



DELAWARE VITAL STATISTICS ANNUAL REPORT INFANT MORTALITY, 2015

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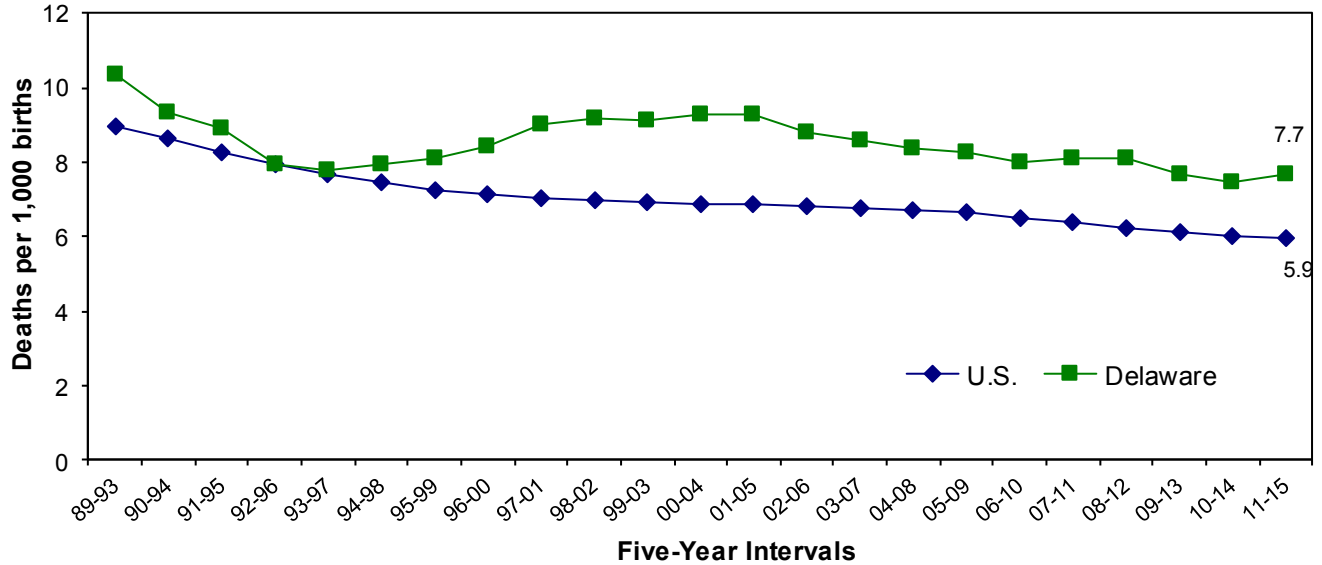
Delaware Health Statistics Center. *Delaware Vital Statistics Annual Report, 2015.*

Delaware Health and Social Services, Division of Public Health: 2017.

INFANT MORTALITY

In 2011-2015, Delaware's infant mortality rate (IMR) was 7.7 infant deaths per 1,000 live births, resulting in a total decline of 17.2 percent from the 2000-2004 rate of 9.3 infant deaths per 1,000 live births. At 5.9 infant deaths per 1,000 live births, the U.S. rate remained lower than the Delaware rate.

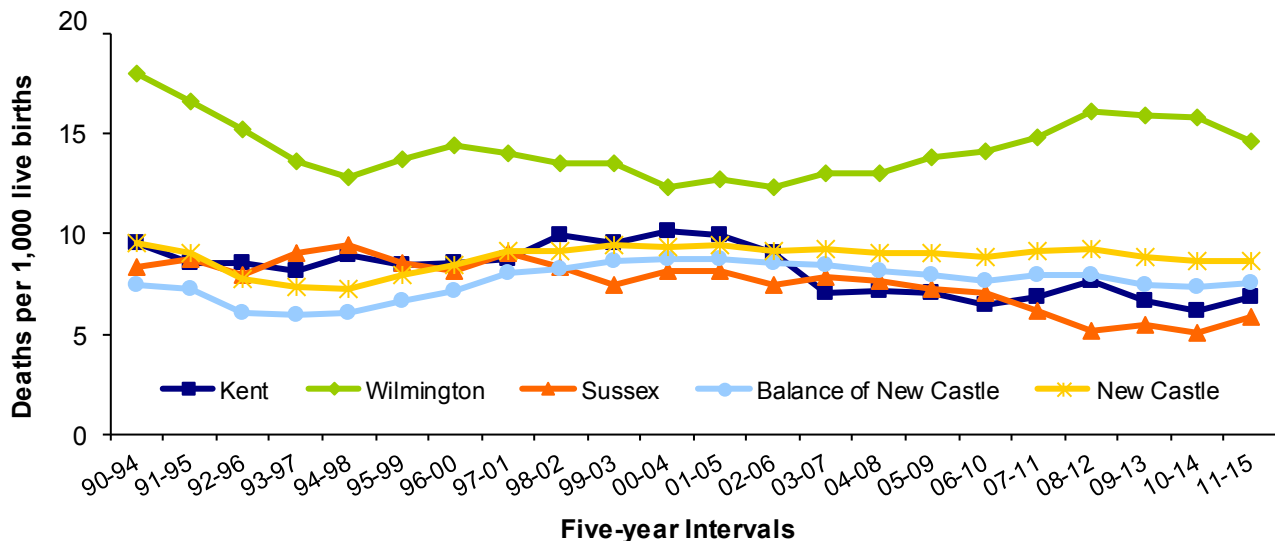
Figure 27. Five-year Average Infant Mortality Rates, Delaware and U.S., 1989-2015



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 5.8 infant deaths per 1,000 live births. In 2011-2015, the balance of New Castle County's IMR was 7.5 infant deaths per 1,000 live births, Wilmington's IMR was 14.6 infant deaths per 1,000 live births, and Kent County's IMR was 6.9 infant deaths per 1,000 live births.

Figure 28. Five-year Average Infant Mortality Rates, Delaware Counties and City of Wilmington, Delaware, 1990-2015

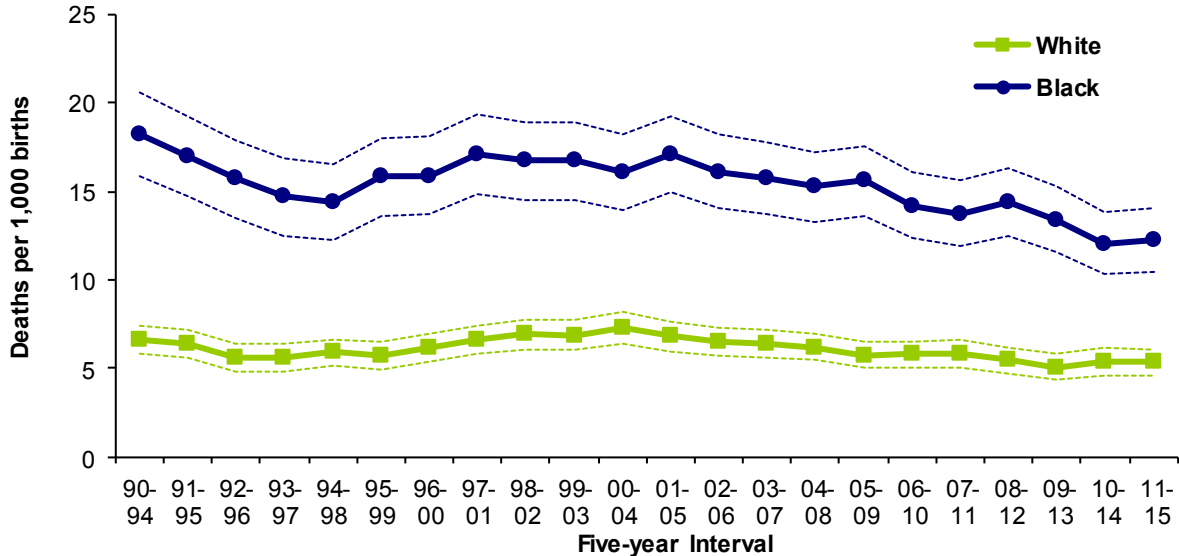


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

INFANT MORTALITY

Black infants experienced significantly higher mortality rates than white infants, but the gap is decreasing. In 2011-2015 the black IMR of 12.3 infant deaths per 1,000 live births was more than two times higher than the white IMR of 5.3 infant deaths per 1,000 live births, whereas in 1990-1994 the black IMR was three times higher than the white IMR.

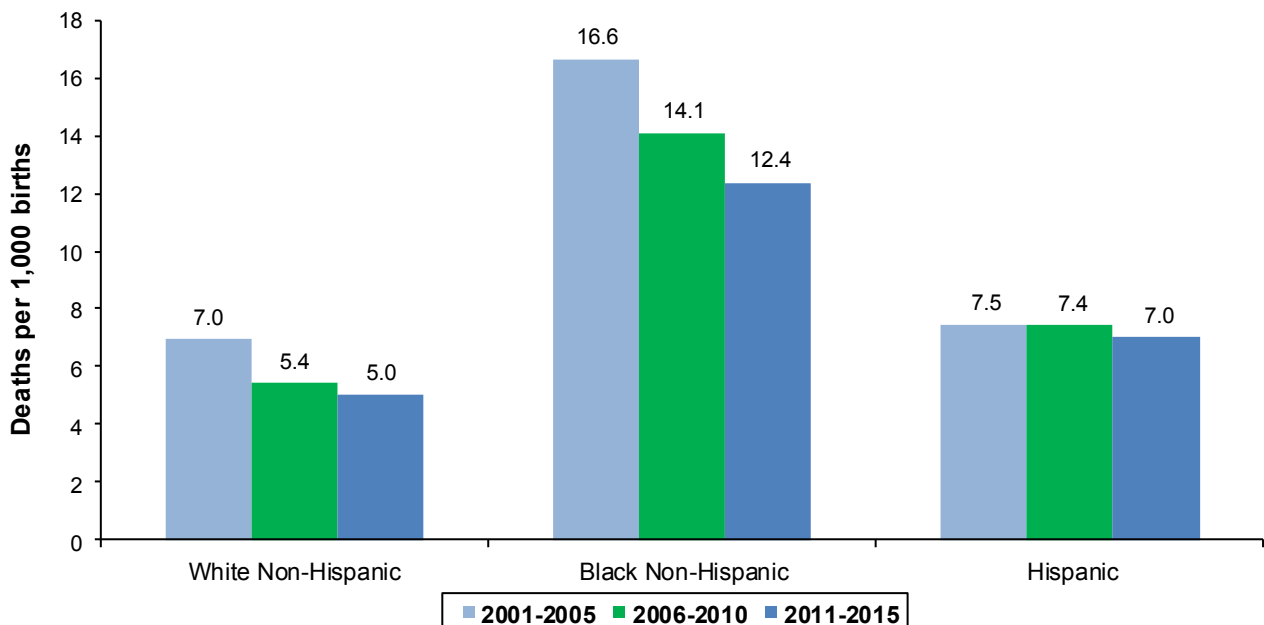
Figure 29. Five-year Average Black and White Infant Mortality Rates with Confidence Intervals, Delaware, 1990-2015



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 12.4 infant deaths per 1,000 live births in 2011-2015 was more than double the white non-Hispanic rate of 5.0 and 1.8 times the Hispanic rate of 7.0 infant deaths per 1,000 live births. Although the rates for each of the race groupings decreased from 2001-2005 to 2011-2015, white non-Hispanics had the largest percentage decrease at 28.5 percent.

