DELAWARE VITAL STATISTICS EXECUTIVE SUMMARY REPORT 2014

DELAWARE HEALTH AND SOCIAL SERVICES
Division of Public Health
A Nationally Accredited Health Department

John Carney, Governor
State of Delaware

Dr. Kara Odom Walker, Secretary
Delaware Health and Social Services

DELAWARE VITAL STATISTICS EXECUTIVE SUMMARY REPORT, 2014

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Questions or comments about this report may be directed to:

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EXECUTIVE SUMMARY

There is an ever increasing demand for vital records data and an increasing recognition of the importance of these data among policy makers, planners and health professionals, the news media, students and teachers, and private citizens. In an effort to meet the demand for quality vital statistics data, the Delaware Health Statistics Center (DHSC) releases the Delaware Vital Statistics Annual Report each year.

The primary sources of data used in preparing this report are certificates of marriage, divorce, live birth, death, and fetal death filed either inside or outside of Delaware and reports of induced termination of pregnancy (ITOP) filed in Delaware. The compilation and enumeration of vital events are accomplished through the cooperation of the DHSC and the Office of Vital Statistics. This cooperation has been the foundation for the development of a comprehensive health data management system designed to facilitate the most effective use of our resources.

This report includes a number of statistics based on five-year averages: age-specific fertility rates, percentages of births to single mothers, percentages of low birthweight births, infant mortality rates and age-adjusted mortality rates for selected causes of deaths. The use of five-year averages for these measures is due to the relatively small number of events in a single year, making annual rates particularly susceptible to the effects of random variations. This report presents trends over time beginning in the 1980s. The DHSC presents rates with stratifications of place of residence, age, marital status, race, ethnicity, gender, educational background, and (for mortality data) causes of death. There are highlights of Delaware's life expectancy, leading causes of death, and even the most popular birth names within this report.

The annual report also has sections that focus on specific topics of concern to Delawareans such as teen pregnancy, infant mortality, trends in HIV Infection/AIDS deaths, and drug and alcohol related deaths. Throughout the years, the DHSC has expanded its sections to include data on Wilmington, incorporated historical tables on the percent of births to single mothers and the percent of low and very low birthweight births, and added comparisons to the United States.

The effective use of vital statistics information is essential to identify and understand the population health challenges facing Delaware. Examining data presented here can provide a general overview of the health of Delawareans; provide an opportunity to generate and evaluate possible hypotheses about the possible determinants of diseases and health risks; and may be useful for policy development and program planning when used in concert with other relevant data.

Selected Characteristics: Delaware Vital Statistics Annual Report, 2014

Population	Number*	Percent
Delaware	933,141	100.0%
Kent	170,178	18.2%
New Castle	550,044	58.9%
Sussex	212,919	22.8%

Marriages	Number*	5-yr Rate[1]
Delaware	5,633	5.8
Kent	946	5.6
New Castle	2,759	4.9
Sussex	1,928	8.3

Divorces	Number*	5-yr Rate[1]
Delaware	3,047	0.0
Kent	659	0.0
New Castle	1,717	0.0
Sussex	671	0.0

Live Births	Number*	5-yr Rate[2]
Delaware	10,934	63.1
Kent	2,266	64.7
New Castle	6,450	60.2
Sussex	2,218	71.5
Births to Teenagers (15-19)		
White	353	24.4
Black	237	41.8
Delaware	612	27.6
Kent	127	28.4
New Castle	318	24.3
Sussex	167	38.2
Race	**Number***	**Percent**
White	7,194	65.8%
Black	2,920	26.7%
Hispanic Origin[4]	1,573	14.4%
Marital Status		
Married	5,860	53.6%
Single	5,074	46.4%
Births to Single Mothers[3]		
White	2,900	40.3%
Black	2,046	70.1%
Hispanic Origin[4]	955	60.7%
Low Birthweight (<2,500 gms)		
All Races	904	8.3%
White	479	6.7%
Black	351	12.0%
Hispanic Origin[4]	106	6.7%

Fetal Deaths	Number*	Percent
Delaware	59	100.0%
Kent	6	10.2%
New Castle	36	61.0%
Sussex	17	28.8%
Race		
White	29	49.2%
Black	30	50.8%
Hispanic Origin[4]	59	100.0%

Infant Mortality	Number*	5-yr Rate[5]
Delaware	74	7.4
Kent	13	6.2
New Castle	49	9.1
Sussex	12	6.2
Race		
White	38	5.3
Black	30	12.0
Hispanic Origin[4]	12	8.0

Mortality	Number*	Adj. Rate[6]
Delaware	8,252	703.3
Kent	1,524	835.6
New Castle	4,334	700.7
Sussex	2,394	650.2
Race and Gender		
White Males	3,399	792.3
White Females	3,278	662.7
Black Males	718	1145.3
Black Females	717	711.0
Decedent's Age	**Number***	**Percent**
<1	74	1.3%
1-14	22	0.4%
15-24	88	1.1%
25-44	375	4.6%
45-64	1610	20.2%
65-74	1546	17.4%
75-84	2048	26.6%
85+	2489	28.6%
Leading Causes of Death		
Malignant neoplasms	1,972	23.9%
Diseases of heart	1,917	23.2%
Dementia	464	5.6%
Chronic lower respiratory diseases	458	5.6%
Cerebrovascular diseases	439	5.3%
Accidents (unintentional injuries)	436	5.3%

Notes:

* Numbers are for 2014.

1.The 5-year rate is per 1,000 population and refers to the period 2010-2014.

2.The 5-year rate refers to total live births per 1,000 women 15-44 years of age during the 2010-2014 period.

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

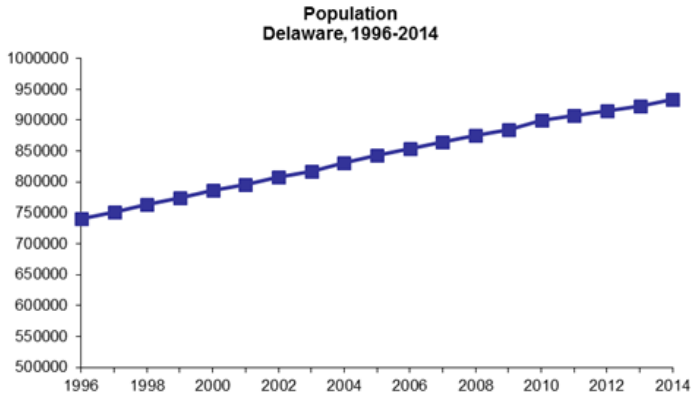
4.People of Hispanic origin may be of any race. The percentage is based on total resident births for 2014.

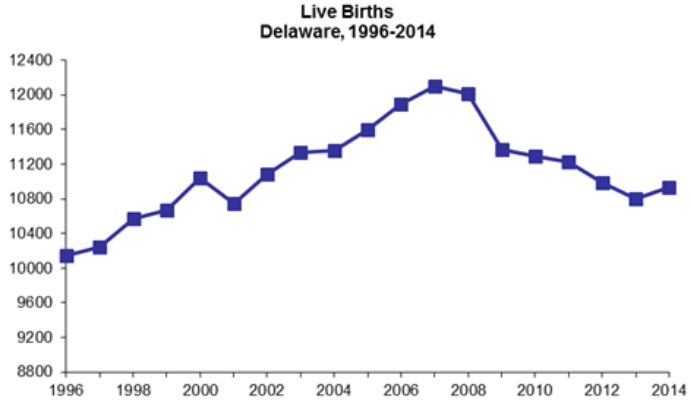
5.The 5-year (2010-2014) infant mortality rates represent the number of deaths to children under 1 year of age per 1,000 live births.

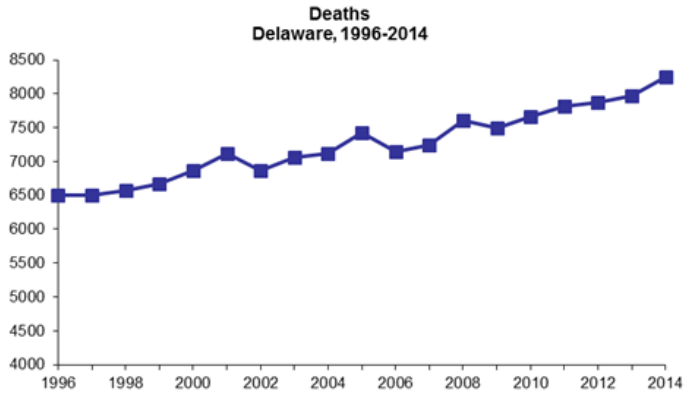
6.The 2014 mortality rates (deaths per 100,000 population) for Delaware and the counties are age-adjusted to the 2000 U.S. population.

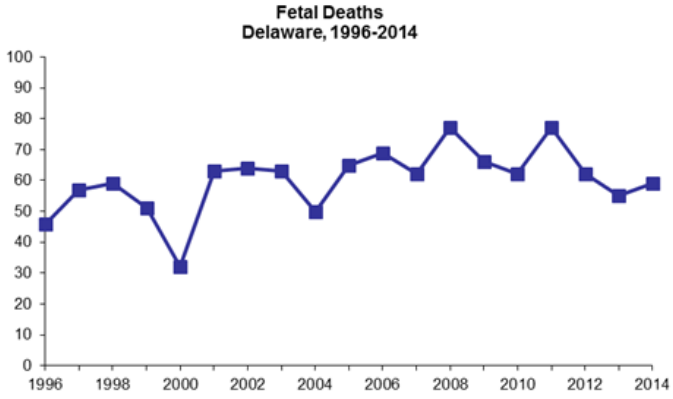
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

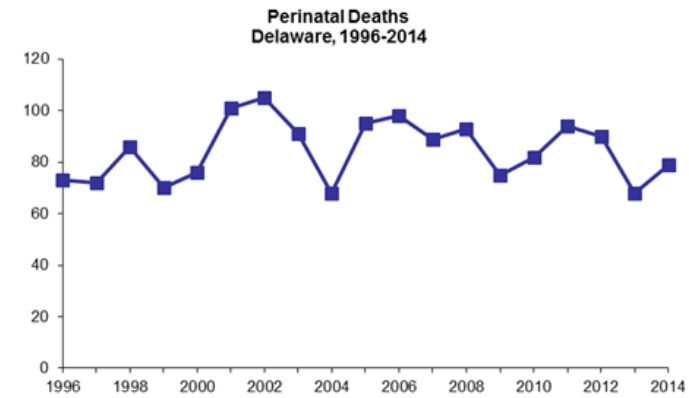
2014 DELAWARE VITAL STATISTICS

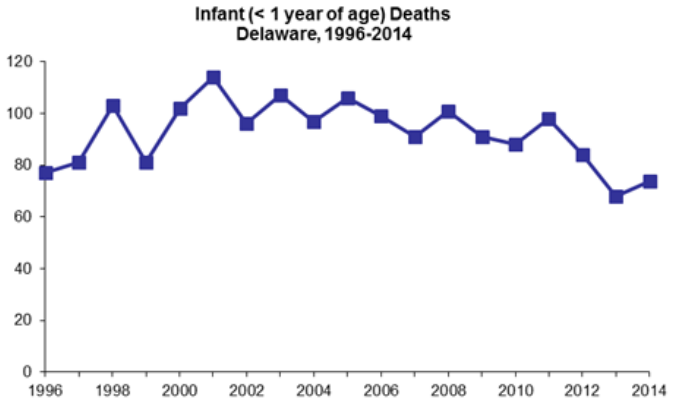


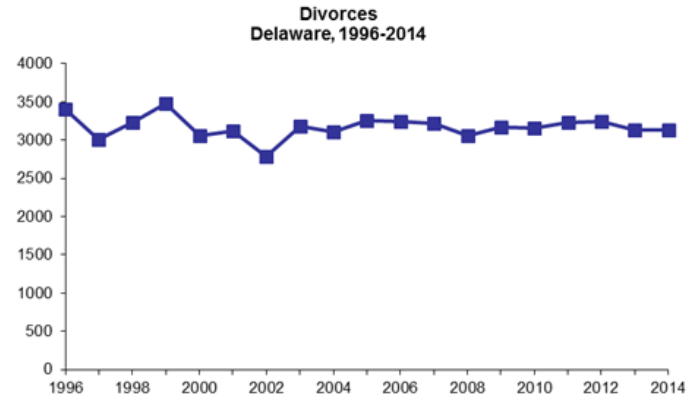


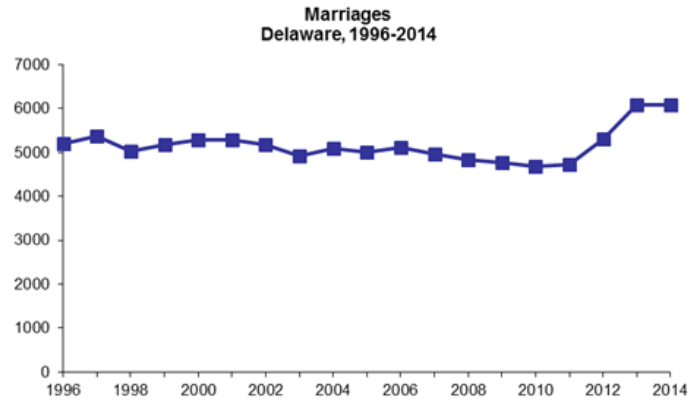












Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

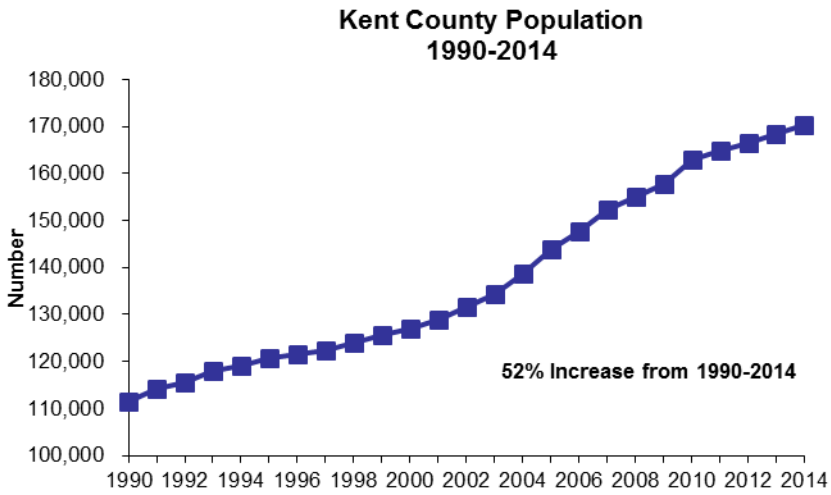
POPULATION

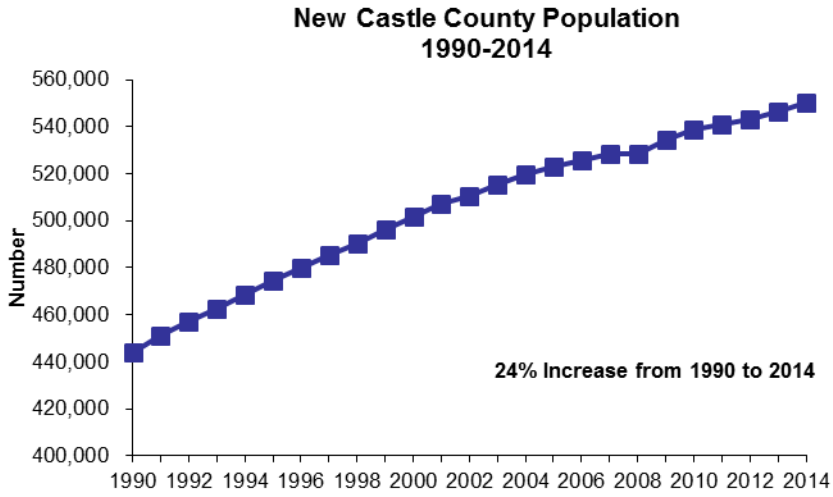
Delaware's three counties continued their increasing population trend, though they grew at different rates. Between 2000 and 2014, county populations grew annually by 2.4 percent for Kent, 0.7 percent for New Castle, and 2.5 percent for Sussex. Delaware's statewide increase was 1.3 percent.

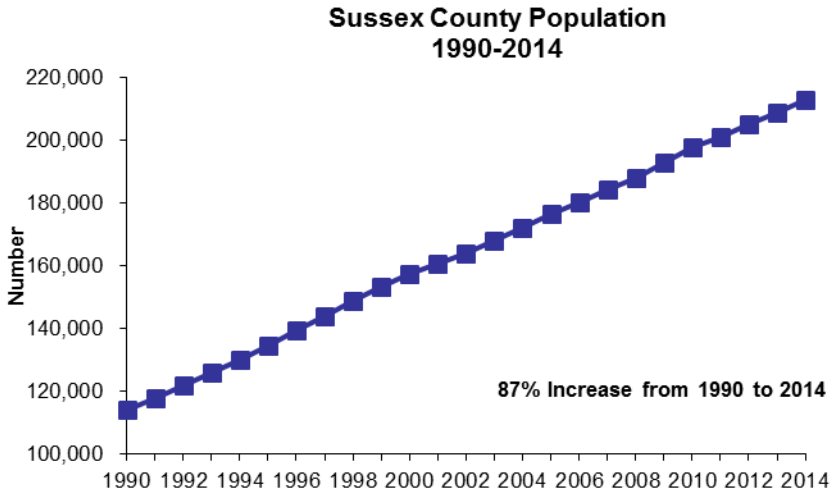
In 2014, just over half of Delaware's 65 and older population resided in New Castle County. However, residents 65 and older represented a much larger proportion of the Sussex County population, where 1 in 4 residents was 65 or older, versus New Castle and Kent counties, where approximately 1 in 7 residents was 65 or older.

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

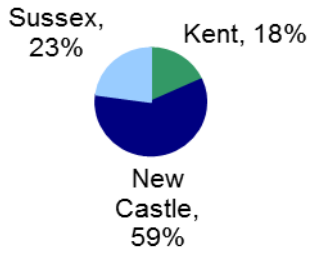
Delaware Resident Population by County, 1990-2014







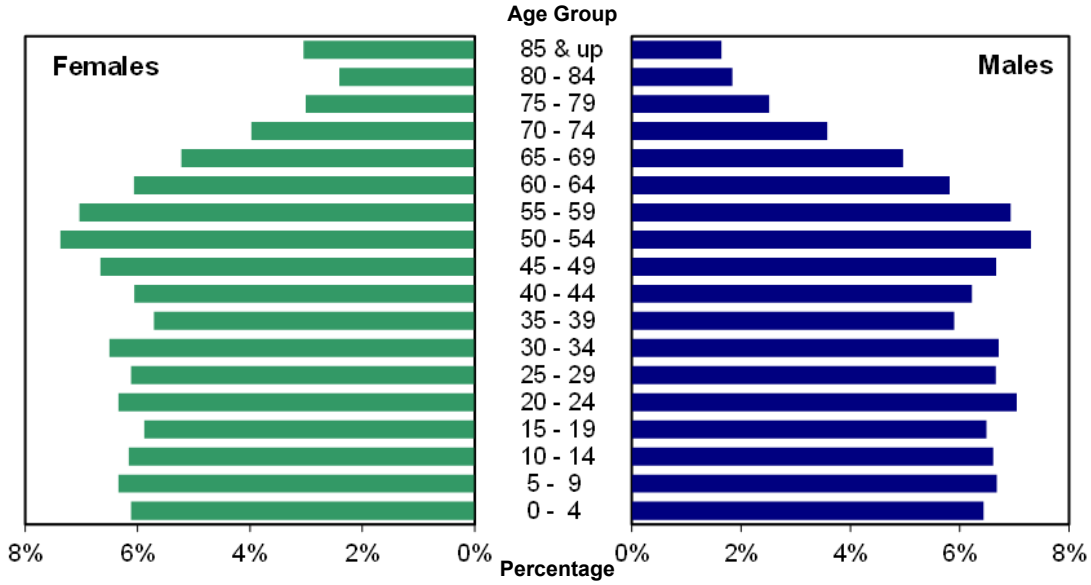
Percent of Population by County Delaware, 2014



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

In 2014, just over 51 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. In 2014, Delaware females could expect to live an average of 82.1 years versus males who could expect to live 76.9 years.

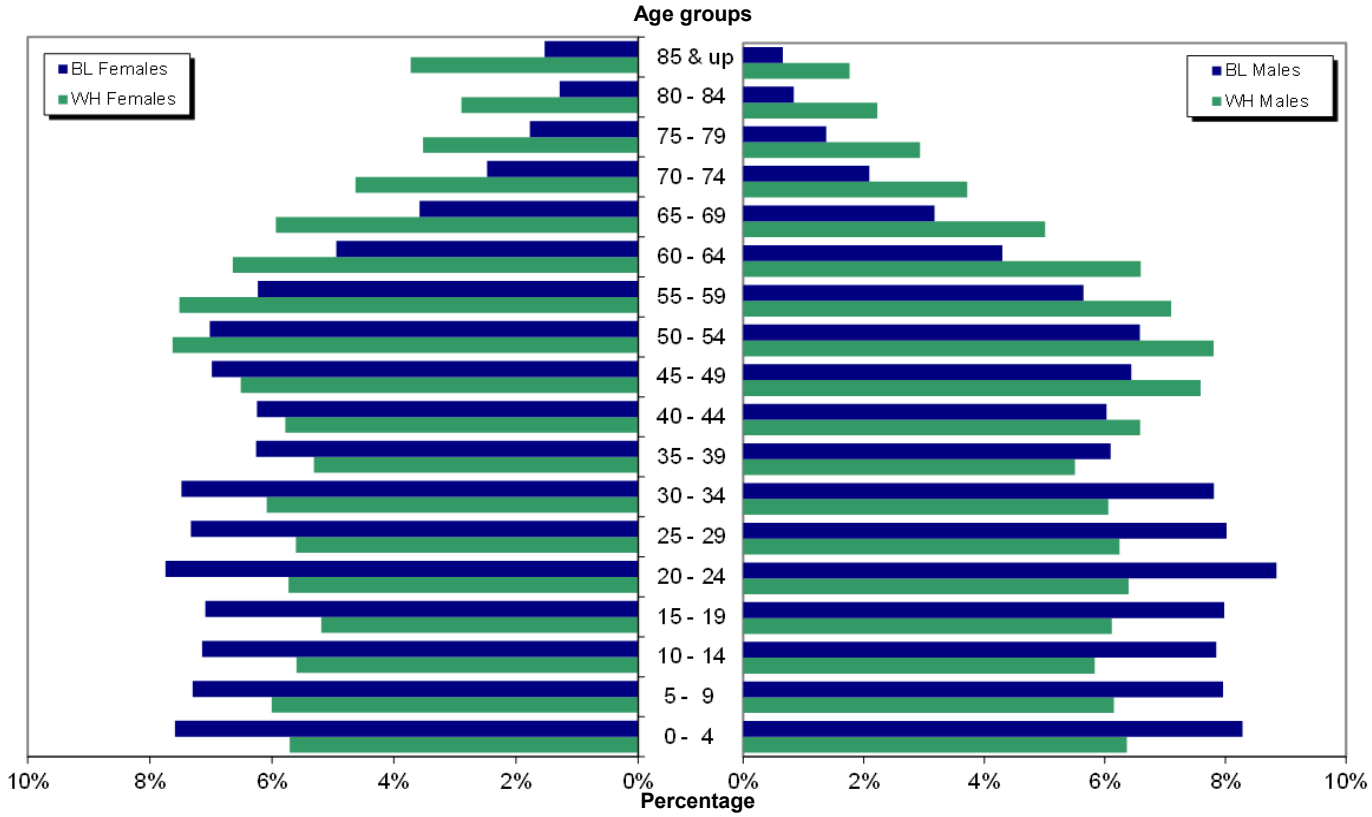
Population by Gender and Age, Delaware, 2014



Source: Delaware Health and Social Services, Division of Public Health, 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. However, both black males and females had a greater percentage of their population in the 0-39 year age range than white males and females. In the 45 and above age range, whites made up a greater proportion of the population.

