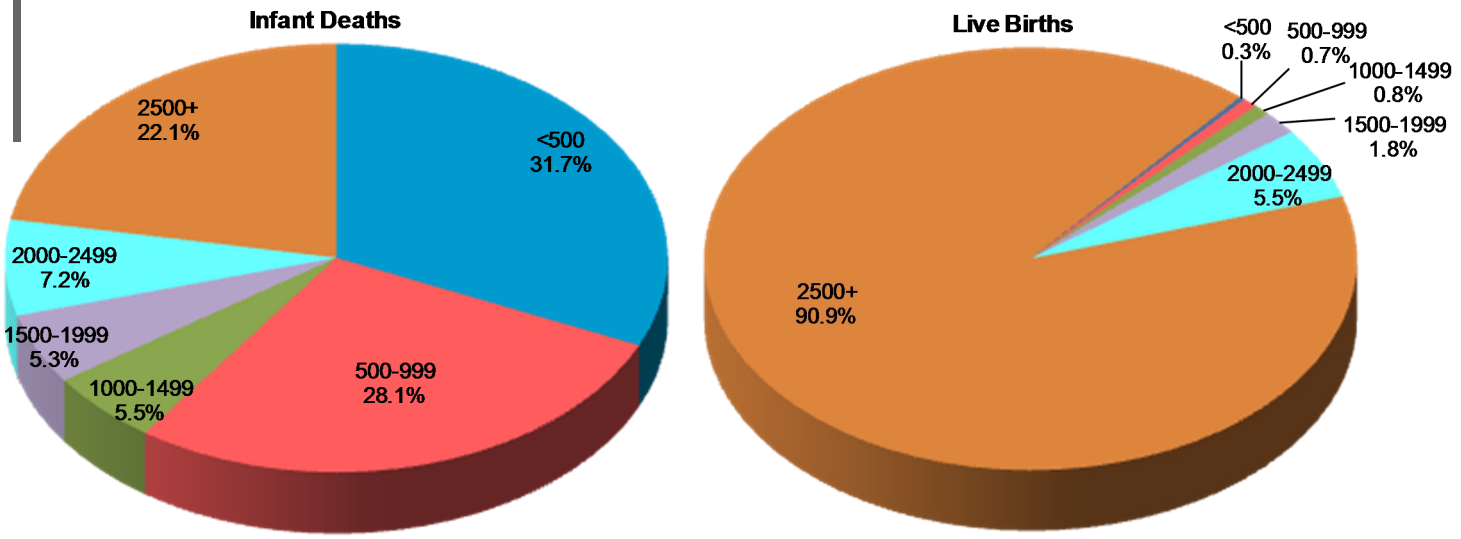
- Sudden infant death syndrome (SIDS) was the only one of the top five causes of death that had the majority of deaths occurring in the postneonatal period, with a mean age at death of 102 days.

  ⇒ 33 percent (13 out of 39) of the SIDS deaths were associated with co-sleeping and/or sleeping on soft surfaces, such as couches and adult beds.

- During that same time period, there were 23 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, 7.4 percent of all infant deaths in 2005-2009 were associated with co-sleeping and/or sleeping on a soft surface.

Though only 1 percent of all live births in 2004-2008 were infants weighing less than 1000 grams, they accounted for over half (59.3 percent) of all infant deaths. In total, 9 percent of all live births in 2004-2008 were infants of low birthweight (under 2500 grams) and 77.2 percent of infant deaths were low birthweight.

Distribution by Birthweight, Delaware Live Birth Cohort, 2004-2008

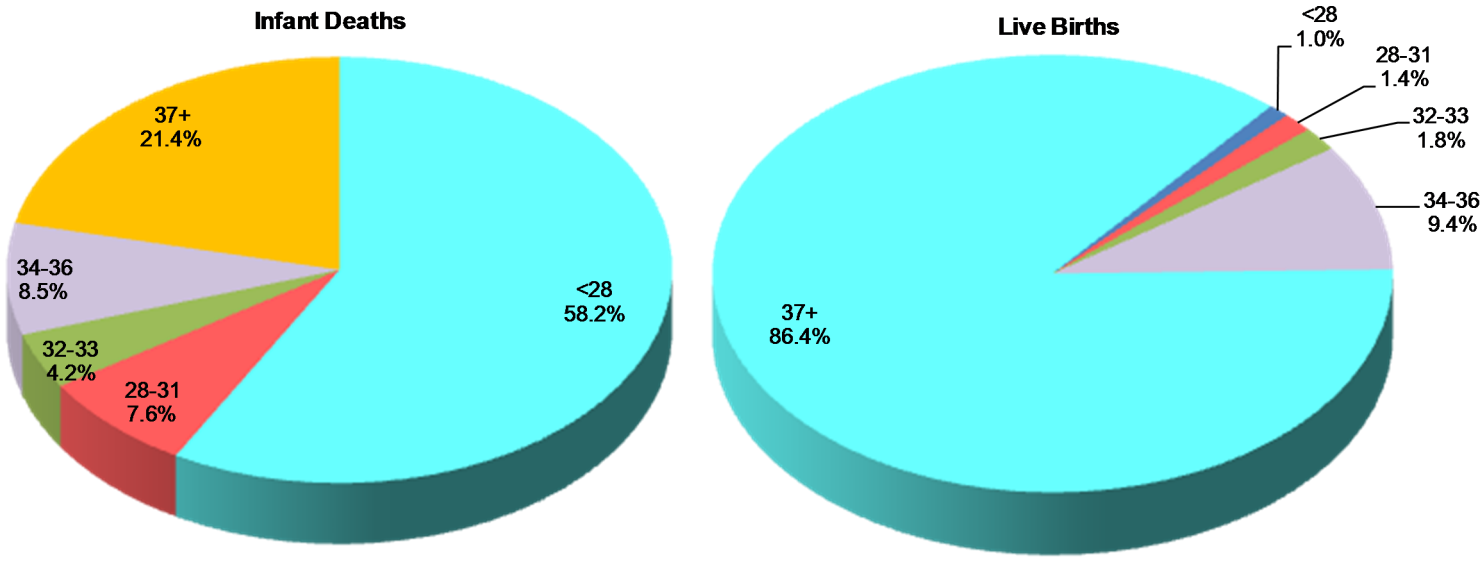


Source: Delaware Health Statistics Center

Gestation and infant death demonstrated the same relationship as birthweight and infant death; infants born at the youngest gestational age made up a very small percentage of live births, yet they accounted for the majority of infant deaths.

One percent of live births in 2004-2008 were less than 28 weeks gestation at birth, but they accounted for 58 percent of all infant deaths. In total, 13.6 percent of all live births in 2004-2008 were born preterm (<37 weeks of gestation) and 78.1 percent of infant deaths were born preterm.

Distribution by Gestation, Delaware Live Birth Cohort, 2004-2008



Source: Delaware Health Statistics Center

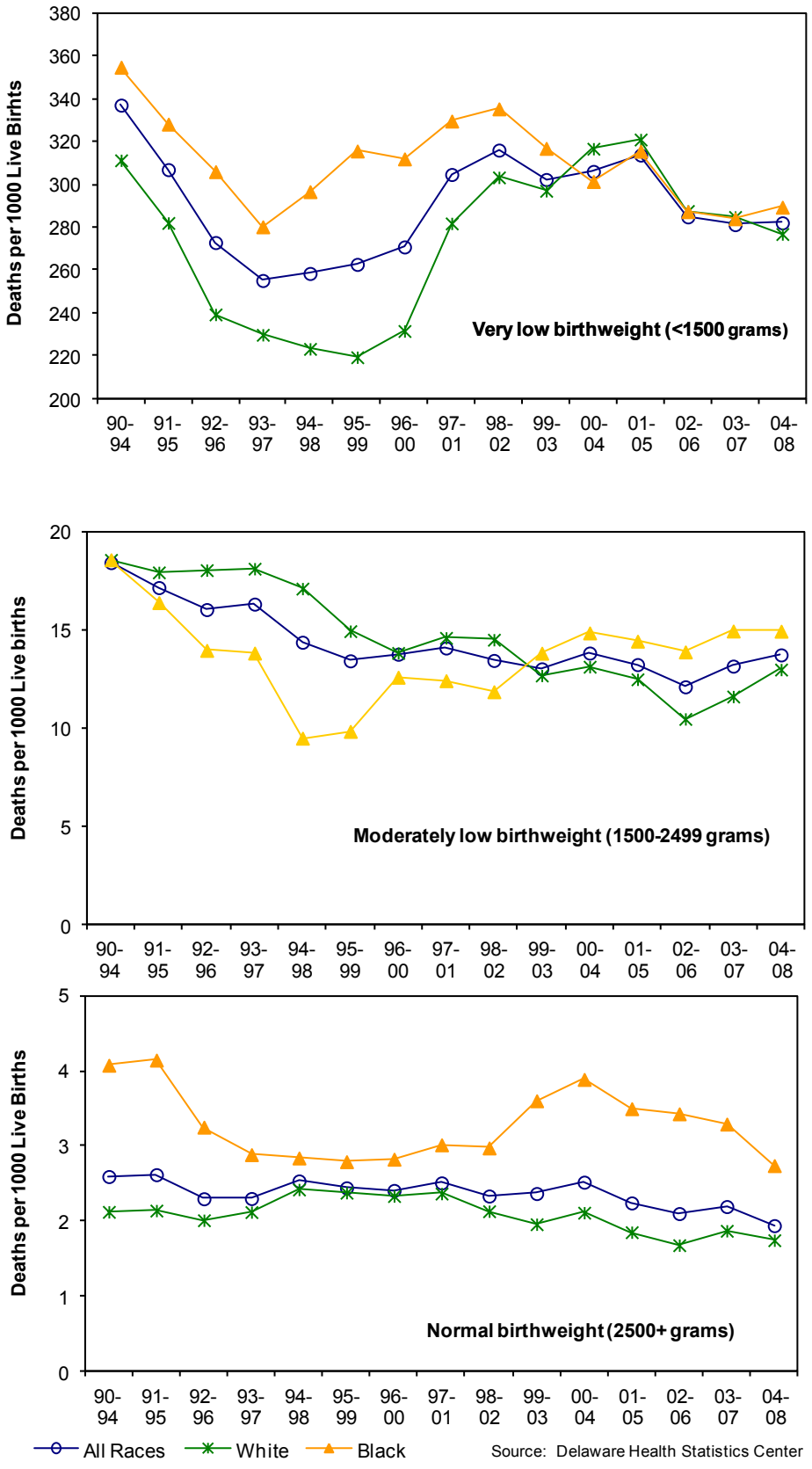
Birthweight and gestation are considered to be the most important predictors of infant health and mortality risk. Infants born too small or too early have a much greater risk of mortality than those who reach a normal birthweight (2500+ grams) or full-term gestation (37+ weeks).