Figure 30. Five-year Average Infant Mortality Rates by Race and Hispanic Origin, Delaware, 2001-2015



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

INFANT MORTALITY

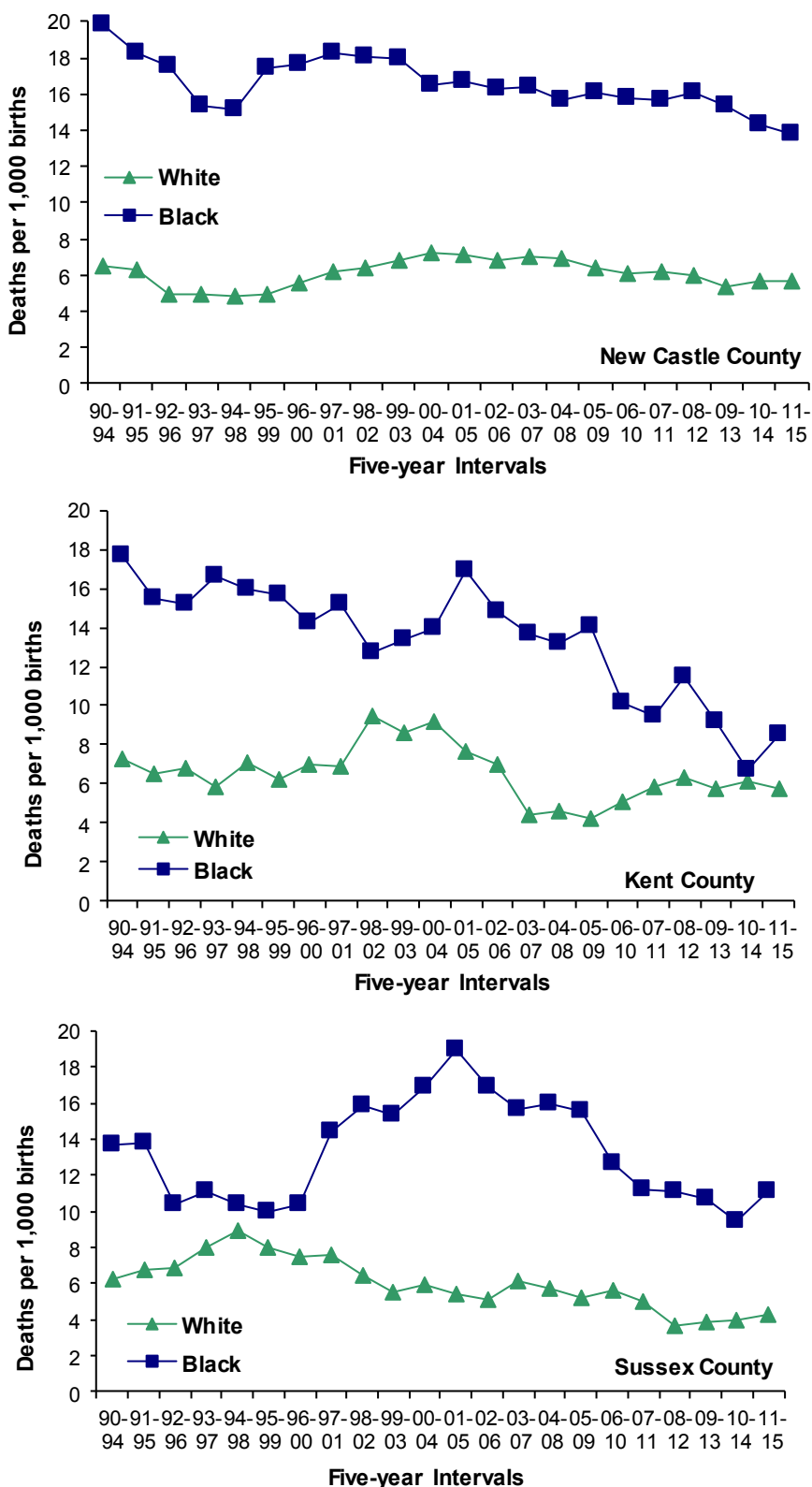
In 2011-2015, New Castle County had the highest IMRs and Sussex County had the lowest.

Black IMRs in New Castle County have hovered around 16 infant deaths per 1,000 live births since 2000-2004, and decreased the last three time periods to 13.7 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 8.5 in 2011-2015, a 50 percent decrease in black IMRs from 2001-2005. The white IMR had a 31.8 percent increase from 2003-2007 to 2011-2015 (4.4 to 5.8 infant deaths per 1,000 live births) which resulted in some narrowing of the disparity between the white and black IMR.

Sussex County's black IMR rose to 11.1 infant deaths per 1,000 live births in 2011-2015, a 6 percent increase since 1996-2000; and a 42 percent reduction from the 2001-2005 peak of 19. Sussex County's white IMR fluctuated between five and six from 1999-2003 to 2007-2011, and in 2011-2015 the rate dropped to 4.3 infant deaths per 1,000 live births.

Figure 31. Five-year Average Infant Mortality Rates by Race and County, Delaware, 1990-2015



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

INFANT MORTALITY- Leading Causes of Death

In 2011-2015 the five leading causes of infant death in Delaware were:

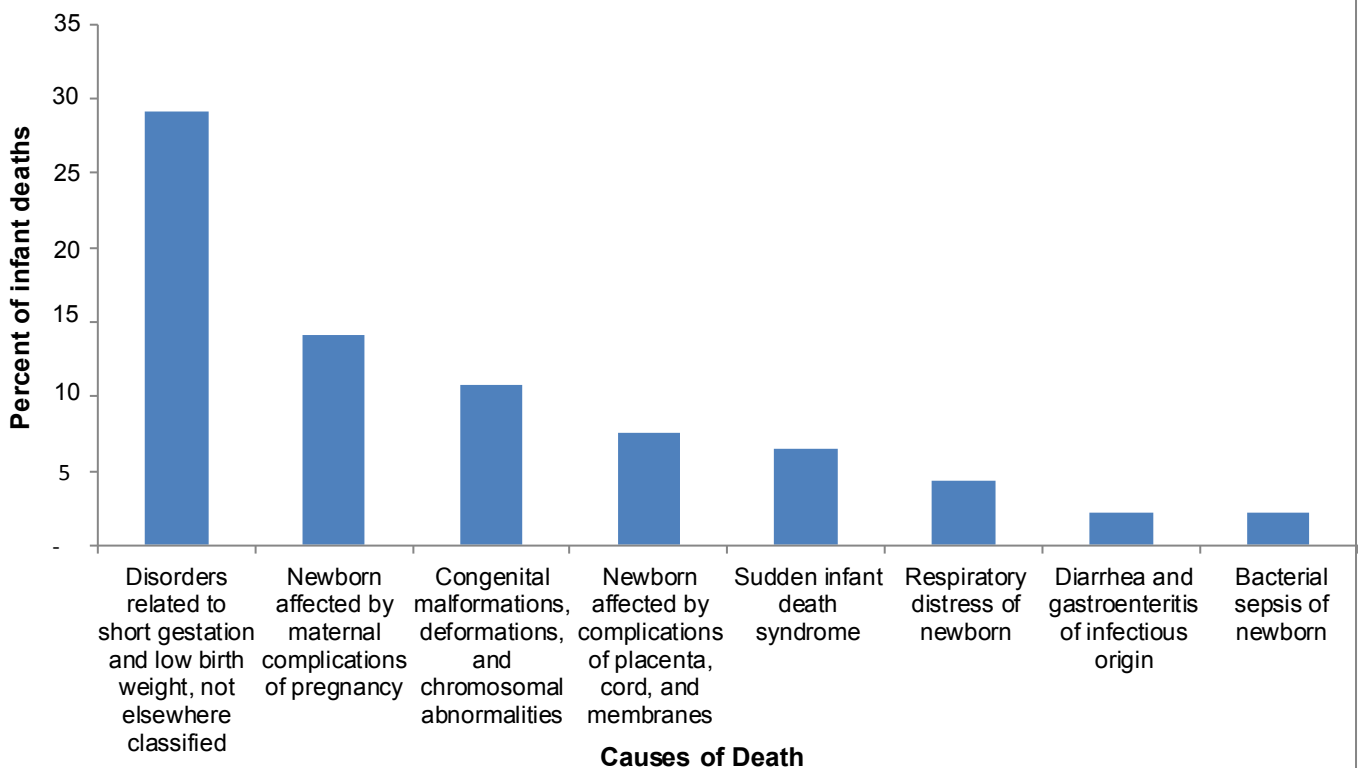
- Disorders related to short gestation and fetal malnutrition (prematurity and low birthweight), which accounted for 22.2 percent of infant deaths.
- Newborns affected by maternal complications of pregnancy, which accounted for 13.9 percent of infant deaths. Of the 59 deaths attributed to this cause, 50 were due to the newborn being affected by incompetent cervix and premature rupture of membranes.
- Congenital anomalies (birth defects), which accounted for 13.7 percent of infant deaths.
- Sudden infant death syndrome (SIDS), which accounted for 7 percent of all infant deaths.
- Newborns affected by complications of placenta, cord, and membranes: 5.9 percent of infant deaths.

In sum, the five most common causes of infant death accounted for 62.5 percent, or 265 of the 424 total infant deaths.

The most frequent causes of death by race are shown in Figures 32-34. Birth defects and disorders related to short gestation and low birthweight are both listed in the top three most frequent causes of death for both black and white infants.