Population by Gender and Race, Delaware, 2014



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

There were 5,633 marriages and 3,047 divorces in Delaware in 2014 (see Tables B-1 and B-11). Over half of all divorces in 2014 were of marriages that lasted less than 10 years.

Marriage

Male		**Female**	
Youngest:	18	Youngest:	17
Oldest:	92	Oldest:	86

Marriage with the greatest age difference between bride and groom: 49 years.
Most popular month to get married: May (see Table B-9).

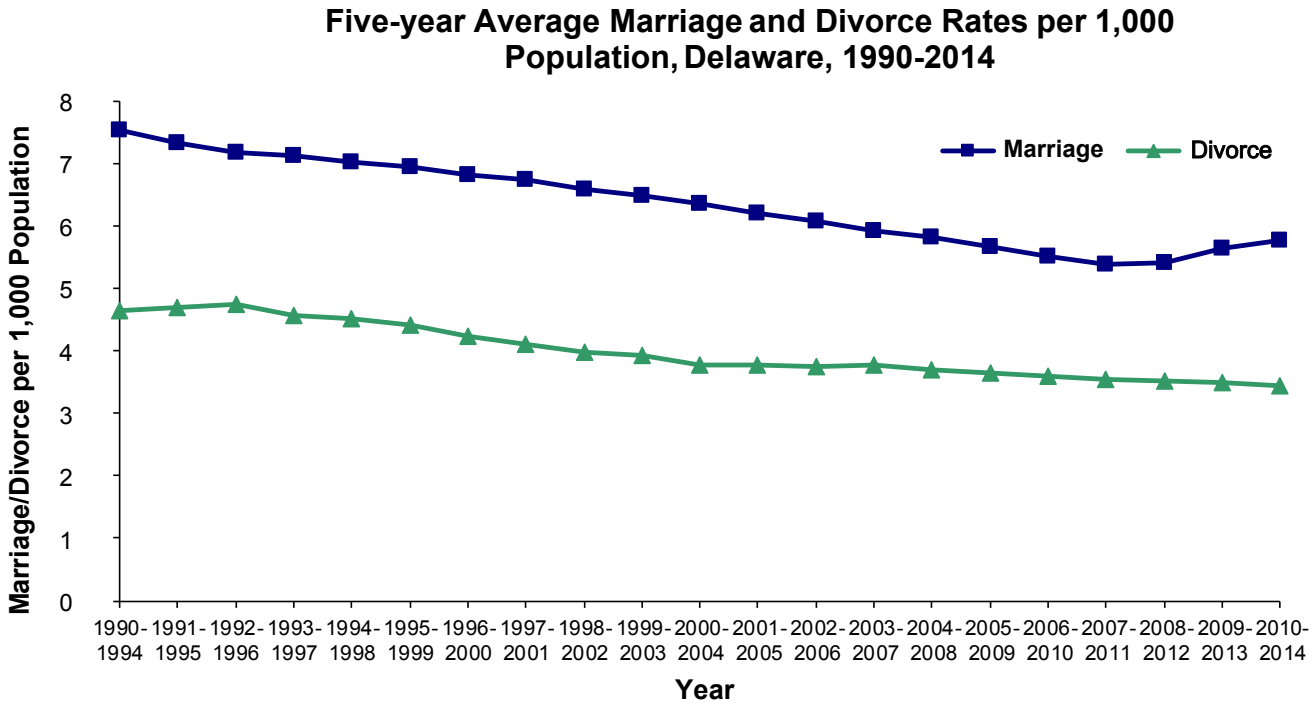
Divorce

Male		**Female**	
Youngest:	19	Youngest:	19
Oldest:	96	Oldest:	87

Shortest duration of marriage: 104 days.
Longest duration of marriage: 59 years.
Median duration of marriage: 9 years (see Table B-16).
Total children under 18 years of age: 1,301 (see Table B-18).

Between 1990-1994 and 2010-2014, the five-year average marriage rate decreased from 7.5 to 5.8 marriages per 1,000 population.

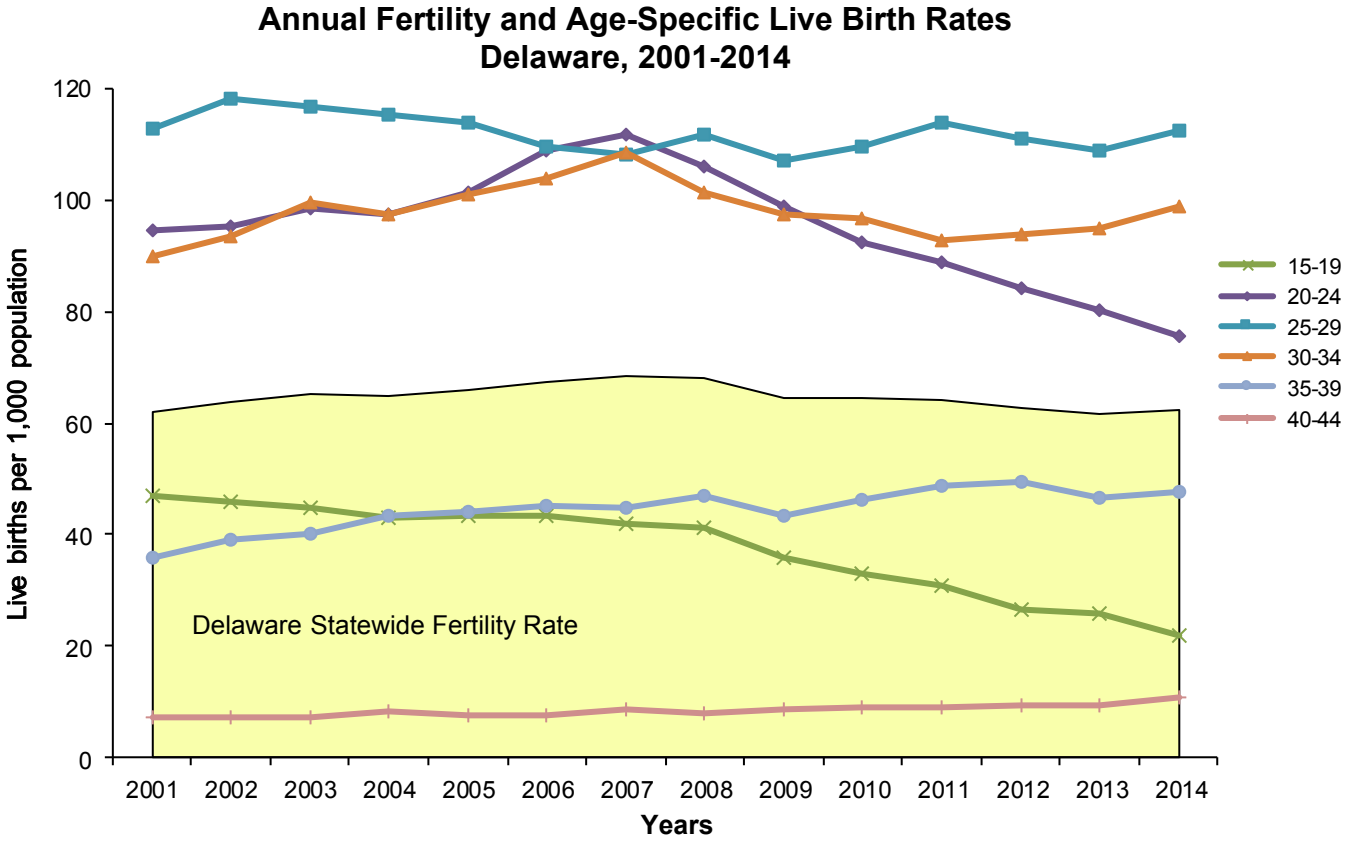
Divorce rates remained fairly stable between 1990-1994 and 1992-1996. From 1992-1996, divorce rates declined 26 percent to 3.5 divorces per 1,000 population in 2010-2014.



Source: Delaware Health and Social Service, Division of Public Health, Delaware Health Statistics Center

In 2014, there were 11,489 births in Delaware; 10,461 were to Delaware residents and 1,028 were to non-residents. Additionally, 473 births to Delaware residents occurred out of state, for a total of 10,934 Delaware resident births, 132 more births to Delaware residents than in 2013.

The recent national declines in general fertility and live birth rates were also apparent in Delaware statistics. From 2007 to 2014, Delaware's general fertility rate (number of births per 1,000 women aged 15-44 years) declined from a high of 68.5 to 62.4 births per 1,000 women ages 15-44. The birth rate of teens (15-19) exhibited the largest decline at 48.2 percent, followed by a 32.2 percent decrease for women ages 20-24. Birth rates for women ages 30-34 years decreased by 8.2 percent. For women ages 35-39 and 40-44 the birth rate increased, with the 40-44 age group having the larger increase of the two (22 percent).



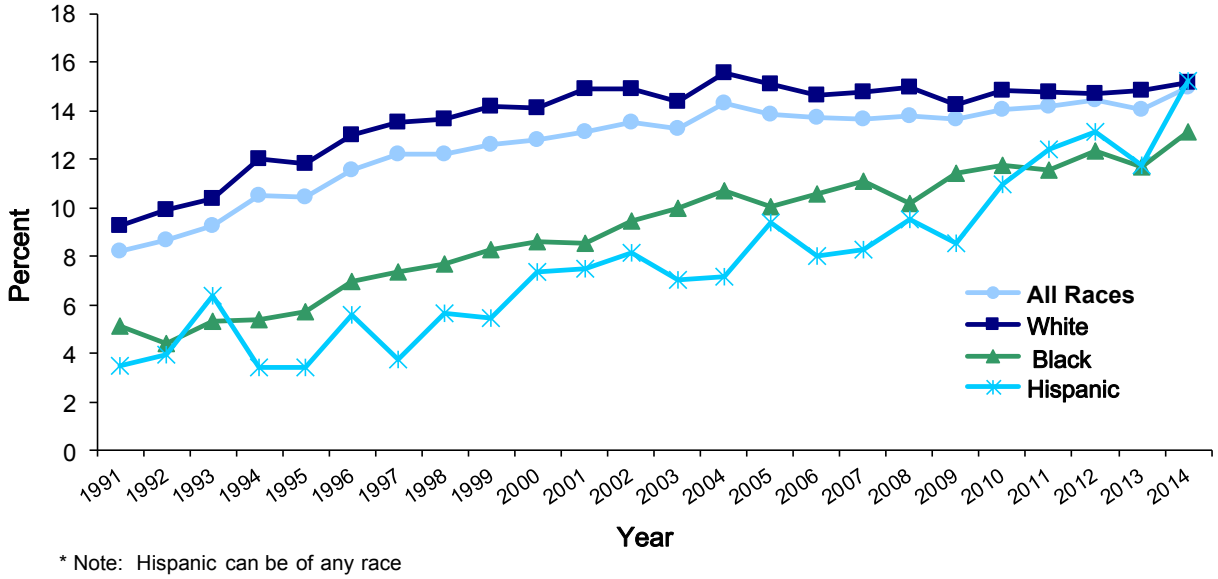
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

The 2010 to 2014 decline seen in teens ages 15-19 was apparent in both the 15-17 and 18-19 age groups. Birth rates among teens ages 15-17 decreased 38.8 percent while birth rates among teens 18-19 fell 31.1 percent. Sussex County had the highest birth rate for teens in both age groups, followed by Kent County.

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 1990 and 2004, the percentage of births to women 35 and older exhibited a clear upward trend that continues to rise. In 2014, 14.9 percent of all births were to women 35 and older, an 82 percent increase since 1991.

Annual Percent of Live Births to Women 35 or Older by Race and Hispanic Origin*, Delaware, 1991-2014

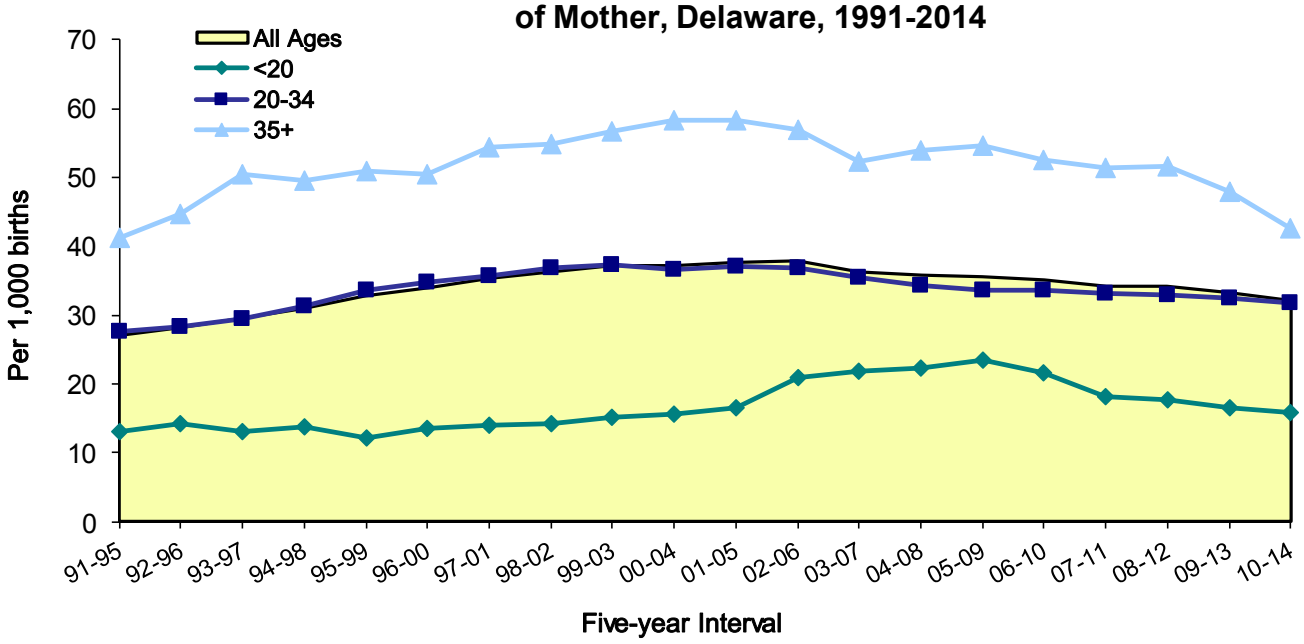


* Note: Hispanic can be of any race

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

For mothers of all ages, the rate of plural births increased 18 percent between 1991-1995 and 2010-2014. In 2010-2014, older mothers (35+) had the highest plural birth rates, at 43 multiples per 1,000 births, almost three times that of mothers under 20, and 35 percent higher than mothers 20-34.

Five-year Average Plural Birth Rate by Age of Mother, Delaware, 1991-2014

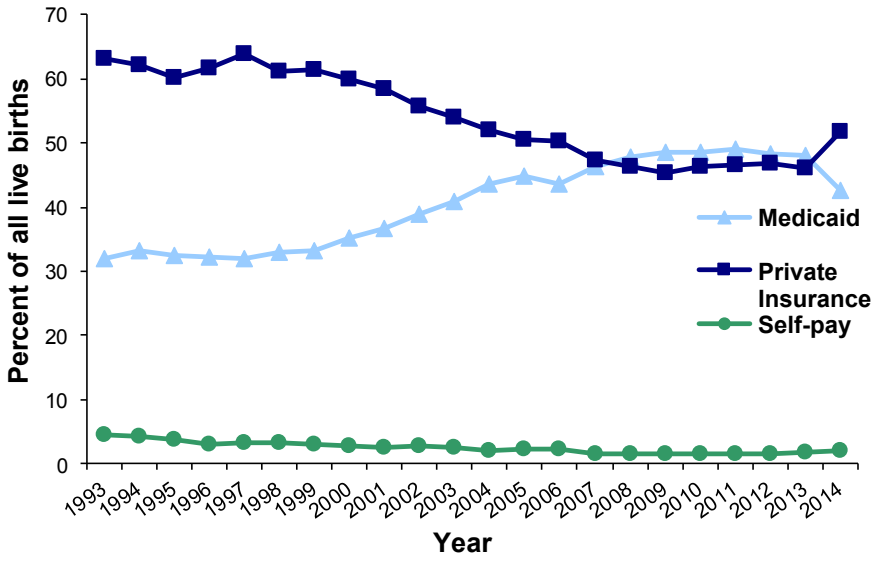


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

In 2014, 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.

- In 2014, private insurance paid for more births than Medicaid.
- Medicaid was still the primary source of payment for the majority of mothers under 20, covering 84 percent of black mothers and 77.4 percent of white mothers.

Percent of Births by Source of Payment for Delivery Delaware, 1993-2014

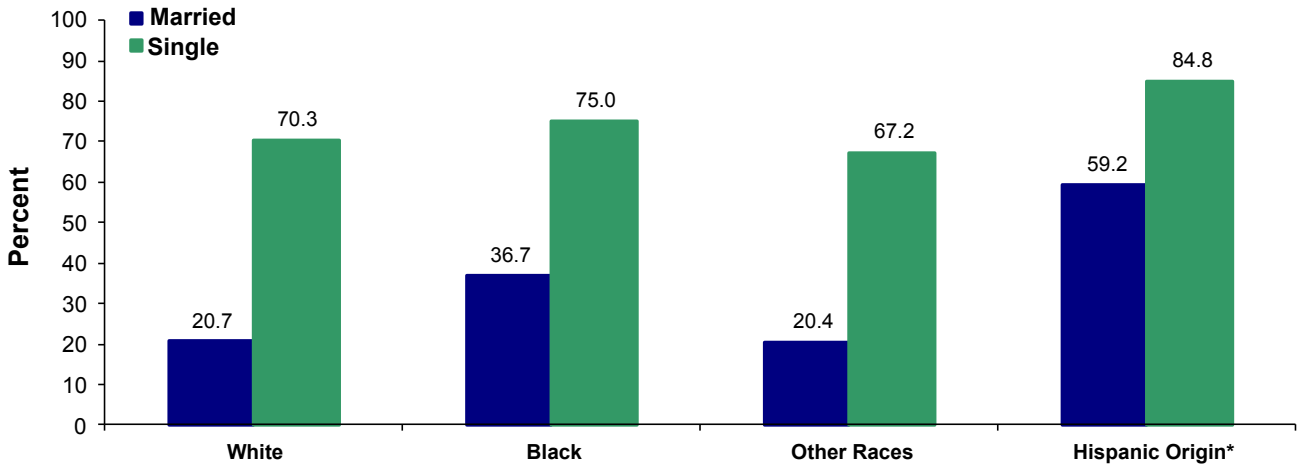


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

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

- The number of single white women who used Medicaid as their primary source of payment (70.3 percent) was more than triple that of white married women (27.7 percent).
- The number of single black women who used Medicaid as their primary source of payment (75 percent) was more than double that of black married women (36.7 percent).
- The number of single women of other race who used Medicaid as their primary source of payment (67.2 percent) was more than three times higher than among married women of other races (24.4 percent).
- The number of single Hispanic women who used Medicaid as their primary source of payment (84.8 percent) was significantly higher than Hispanic married women (59.2 percent).

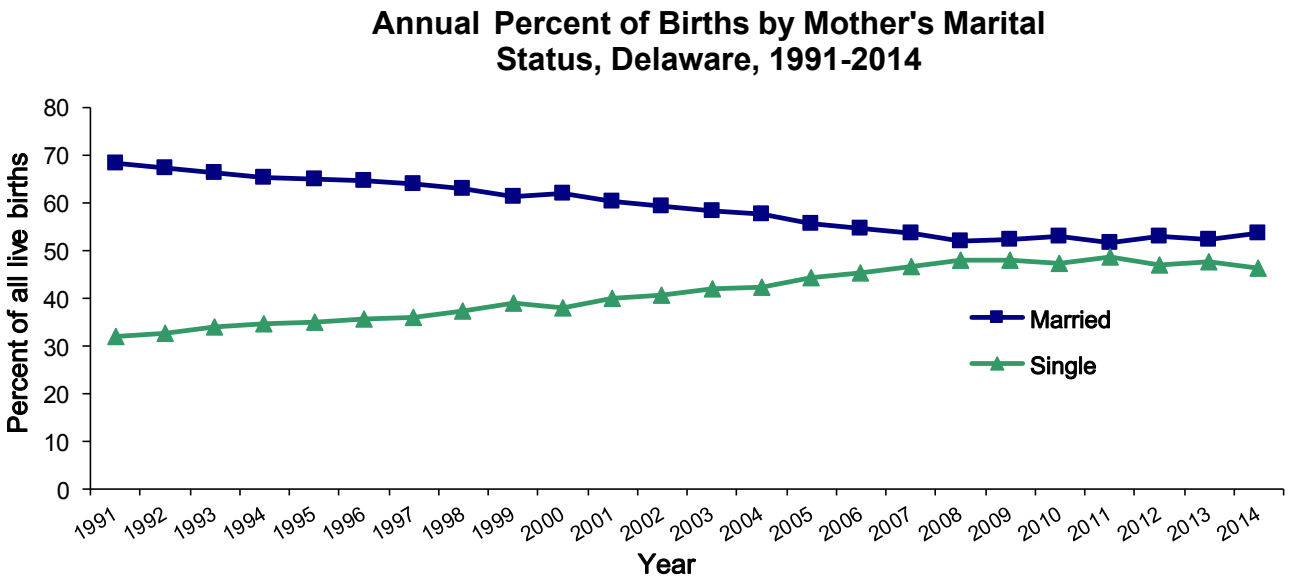
Percent of Births by Race, Hispanic Origin, Marital Status, and Medicaid as Primary Source of Payment, Delaware, 2014



* Note: Hispanic can be of any race.