Most recently, IMRs for very low birthweight (VLBW) infants demonstrated no significant change (285 in 2002-2006 to 282 in 2004 -2008). In 2004-2008, IMRs for white and black VLBW infants were 277 and 290 infant deaths per 1,000 live births.

What looked like the beginning of a downward trend in moderately LBW IMRs in 2001-2005 and 2002-2006, reversed direction in 2003-2007 and continued to move upward in 2004-2008. As a result, during the last five-year intervals, there was no net change in the rates.

IMRs for normal birthweight infants trended downward between 2000-2004 and 2004-2008. During that time, white IMRs decreased 17 percent and black IMRs decreased by 30 percent. In 2004-2008, the black IMR for normal birthweight infants was 2.7, versus 1.7 for white infant of normal birthweight.

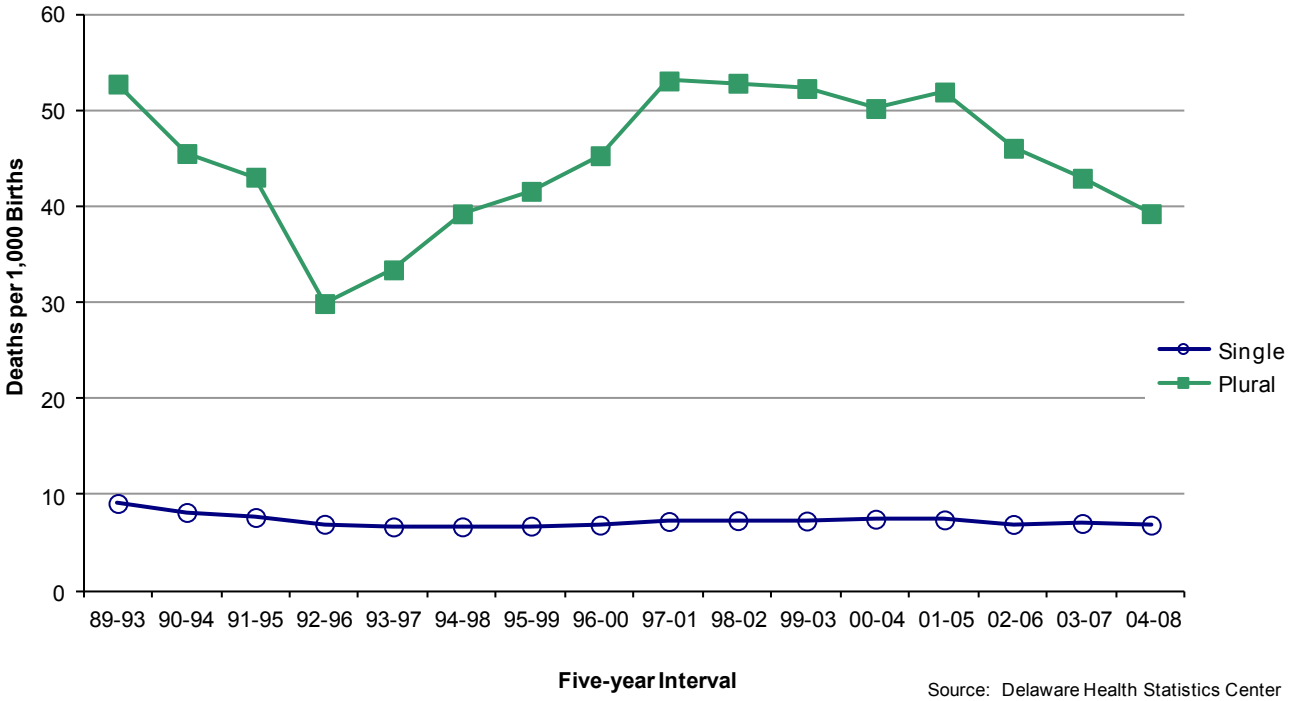
Five-year Average Infant Mortality Rate by Birthweight and Race
Delaware, 1990-2008 Live Birth Cohort



Source: Delaware Health Statistics Center

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 26 percent, with the majority of that occurring in the most recent time period. IMRs for singleton births experienced a slight decrease of only 5 percent. In 2004-2008, the infant mortality rate for plural births was 5.7 times that of singleton births (39.3 versus 6.9).

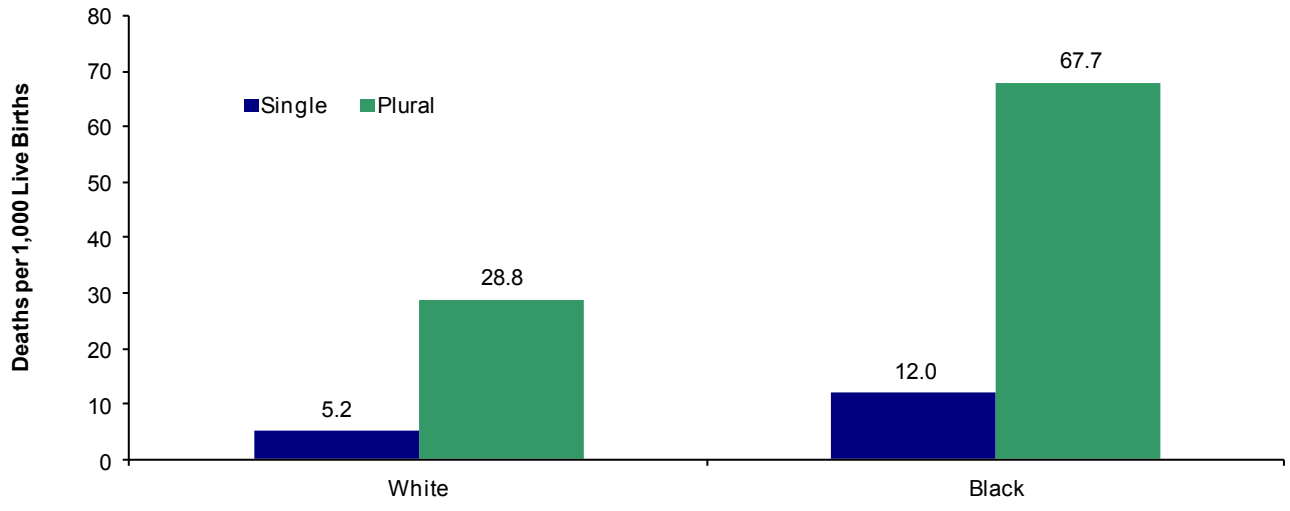
Five-year Average Infant Mortality Rates by Plurality
Delaware Live Birth Cohort, 1989-2008



Source: Delaware Health Statistics Center

The magnitude of difference between singleton and plural IMRs remained the same regardless of race, though rates for black infants, both singleton and plural, were more than double those of white infants.