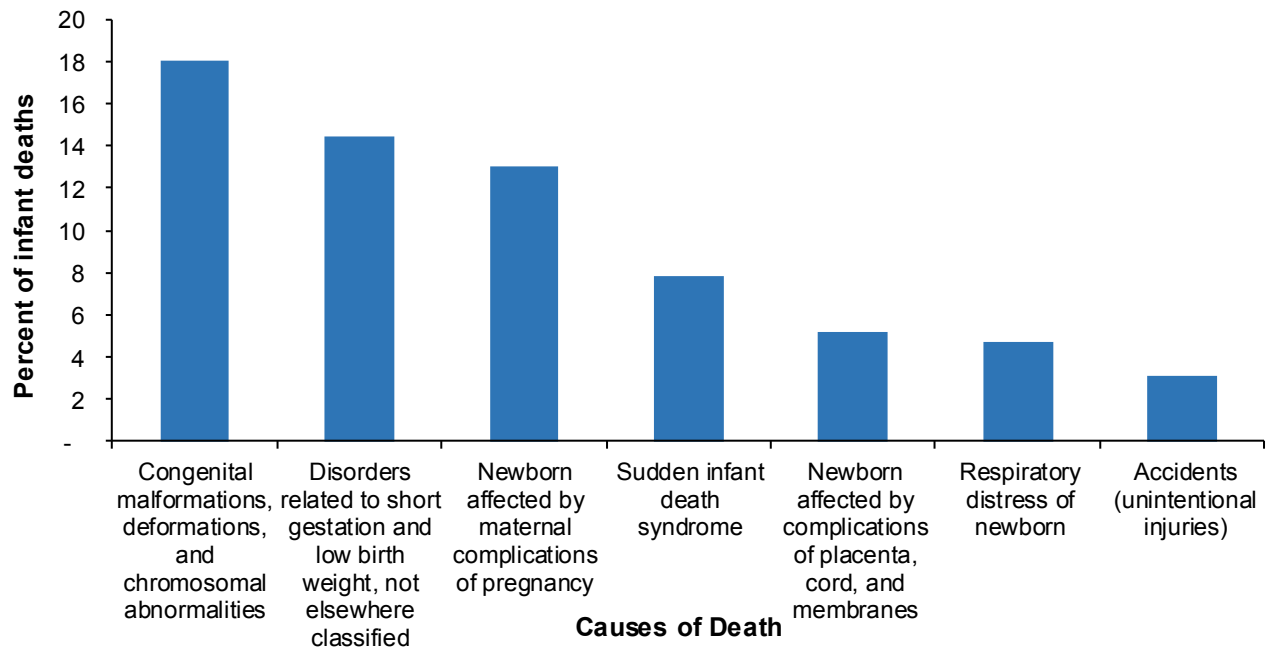
Though the proportions of deaths by race were similar for many of the causes of death, notable exceptions were birth defects and disorders due to prematurity and low birthweight. While birth defects were responsible for 18 percent of all white infant deaths, they accounted for only 11 percent of black infant deaths. Conversely, 2011-2015, infant deaths due to disorders related to prematurity and low birthweight accounted for larger percentages of black infant deaths than white infant deaths (29 versus 15 percent for prematurity and low birthweight).

Figure 32. Most Frequent Causes of Black Infant Death, Delaware, 2011-2015



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

Figure 33. Most Frequent Causes of White Infant Death, Delaware, 2011-2015

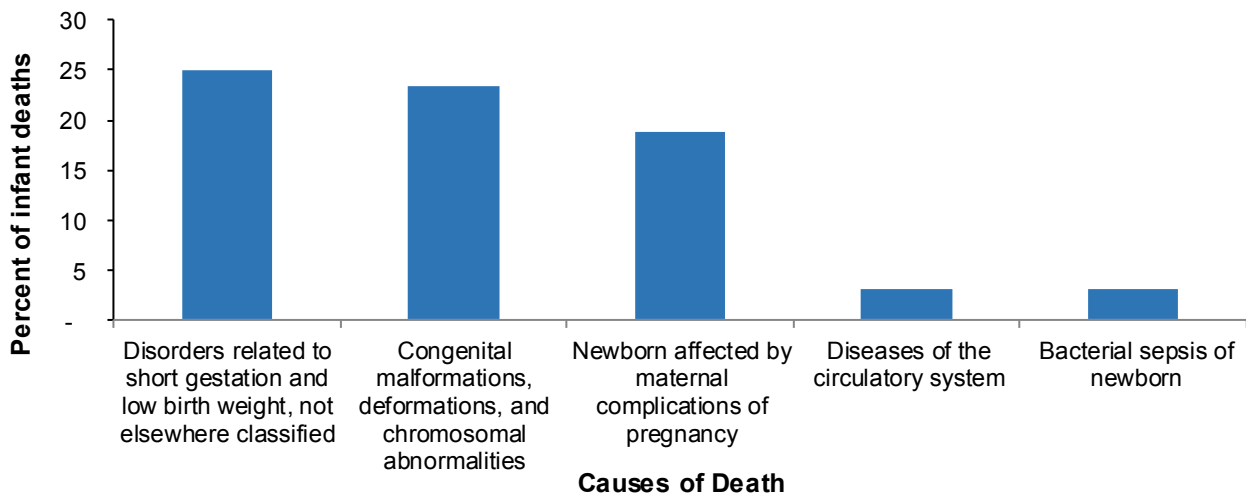


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

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, 2011-2015, 13.2 percent of all live births were to Hispanic mothers, and 12.1 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 prematurity and low birthweight; and birth defects.

Figure 34. Most Frequent Causes of Hispanic Infant Death, Delaware, 2011-2015



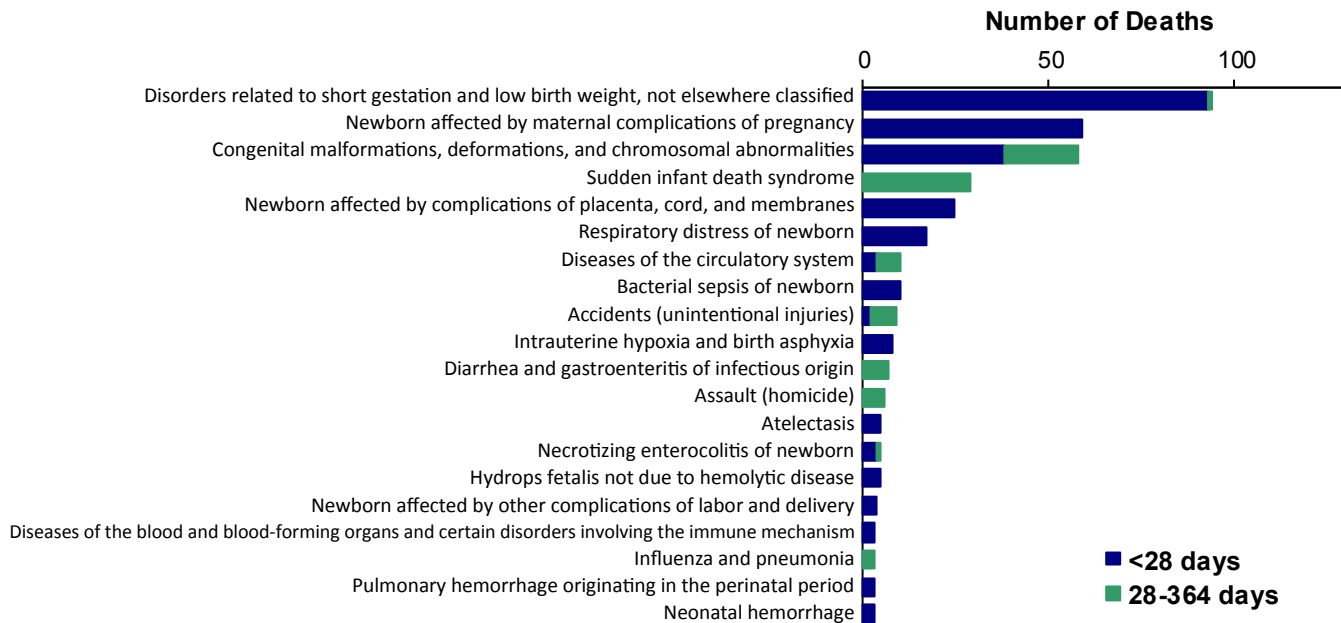
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

INFANT MORTALITY - Leading Causes of Death

In Delaware in 2011-2015, approximately 94 percent of all infant deaths occurred within the first six months of life, 76 percent occurred within the first 28 days of life, and 47 percent occurred within 24 hours of birth.

Figure 35 displays deaths by specific cause and the infant's age classification at death: neonatal (<28 days), or postneonatal (28-364 days).

Figure 35. Most Frequent Causes of Infant Death, Delaware, 2011-2015



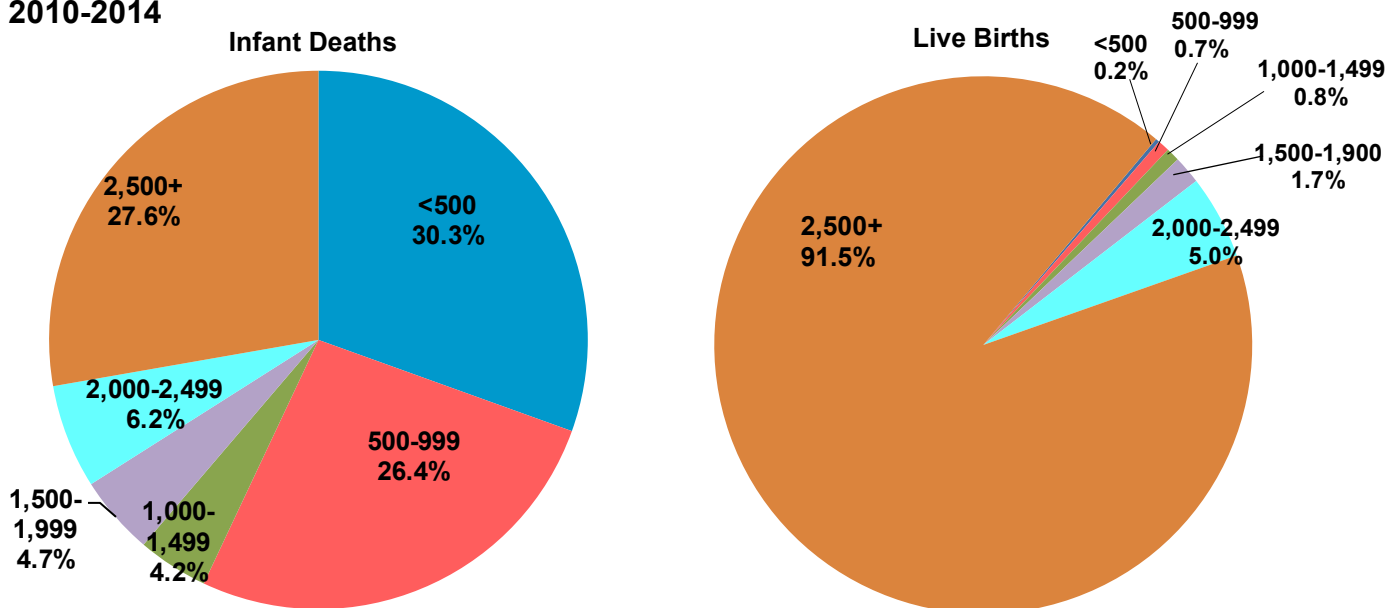
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

- Prematurity and low birthweight accounted for the greatest number of infant deaths in 2011-2015; 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 110 days. Although more infants died in 2011-2015 compared to 2006-2010, and less infants died due to SIDS, it remained in the top five leading causes of infant death in 2011-2015.
 - ⇒ 45 percent (13 out of 29) of the SIDS deaths were associated with co-sleeping and/or sleeping on soft surfaces, such as couches and adult beds.
- In 2011-2015, there were 11 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, 10.4 percent of all infant deaths were associated with co-sleeping and/or unsafe sleep practices.