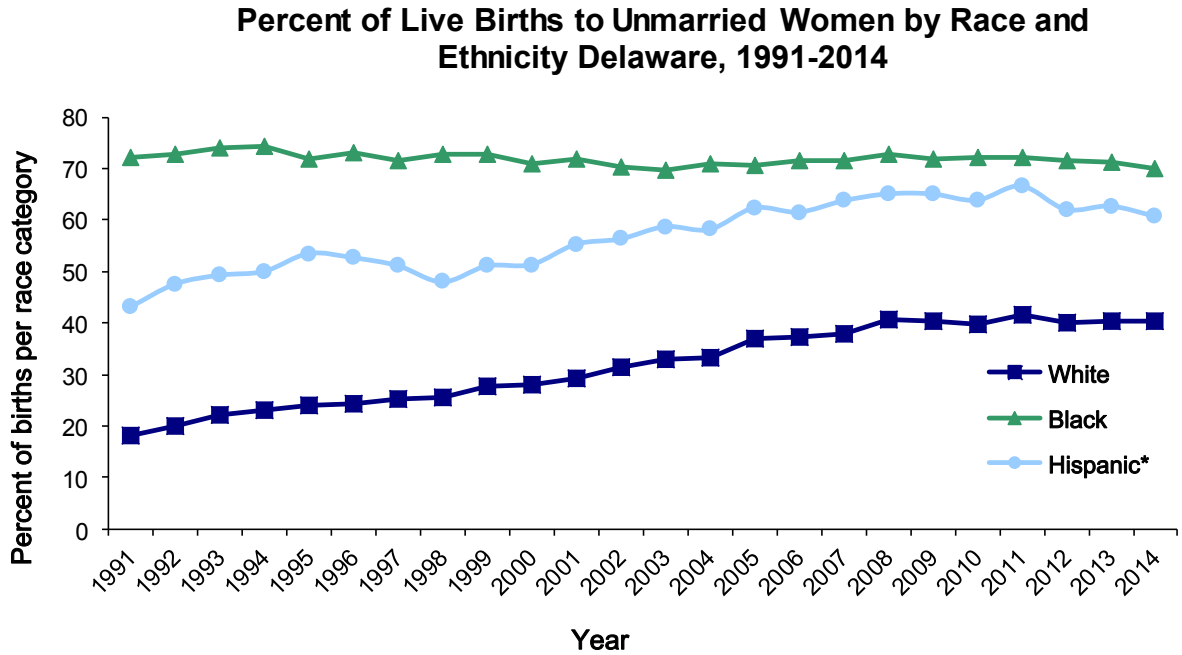
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

After increasing steadily from 1991 to 2008, the percent of births to unmarried women stabilized. The number of births to unmarried women fell to 3.3 percent since 2008, compared to a 3 percent increase in births to married women during that same time period. In 2014, 46.4 percent of all births were to unmarried women.



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

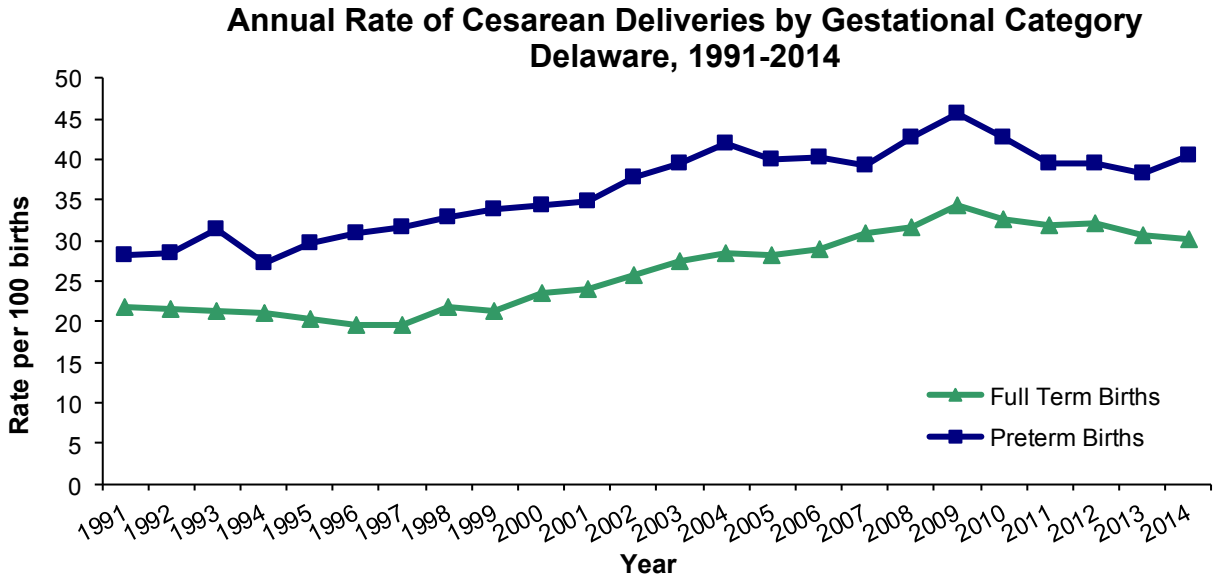
This shift in the distribution of mother's marital status was only apparent in births to white and Hispanic women. Between 1991 and 2014, the percentage of births to unmarried white women increased from 18 to 40 percent, and the percentage of births to unmarried Hispanic women rose from 43 to 61 percent. During the same time period, the percent of births to unmarried black women remained stable at approximately 70 percent.



* Note: Hispanic may be of any race.

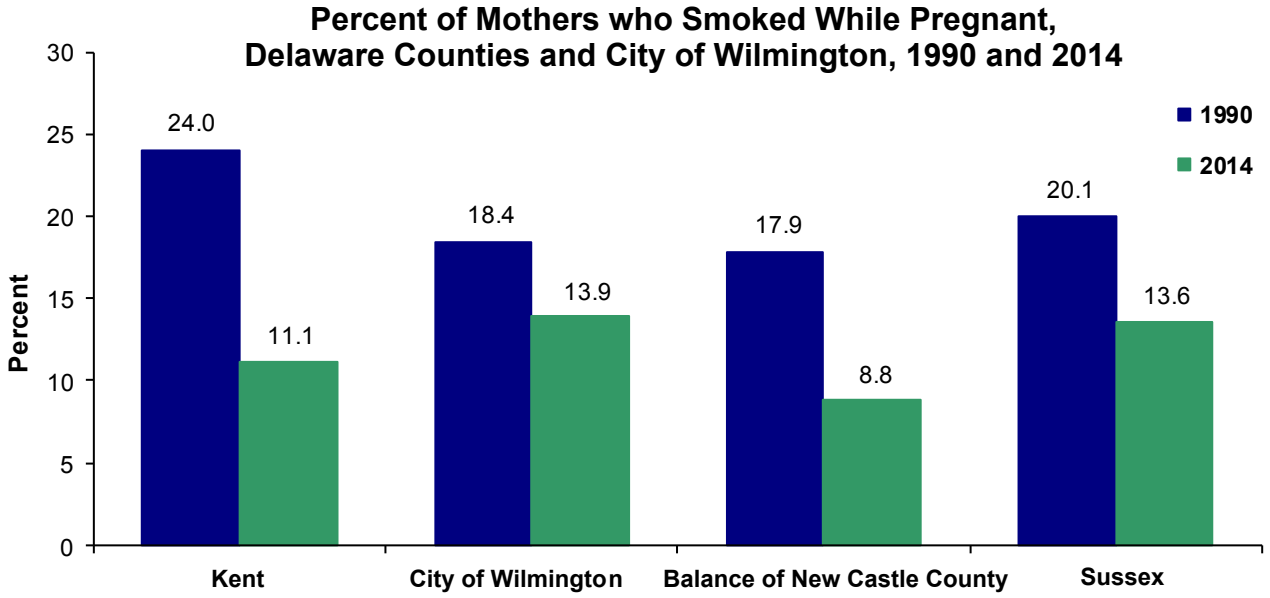
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

From 1998 to 2014, the rate of cesarean deliveries increased 35.8 percent, to 31.5 per 100 live births, whereas the rate of vaginal births decreased by 10.8 percent. Since 1998, both preterm (<37 weeks gestation) and term (37+ weeks gestation) births had increases in cesarean delivery rates. Although term births demonstrated a greater increase in rates between 1998 and 2014, the C-section rate for preterm births remained higher at 40.5 per 100 preterm births, versus 30.2 per 100 term births in 2014.



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

From 1990 to 2014, the percentage of Delaware mothers who used tobacco while pregnant decreased in all three counties and the city of Wilmington. In 2014, the city of Wilmington had the highest percentage of mothers who smoked while pregnant.

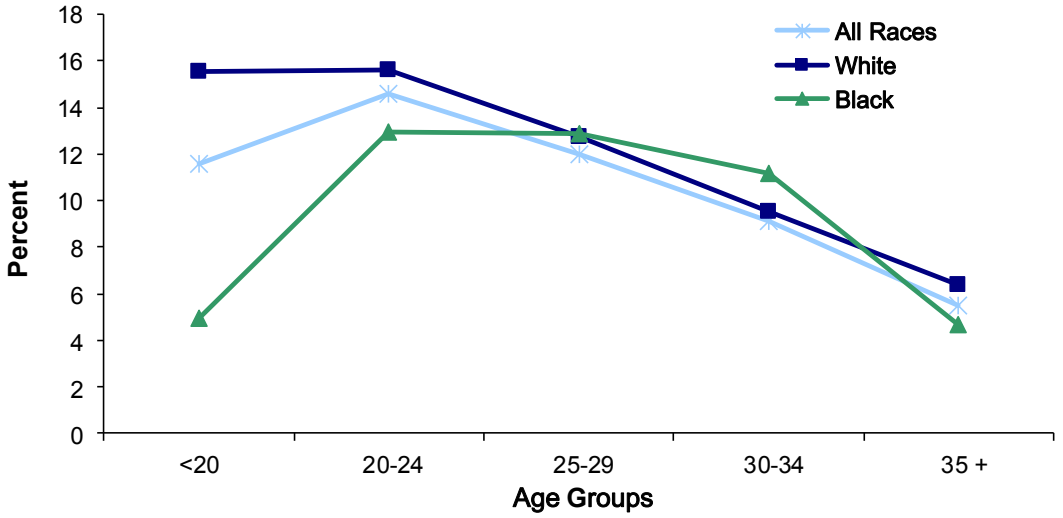


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

White mothers younger than 25 were more likely to smoke while pregnant than black mothers in the same age group.

In the 30-34 age group, black mothers were more likely to smoke while pregnant than white mothers.

Percent of Mothers who Smoked While Pregnant by Age Group and Race, Delaware, 2014

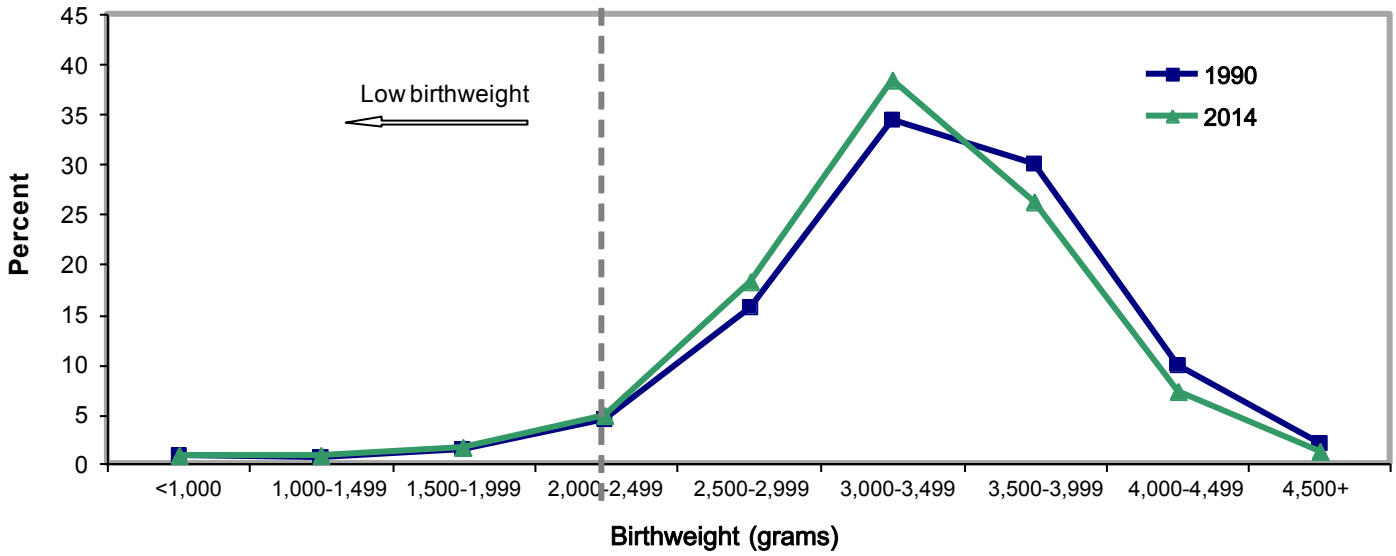


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

In 2014, 16.2 percent of Delaware women who smoked while pregnant gave birth to low birthweight babies (< 2,500 grams), versus the significantly lower percentage (7.3) of non-smokers who gave birth to low birthweight babies.

The percent distribution of births by birthweight did not differ significantly between 1990 and 2014. The greatest percentage of births fell within the 3,000 to 3,499 gram range.

Percent Distribution of Births by Birthweight, Delaware, 1990 and 2014

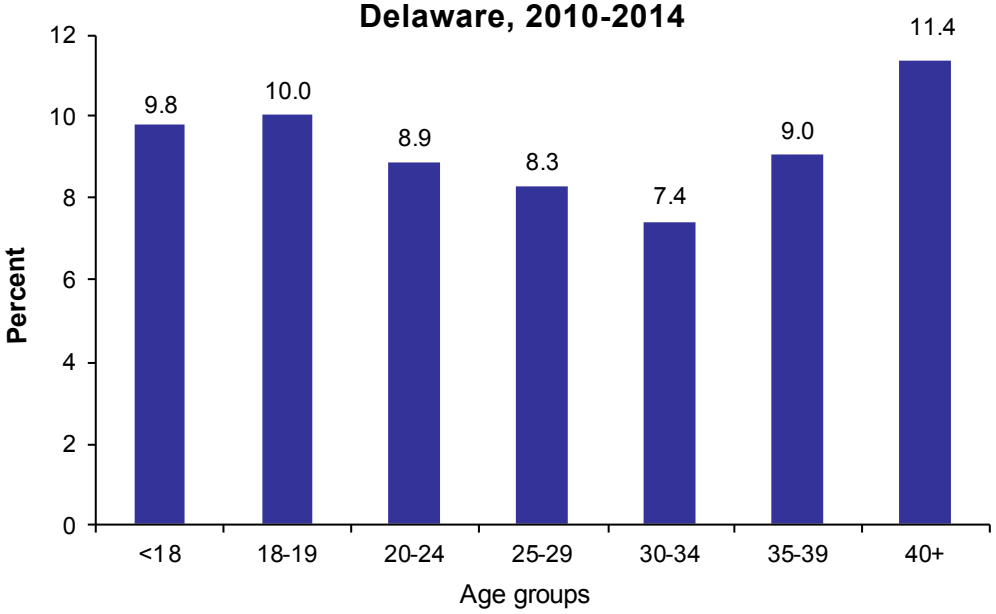


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

From 2009-2013 to 2010-2014, the five-year percent of low birthweight (LBW) births and very low birth-weight (VLBW) births remained relatively stable at 8.5 and 1.8, respectively.

The percent of LBW births was greatest for mothers in the 40 and older age group (11.4 percent) and lowest for those in the 30-34 age group (7.4 percent).

Five-year Percent of Low Birthweight Births (<2,500 grams) by Mother's Age, Delaware, 2010-2014

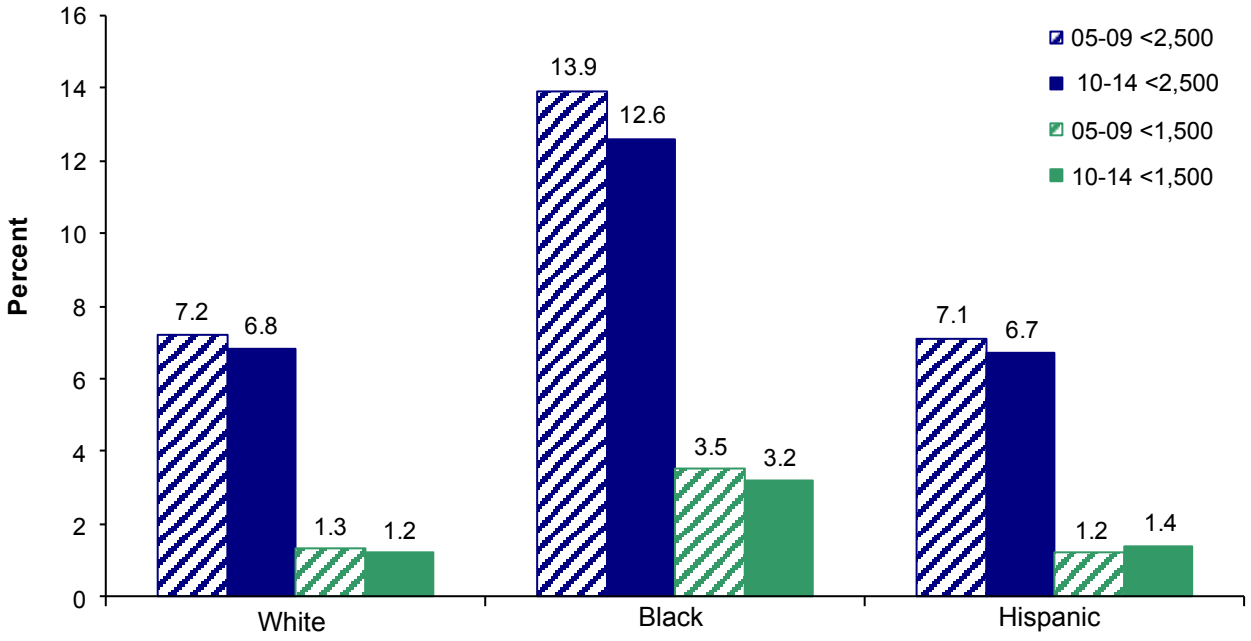


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Among mothers of all ages, black mothers had the highest percentage of LBW and VLBW births, at 12.6 percent and 3.2 percent, respectively.

Between 2005-2009 and 2010-2014, the percentages of white and black infants born at low birthweight declined. During this same time period, the percentage of white and black infants born at very low birthweight declined, while the percentage of Hispanic infants born at very low birthweight increased.

Five-year Average Percent of Low (<2,500 grams) and Very Low Birthweight Births (<1,500 grams), by Race and Hispanic Origin, Delaware, 2005-2009 and 2010-2014

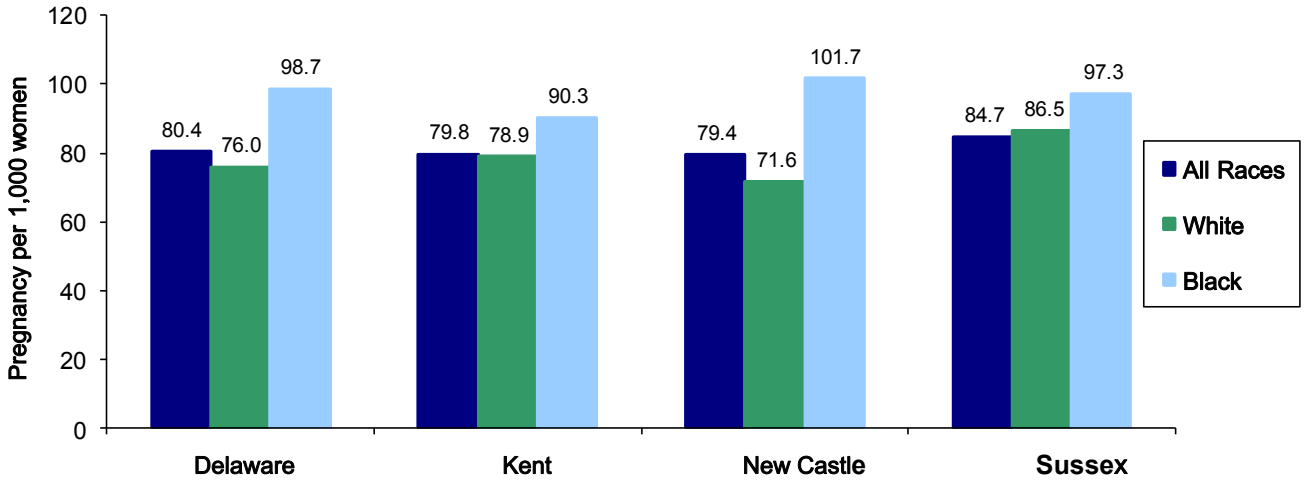


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

REPORTED PREGNANCIES

At 80 reported pregnancies per 1,000 women ages 15-44, the 2010-2014 rate of reported pregnancies remained stable. Although pregnancy rates of black mothers were significantly higher than those of white mothers in every county, the largest difference between the pregnancy rate of white (71.6 percent) and black (101.7 percent) mothers occurred in New Castle County.