Five-year Average Infant Mortality Rates by Plurality and Race
Delaware Live Birth Cohort, 2004-2008

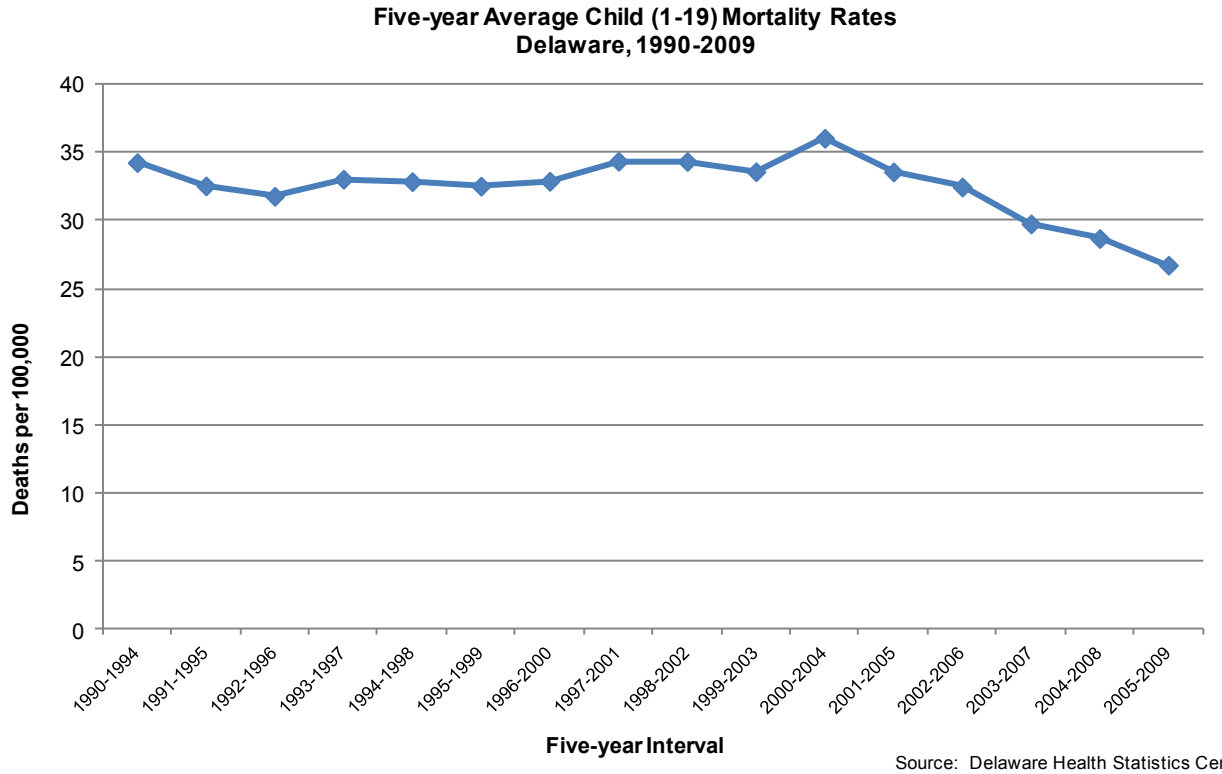


Source: Delaware Health Statistics Center

CHILD MORTALITY

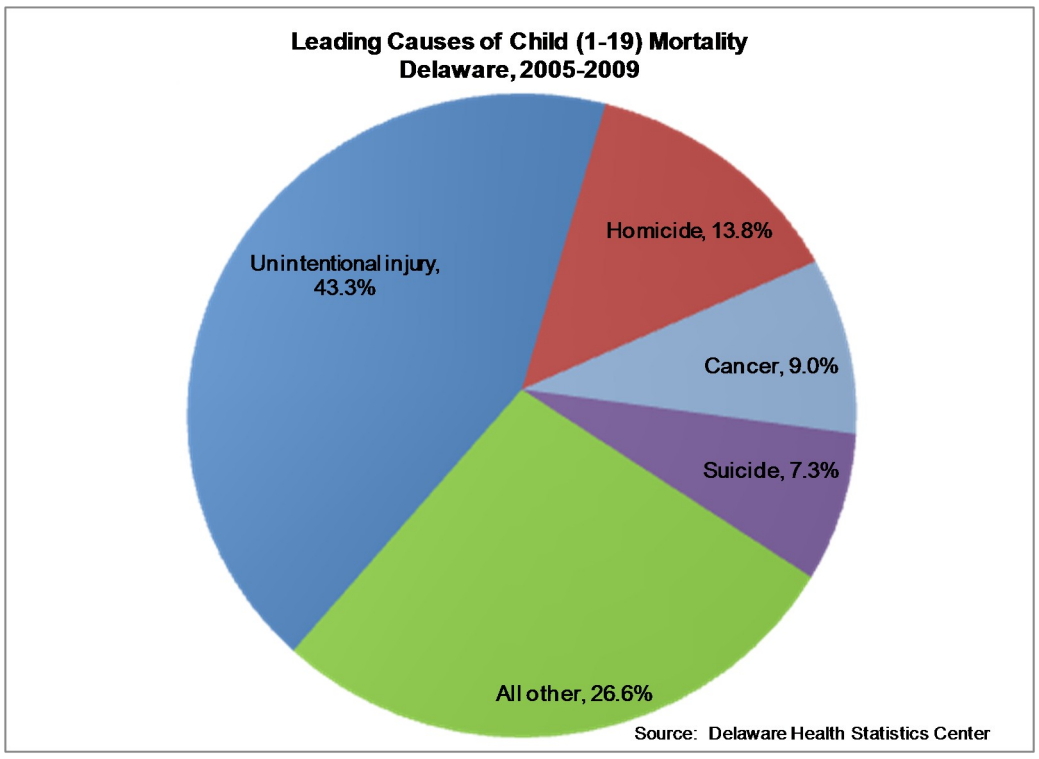
From 2005 to 2009, 289 children and adolescents between the ages of 1 and 19 died in Delaware, which represented 0.8 percent of the total deaths that occurred during that time.

After small fluctuations throughout the 1990s, the mortality rate for children ages 1 to 19 began to decline. Since its peak of 36.1 in 2000-2004, the rate has decreased 26 percent to 26.7 deaths per 100,000 children.



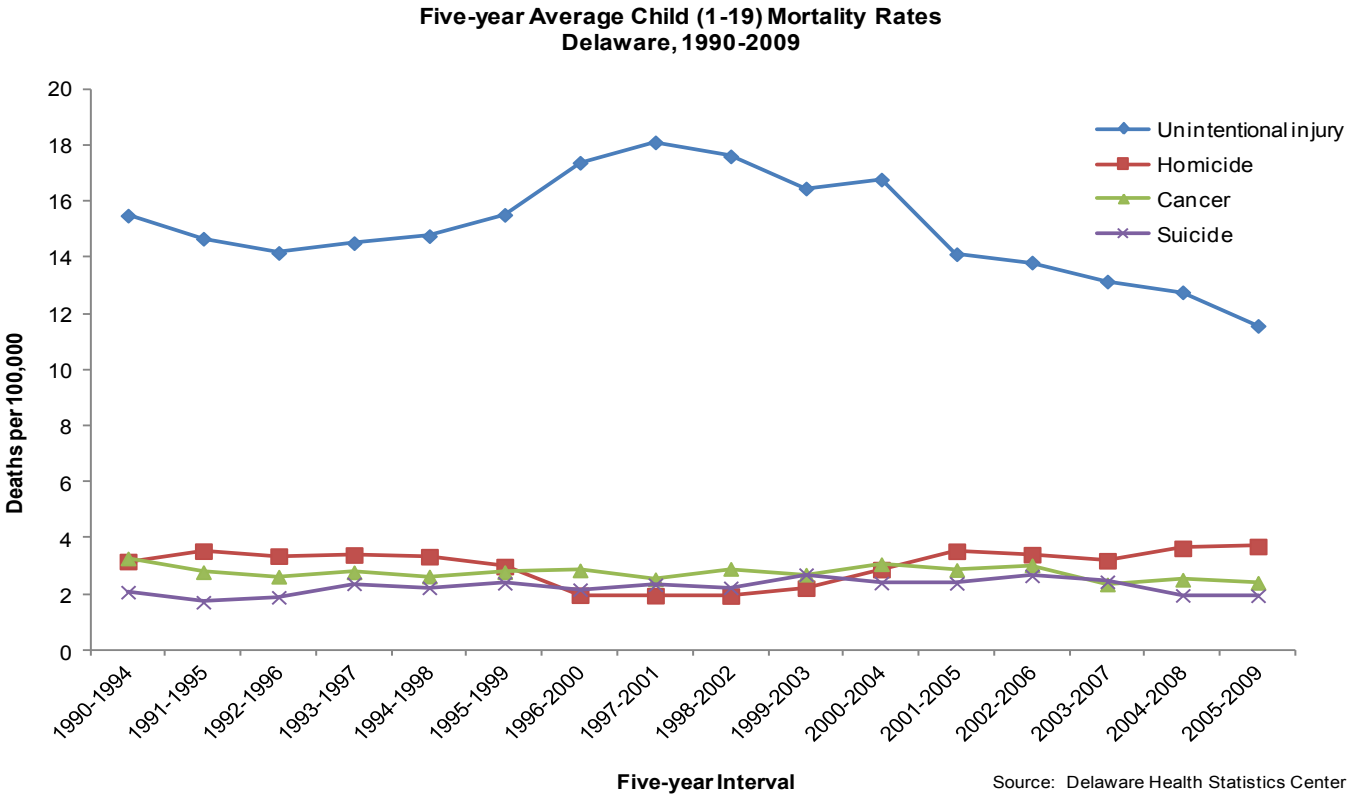
Source: Delaware Health Statistics Center

Accidents, homicide, cancer, and suicide were the four most common causes of child mortality in 2005-2009. Together, they accounted for nearly three-quarters of all child deaths.