INFANT MORTALITY - Live Birth Cohort

Though only about 1 percent of all live births in 2010-2014 were infants weighing less than 1000 grams, they accounted for over half (57 percent) of all infant deaths. In total, 8.4 percent of all live births in 2010-2014 were infants of low birthweight (under 2,500 grams) and 71.9 percent of infant deaths were low birthweight.

Figure 36. Percent Distribution by Birthweight in Grams, Delaware, Live Birth Cohort, 2010-2014

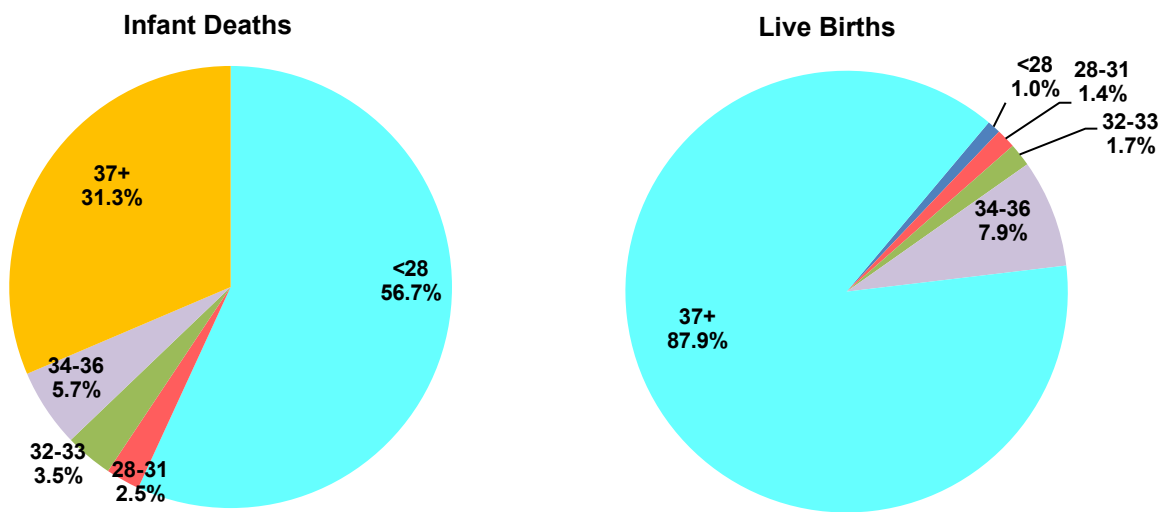


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

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 2010-2014 were less than 28 weeks gestation at birth, but they accounted for 57 percent of all infant deaths. In total, 12 percent of all live births in 2010-2014 were born preterm (<37 weeks of gestation) and 68 percent of infant deaths were born preterm.

Figure 37. Distribution by Gestation in Weeks, Delaware Live Birth Cohort, 2010-2014



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

INFANT MORTALITY - Live Birth Cohort

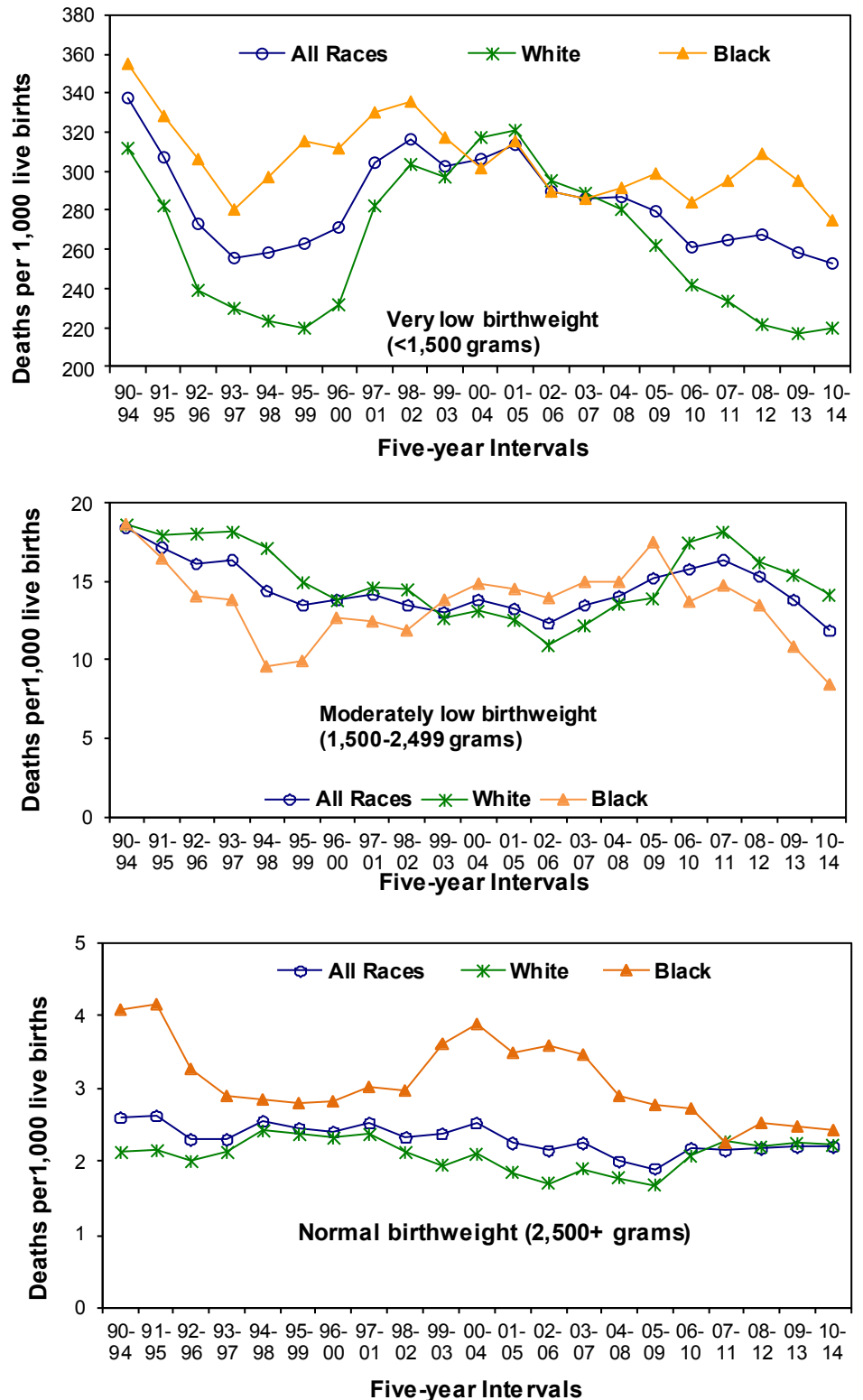
Birthweight and gestation are considered to be the most important predictors of infant health and mortality risk. Infants born too small or too early have a much greater risk of mortality than those who reach a normal birthweight (2,500+ grams) or full-term gestation (37+ weeks).

The IMR for very low birthweight (VLBW) (<1,500 grams) black infants continued to decrease in 2010-2014 while the IMR for VLBW white infants increased for the first time since 2001-2005. In 2010-2014, IMRs for VLBW infants were 220 white infant deaths and 275 black infant deaths per 1,000 live births.

IMRs for moderately low birthweight infants of all races declined 21.7 percent between 2005-2009 and 2010-2014. During that time, white IMRs (14.1) increased 1.4 percent while the black IMR (8.4) decreased by 52 percent, making the black rates lower than the white rates.

The IMR for all races and normal birthweight increased 16 percent from 2005-2009 to 2010-2014. IMRs for normal birthweight white infants increased 5 percent since 2000-2004, while the IMRs for black infants declined 38 percent between 2000-2004 and 2010-2014. The divergent movement in black and white rates in 2010-2014 narrowed the black/white disparity ratio; the black IMR for normal birthweight infants was 2.4, versus 2.2 for white infants of normal birthweight.

Figure 38. Five-year Average Infant Mortality Rate by Birthweight and Race, Delaware, 1990-2014 Live Birth

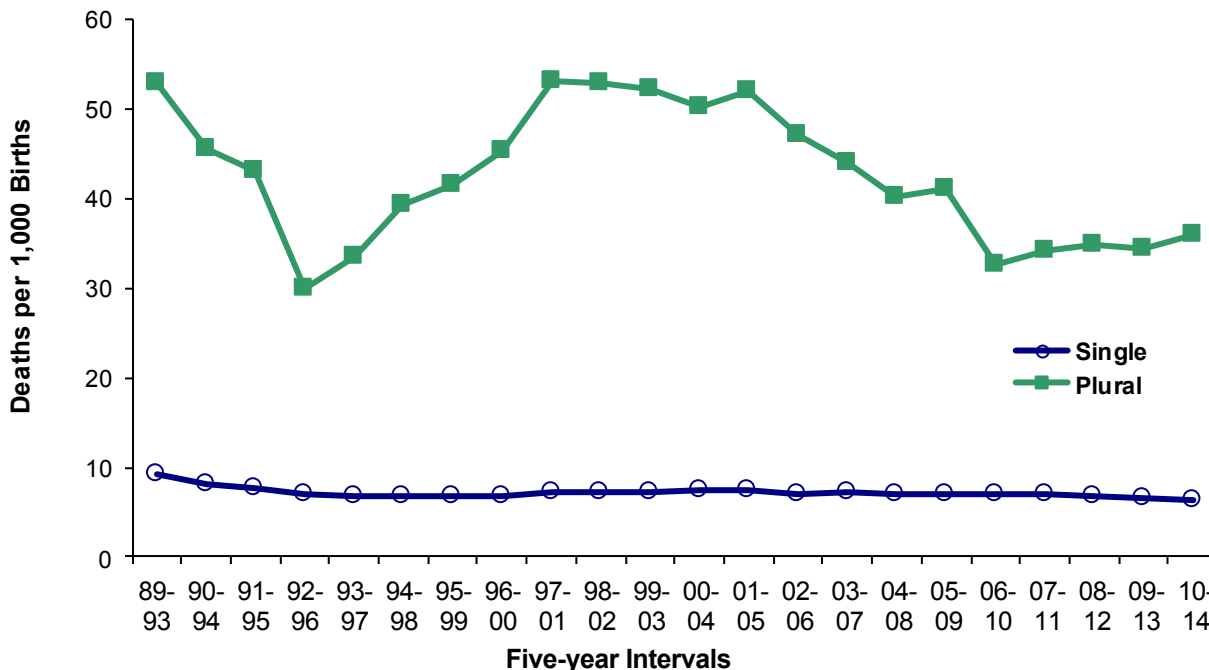


Source: Delaware Health and Social Services, Division of Public Health, Health Statistics Center

INFANT MORTALITY - Live Birth Cohort

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 32 percent. IMRs for singleton births experienced a decrease of 13 percent. In 2010-2014, the infant mortality rate for plural births (36.1) was nearly six times that of singleton births (6.3 infant deaths per 1,000 live births).