Five-year Average Rate of Reported Pregnancies by Race
Delaware and Counties, 2010-2014

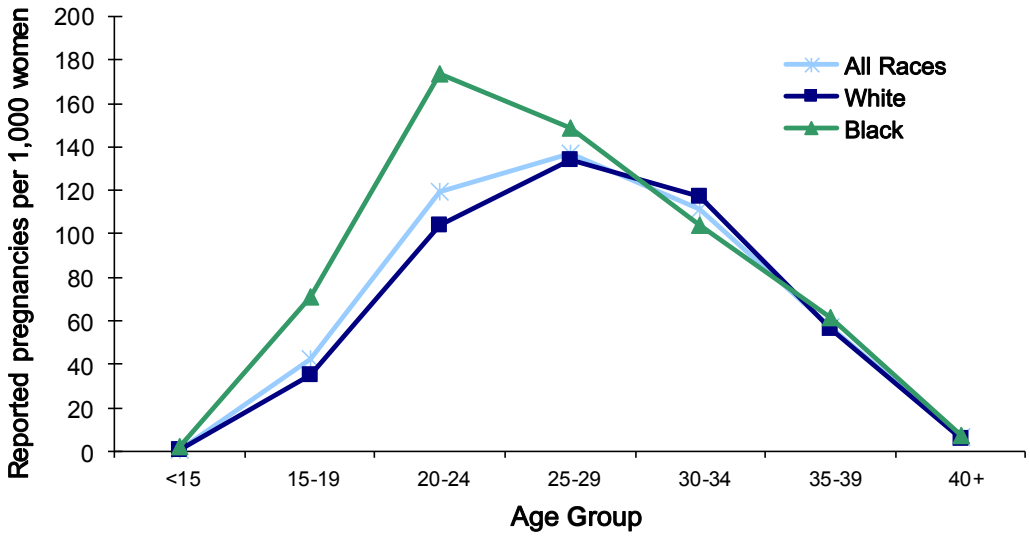


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

For women of all races, the 25-29 year age group had the highest pregnancy rate, at 137 pregnancies per 1,000 women in 2010-2014.

Black women had higher pregnancy rates than white women in all age groups except the 30-34 age group.

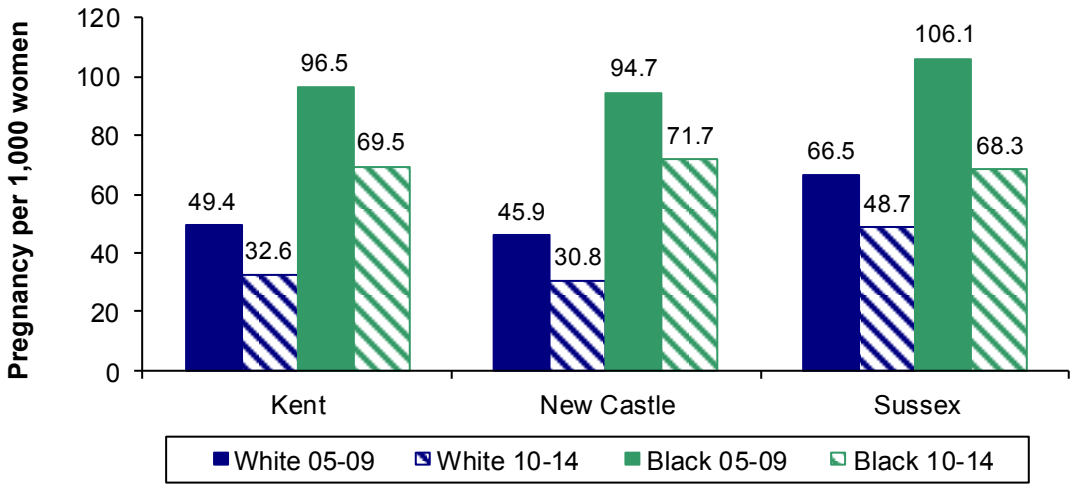
Five-year Average Rate of Reported Pregnancies
by Age and Race, Delaware, 2010-2014



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

In Kent and New Castle counties, the teen (15-19) pregnancy rates for all races declined between 2005-2009 and 2010-2014. Although all three counties had a significant decline in the black teen pregnancy rate, Sussex County's black teen pregnancy rate showed the greatest decline from 106.1 in 2005-2009 to 68.3 in 2010-2014. White teens in New Castle County had the lowest reported pregnancy rate at 30.8 pregnancies per 1,000 women in 2010-2014.

Five-year Average Teenage (15-19) Pregnancy Rates by County and Race, Delaware, 2005-2009 and 2010-2014



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

- The five-year average (2010-2014) pregnancy rate for younger teens aged 15-17 was lowest in Kent County, with 19.6 pregnancies per 1,000 females, followed by New Castle County with a rate of 22.1, and Sussex County with a rate of 23.8 (see Table D-8). The rates decreased in all three counties between 2009-2013 to 2010-2014.

- The five-year average (2010-2014) pregnancy rate for older teens aged 18-19 was lowest in New Castle County (68.2 pregnancies per 1,000 females), and highest in Sussex County (86.1). See Table D-8.

- In 2014, there were 2,937 abortions performed in Delaware: 2,468 to Delaware residents and 469 to non-residents.

  - One half of all pregnancies to females under 15 ended in termination.
    ⇒ 75 percent of pregnancies to white females under 15, and 41.7 percent of pregnancies to black females under 15, ended in terminations.

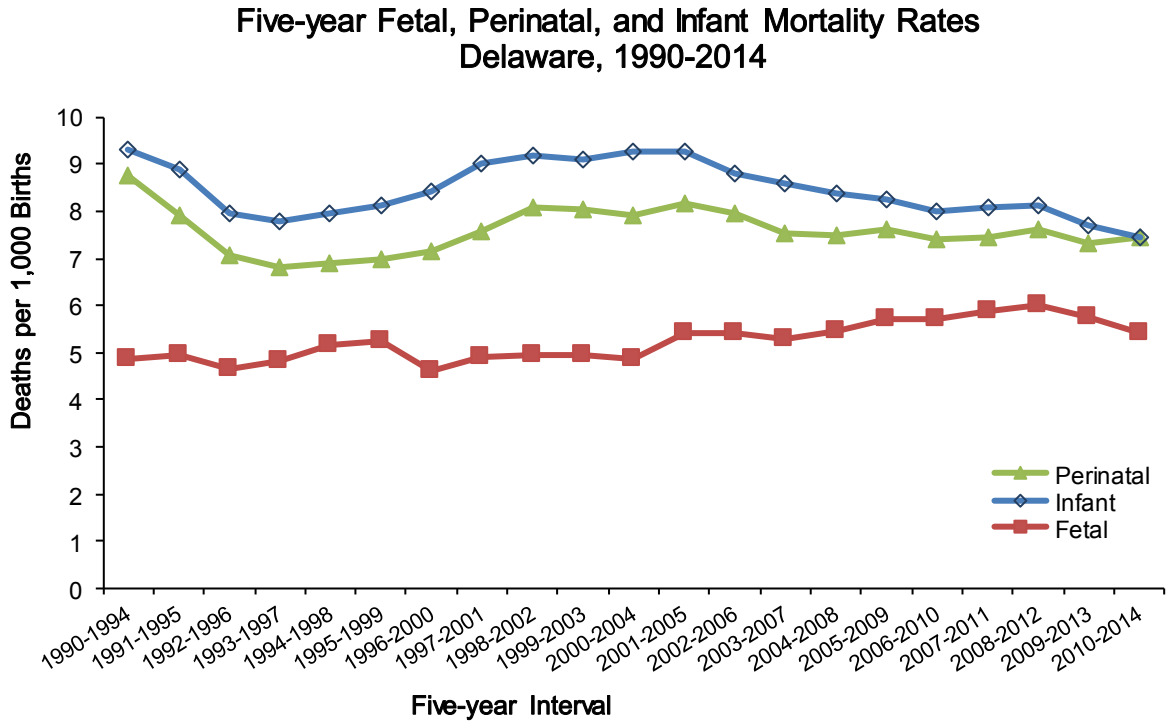
  - Married women undergo significantly fewer terminations than their single counterparts.
    3.2 percent of pregnancies to white married women ended in termination and 8.7 percent of pregnancies to black married women ended in termination.

    When the women were unmarried, these numbers increased to 26 percent among white women and 34.1 percent among black women.

  - There were 59 fetal deaths of Delaware residents in 2014.

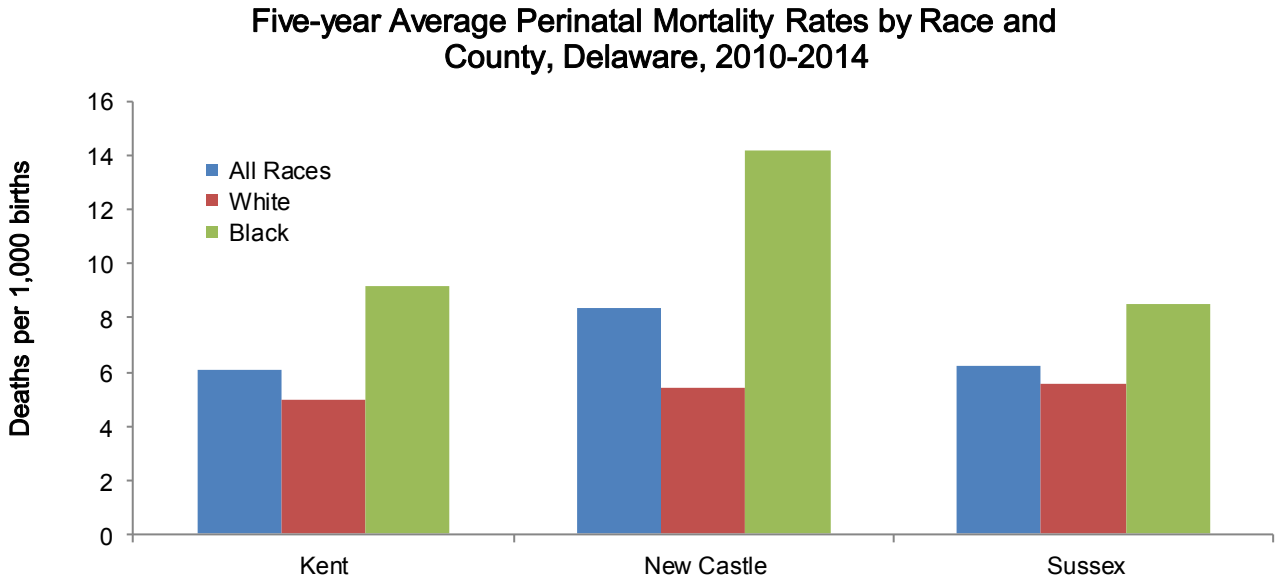
  - There were 10,934 live births to Delaware residents in 2014.

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 1990-1994 to their lowest level in 1993-1997, and then increasing through 2001-2005, after which they began a gradual decrease through 2009-2014.



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

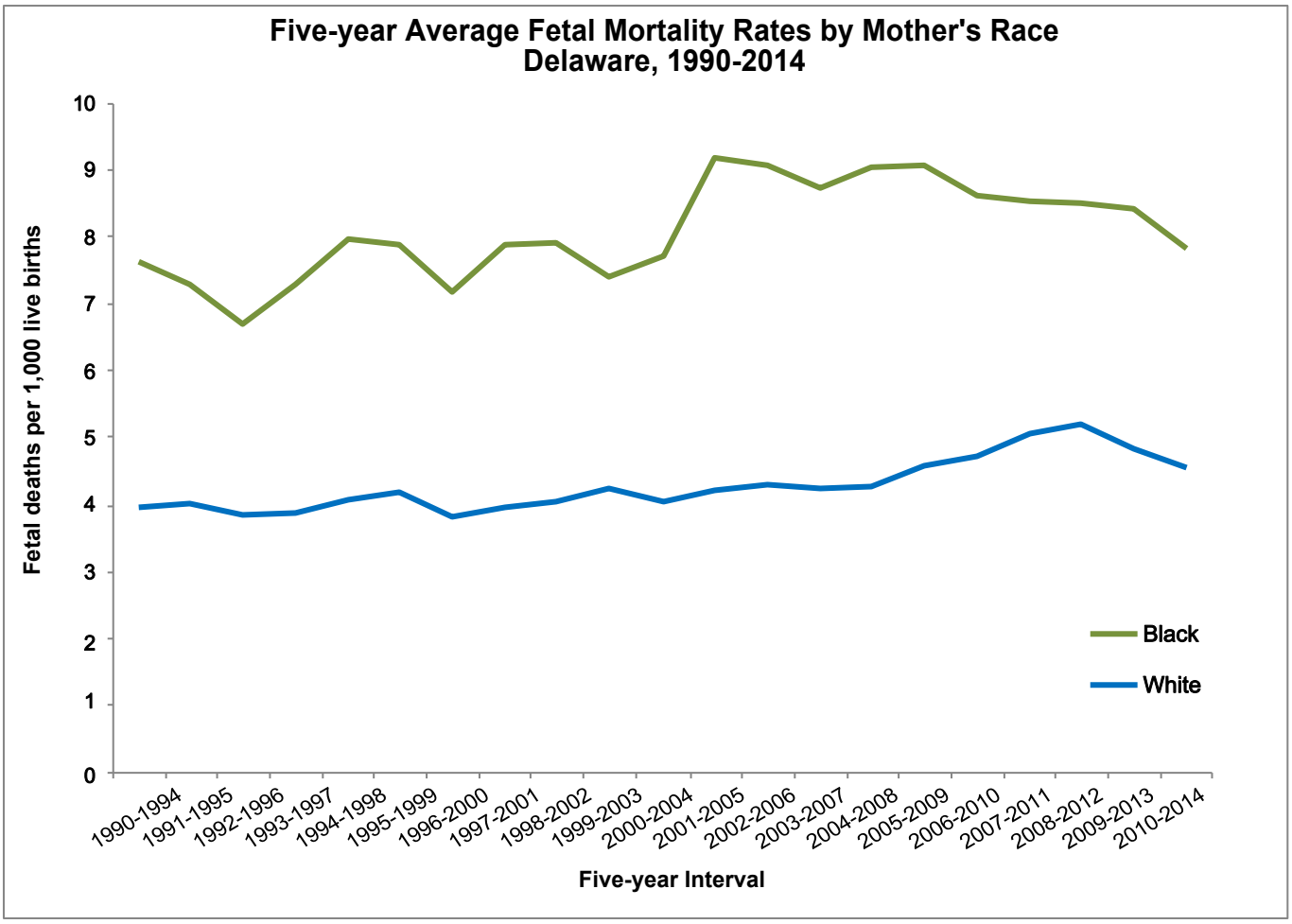
Like infant mortality rates, perinatal mortality rates for black women were substantially higher than the perinatal mortality rates for white women, regardless of county. In New Castle County, the perinatal mortality rate for black women was more than double that of white women.



Note: Rates include late fetal deaths

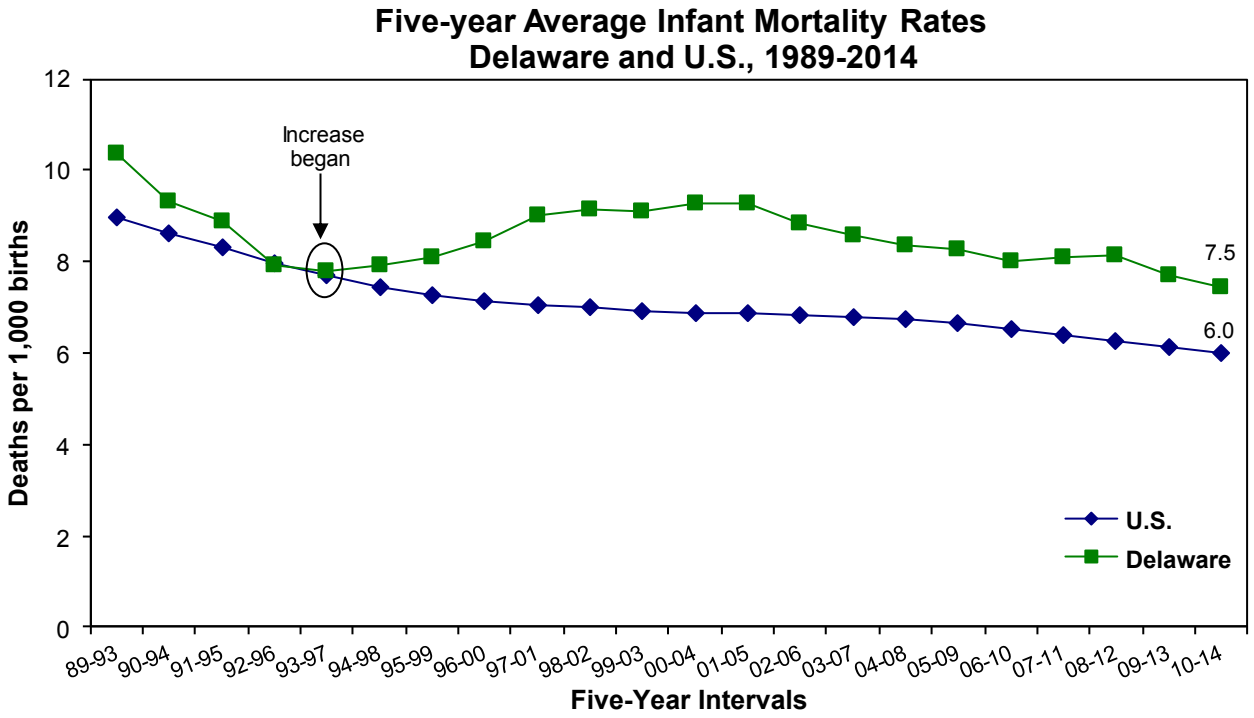
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

In 2014, there were 59 reported fetal deaths in Delaware. In 2010-2014, 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 2010-2014 they were 41 percent higher than the rate of white women (7.8 versus 4.6).



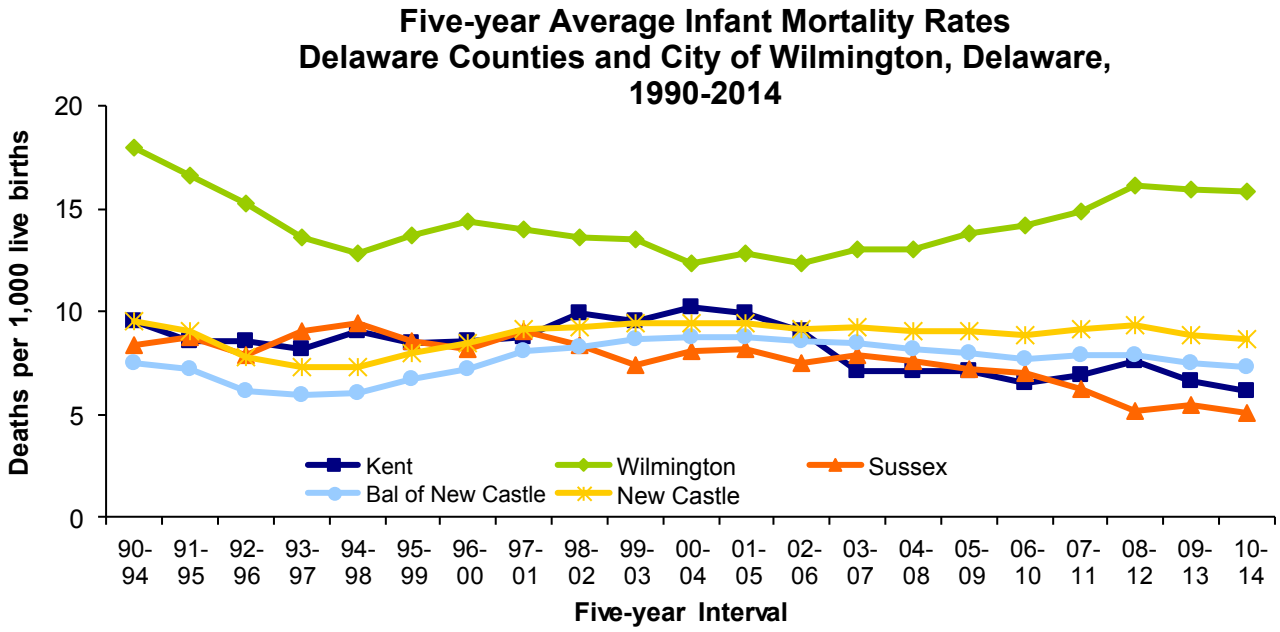
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

In 2010-2014, Delaware's infant mortality rate (IMR) was 7.5 infant deaths per 1,000 live births, resulting in a total decline of 19.4 percent from its 2000-2004 peak of 9.3 infant deaths per 1,000 live births. At 6.0 infant deaths per 1,000 live births, the U.S. rate remained lower than the Delaware rate.