CHILD MORTALITY

From 2000-2004 to 2005-2009, rates for three of the four leading causes of child mortality declined. Unintentional injury mortality rates declined by 31 percent; cancer and suicide mortality rates also decreased, though the change was not statistically significant. Homicide was the only cause to demonstrate an increase; the rate increased 29 percent, from 2.9 in 2000-2004 to 3.7 in 2005-2009.



Source: Delaware Health Statistics Center

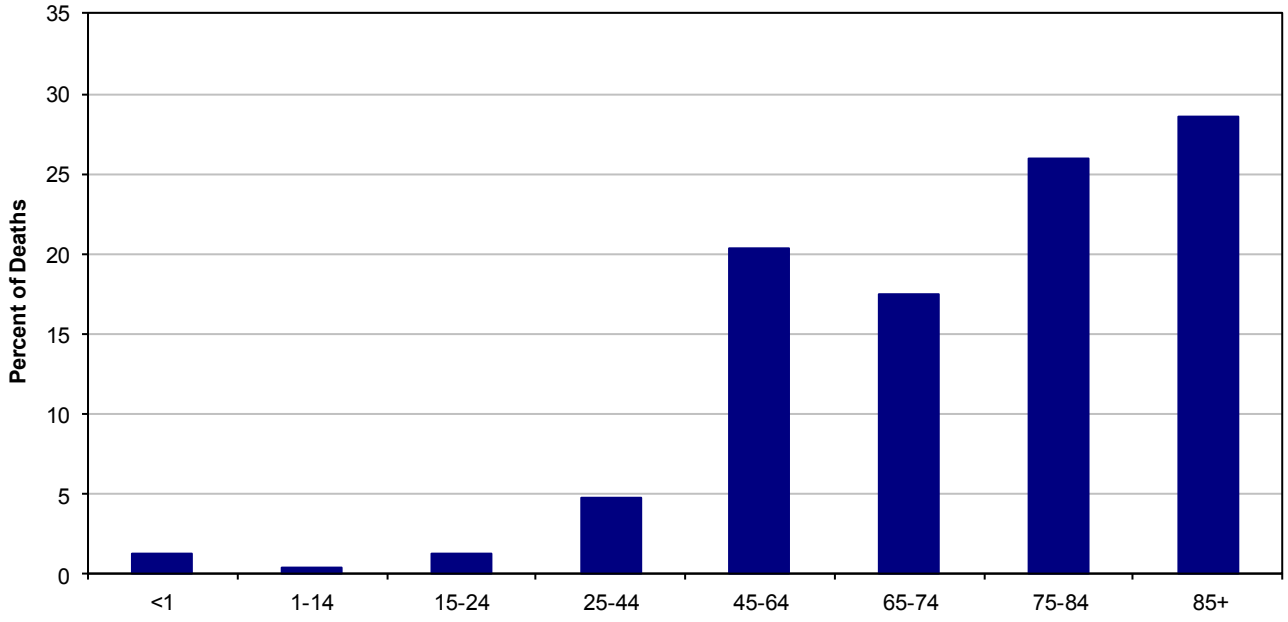
Detailed manner of the most common causes of child deaths in 2005-2009:

- Motor vehicle crashes accounted for 69 percent of all deaths due to unintentional injuries; the second and third most common causes of unintentional injury deaths of children were poisoning and drowning, which accounted for 10 and 8 percent of deaths respectively.
- Firearms and cutting/piercing accounted for over 90 percent of all homicides, 78 and 15 percent respectively.
- The majority of child cancer deaths were due to brain cancer (39 percent) and leukemia (27 percent).
- Suffocation, followed by firearms, were the most common methods of suicide, and accounted for 48 and 33 percent of the total suicide deaths.

Fewer Delaware residents died in 2009 than in 2008. A total of 7,498 residents died, 91 of whom were infants 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 47.8 percent of all deaths in 2009.

- Just over 28 percent of the Delawareans who died in 2009 were 85 or older. Deaths to those 75 and older accounted for more than half of all deaths.

Percent of Deaths by Age
Delaware, 2009

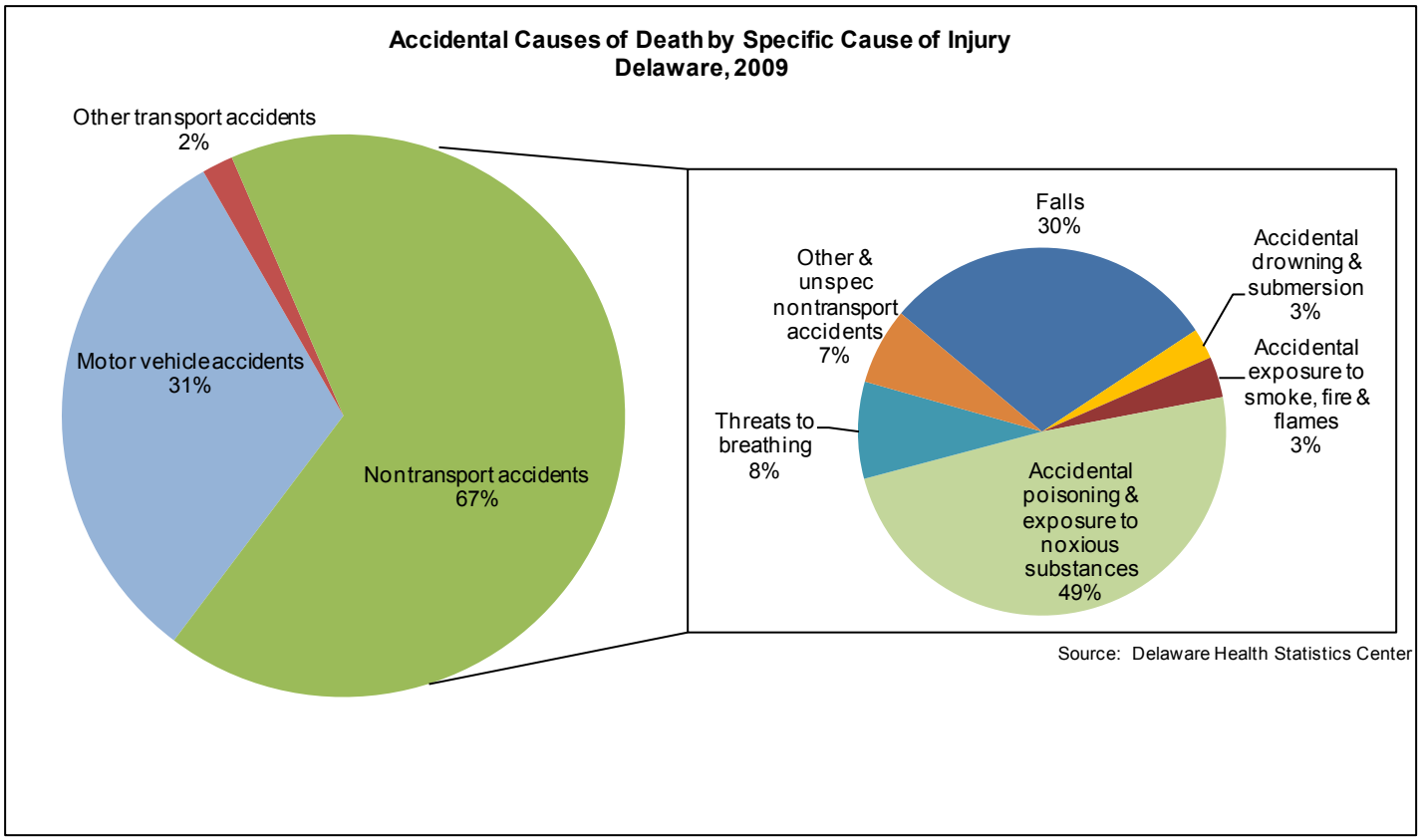


Source: Delaware Health Statistics Center

- A Delaware resident born in 2009 could expect to live an average of 78.9 years.
- Life expectancy at birth varied by race and sex; white females had the highest life expectancy (82.1) while black males had the lowest (72.7).
- In 1989, 80 percent of Delaware decedents were buried and 15 percent were cremated, by 2009 the distribution had shifted: 57 percent of decedents were buried and 39 percent were cremated.
- In 2009, the ten leading causes of death for residents of all ages were almost identical to the top 10 in 2008; movement among the rankings and the replacement of septicemia with influenza and pneumonia were the only changes.