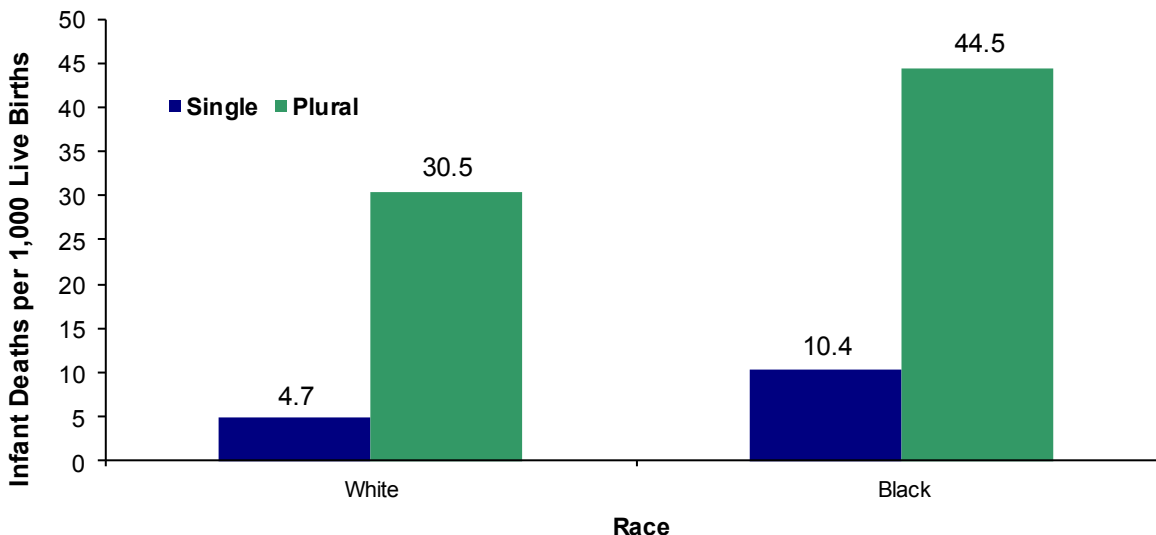
Figure 36. Five-year Average Infant Mortality Rates by Plurality, Delaware Live Birth Cohort, 1989-2014



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

The disparity between singleton and plural IMRs was evident regardless of race. The rates for black infants, both singleton and plural, were at least one and a half times those of white infants.

Figure 37. Five-year Average Infant Mortality Rates by Plurality and Race, Delaware Live Birth Cohort, 2010-2014



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

TABLE E-1. NUMBER OF INFANT DEATHS BY RACE, COUNTY, CITY OF WILMINGTON, U.S., AND DELAWARE, 1998-2015

Area/ Race	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
U.S.																		
All Races	28371	27937	28035	27568	28034	28025	27936	28440	28527	29138	28059	26412	24586	23985	23629	23446	23215	23455
White	18561	18067	18144	17955	18369	18440	18231	18514	18403	18807	18164	16817	15954	15460	15258	15152	14883	14834
Black	8726	8822	8771	8498	8524	8402	8494	8695	8858	8944	8543	8312	7401	7284	7095	6862	7076	7289
Other	1084	1048	1120	1115	1141	1183	1211	1231	1266	1387	1352	1283	1231	1241	1276	1432	1256	1332
Delaware																		
All Races	103	81	102	114	96	107	97	106	99	91	101	91	88	98	84	68	74	100
White	54	31	65	60	57	53	51	48	50	52	49	30	47	48	34	30	38	44
Black	49	49	37	53	35	53	44	55	44	38	52	54	36	38	44	34	30	39
Other	0	1	0	1	4	1	2	3	5	1	0	7	5	12	6	4	6	17
Kent																		
All Races	18	10	21	19	27	16	17	21	13	9	18	18	15	17	17	6	13	23
White	13	4	16	10	22	8	8	6	7	4	10	6	12	13	7	5	9	9
Black	5	6	5	9	5	8	8	14	5	4	8	12	3	3	10	1	4	9
Other	0	0	0	0	0	0	1	1	1	1	0	0	0	1	0	0	0	5
New Castle																		
All Races	65	61	67	72	55	78	60	68	68	60	70	57	58	74	58	48	49	54
White	27	22	40	37	30	37	33	35	31	33	32	18	24	29	24	17	22	21
Black	38	38	27	35	22	40	27	31	35	27	38	34	30	34	28	28	21	24
Other	0	1	0	0	3	1	0	2	2	0	0	5	4	11	6	3	6	9
Wilmington																		
All Races	18	20	16	17	12	18	12	18	16	17	19	18	18	17	20	14	14	10
White	2	4	4	2	2	4	4	3	2	3	7	0	4	2	8	2	5	3
Black	16	16	12	15	10	14	8	15	14	14	12	16	13	15	11	11	8	4
Other	0	0	0	0	0	0	0	0	0	0	0	2	1	0	1	1	1	3
Balance of NC County																		
All Races	47	41	51	55	43	60	48	50	52	43	51	39	40	57	38	34	35	44
White	25	18	36	35	28	33	29	32	29	30	25	18	20	27	16	15	17	18
Black	22	22	15	20	12	26	19	16	21	13	26	18	17	19	17	17	13	20
Other	0	1	0	0	3	1	0	2	2	0	0	3	3	11	5	2	5	6
Sussex																		
All Races	20	10	14	23	14	13	20	17	18	22	13	16	15	7	9	14	12	23
White	14	5	9	13	5	8	10	7	12	15	7	6	11	6	3	8	7	14
Black	6	5	5	9	8	5	9	10	4	7	6	8	3	1	6	5	5	6
Other	0	0	0	1	1	0	1	0	2	0	0	2	1	0	0	1	0	3

Notes:

1. *Based on NCHS estimate.
2. Infant deaths refer to deaths to children under one year of age.

Sources: National Center for Health Statistics
 Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

TABLE E-2. NUMBER OF NEONATAL DEATHS BY RACE, COUNTY, CITY OF WILMINGTON, U.S., AND DELAWARE, 1998-2015

Area/ Race	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
U.S.																		
All Races	18918	18728	18776	18265	18749	18893	18593	18770	18989	19058	18211	17255	16188	15954	15886	15893	15720	N/A
White	12406	12164	12201	12013	12354	12495	12238	12239	12302	12333	11843	11054	10612	10422	10267	10264	10170	N/A
Black	5824	5920	5843	5585	5646	5640	5495	5740	5876	5842	5523	5374	4769	4719	4610	4647	4686	N/A
Other	688	644	732	667	749	758	860	791	811	883	845	827	807	813	1009	982	864	N/A
Delaware																		
All Races	74	58	71	82	79	75	63	79	72	65	68	66	58	73	66	47	55	79
White	33	21	45	44	48	36	33	36	36	37	32	19	27	30	25	18	29	37
Black	41	37	26	37	28	38	28	40	33	28	36	40	26	35	35	25	21	32
Other	0	0	0	1	3	1	2	3	3	0	0	7	5	8	6	4	5	10
Kent																		
All Races	9	8	15	15	22	8	11	14	7	6	12	14	11	13	12	3	10	17
White	6	3	11	10	18	3	5	3	4	3	7	4	9	9	4	3	8	8
Black	3	5	4	5	4	5	5	10	3	3	5	10	2	3	8	0	2	6
Other	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	3
New Castle																		
All Races	47	44	50	54	47	56	39	54	52	43	48	42	36	57	47	34	37	49
White	15	14	29	27	26	27	21	28	22	23	20	13	9	18	20	9	15	19
Black	32	30	21	27	19	28	18	24	28	20	28	24	23	32	21	22	17	24
Other	0	0	0	0	2	1	0	2	2	0	0	5	4	7	6	3	5	6
Wilmington																		
All Races	12	14	13	14	9	10	9	15	12	10	10	14	10	14	18	11	12	10
White	1	2	4	1	1	1	3	3	1	1	3	0	0	1	8	2	5	3
Black	11	12	9	13	8	9	6	12	11	9	7	12	9	13	9	8	6	4
Other	0	0	0	0	0	0	0	0	0	0	0	2	1	0	1	1	1	3
Balance of NC County																		
All Races	35	30	37	40	38	46	30	39	40	33	38	28	26	43	29	23	25	39
White	14	12	25	26	25	26	18	25	21	22	17	13	9	17	12	7	10	16
Black	21	18	12	14	11	19	12	12	17	11	21	12	14	19	12	14	11	20
Other	0	0	0	0	2	1	0	2	2	0	0	3	3	7	5	2	4	3
Sussex																		
All Races	18	6	6	13	10	11	13	11	13	16	8	10	11	3	7	10	8	13
White	12	4	5	7	4	6	7	5	10	11	5	2	9	3	1	6	6	10
Black	6	2	1	5	5	5	5	6	2	5	3	6	1	0	6	3	2	2
Other	0	0	0	1	1	0	1	0	1	0	0	2	1	0	0	1	0	1

Notes:

1. N/A NCHS estimate not released at the time of this report
2. Neonatal deaths refer to deaths of children under 28 days of age.