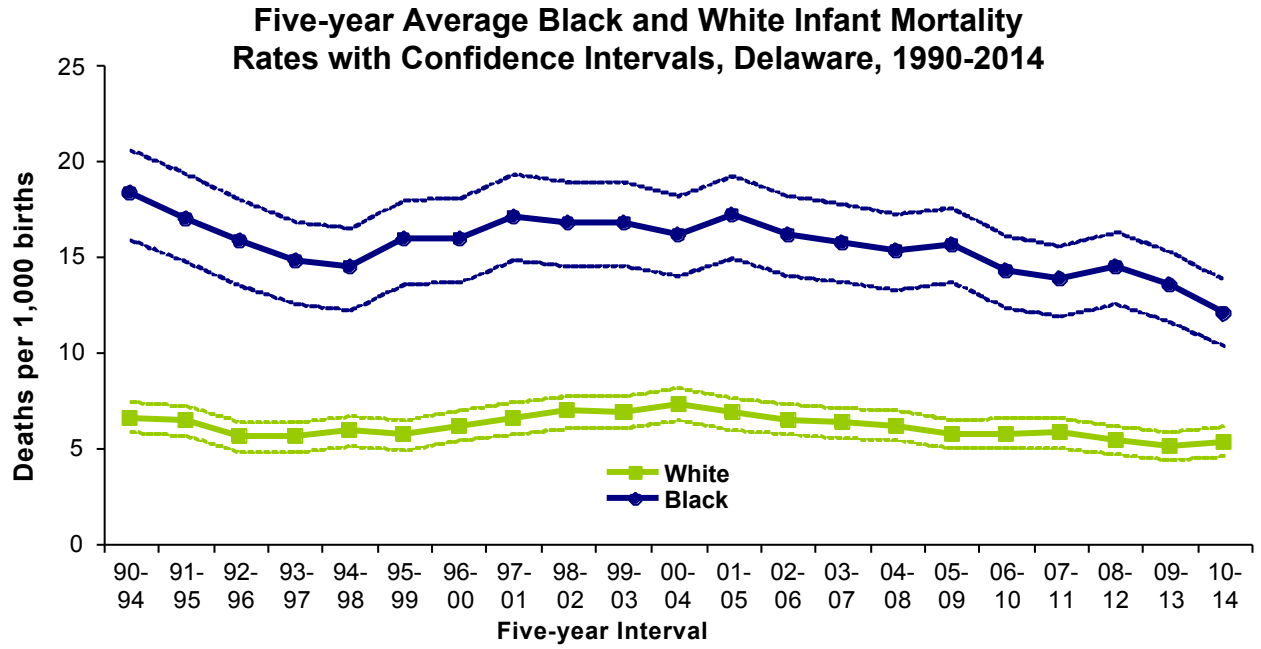
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Wilmington's IMR continued to be the highest in Delaware. The combination of Wilmington's high IMR and a higher IMR in the balance of New Castle County resulted in New Castle County's IMR being higher than the IMRs of both Kent and Sussex counties. Sussex County's IMR remained the lowest at 5.1. In 2010-2014, the balance of New Castle County's IMR was 7.3, Wilmington's IMR was 15.8, and Kent County's IMR was 6.2.



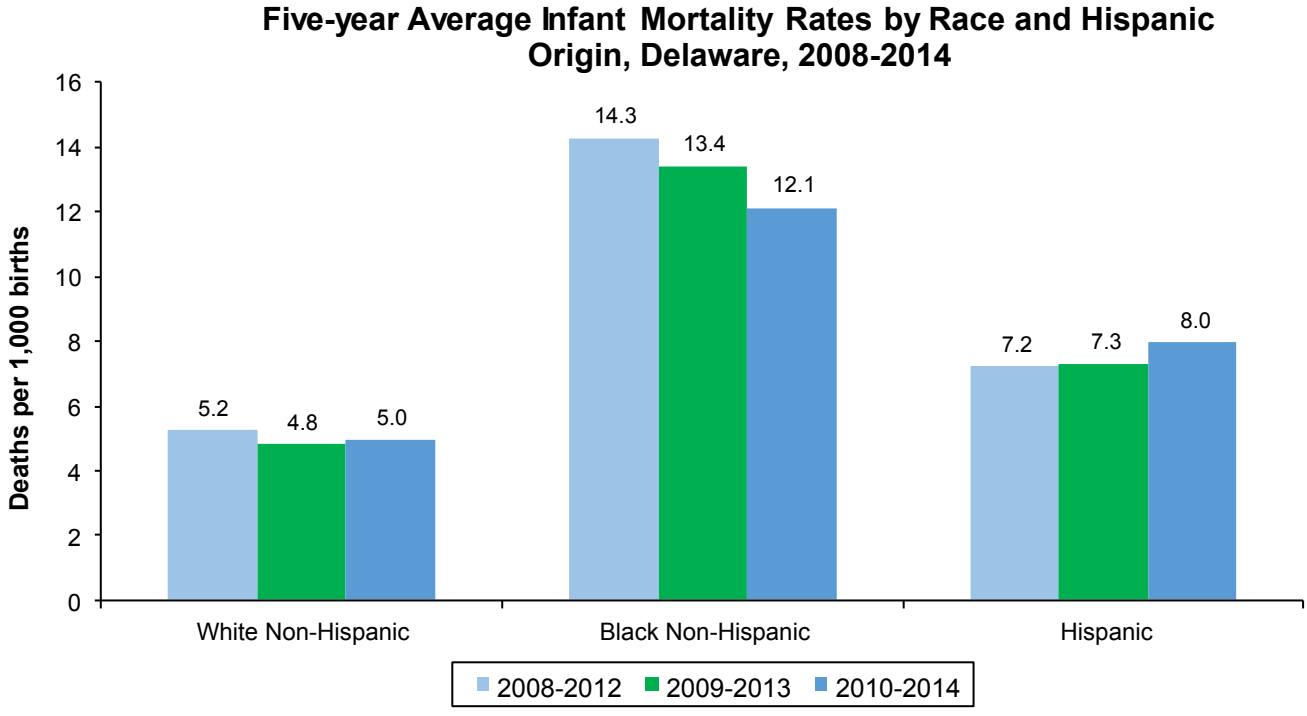
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Black infants experienced significantly higher mortality rates than white infants, but the gap is decreasing. In 2010-2014, the black IMR was two times higher than the white IMR, whereas in 1990-1994 the black IMR was three times higher.



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Significant disparities existed between black non-Hispanics and each of the two other groups: white non-Hispanics and Hispanics. Black non-Hispanics had the highest IMRs in all three time periods, and their rate of 12.1 infant deaths per 1,000 live births in 2010-2014 was more than double the white non-Hispanic rate of 5.0 and 1.5 times the Hispanic rate of 8.0.



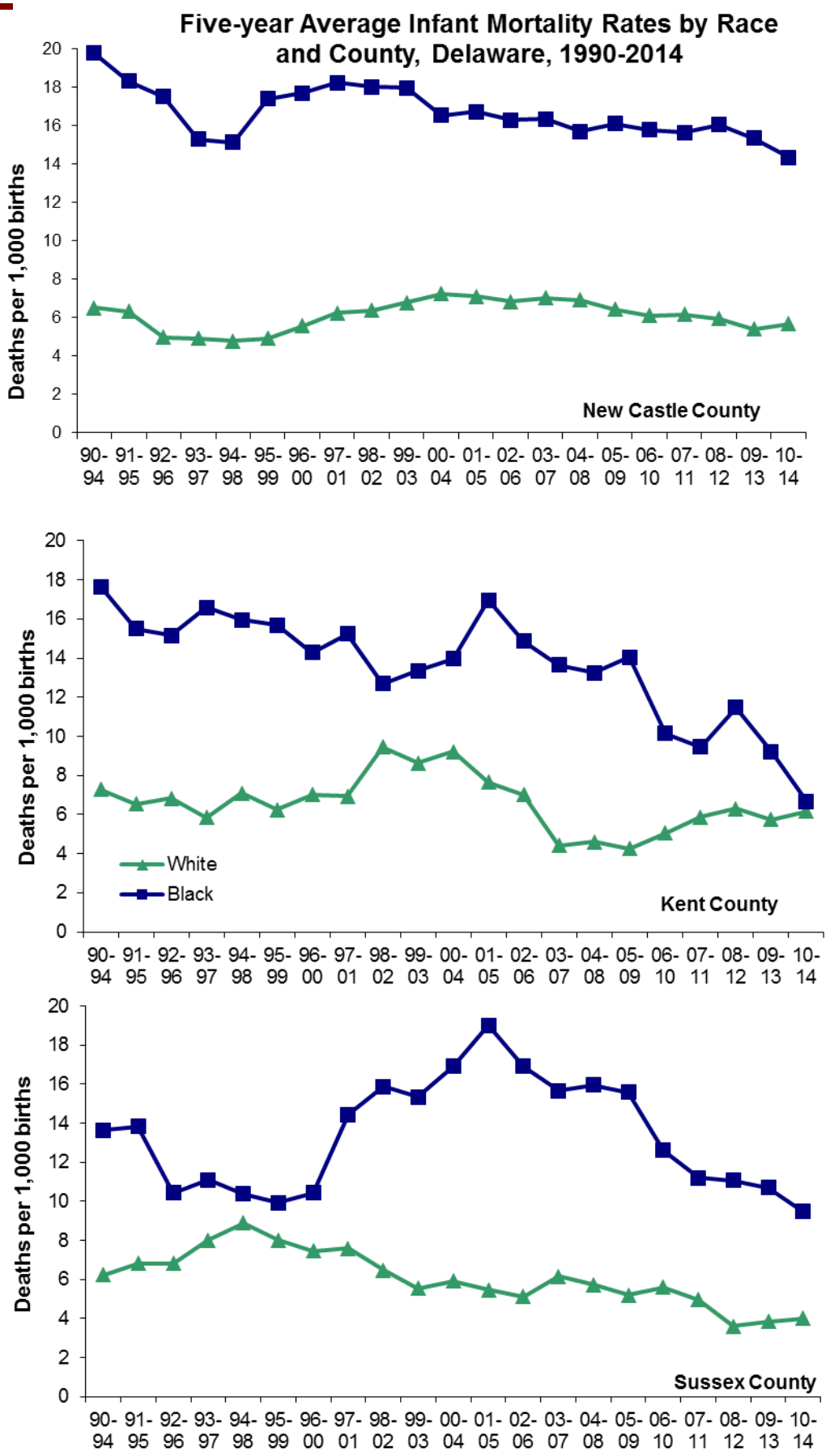
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

In 2010-2014, New Castle County had the highest IMRs and Sussex County had the lowest.

Black IMRs in New Castle County have hovered around 16 infants per 1,000 live births since 2002-2006, and decreased the last two time periods to 14.3 infant deaths per 1,000 live births.

Black IMRs in Kent County peaked at 17 infant deaths per 1,000 live births in 2001-2005. The IMR dropped to 6.7 in 2010-2014, a 61 percent decrease in black IMRs from 2001-2005. The white IMR had a 44 percent increase from 2005-2009 to 2010-2014 (4.3 to 6.2 infant deaths per 1,000 live births), thus narrowing the disparity between the white and black IMR.

Sussex County's black IMR dropped to 9.5 infant deaths per 1,000 live births in 2010-2014, its lowest rate since 1996-2000; a 50 percent reduction from the 2001-2005 peak of 19. Sussex County's white IMR fluctuated between 5 and 6 from 1999-2003 to 2007-2011, and in 2010-2014 the rate dropped to 4 infant deaths per 1,000 births.



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

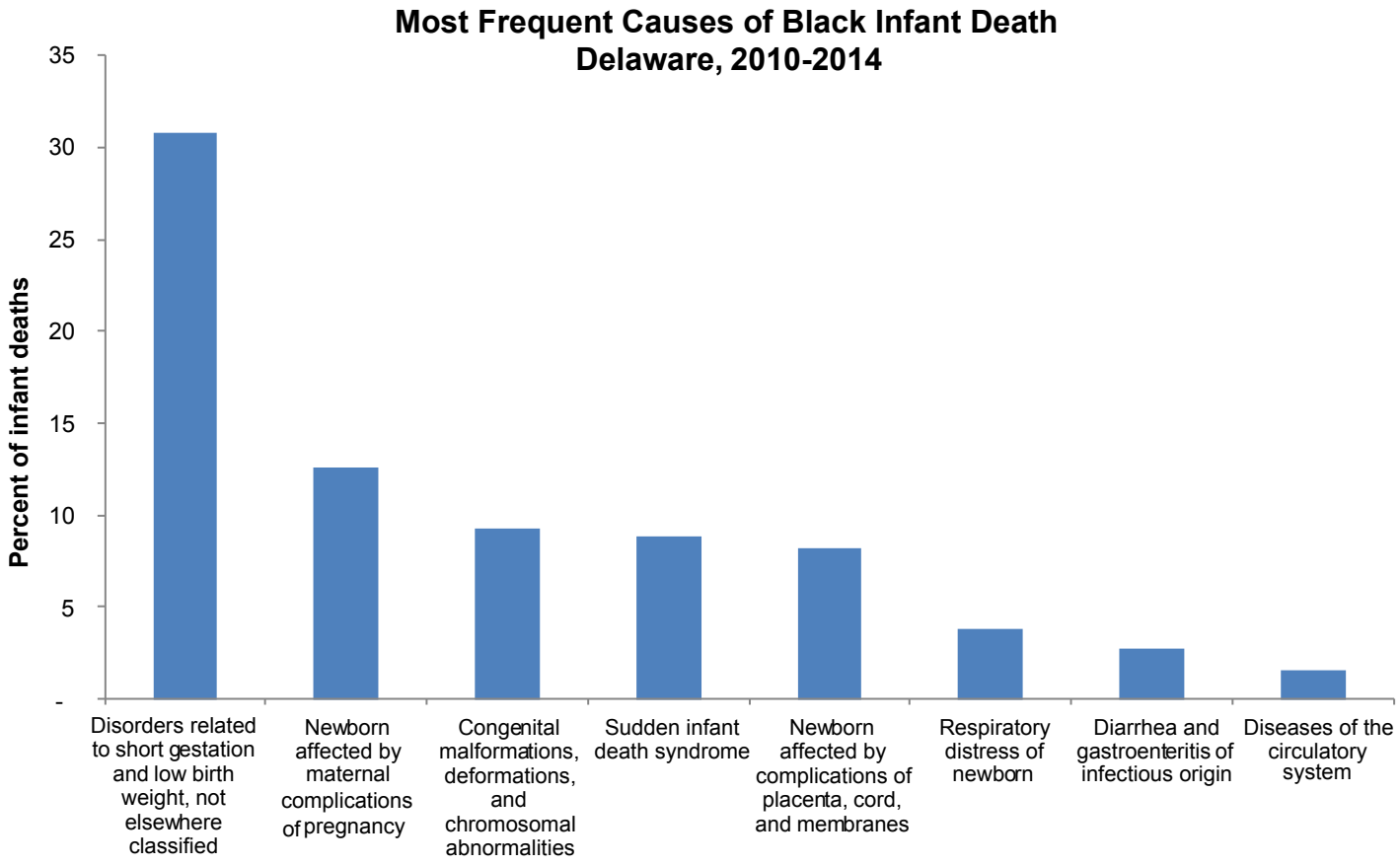
In 2010-2014, the five leading causes of infant death in Delaware were:

- Disorders related to short gestation and fetal malnutrition (prematurity and low birthweight), which accounted for 23.1 percent of infant deaths.
- Congenital anomalies (birth defects), which accounted for 15.5 percent of infant deaths.
- Newborns affected by maternal complications of pregnancy, which accounted for 10.4 percent of infant deaths. Of the 43 deaths attributed to this cause, 37 were due to the newborn being affected by incompetent cervix and premature rupture of membranes.
- Sudden infant death syndrome (SIDS), which accounted for 10 percent of all infant deaths.
- Newborns affected by complications of placenta, cord, and membranes were 6.6 percent of infant deaths.

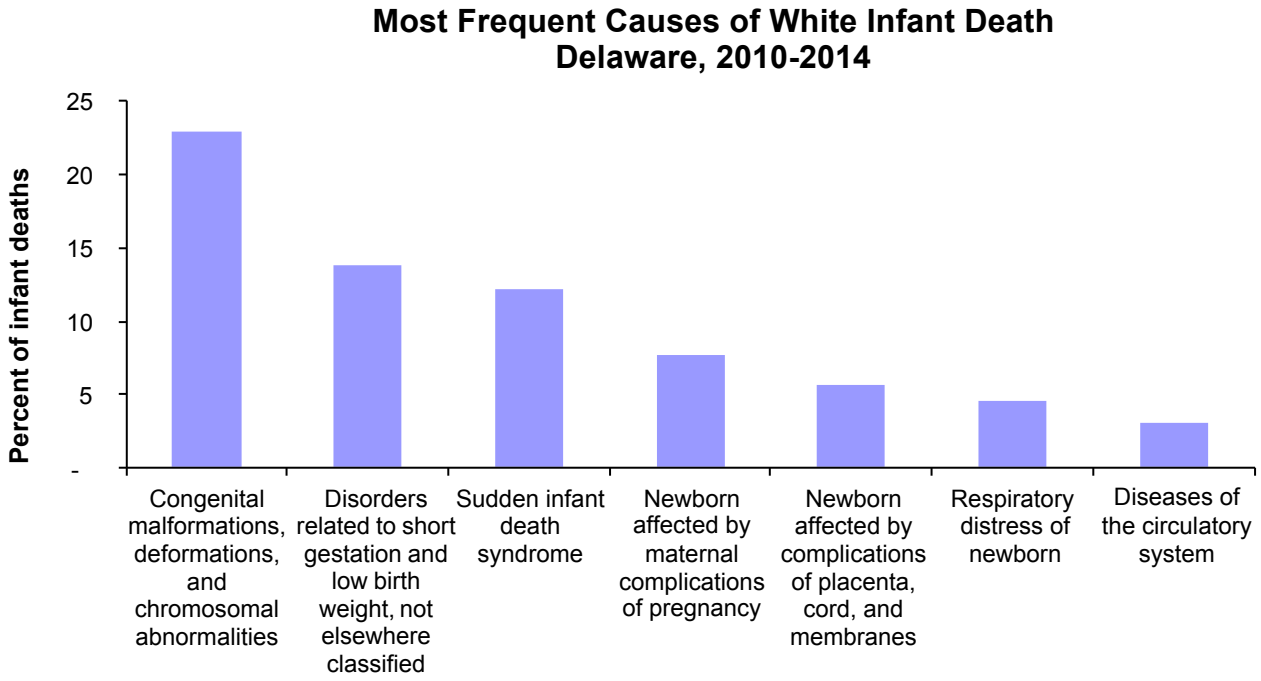
In sum, the five most common causes of infant death accounted for 66 percent, or 286 of the 412 total infant deaths.

The most frequent causes of death by race are shown in the graphs below and on the following page. Birth defects and disorders related to short gestation and low birthweight 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 disorders due to prematurity and low birthweight. While birth defects were responsible for 23 percent of all white infant deaths, they accounted for only 9 percent of black infant deaths. Conversely in 2010-2014, infant deaths due to disorders related to prematurity and low birthweight accounted for larger percentages of black infant deaths than white infant deaths (31 percent versus 14 percent for prematurity and low birthweight).



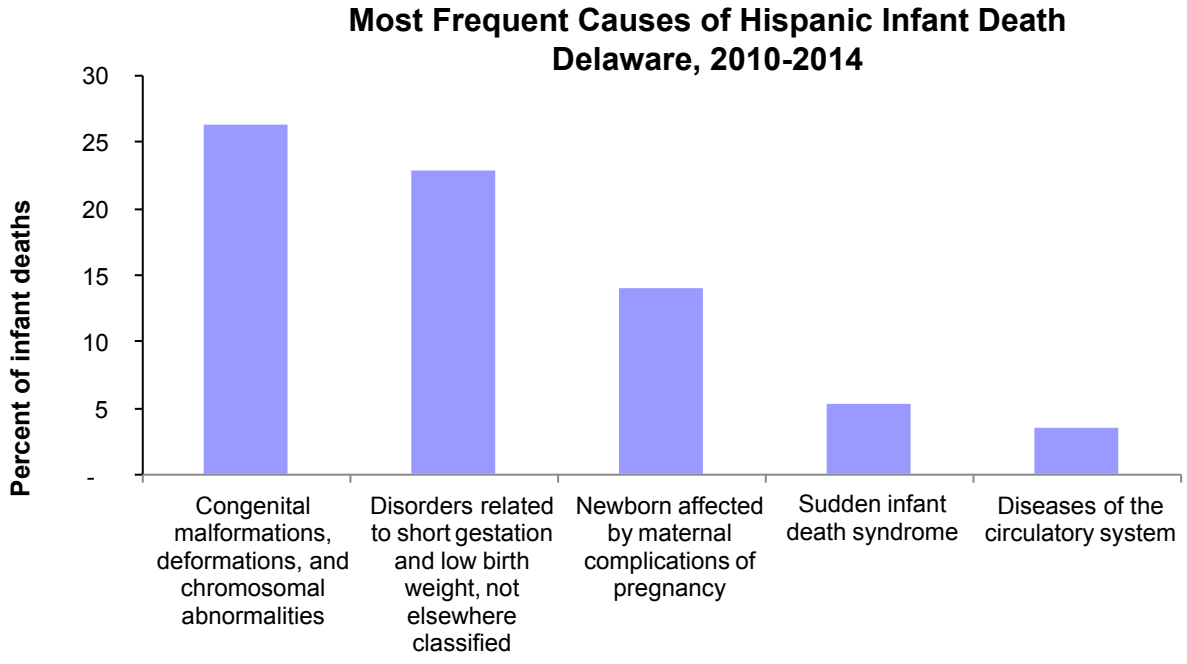
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

In 1989-1993, 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 nearly quadrupled. In the most recent five-year period, 2010-2014, 13.0 percent of all live births were to Hispanic mothers, and 13.8 percent of all infant deaths were of Hispanic origin.