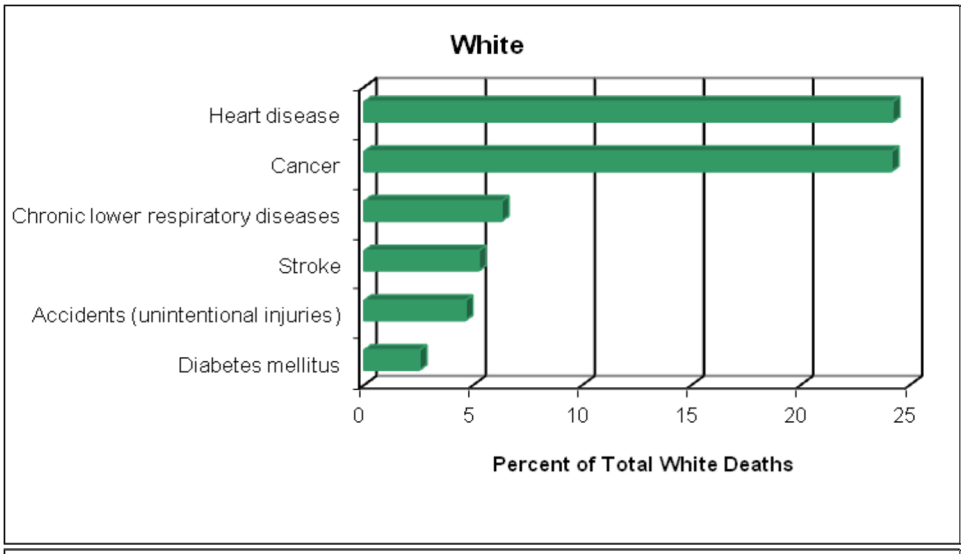
Rank	Leading Cause of Death	Number
1	Malignant neoplasms (cancer)	1801
2	Diseases of heart	1784
3	Chronic lower respiratory diseases	429
4	Cerebrovascular diseases (stroke)	412
5	Dementia	404
6	Accidents (unintentional injuries)	334
7	Diabetes mellitus	206
8	Nephritis, nephrotic syndrome & nephrosis (kidney disease)	175
9	Alzheimer's disease	163
10	Influenza & pneumonia	129

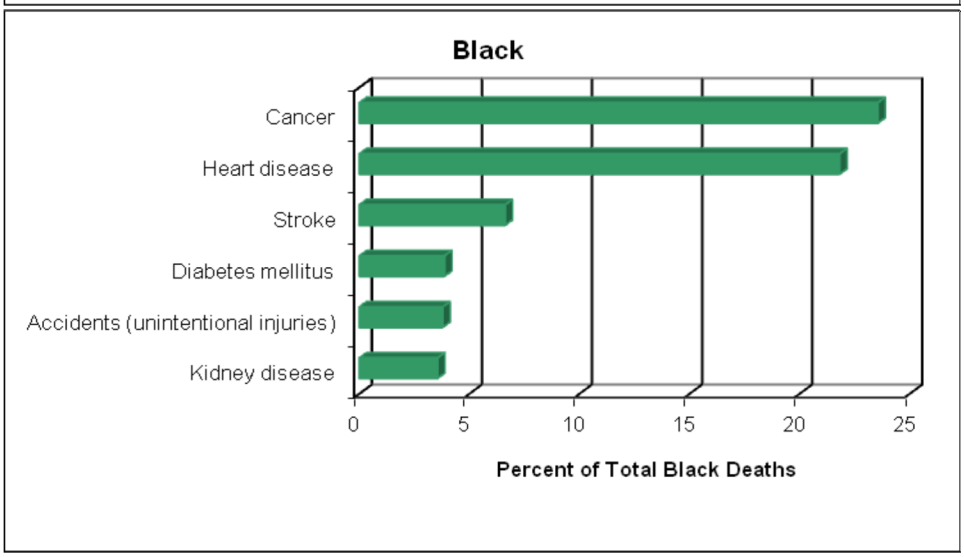
- There were 334 deaths due to unintentional injury in 2009 (4.5 percent of all deaths); 31 percent of which were due to motor vehicle accidents and 67 percent of which were due to non-transport accidents. Nearly half of the 223 non-transport accidents were caused by unintentional poisonings; the majority (95 percent) of unintentional poisonings were drug poisonings.
- For the first time, unintentional poisonings moved past motor vehicle injuries to become the leading cause of unintentional injury death in 2009.
    - For whites of both sexes, poisonings caused the most unintentional injuries, followed by motor vehicle accidents. For blacks of both sexes, motor vehicle accidents caused the most unintentional injuries.

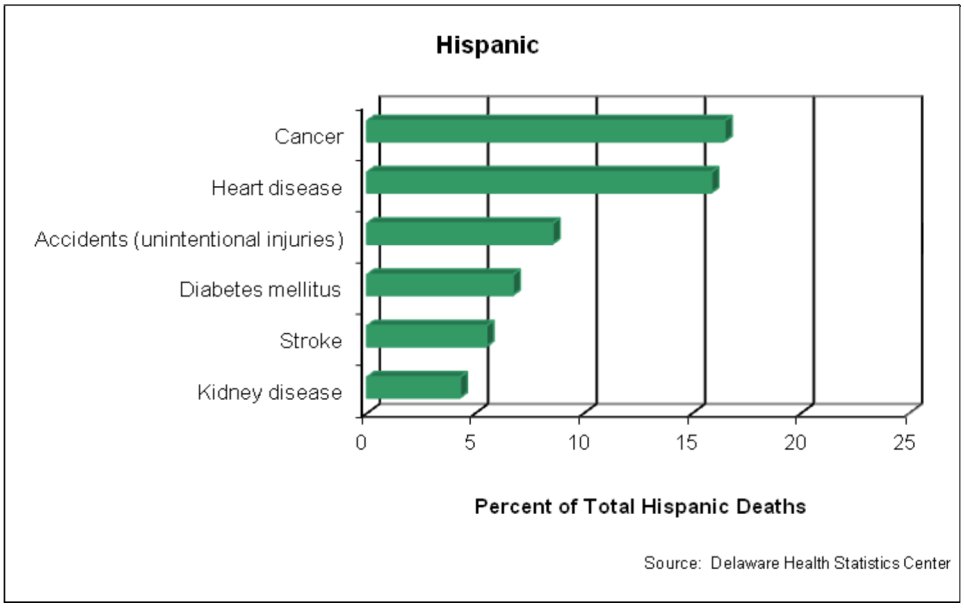


- In 2005-2009, accidents were the number one cause of death for people 1-44 years of age, and were responsible for 43 percent of all deaths of people 15-24 years of age. For decedents ages 15-24, accidents, homicides, and suicides were the three most frequent causes of death and accounted for three-fourths of total deaths (See Table F-11).

The leading causes of death varied by race and ethnic group. In 2009, the most common causes of death for white, black, and Hispanic Delawareans were:



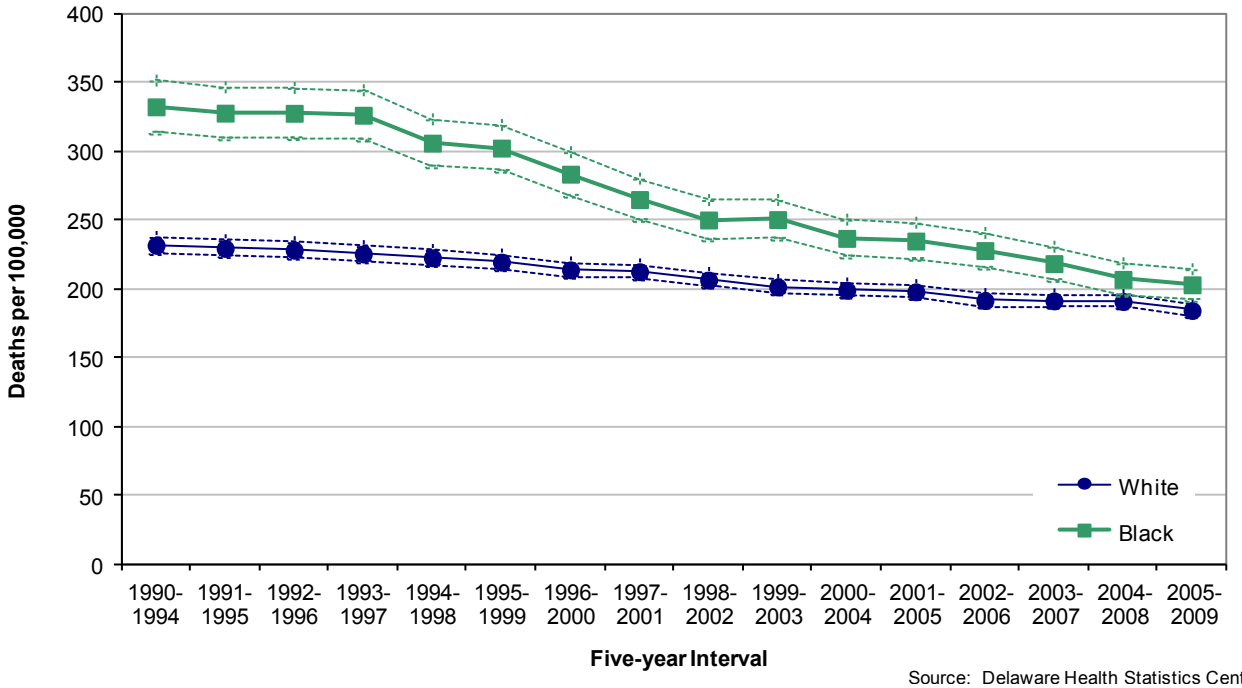




Cancer mortality rates have been decreasing in all three counties since the early 1990s, though most recently Kent County rates have leveled off. In 2005-2009, the 5-year age-adjusted cancer mortality rates ranged from 176.5 in Sussex County to 210.2 deaths per 100,000 population in Kent County.

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 2005-2009 remained significantly higher than white rates.