Sources: National Center for Health Statistics,
Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

TABLE E-3. NUMBER OF POSTNEONATAL DEATHS BY RACE, COUNTY, CITY OF WILMINGTON, U.S., ANDELAWARE, 1998-2015

Area/ Race	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
U.S.																		
All Races	9453	9209	9259	9303	9285	9132	9343	9670	9538	10080	9848	9157	8398	8031	7743	7553	7495	N/A
White	6155	5903	5943	5942	6015	5945	5993	6275	6101	6474	6321	5763	5342	5038	4991	4888	4713	N/A
Black	2902	2902	2928	2913	2878	2762	2999	2955	2982	3102	3020	2938	2632	2565	2485	2215	2390	N/A
Other	396	404	388	448	392	425	351	440	455	504	507	456	424	428	267	450	392	N/A
Delaware																		
All Races	29	23	31	32	17	32	34	27	27	26	33	25	30	25	18	21	19	21
White	21	10	20	16	9	17	18	12	14	15	17	11	20	18	9	12	9	7
Black	8	12	11	16	7	15	16	15	11	10	16	14	10	3	9	9	9	7
Other	0	1	0	0	1	0	0	0	2	1	0	0	0	4	0	0	1	7
Kent																		
All Races	9	2	6	4	5	8	6	7	6	3	6	4	4	4	5	3	3	6
White	7	1	5	0	4	5	3	3	3	1	3	2	3	4	3	2	1	1
Black	2	1	1	4	1	3	3	4	2	1	3	2	1	0	2	1	2	3
Other	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
New Castle																		
All Races	18	17	17	18	8	22	21	14	16	17	22	15	22	17	11	14	12	5
White	12	8	11	10	4	10	12	7	9	10	12	5	15	11	4	8	7	2
Black	6	8	6	8	3	12	9	7	7	7	10	10	7	2	7	6	4	0
Other	0	1	0	0	1	0	0	0	0	0	0	0	0	4	0	0	1	3
Wilmington																		
All Races	6	6	3	3	3	8	3	3	4	7	9	4	8	3	2	3	2	0
White	1	2	0	1	1	3	1	0	1	2	4	0	4	1	0	0	0	0
Black	5	4	3	2	2	5	2	3	3	5	5	4	4	2	2	3	2	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Balance of NC County																		
All Races	12	11	14	15	5	14	18	11	12	10	13	11	14	14	9	11	10	5
White	11	6	11	9	3	7	11	7	8	8	8	5	11	10	4	8	7	2
Black	1	4	3	6	1	7	7	4	4	2	5	6	3	0	5	3	2	0
Other	0	1	0	0	1	0	0	0	0	0	0	0	0	4	0	0	1	3
Sussex																		
All Races	2	4	8	10	4	2	7	6	5	6	5	6	4	4	2	4	4	10
White	2	1	4	6	1	2	3	2	2	4	2	4	2	3	2	2	1	4
Black	0	3	4	4	3	0	4	4	2	2	3	2	2	1	0	2	3	4
Other	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2

Notes:

1. N/A NCHS estimate not released at time of this report
2. Postneonatal deaths refer to deaths of children 28 to 364 days of age.

Sources: National Center for Health Statistics

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

TABLE E- 4. FIVE-YEAR AVERAGE INFANT MORTALITY RATES BY RACE, COUNTY, CITY OF WILMINGTON, U.S., AND DELAWARE, 1995-2015

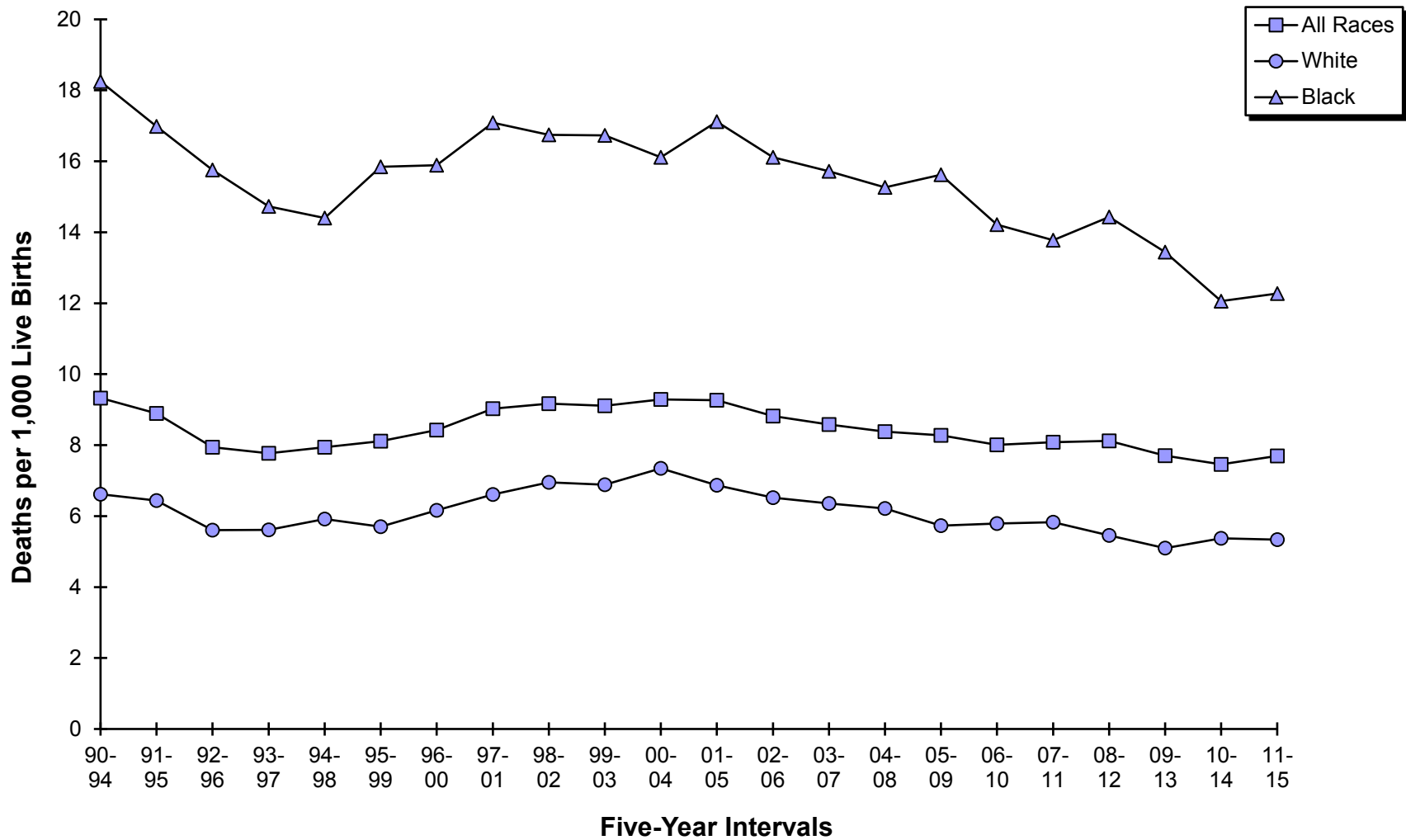
Area/ Race	1995 -1999	1996 -2000	1997 -2001	1998 -2002	1999 -2003	2000 -2004	2001 -2005	2002 -2006	2003 -2007	2004 -2008	2005 -2009	2006 -2010	2007 -2011	2008 -2012	2009 -2013	2010 -2014	2011 -2015
U.S.																	
All Races	7.3	7.1	7.0	7.0	6.9	6.9	6.9	6.8	6.8	6.7	6.7	6.5	6.4	6.2	6.1	6.0	5.9
White	6.0	5.9	5.8	5.8	5.7	5.7	5.7	5.7	5.7	5.6	5.6	5.5	5.4	5.3	5.2	5.1	5.0
Black	14.6	14.4	14.2	14.3	14.2	14.0	14.0	13.8	13.6	13.3	13.1	12.7	12.4	12.0	11.6	11.2	11.2
Delaware																	
All Races	8.1+	8.4+	9.0+	9.2+	9.1+	9.3+	9.3+	8.8+	8.6+	8.4+	8.3+	8.0+	8.1+	8.1+	7.7+	7.5+	7.7+
White	5.7	6.2	6.6	6.9+	6.9+	7.3+	6.9+	6.5+	6.4	6.2	5.7	5.8	5.8	5.5	5.1	5.4	5.3
Black	15.8	15.9	17.1+	16.7+	16.7+	16.1	17.1+	16.1+	15.7+	15.3	15.6+	14.2	13.8	14.4+	13.4	12.1	12.3
Kent																	
All Races	8.4	8.6	8.7	9.9	9.5	10.2	10.0	9.1	7.1	7.1	7.1	6.5	6.9	7.6	6.6	6.2	6.9
White	6.3	7.0	6.9	9.5	8.6	9.2	7.6	7.0	4.4	4.6	4.3	5.1	5.9	6.3	5.7	6.2	5.8
Black	15.7	14.3	15.2	12.7	13.4	13.9	17.0	14.9	13.6	13.2	14.0	10.2	9.4	11.5	9.2	6.7	8.5
New Castle																	
All Races	7.9	8.5	9.1	9.2	9.5	9.4	9.4	9.2	9.2	9.0	9.0	8.8	9.1	9.3	8.8	8.7	8.6
White	4.9	5.6	6.2	6.4	6.8	7.3	7.1	6.8	7.0	6.9	6.4	6.1	6.2	5.9	5.4	5.7	5.6
Black	17.4	17.7	18.2	18.0	18.0	16.5	16.7	16.3	16.3	15.7	16.1	15.8	15.6	16.1	15.3	14.3	13.7
Wilmington																	
All Races	13.7	14.4	14.0	13.5	13.5	12.4	12.8	12.3	13.0	13.0	13.8	14.1	14.8	16.1	15.9	15.8	14.6
White	---	---	---	---	---	---	---	---	---	---	---	---	---	9.8	---	10.1	10.0
Black	18.0	18.7	18.0	17.9	17.6	15.9	17.0	16.3	17.3	16.3	18.0	18.0	19.1	19.3	20.3	19.2	16.3
Balance of NC County																	
All Races	6.7	7.2	8.1	8.3	8.6	8.8	8.7	8.5	8.5	8.2	8.0	7.7	7.9	7.9	7.5	7.3	7.5
White	4.8	5.4	6.1	6.4	6.8	7.3	7.2	6.9	7.0	6.8	6.4	6.0	6.0	5.5	5.1	5.2	5.1
Black	16.8	16.8	18.5	18.1	18.2	17.0	16.6	16.3	15.8	15.3	14.9	14.5	13.8	14.4	13.0	12.2	12.6
Sussex																	
All Races	8.5	8.1	9.0	8.3	7.4	8.1	8.2	7.5	7.9	7.6	7.2	7.0	6.2	5.2	5.4	5.1	5.8
White	8.0	7.5	7.6	6.5	5.5	5.9	5.5	5.1	6.2	5.7	5.2	5.6	5.0	3.6	3.8	4.0	4.3
Black	9.9	10.4	14.4	15.9	15.4	16.9	19.0	16.9	15.7	16.0	15.6	12.6	11.2	11.1	10.7	9.5	11.1

Notes:

1. 2011-2015 U.S. data are based on NCHS estimates.
2. Infant mortality rates represent the number of deaths of children under one year of age per 1000 live births.
3. '+' indicates that the Delaware rate is significantly higher than the U.S. rate.
4. '-' indicates that the Delaware rate is significantly lower than the U.S. rate.
5. "----" Indicates rate does not meet standard of reliability or precision; based on fewer than 20 deaths in the numerator.
6. No statistical comparisons were made between the county rates and the U.S. rate due to small numbers. See Appendix C for details.