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

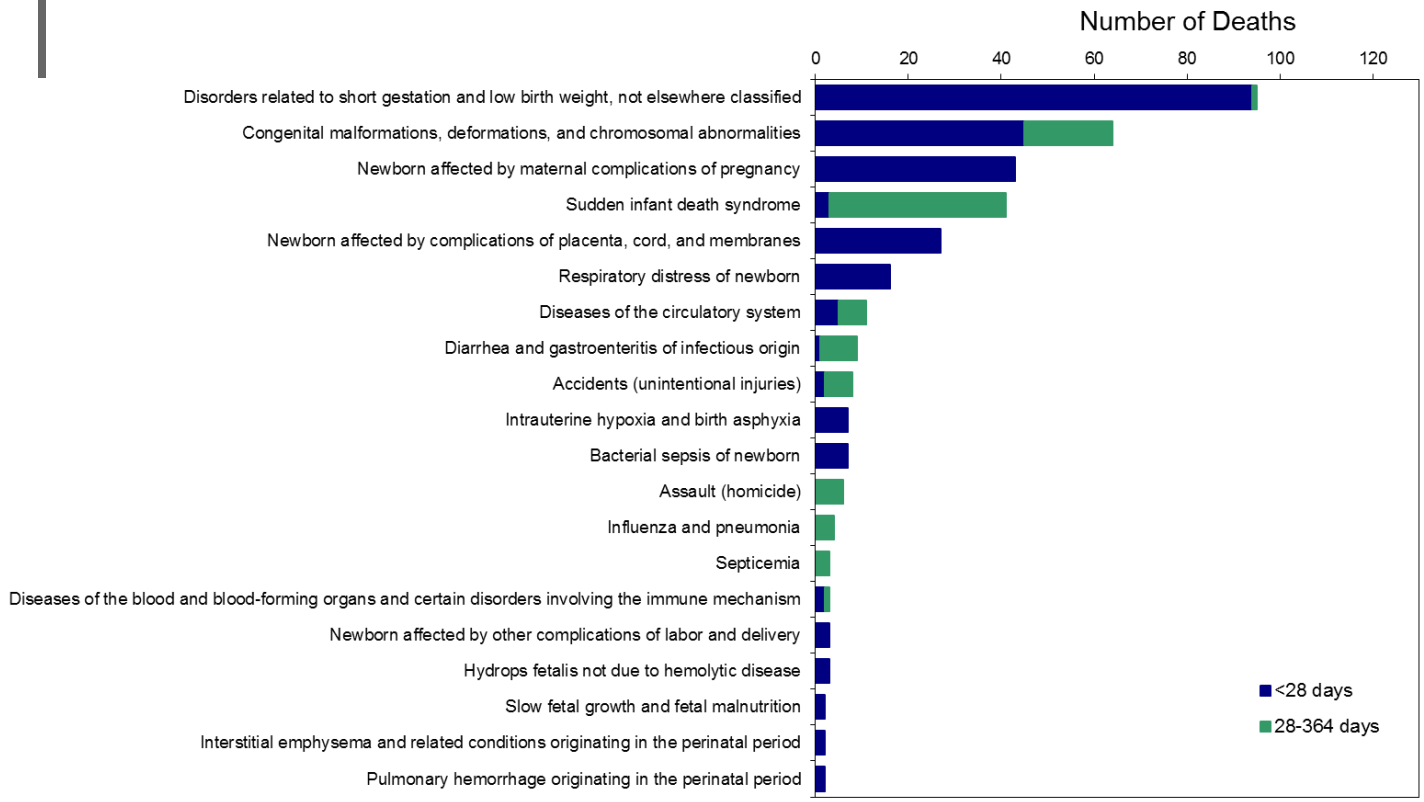


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

In Delaware in 2010-2014, approximately 94 percent of all infant deaths occurred within the first six months of life, 73 percent occurred within the first 28 days of life, and 44 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, 2010-2014



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

- Prematurity and low birthweight accounted for the greatest number of infant deaths in 2010-2014; all but one of these deaths occurred in the neonatal period.

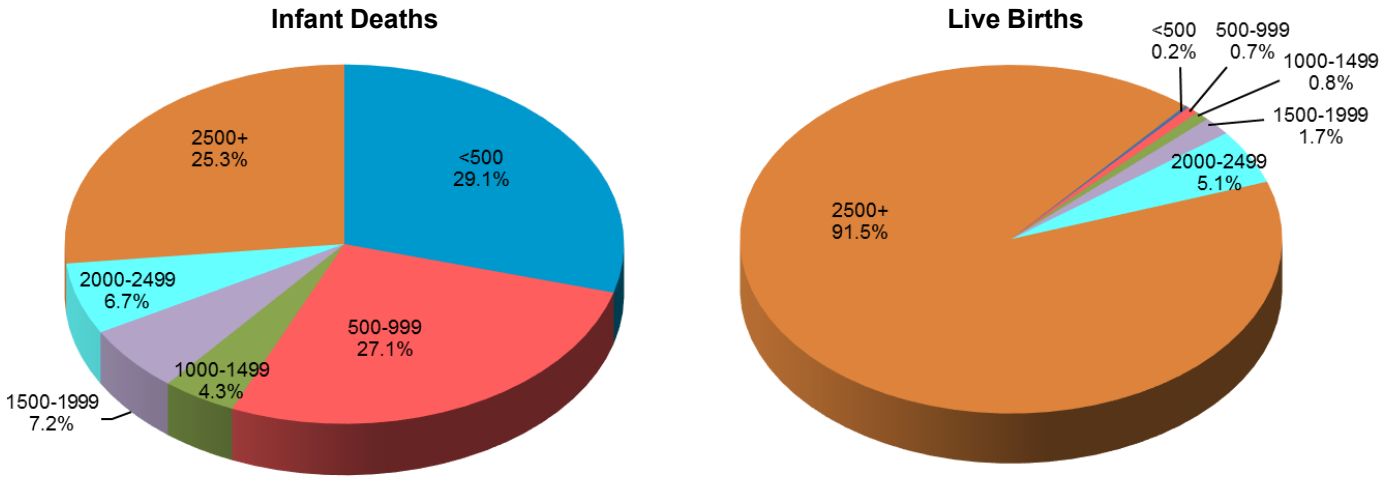
- Sudden infant death syndrome (SIDS) was the only one of the top five causes of death that had the majority of deaths occurring in the postneonatal period, with a mean age at death of 107 days. Although fewer infants died in 2010-2014 compared to 2009-2013 and less infants died due to SIDS, it remained in the top five leading causes of infant death in 2010-2014.

  ⇒ 41 percent (17 out of 41) of the SIDS deaths were associated with co-sleeping and/or sleeping on soft surfaces, such as couches and adult beds.

- In 2010-2014, there were eight 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, 6.1 percent of all infant deaths were associated with co-sleeping and/or unsafe sleep practices.

Though only 1 percent of all live births in 2009-2013 were infants weighing less than 1,000 grams, they accounted for over half (56 percent) of all infant deaths. In total, 8.5 percent of all live births in 2009-2013 were infants of low birthweight (under 2,500 grams), while 74.4 percent of infant deaths were low birthweight.

Distribution by Birthweight, Delaware Live Birth Cohort, 2009-2013

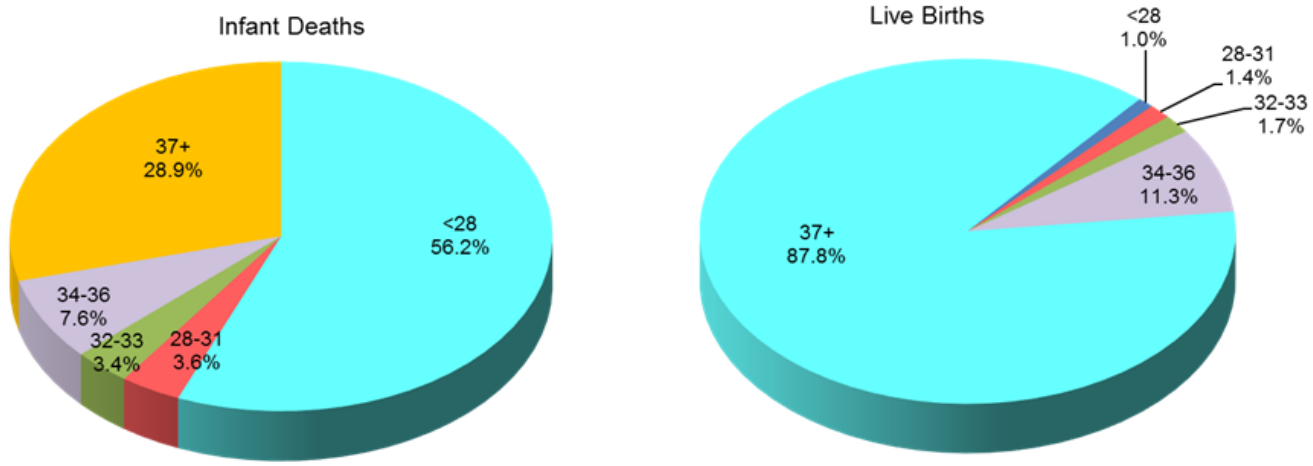


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

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 2009-2013 were less than 28 weeks gestation at birth, but they accounted for 56 percent of all infant deaths. In total, 15 percent of all live births in 2009-2013 were born preterm (<37 weeks of gestation) and 71 percent of infant deaths were born preterm.

Distribution by Gestation, Delaware Live Birth Cohort, 2009-2013



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

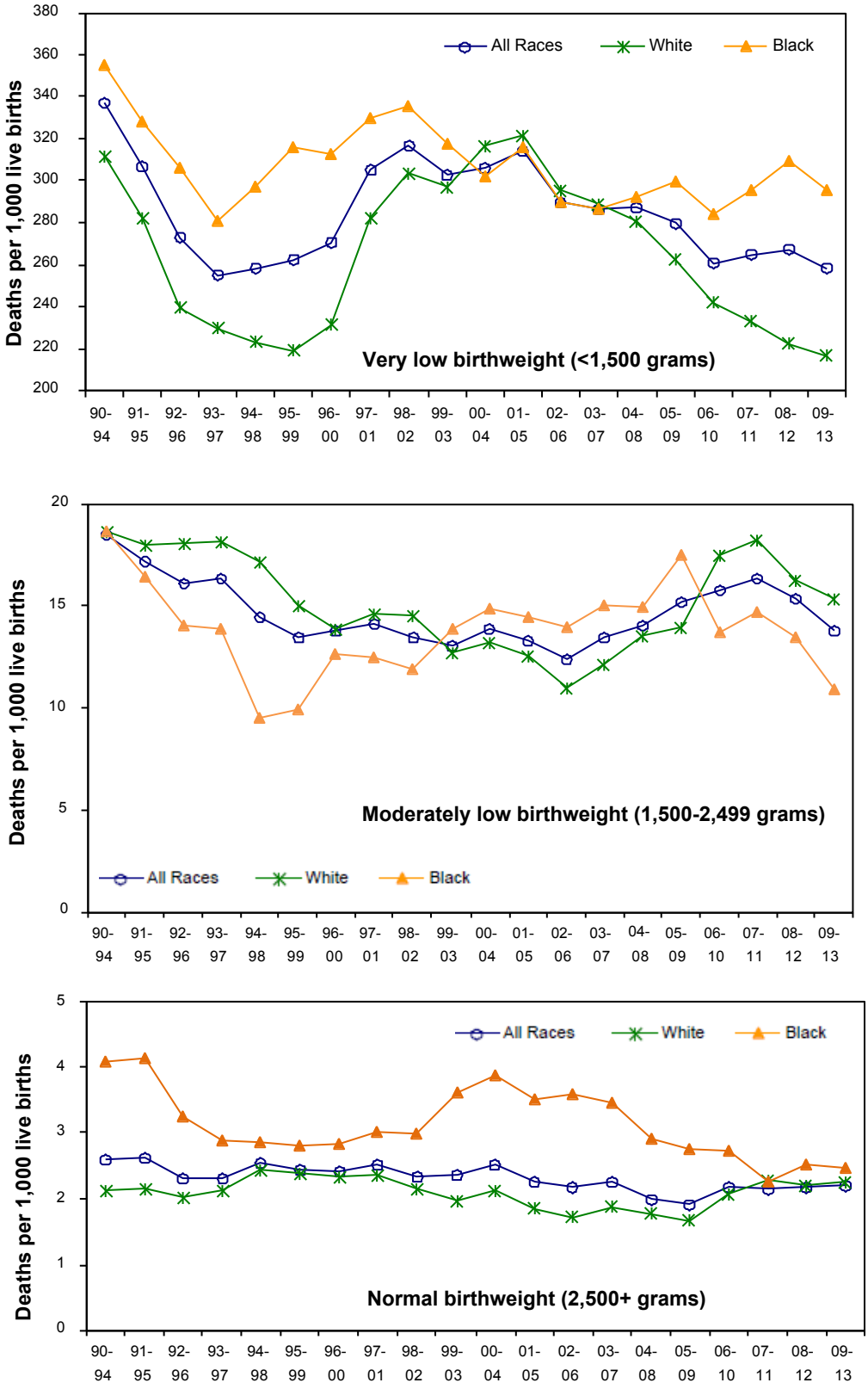
Birthweight and gestation are considered to be the most important predictors of infant health and mortality risk. Infants born too small or too early have a much greater risk of mortality than those who reach a normal birthweight (2,500+ grams) or full-term gestation (37+ weeks).

The IMR for very low birthweight (VLBW) black infants decreased in the most recent year after increasing for two years while the IMR for VLBW white infants decreased for the eighth straight year. In 2009-2013, IMRs for VLBW infants were 217 white infant deaths and 295 black infant deaths per 1,000 live births.

IMRs for moderately low birthweight infants of all races declined 15.3 percent between 2007-2011 and 2009 -2013. During that time, white IMRs decreased 15.4 percent while the black IMR decreased by 25.6 percent, making their rates lower than the white rates (10.9 vs 15.4).

The IMR for all races remained the same from 2007-2011 to 2009-2013. IMRs for normal birthweight white infants also remained stable, resulting in no net change since 2000-2004, while the IMRs for black infants declined 36 percent between 2000-2004 and 2009 -2013. The divergent movement in black and white rates in 2009-2013 narrowed the black/white disparity ratio; the black IMR for normal birthweight infants was 2.5, versus 2.3 for white infants of normal birthweight.

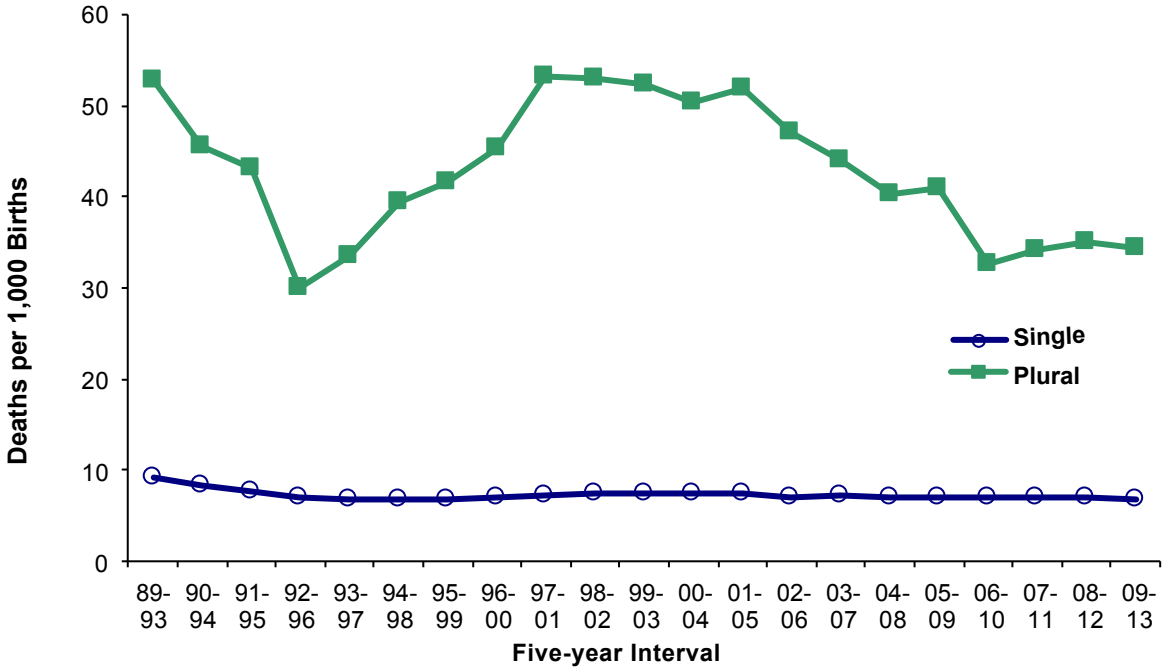
Five-year Average Infant Mortality Rate by Birthweight and Race, Delaware, 1990-2013 Live Birth Cohort



Source: Delaware Health and Social Services, Division of Public Health, Health Statistics Center

From 1992-1996 to 1997-2001, IMRs for plural births increased 77 percent, to 53.1 infant deaths per 1,000 live births. During the same time, IMRs for singleton births increased by 5 percent. Since then, plural IMRs have decreased 35 percent. IMRs for singleton births experienced a decrease of 8 percent. In 2009-2013, the infant mortality rate for plural births was more than five times that of singleton births (34.5 versus 6.7 infant deaths per 1,000 live births).

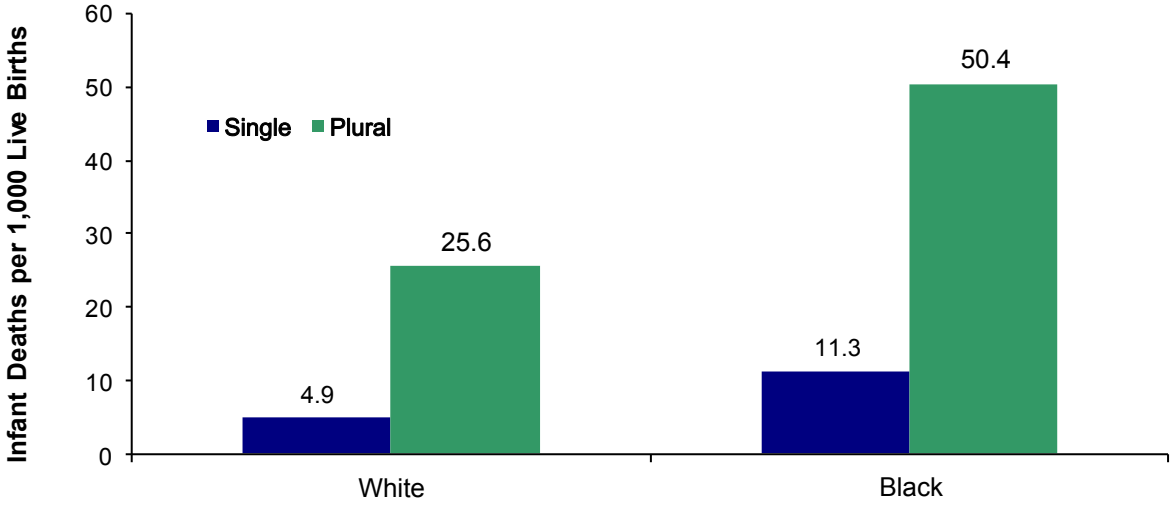
Five-year Average Infant Mortality Rates by Plurality, Delaware Live Birth Cohort, 1989-2013



Source: Delaware Health and Social Services, Division of Public Health, 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 nearly double those of white infants.

Five-year Average Infant Mortality Rates by Plurality and Race, Delaware Live Birth Cohort, 2009-2013

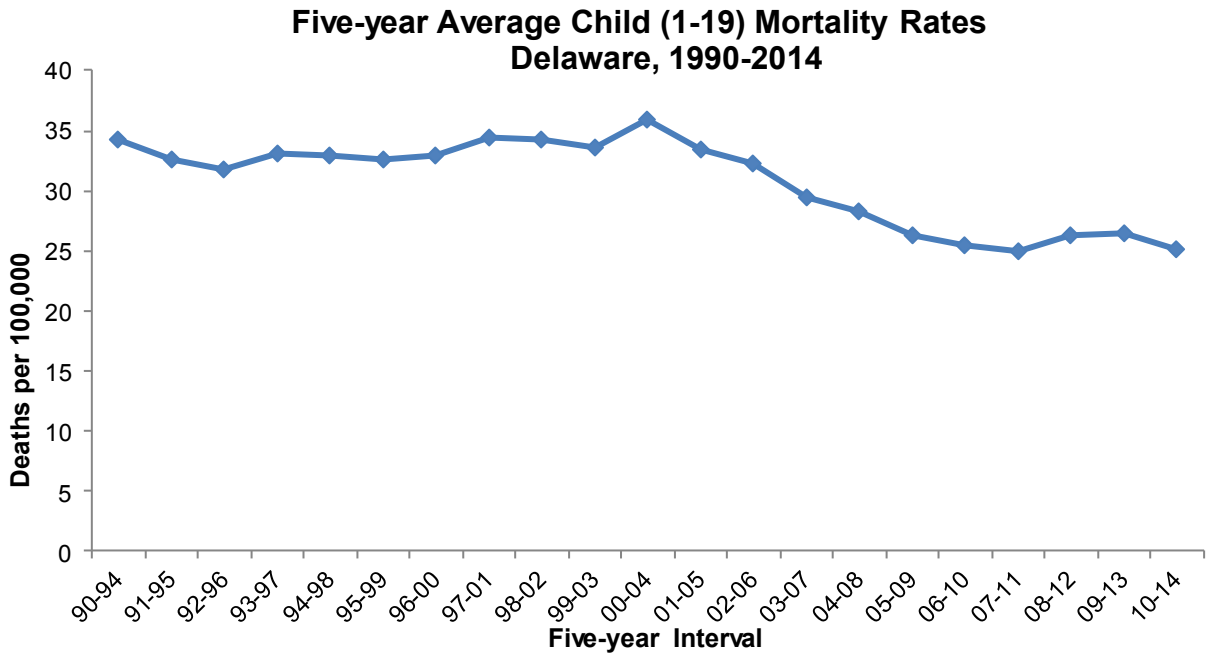


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

CHILD MORTALITY

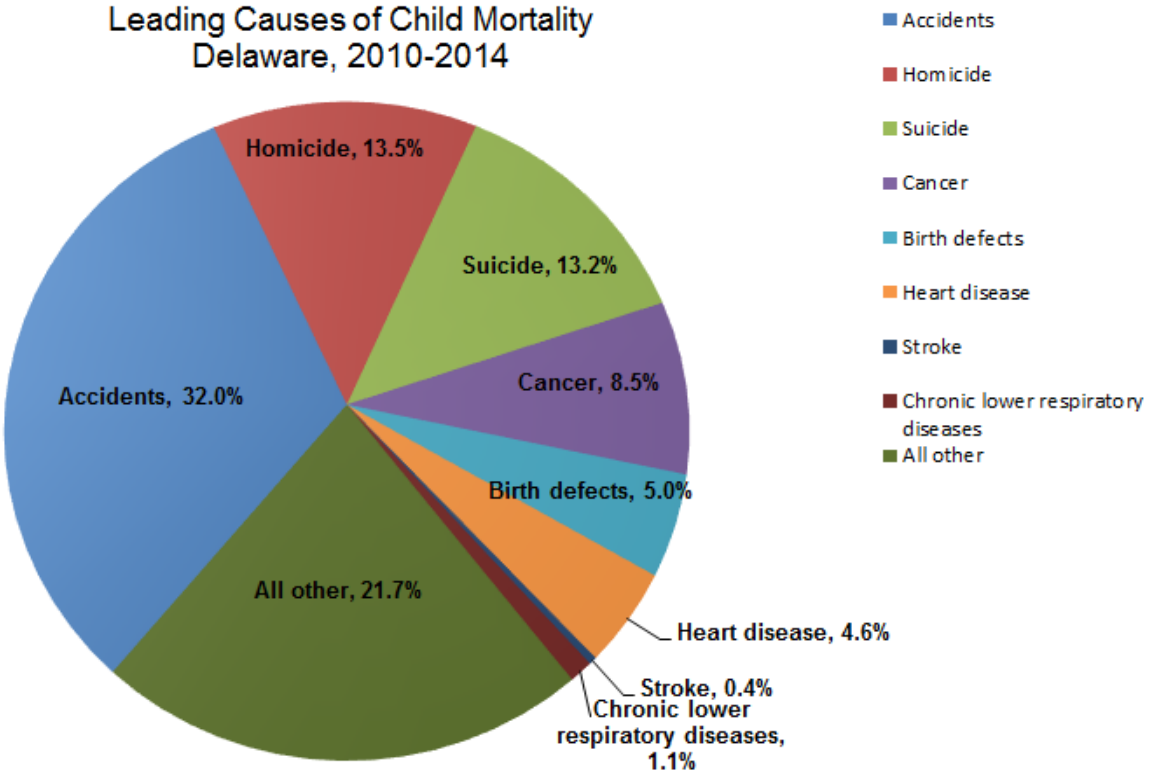
From 2010 to 2014, 281 children and adolescents between the ages of 1 and 19 died in Delaware, representing 0.7 percent of the total deaths that occurred during that time. Males accounted for 64 percent of all child deaths in 2010-2014.