Five-year Age-Adjusted Cancer Mortality Rates by Race
Delaware, 1990-2009

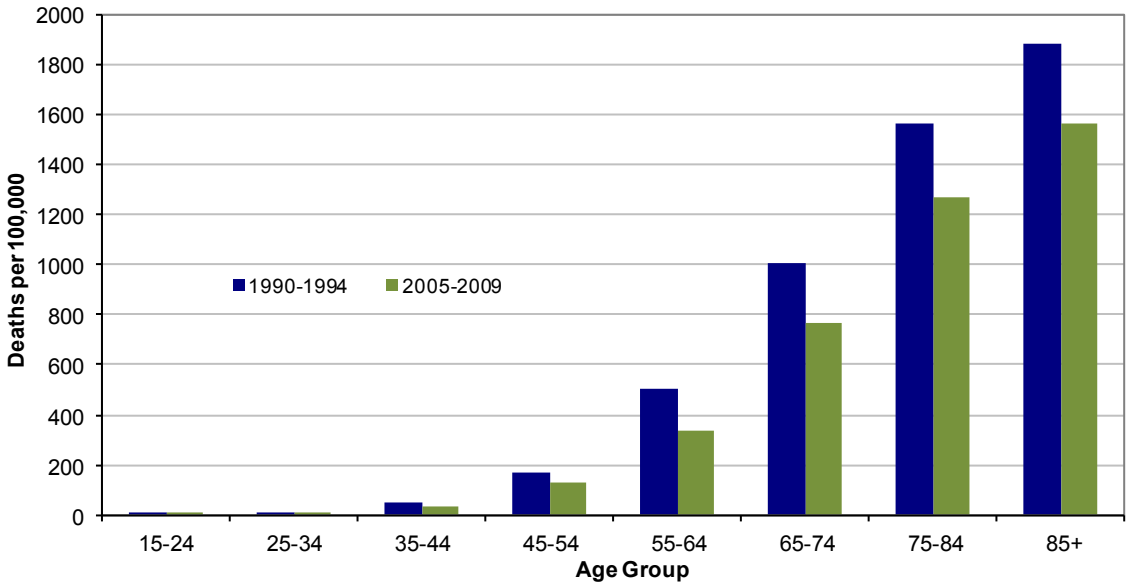


Source: Delaware Health Statistics Center

Five-year Average Age-Specific Cancer Mortality Rates
Delaware, 1990-1994 and 2005-2009

The same decreases seen in the age-adjusted cancer mortality rates were reflected in the age-specific rates as well.

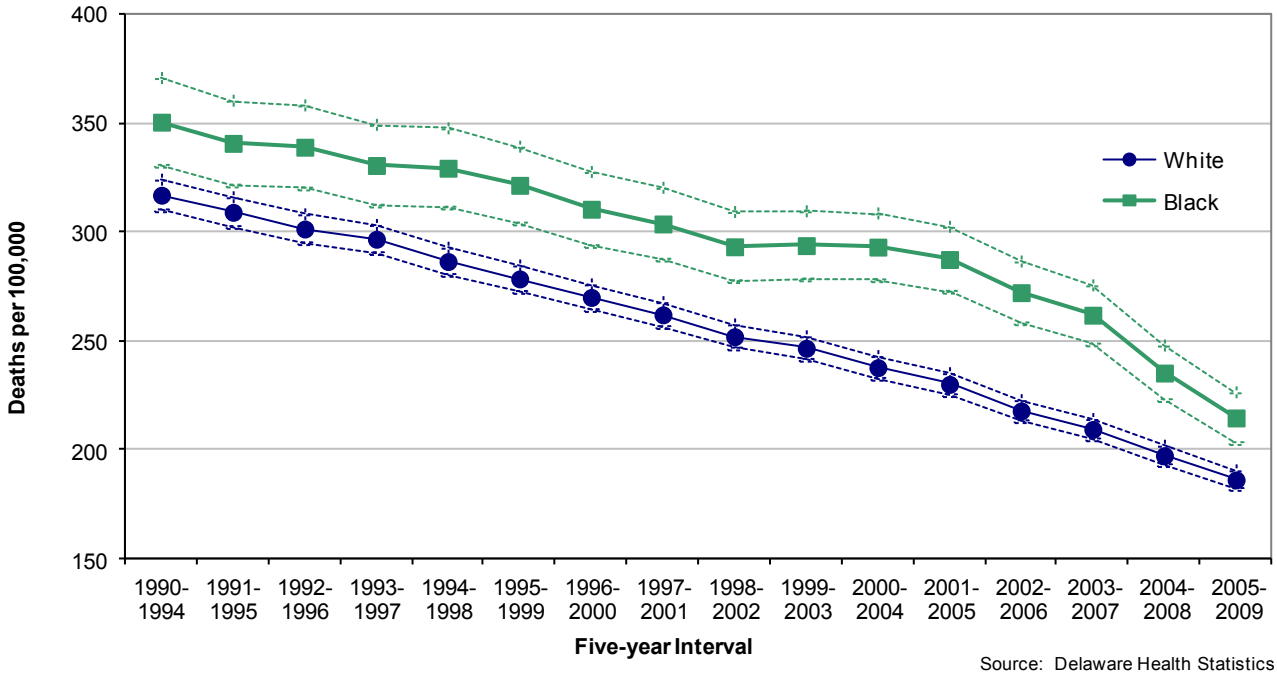
Cancer mortality rates declined for all age groups between 1990 -1994 and 2005-2009. The 25-34 age group experienced the largest decrease.



Source: Delaware Health Statistics Center

Heart disease remained the most common cause of death for both black and white Delawareans in 2005-2009. Both black and white heart disease mortality rates have declined significantly since 1990-1994, with white rates declining 41 percent and black rates declining 39 percent.

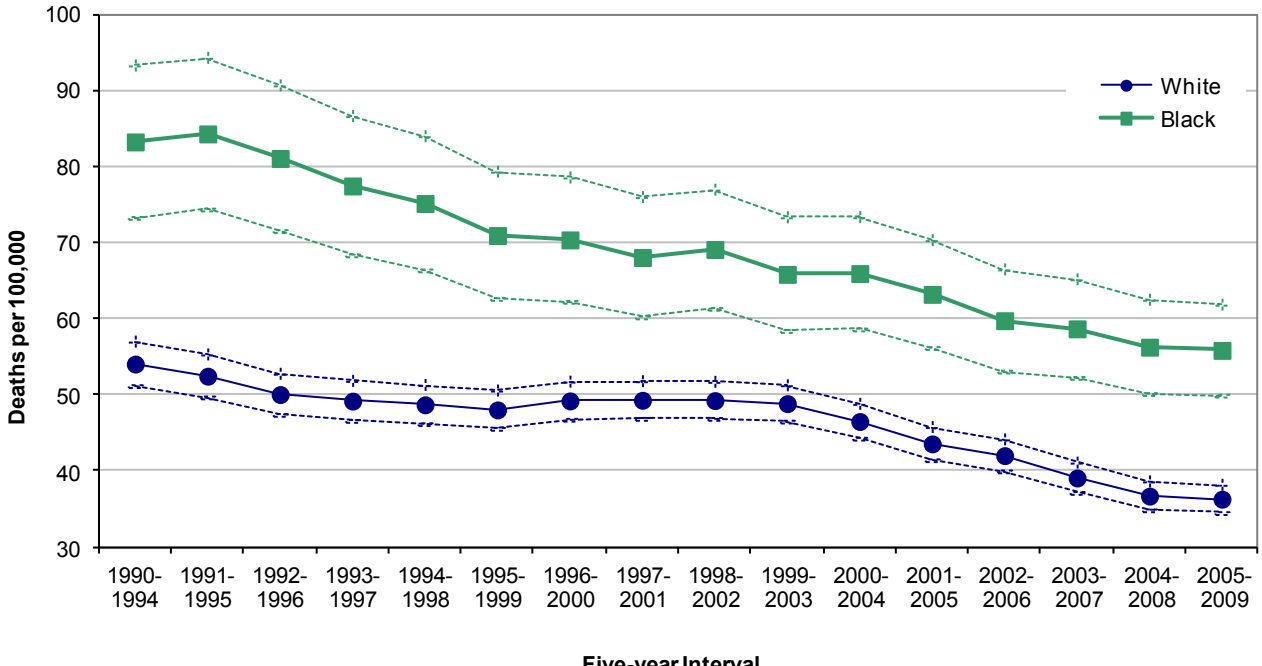
Five-year Age-Adjusted Heart Disease Mortality Rates by Race
Delaware, 1990-2009



Source: Delaware Health Statistics Center

Stroke mortality rates for both races continued their declining trends, with rates for both races decreasing 33 percent between 1990-1994 and 2005-2009. Due to the similarity in their declines, the black stroke mortality rates remained approximately 55 percent higher than white rates (55.9 versus 36.3).