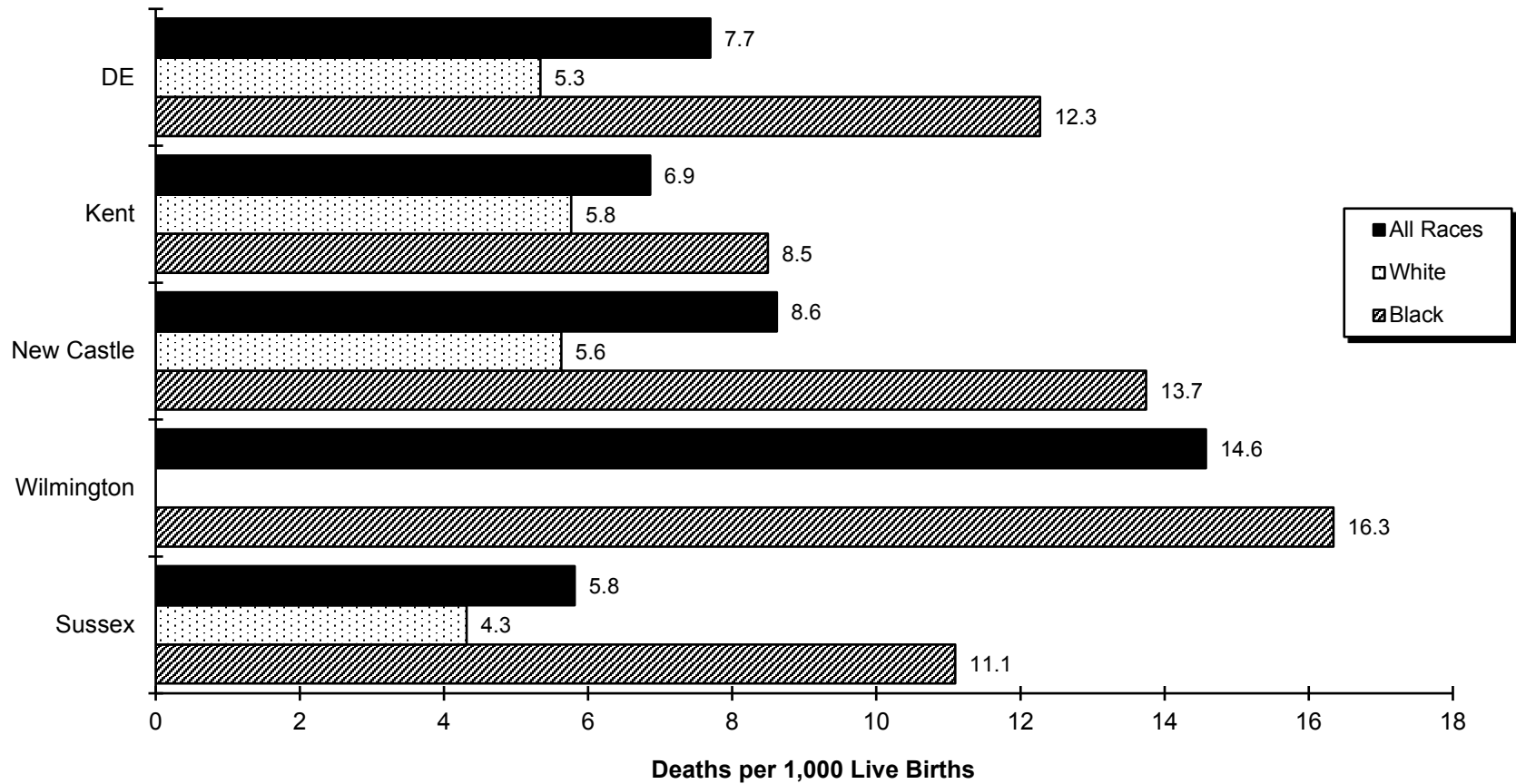
Sources: National Center for Health Statistics,
Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Figure E-1. Five-Year Average Infant Mortality Rates by Race, Delaware, 1990-2015



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

Figure E-2. Five-Year Average Infant Mortality Rates by Race, Delaware, Counties and the City of Wilmington, 2011-2015



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

TABLE E-5. FIVE-YEAR AVERAGE NEONATAL MORTALITY RATES BY RACE, COUNTY, CITY OF WILMINGTON, U.S., AND DELAWARE, 1995-2015

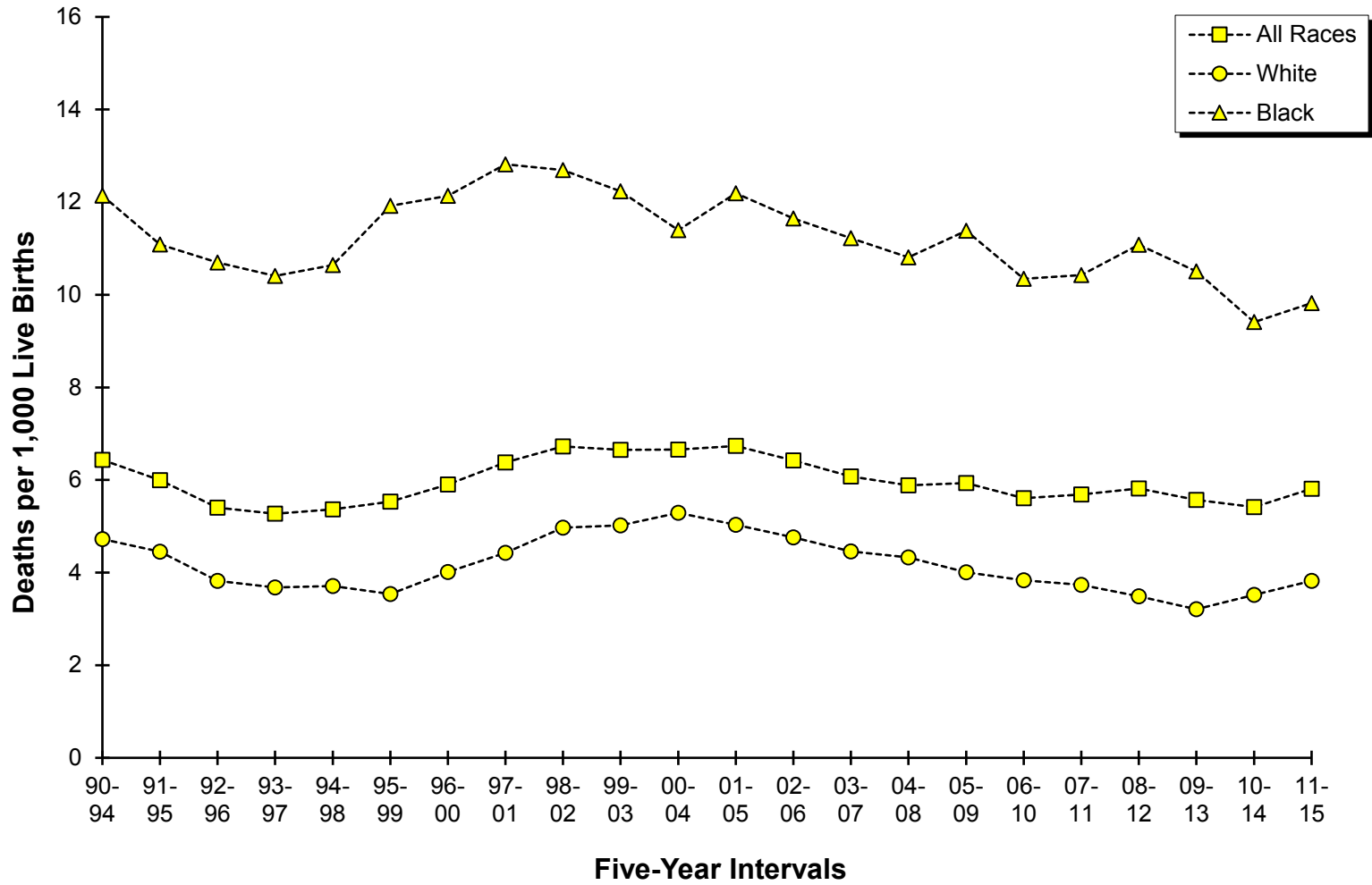
Area/ Race	1995 -1999	1996 -2000	1997 -2001	1998 -2002	1999 -2003	2000 -2004	2001 -2005	2002 -2006	2003 -2007	2004 -2008	2005 -2009	2006 -2010	2007 -2011	2008 -2012	2009 -2013	2010 -2014	2011 -2015
U.S.																	
All Races	4.8	4.7	4.7	4.7	4.6	4.6	4.6	4.6	4.5	4.4	4.4	4.3	4.2	4.1	4.1	4.0	N/A
White	4.0	3.9	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.7	3.7	3.6	3.5	3.5	3.5	3.4	N/A
Black	9.6	9.5	9.5	9.5	9.5	9.3	9.2	9.1	9.0	8.7	8.6	8.3	8.0	7.7	7.5	7.4	N/A
Delaware																	
All Races	5.5+	5.9+	6.4+	6.7+	6.7+	6.7+	6.7+	6.4+	6.1+	5.9+	5.9+	5.6+	5.7+	5.8+	5.6+	5.4+	5.8
White	3.5	4.0	4.4	5.0+	5.0+	5.3+	5.0+	4.8+	4.5+	4.3	4.0	3.8	3.7	3.5	3.2	3.5	3.8
Black	11.9+	12.1+	12.8+	12.7+	12.2+	11.4+	12.2+	11.6+	11.2+	10.8+	11.4+	10.3+	10.4+	11.1+	10.5+	9.4+	9.8
Kent																	
All Races	5.5	5.9	6.1	7.2	7.0	7.2	7.0	6.0	4.3	4.6	4.7	4.4	5.0	5.6	4.8	4.4	5.0
White	3.4	4.1	4.6	7.0	6.5	6.8	5.5	4.5	---	2.9	2.7	3.5	4.2	4.3	3.9	4.4	4.3
Black	12.0	12.1	11.3	8.9	9.3	9.2	11.2	10.0	9.1	8.8	10.1	7.3	7.2	8.9	7.3	---	---
New Castle																	
All Races	5.4	6.1	6.6	6.9	7.1	7.0	7.1	6.9	6.8	6.5	6.7	6.2	6.4	6.7	6.5	6.4	6.8
White	3.0	3.7	4.3	4.5	5.0	5.3	5.3	5.1	5.0	4.8	4.6	3.9	3.8	3.7	3.3	3.5	4.0
Black	13.0	13.5	14.2	14.5	13.9	12.4	12.5	12.3	12.1	11.7	12.1	11.8	12.2	12.5	12.2	11.7	11.8
Wilmington																	
All Races	8.7	9.8	9.7	10.1	9.8	9.1	9.5	8.9	9.0	8.9	9.6	9.0	9.7	11.6	12.2	12.4	12.6
White	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Black	11.8	12.5	12.5	13.8	13.4	12.1	13.1	12.3	12.5	11.6	12.9	12.5	13.6	14.4	15.7	14.9	13.3
Balance of NC County																	
All Races	4.7	5.3	6.0	6.3	6.6	6.5	6.6	6.5	6.3	6.0	6.0	5.6	5.8	5.8	5.3	5.3	5.7
White	3.0	3.6	4.2	4.6	5.1	5.4	5.5	5.2	5.2	4.8	4.7	4.0	3.9	3.5	3.1	3.0	3.4
Black	14.1	14.4	15.6	15.1	14.2	12.5	12.1	12.3	11.8	11.8	11.6	11.5	11.4	11.6	10.5	10.3	11.1
Sussex																	
All Races	6.0	5.3	5.8	5.5	4.6	5.1	5.5	5.3	5.6	5.2	4.9	4.9	4.1	3.4	3.6	3.5	3.7
White	5.5	5.0	4.9	4.5	3.6	3.8	3.7	3.9	4.6	4.3	3.7	4.1	3.3	2.2	2.4	2.9	3.0
Black	---	---	---	---	---	9.9	12.1	10.8	10.3	9.3	9.8	---	---	---	---	---	---

Notes:

1. 2011-2015 U.S. data are based on NCHS estimates which have not been released at the time of this report.
2. Neonatal mortality rates represent the number of deaths of children under 28 days of age per 1000 live births.
3. '+' indicates that the Delaware rate is significantly higher than the U.S. rate.
4. '---' Indicates rate does not meet standard of reliability or precision; based on fewer than 20 deaths in the numerator.
5. No statistical comparisons were made between the county rates and the U.S. rate due to small numbers. See Appendix C for details.