After small fluctuations throughout the 1990s, the mortality rate for children ages 1 to 19 began to decline. Since its peak of 36 in 2000-2004, the rate decreased 30 percent, to 25 deaths per 100,000 children.



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

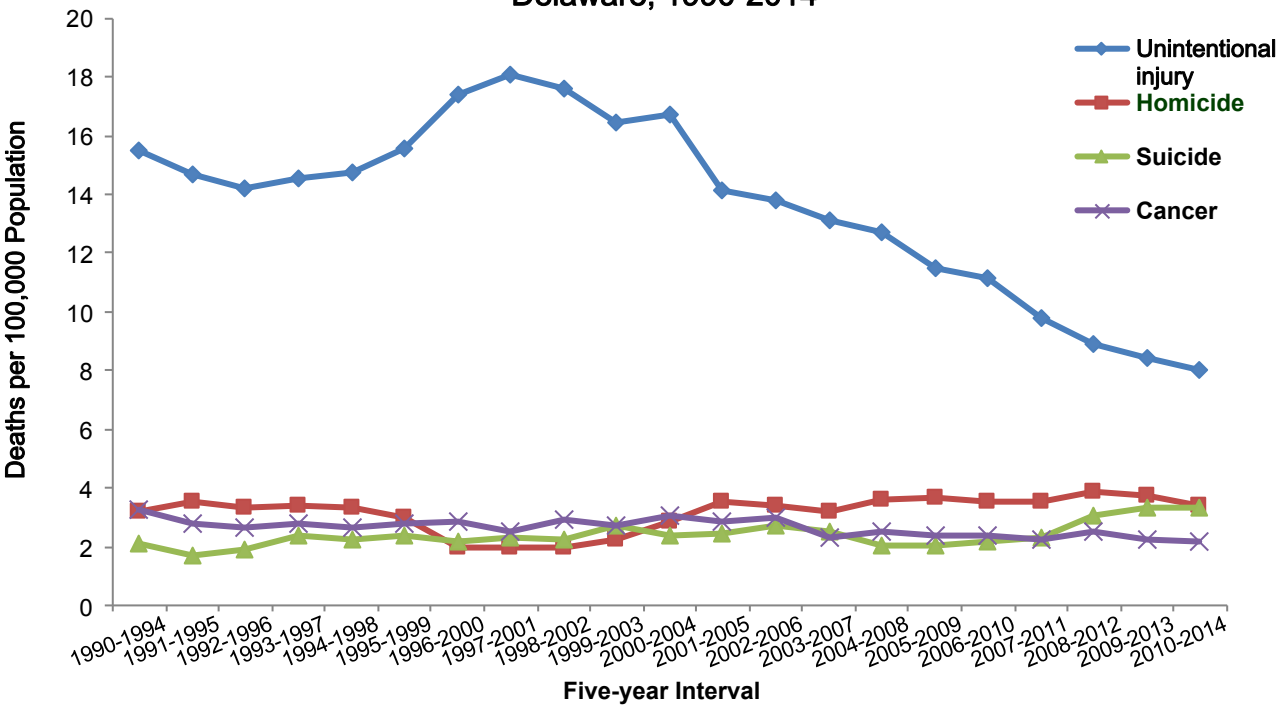
Accidents, homicide, suicide, and cancer were the four most common causes of child mortality in 2010-2014. Together, they accounted for more than two-thirds of all child deaths.



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

CHILD MORTALITY

From 2001-2005 to 2010-2014, rates for three of the four leading causes of child mortality declined. Unintentional injury mortality rates declined 43 percent; cancer mortality rates fell 25 percent; and homicide mortality rates decreased 6 percent. Suicide mortality rates increased 32 percent to 3.3 deaths per 100,000 children.



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

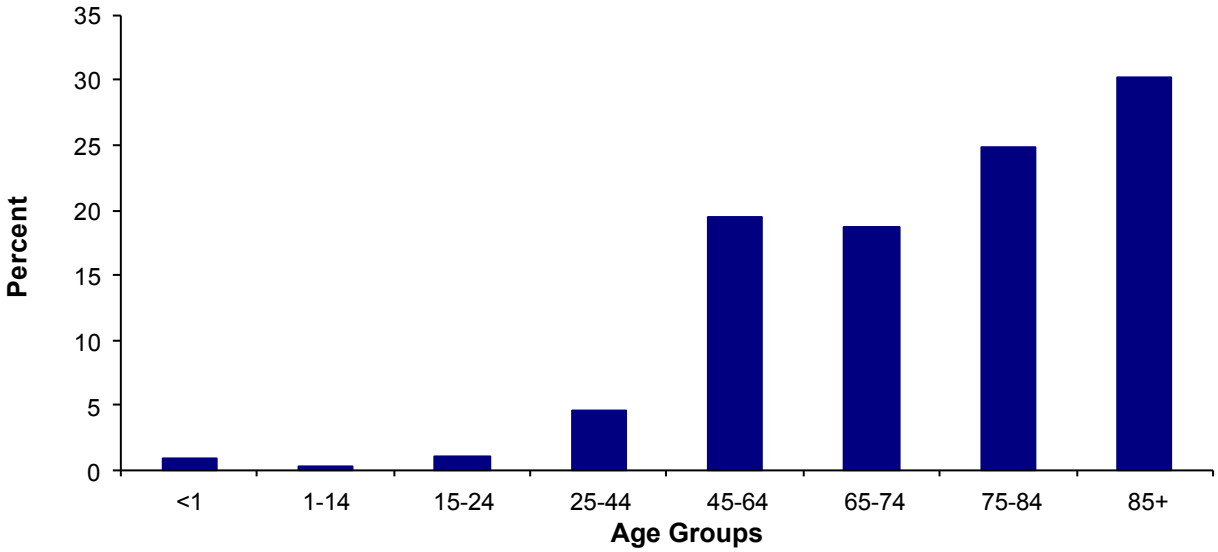
The most common causes of child deaths in 2010-2014 are:

- Motor vehicle crashes accounted for 57 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 16 and 11 percent of deaths, respectively.
- Most child homicides were due to firearms (74 percent) and fire/burning (8 percent).
- The majority of child cancer deaths were due to brain cancer (42 percent) and leukemia (25 percent).
- Suffocation, followed by firearms, were the most common methods of suicide, and accounted for 49 and 32 percent of the total suicide deaths.

More Delaware residents died in 2014 than in 2013. A total of 8,252 residents died, 74 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 percent of all deaths in 2014.

- Thirty percent of the Delawareans who died in 2014 were 85 or older. Deaths of those 75 and older accounted for more than half of all deaths.

Percent of Deaths by Age
Delaware, 2014



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

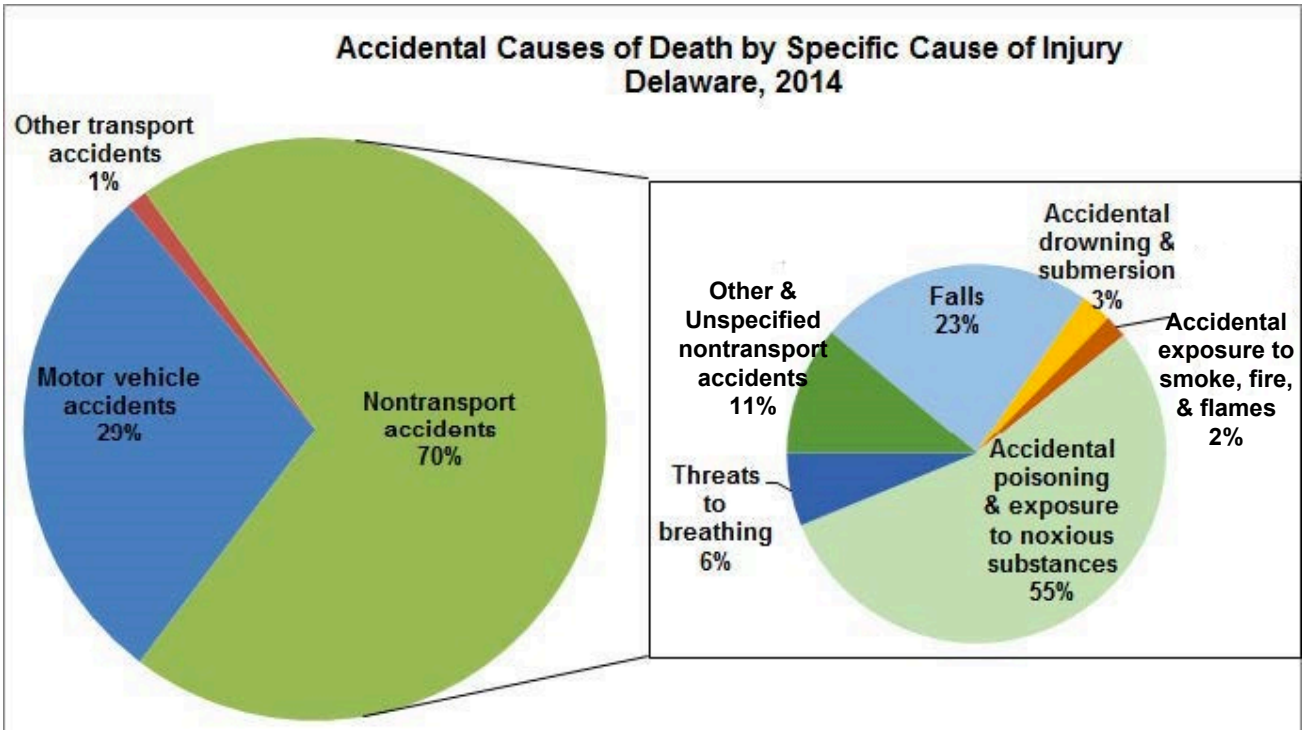
- A Delaware resident born in 2014 could expect to live an average of 79.6 years.
- Life expectancy at birth varied by race and sex; white females had the highest life expectancy (82.5 years) while black males had the lowest (73.8 years).
- In 1989, 80 percent of Delaware decedents were buried and 15 percent were cremated. By 2014, the distribution had shifted: 49 percent of decedents were buried and 46 percent were cremated.
- In 2014, the 10 leading causes of death for residents of all ages changed slightly from the top 10 in 2013. Septicemia moved down into the tenth leading cause of death, whereas influenza moved up to the ninth leading cause of death.

Number of Deaths by Leading Cause, Delaware, 2014

Rank	Leading Cause of Death	Number
1	Malignant neoplasms	1,972
2	Diseases of heart	1,917
3	Chronic lower respiratory diseases	458
4	Cerebrovascular diseases	439
5	Accidents (unintentional injuries)	436
6	Diabetes mellitus	226
7	Alzheimer's disease	188
8	Nephritis, nephrotic syndrome & nephrosis	172
9	Influenza & pneumonia	156
10	Septicemia	136

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

- Of the 436 deaths due to unintentional injury in 2014 (5.3 percent of all deaths), 29 percent were due to motor vehicle accidents and 70 percent were due to non-transport accidents. More than half of the 306 non-transport accidents were caused by unintentional poisonings; the majority (98 percent) of unintentional poisonings were drug-induced poisonings.
- For the sixth year, unintentional poisonings surpassed motor vehicle injuries and became the leading cause of unintentional injury death in 2014.
    - Poisonings were the cause of the most unintentional injuries for white males and females, followed by motor vehicle accidents. Motor vehicle accidents and poisoning were equally the greatest number of unintentional injuries for black males. Black females, although differing by only one, had more motor vehicle accidents than poisonings.
- In 2010-2014, accidents were the number one cause of death for people 1-44 years of age, and they were responsible for 53 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 more than three-quarters of total deaths.

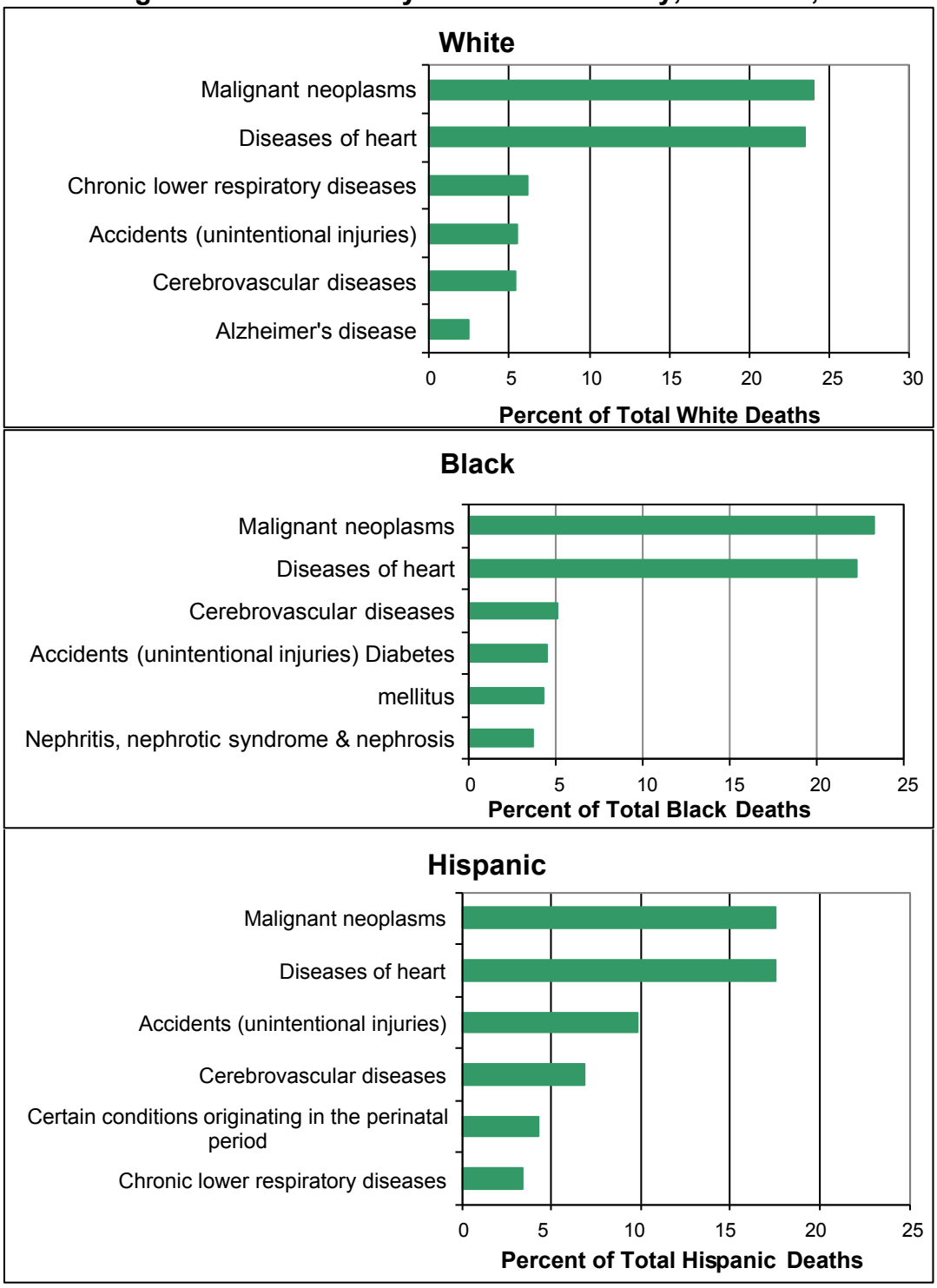


Note: Classification of causes of death are specified in the Technical Notes and Appendices section of the report.

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

The leading causes of death varied by race and ethnic group. In 2014, the most common causes of death for white, black, and Hispanic Delawareans were:

Leading Causes of Death by Race and Ethnicity, Delaware, 2014

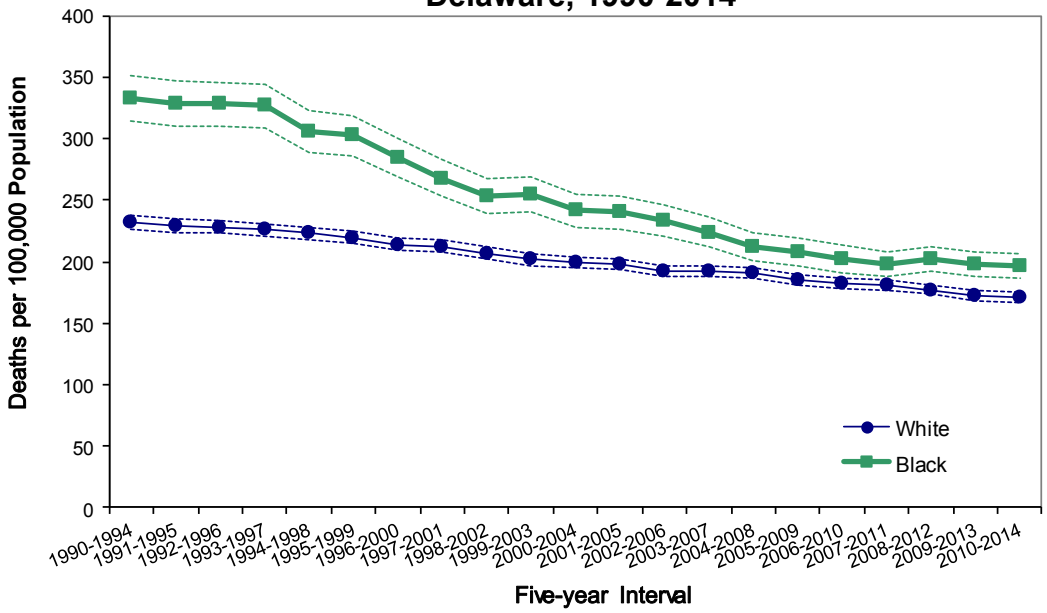


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Cancer mortality rates have decreased in all three counties since the early 1990s. In 2010-2014, the five-year age-adjusted cancer mortality rates were 158.5 in Sussex County, 172.7 in New Castle County, and in Kent County 199.5 deaths per 100,000 population. The cancer mortality rate in Wilmington exceeded all counties at 212.5 deaths per 100,000 population.

Cancer mortality rates for black and white decedents followed the same declining trend, and though the gap between black and white cancer mortality rates has narrowed, black cancer mortality rates in 2010-2014 remained higher than white rates.

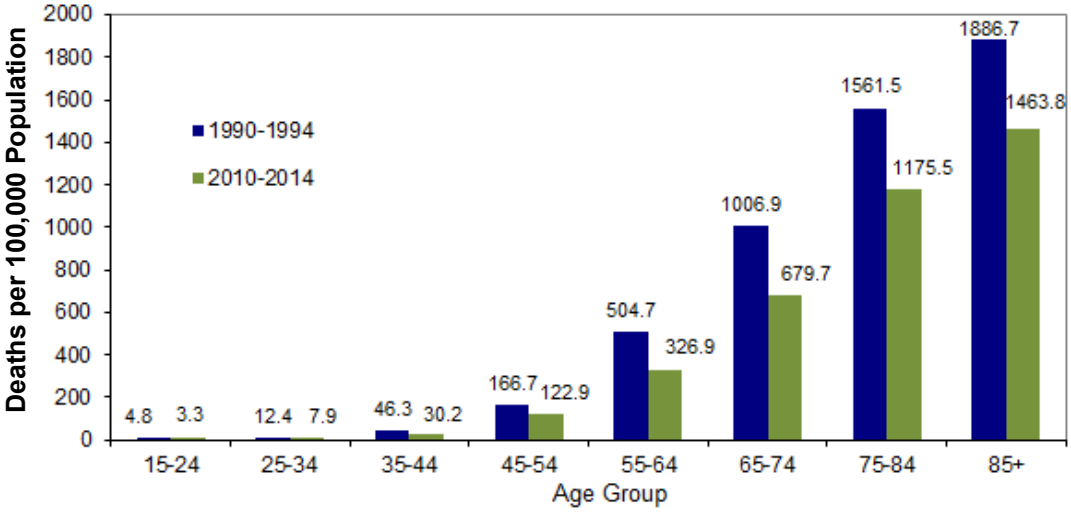
Five-year Age-Adjusted Cancer Mortality rates by Race
Delaware, 1990-2014



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

The same decreases seen in the age-adjusted cancer mortality rates were reflected in the age-specific rates as well. Cancer mortality rates declined fr all age groups between 1990-1994 and 2010-2014. The 25-34 and 55-64 age groups experienced the largest decreases.