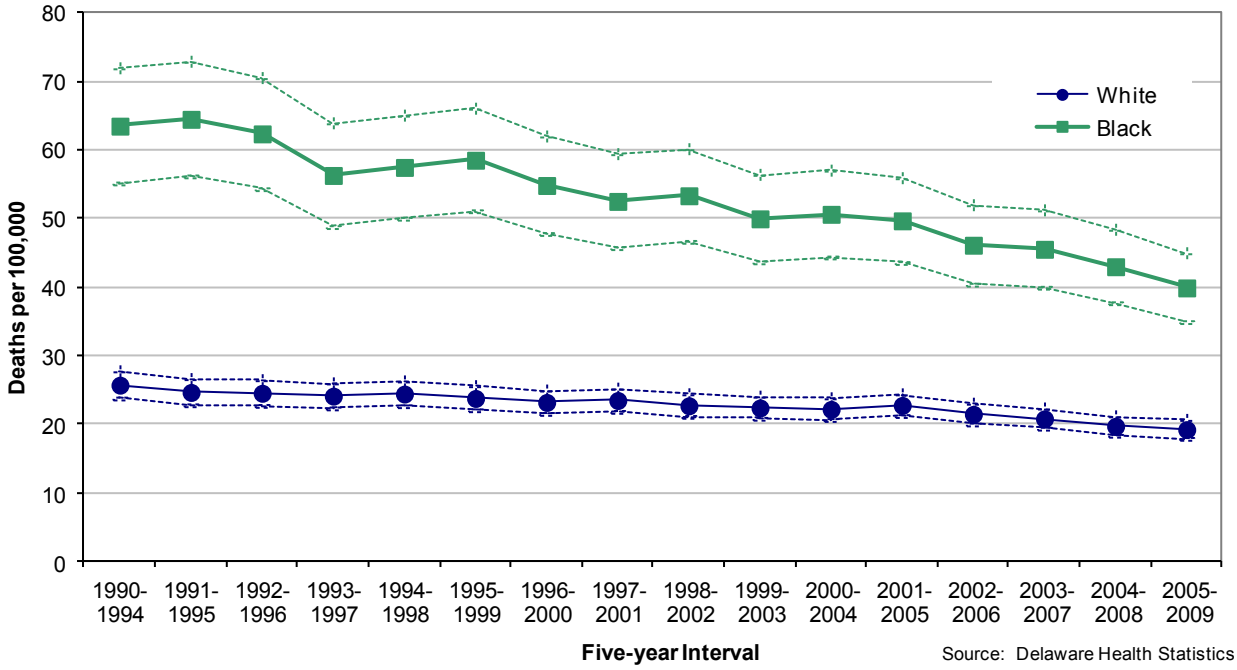
Five-year Age-Adjusted Stroke Mortality Rates by Race
Delaware, 1990-2009



Source: Delaware Health Statistics Center

Though black mortality rates for diabetes have been declining since 1990-1994, their rates were nearly twice that of whites in 2005-2009.

Five-year Age-Adjusted Diabetes Mortality Rates by Race
Delaware, 1990-2009



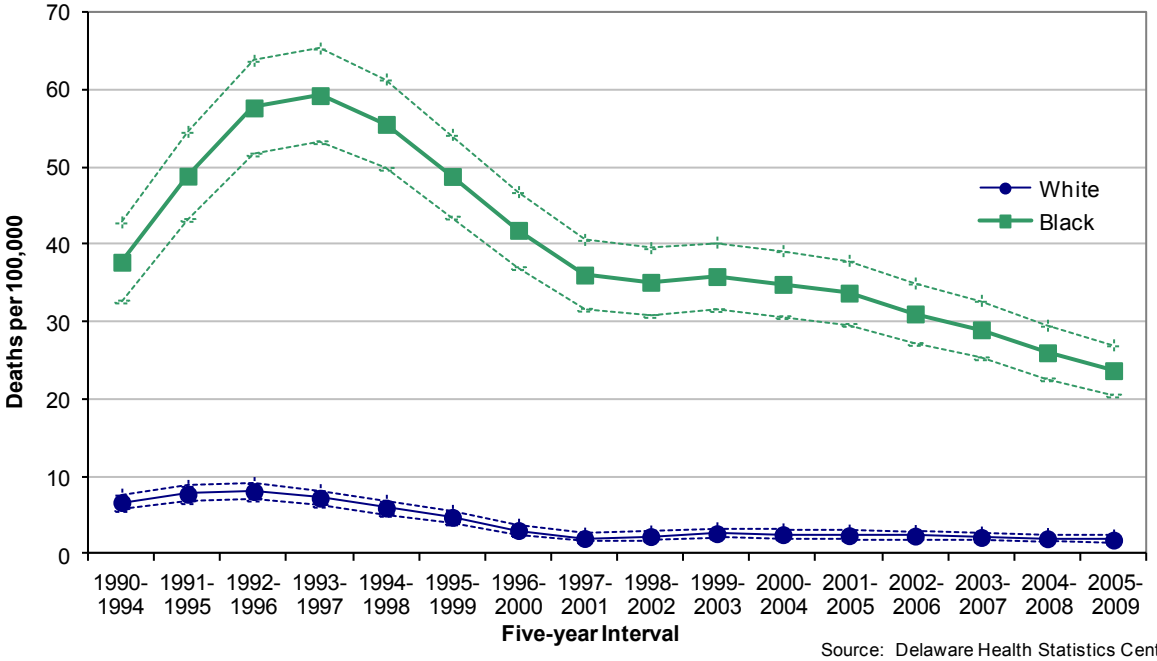
Source: Delaware Health Statistics Center

HIV/AIDS mortality has disproportionately affected Delaware's black population. Despite black HIV/AIDS mortality rates decreasing significantly since the 1993-1997 peak, their 2005-2009 mortality rate of 23.7 deaths per 100,000 was more than 13 times that of whites. Though they made up only 21 percent of the total Delaware population in 2005-2009, blacks accounted for 78 percent of all deaths due to HIV/AIDS.

In 2005-2009, HIV was the fifth leading cause of death for black Delawareans; it ranked seventh for black males and sixth for black females.

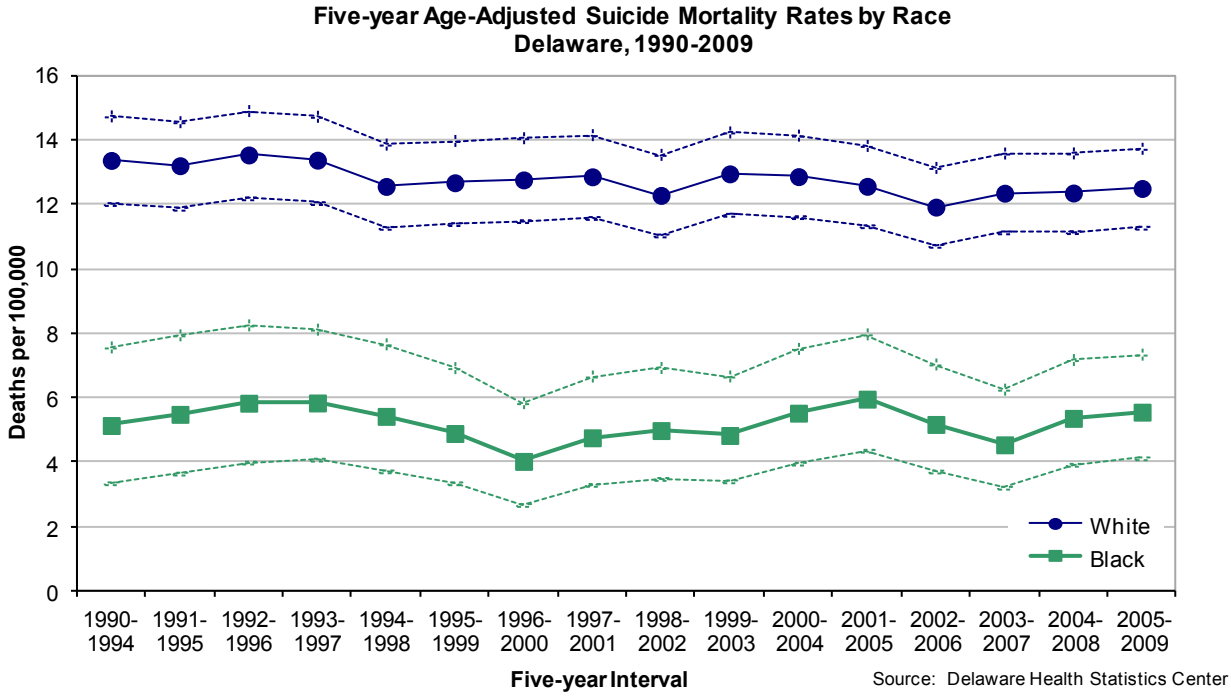
For black females ages 25 -44 it was the second most common cause of death.

Five-year Age-Adjusted HIV/AIDS Mortality Rates by Race
Delaware, 1990-2009

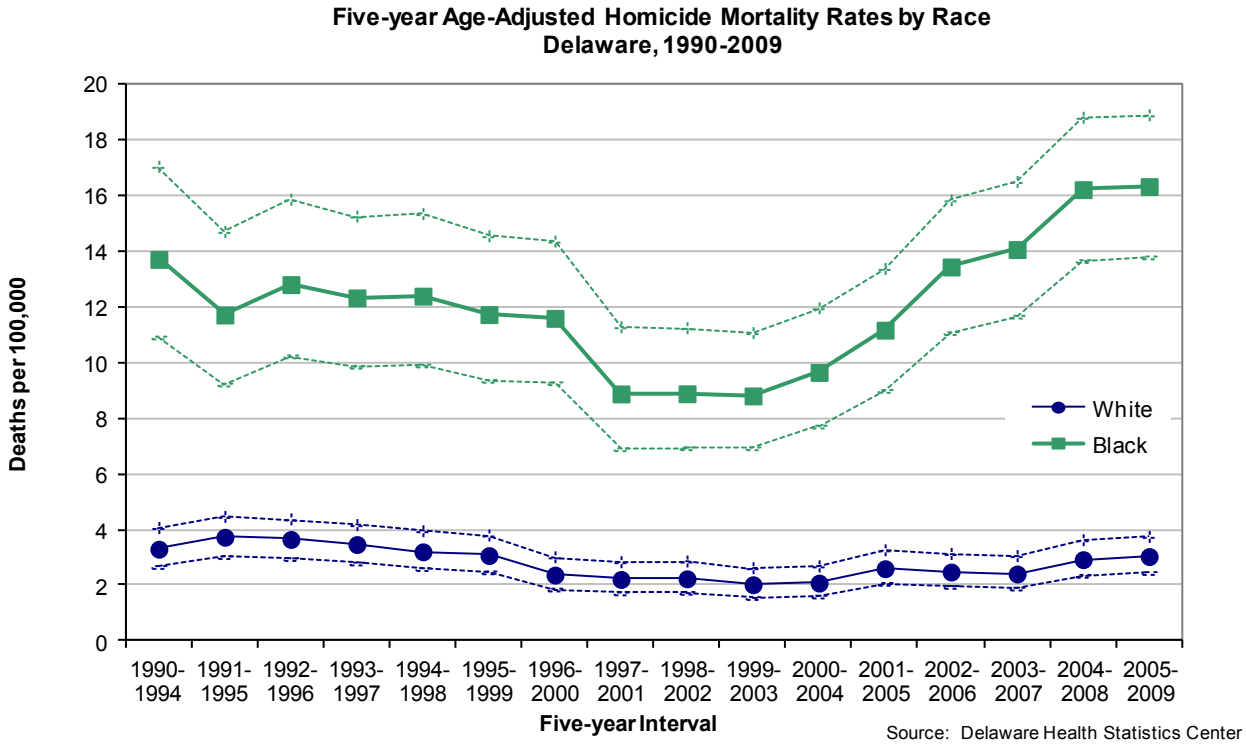


Source: Delaware Health Statistics Center

Suicide mortality trends for both black and white populations changed little between 1990-1994 and 2005-2009, with the white rate (12.5) more than double that of the black rate (5.6).

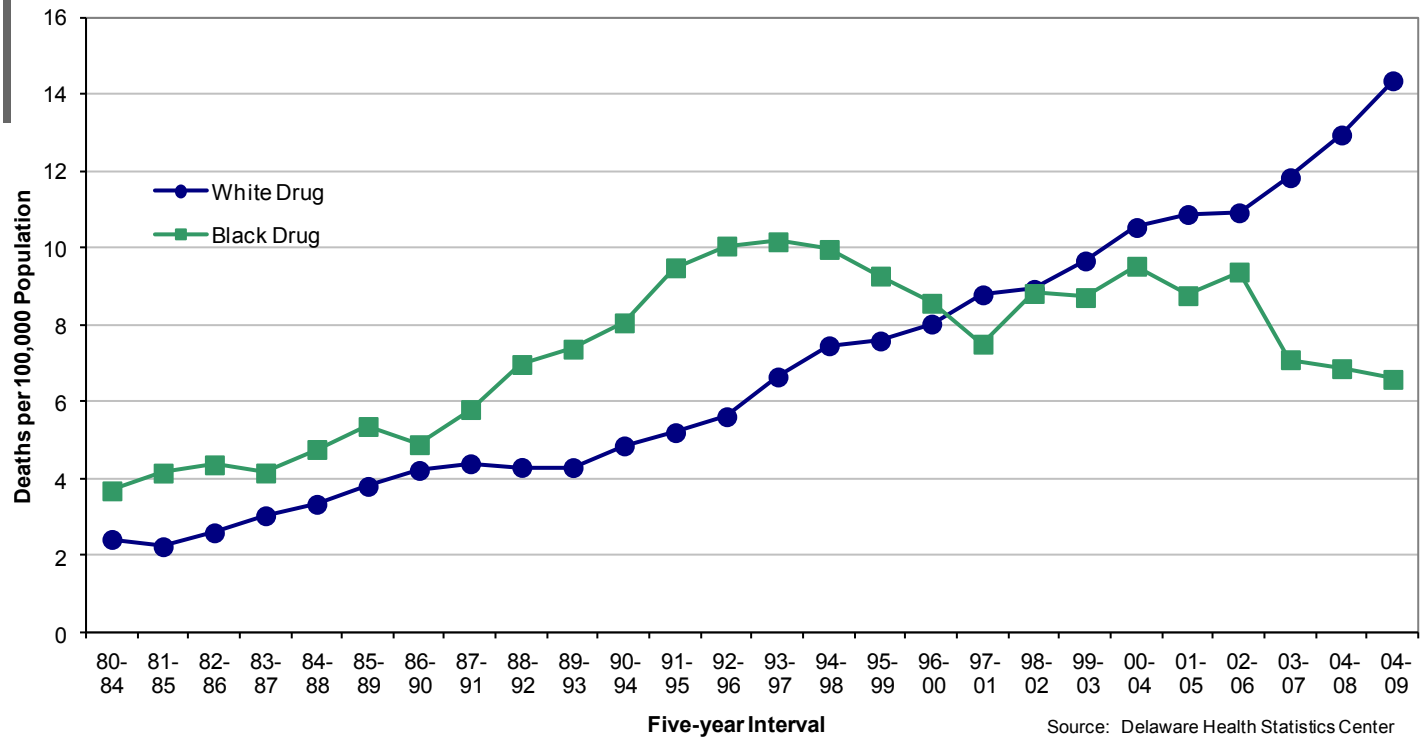


After declining throughout most of the '90s and reaching their lowest point in 1999-2003, homicide mortality rates have risen 74 percent. The majority of the increase was due to an 85 percent increase in black homicide mortality rates; white homicide mortality rates rose 50 percent during the same time period. In 2005-2009, black and white homicide mortality rates were 16.3 and 3 deaths per 100,000 population, respectively.



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 2005-2009, the white rate (14.4) was more than twice the black rate (6.6).

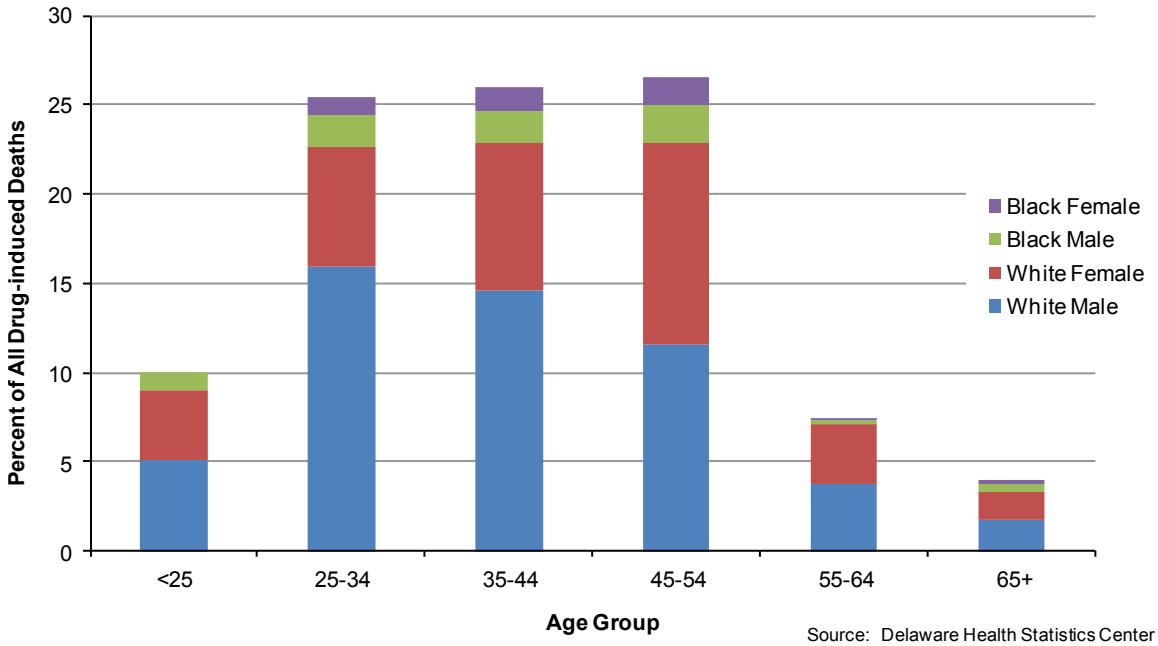
Five-year Age-adjusted Mortality Rates for Drug-Induced Deaths by Race
Delaware, 1980-2009



Source: Delaware Health Statistics Center

Over 53 percent of all drug-induced deaths in 2005-2009 were white males. Of all the race-age groups, white males ages 25-34 were responsible for the single largest proportion (16 percent) of drug-induced deaths.

Distribution of Drug-induced Deaths by Race, Sex, and Age Group
Delaware, 2005-2009



Source: Delaware Health Statistics Center