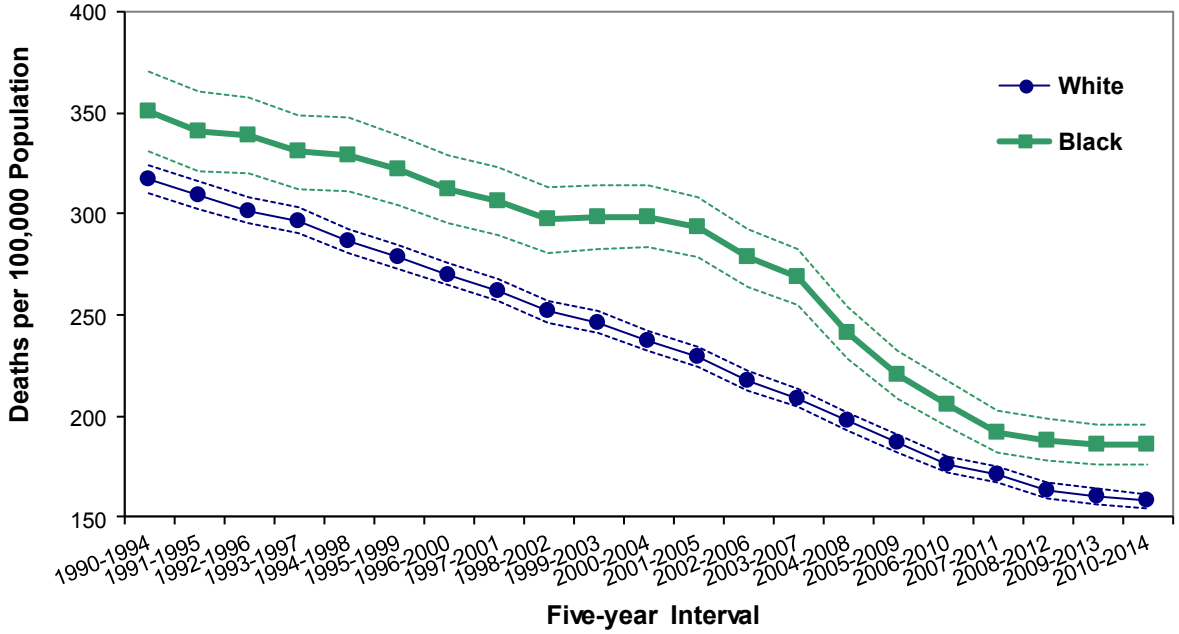
Five-Year Average Age- Specific Cancer Mortality Rates
Delaware, 1990-1994 and 2010-2014



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Heart disease was the second most common cause of death for both black and white Delawareans in 2010-2014. Both black and white heart disease mortality rates have declined significantly since 1990-1994, with white rates declining 49.09 percent and black rates declining 47.1 percent.

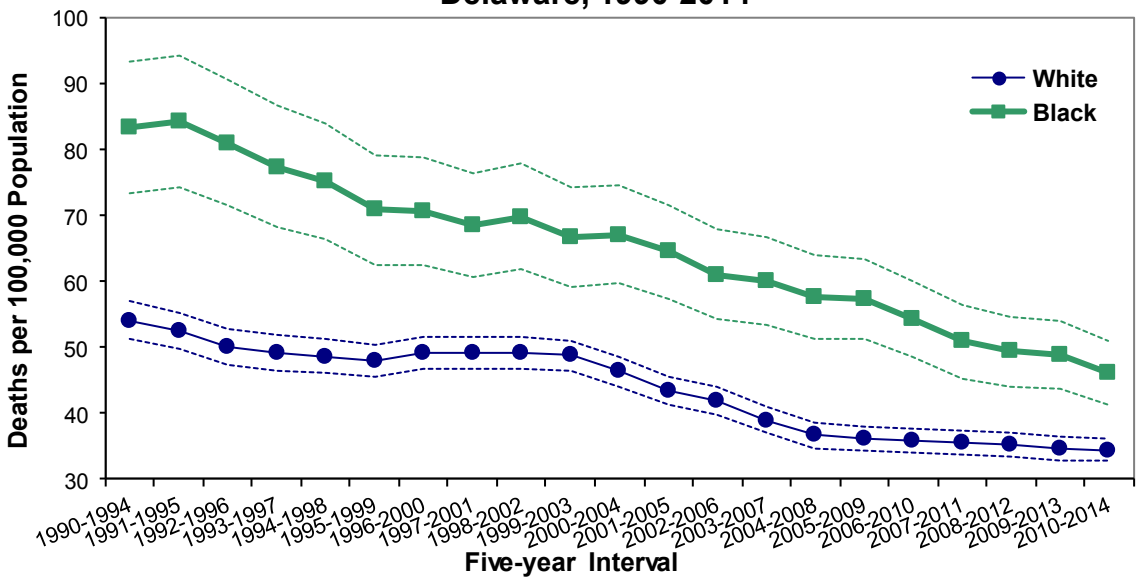
Five-year Age-Adjusted Heart Disease Mortality Rates by Race
Delaware, 1990-2014



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

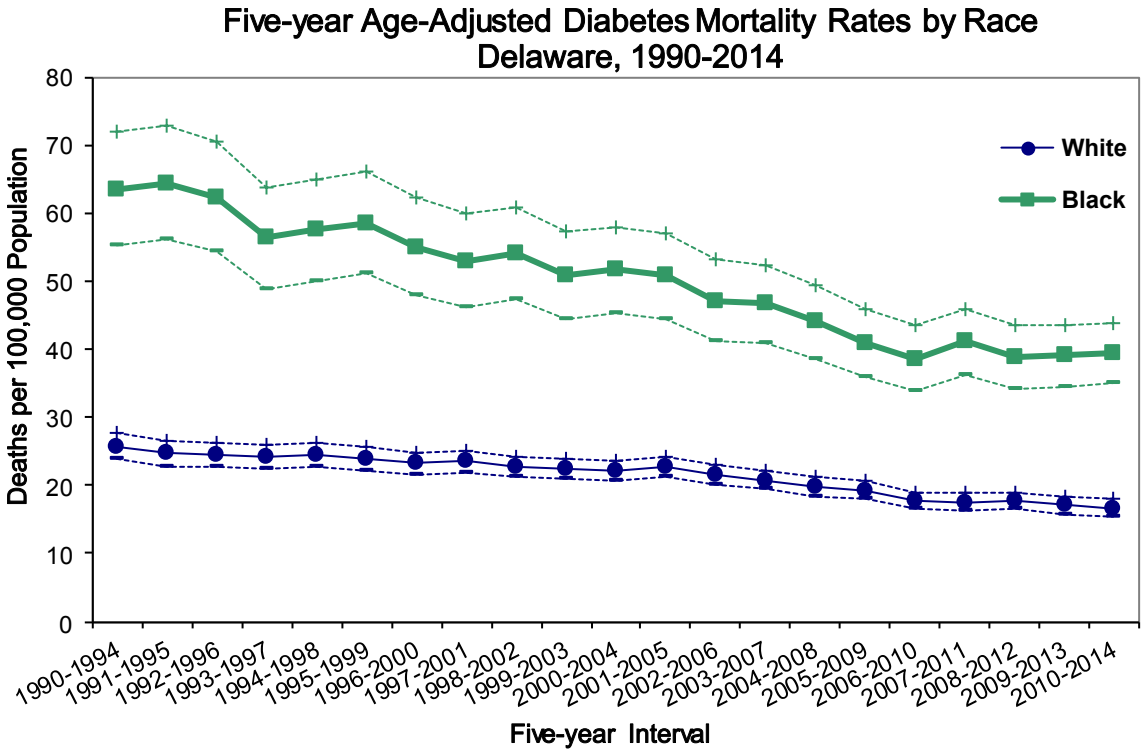
Stroke mortality rates for both races continued their declining trends between 1990-1994 and 2010-2014, with rates for white rates decreasing 36 percent and black rates declining 45 percent. In 2010-2014, the black stroke mortality rate of 46.2 deaths per 100,000 remained approximately 34 percent higher than the white rate of 34.5.

Five-year Age-Adjusted Stroke Mortality Rates by Race
Delaware, 1990-2014



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

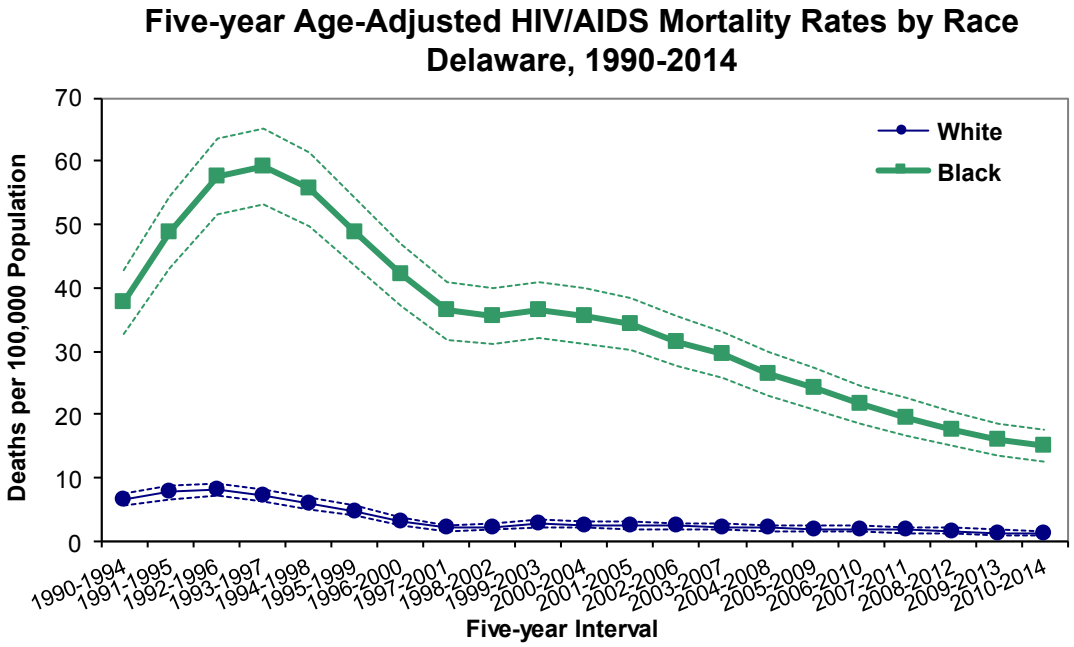
Though black mortality rates for diabetes have declined 38 percent since 1990-1994, their rates were more than double that of whites in 2010-2014.



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

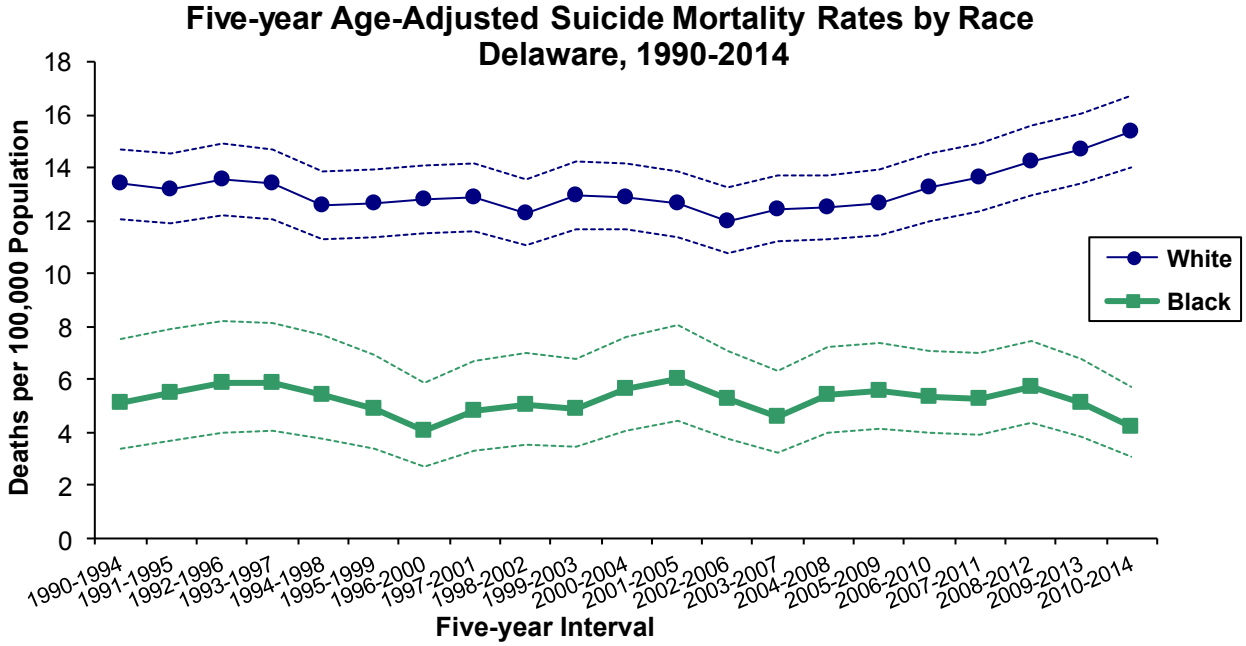
HIV/AIDS mortality has disproportionately affected Delaware's black population. Despite black HIV/AIDS mortality rates decreasing significantly since the 1993-1997 peak, their 2010-2014 mortality rate of 15.1 deaths per 100,000 was nearly 10 times that of whites. Though they made up only 22 percent of the total Delaware population in 2010-2014, black decedents accounted for 78 percent of all deaths due to HIV/AIDS.

In 2010-2014, HIV was the ninth leading cause of death for black Delawareans; it ranked eighth for black males and twelfth for black females.



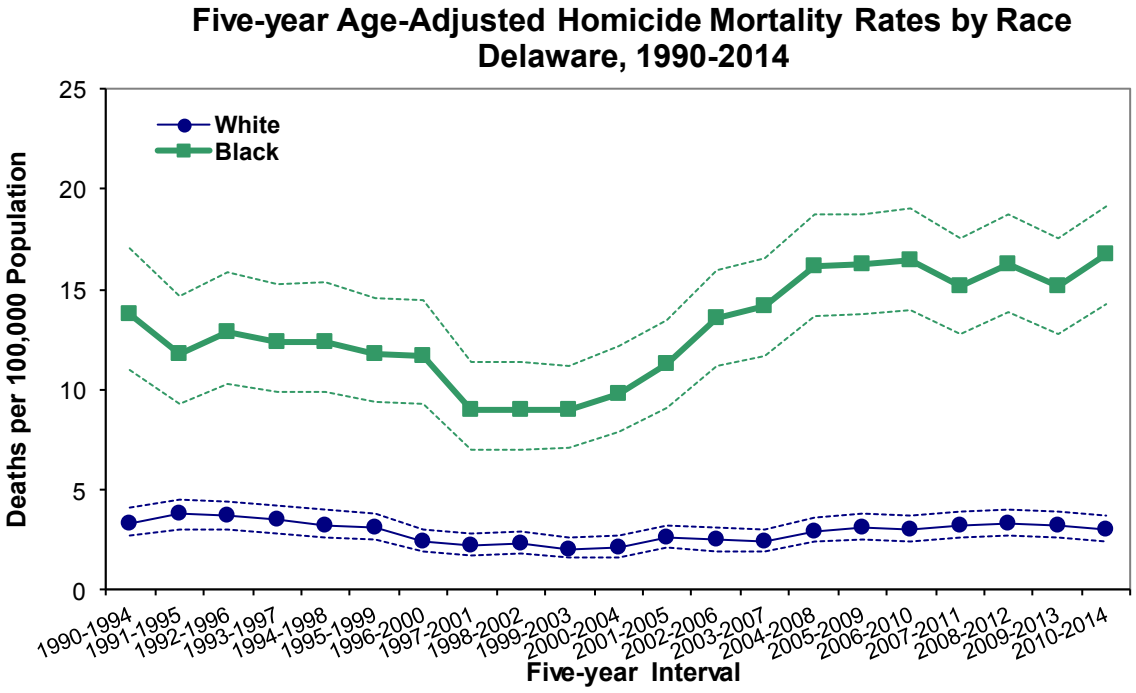
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Suicide mortality trends for white populations increased between 1990-1994 and 2010-2014, with the white rate (15.4) more than triple that of the black rate (4.2). Suicide mortality trends for white populations increased between 1990-1994 and 2010-2014, with the white rate (15.4) more than triple that of the black rate (4.2).



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

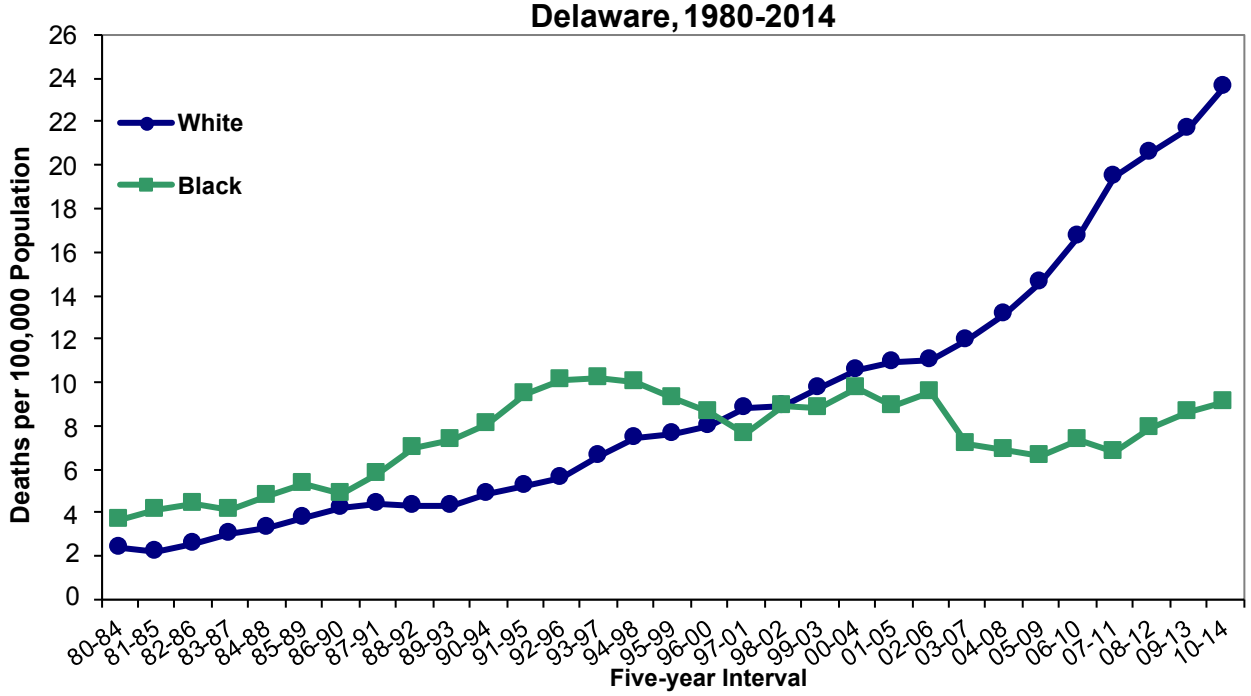
After declining throughout most of the 1990s and reaching their lowest point in 1999-2003, homicide mortality rates have risen 83 percent. In 2010-2014, the black homicide rate increased 88 percent to 16.7 and the white homicide mortality rate increased 50 percent to 3.0 deaths per 100,000 population.



Source: Delaware Health and Social Services, Divsion of Public Health, Delaware Health Statistics Center

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 by 1997-2001. Since then, white mortality rates remained higher and continued to rise. By 2010-2014, the white drug-induced mortality rate (23.6 deaths per 100,000 population) was more than twice the black rate (9.1).

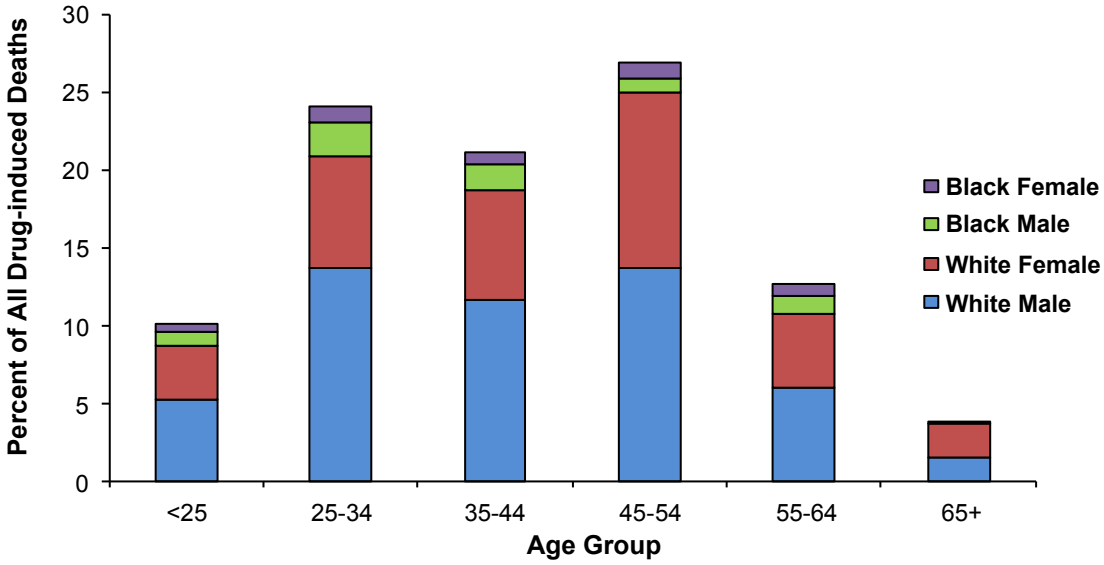
Five-year Age-adjusted Rates for Drug-Induced Deaths by Race
Delaware, 1980-2014



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

In 2010-2014, 53 percent of all drug-induced deaths were white males. Of all the race-age groups, white males ages 25-34 and 45-54 and white females ages 45-54 were responsible for the largest number of drug-induced deaths. White females ages 45-54 accounted for 11.2 percent of the deaths, whereas white males ages 25-34 and 45-54 accounted for 28 percent of the drug-induced deaths. Black females ages 45-54 and black males ages 25-34 and 45-54 were only 4 percent of the drug-induced deaths.

Distribution of Drug-induced Deaths by Race, Sex, and Age Group Delaware, 2010-2014



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center