Sources: National Center for Health Statistics
 Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Figure E-3. Five-Year Average Neonatal Mortality Rates by Race, Delaware, 1990-2015



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

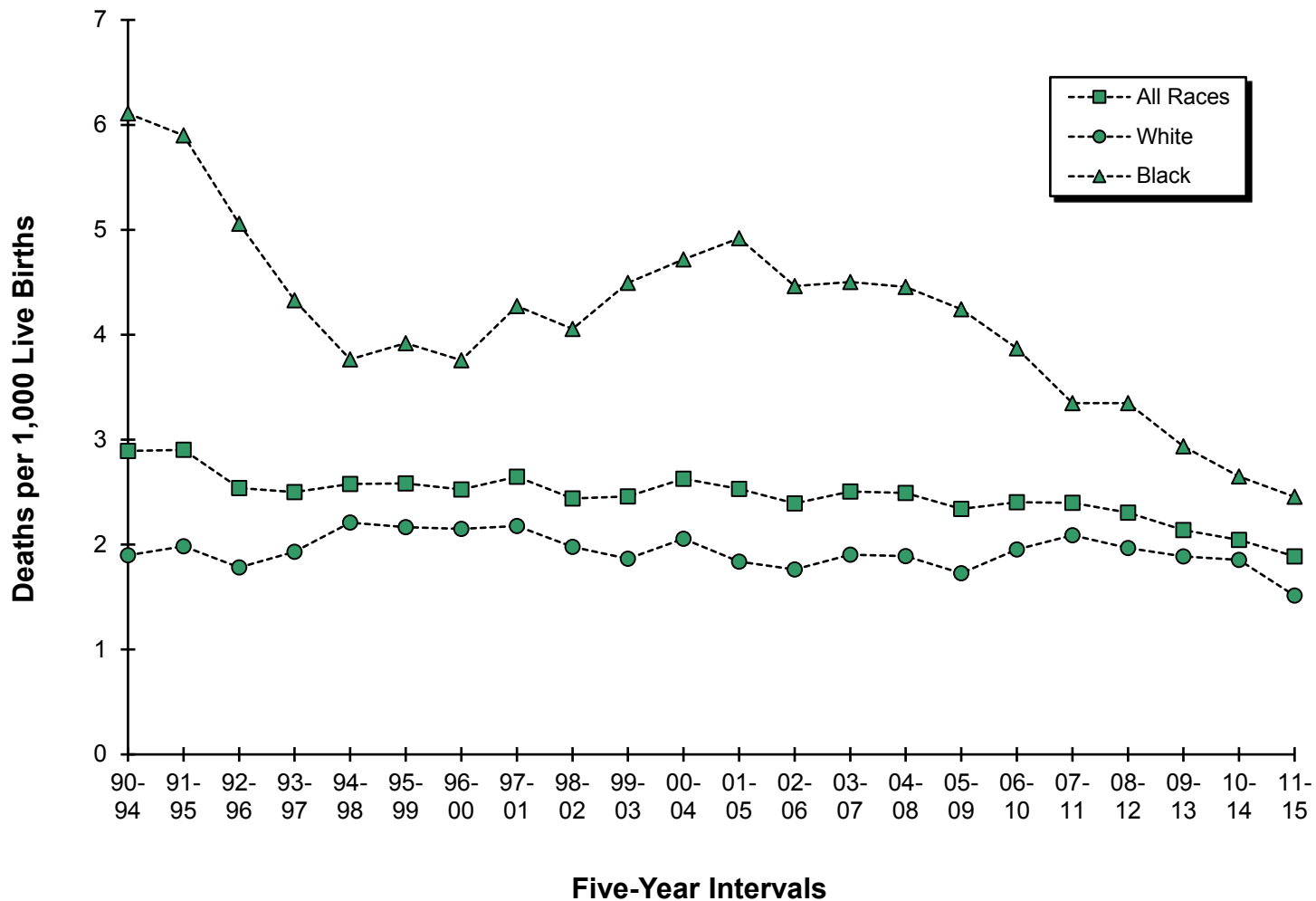
TABLE E-6. FIVE-YEAR AVERAGE POSTNEONATAL MORTALITY RATES BY RACE, COUNTY, CITY OF WILMINGTON, U.S., AND DELAWARE, 1995-2015

Area/ Race	1995 -1999	1996 -2000	1997 -2001	1998 -2002	1999 -2003	2000 -2004	2001 -2005	2002 -2006	2003 -2007	2004 -2008	2005 -2009	2006 -2010	2007 -2011	2008 -2012	2009 -2013	2010 -2014	2011 -2015
U.S.																	
All Races	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.0	2.0	N/A
White	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.7	1.7	N/A
Black	5.0	4.8	4.8	4.8	4.7	4.8	4.8	4.7	4.6	4.6	4.5	4.4	4.4	4.2	4.0	3.9	N/A
Delaware																	
All Races	2.6	2.5	2.6	2.4	2.5	2.6	2.5	2.4	2.5	2.5	2.3	2.4	2.4	2.3	2.1	2.0	1.9
White	2.2	2.2	2.2	2.0	1.9	2.1	1.8	1.8	1.9	1.9	1.7	2.0	2.1	2.0	1.9	1.9	1.5
Black	3.9	3.8	4.3	4.1	4.5	4.7	4.9	4.5	4.5	4.5	4.2	3.9	3.3-	3.3	2.9-	2.7-	2.5
Kent																	
All Races	3.0	2.7	2.7	2.7	2.6	2.9	3.0	3.1	2.8	2.6	2.3	2.0	1.9	2.1	1.8	---	1.9
White	---	2.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Black	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
New Castle																	
All Races	2.5	2.4	2.5	2.2	2.3	2.4	2.3	2.3	2.5	2.5	2.3	2.6	2.7	2.5	2.4	2.3	1.8
White	1.9	1.8	2.0	1.8	1.8	1.9	1.8	1.7	2.0	2.1	1.9	2.3	2.4	2.2	2.1	2.2	1.6
Black	4.4	4.2	4.0	3.5	4.1	4.2	4.2	4.0	4.3	4.0	4.0	3.9	3.5	3.5	3.2	2.6	---
Wilmington																	
All Races	5.0	4.6	4.3	3.4	3.7	3.3	3.3	3.4	4.0	4.1	4.2	5.1	5.2	4.6	3.7	---	---
White	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Black	6.3	6.2	5.5	---	---	---	---	---	---	---	5.1	5.5	5.5	---	---	---	---
Balance of NC County																	
All Races	1.9	1.9	2.1	2.0	2.0	2.3	2.1	2.0	2.2	2.1	1.9	2.1	2.1	2.1	2.1	2.1	1.8
White	1.8	1.8	1.9	1.8	1.6	1.9	1.7	1.6	1.9	2.0	1.7	2.0	2.1	2.0	2.0	2.2	1.7
Black	---	---	---	---	4.0	4.4	4.4	4.0	4.0	3.5	3.3	3.1	---	---	---	---	---
Sussex																	
All Races	2.5	2.8	3.3	2.9	2.8	3.0	2.7	2.2	2.3	2.4	2.3	2.2	2.1	1.8	1.8	---	2.1
White	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Black	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:
 1. 2011-2015 U.S. data are based on NCHS estimates which had not been released at the time of this report
 2. Postneonatal mortality rates represent the number of deaths of children 28 to 364 days of age per 1000 live births.
 3. '-' indicates that the Delaware rate is significantly lower than the U.S. rate.
 4. "----" Indicates rate does not meet standard of reliability or precision; based on fewer than 20 deaths in the numerator.
 5. No statistical comparisons were made between the county rates and the U.S. rate due to small numbers. See Appendix C for details.

Sources: National Center for Health Statistics
 Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Figure E-4. Five-Year Average Postneonatal Mortality Rates by Race, Delaware, 1990-2015



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

TABLE E-7. FIVE-YEAR AVERAGE INFANT MORTALITY RATES BY SELECTED RISK MARKERS AND RACE OF MOTHER, DELAWARE, 2010-2014 LIVE BIRTH COHORT

Risk Factor	Race		
	All Races	White	Black
Birth Weight of Child			
<2500	61.7	50.0	76.0
<1500	253.1	219.9	275.4
1500-2499	11.9	14.1	---
2500+	2.2	2.2	2.4
Age of Mother			
<20	8.7	7.6	10.1
20-24	8.3	6.6	11.3
25-29	7.1	5.6	10.7
30+	6.6	4.6	13.6
Marital Status of Mother			
Married	5.0	4.3	7.7
Single	9.9	7.2	13.4
Education of Mother			
<12 years	6.0	5.0	8.6
H.S. diploma	11.0	7.7	15.9
1+ years college	5.7	4.7	8.9
Interval Since Last Live Birth			
<18 months	6.7	---	---
18+ months	4.6	4.0	7.1

Notes:

1. Infant mortality rates represent the number of deaths to children under one year of age per 1,000 live births.

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

TABLE E-8. LEADING CAUSES OF INFANT DEATH BY GESTATIONAL AGE CATEGORY, DELAWARE, 2010-2014 LIVE BIRTH COHORT

Leading causes of death	Gestational Age Category					% Born Very Preterm	% Born Preterm
	Very preterm	Moderately preterm	Term	Unknown	Total		
Disorders related to short gestation and low birth weight, not elsewhere classified	93	0	2	0	95	97.9	97.9
Congenital malformations, deformations, and chromosomal abnormalities	9	19	32	0	60	15.0	46.7
Newborn affected by maternal complications of pregnancy	42	0	0	0	42	100.0	100.0
Sudden infant death syndrome	1	4	28	0	33	3.0	15.2
Newborn affected by complications of placenta, cord, and membranes	25	1	0	0	26	96.2	100.0
Respiratory distress of newborn	13	1	2	0	16	81.3	87.5
Diseases of the circulatory system	1	3	8	0	12	8.3	33.3
Diarrhea and gastroenteritis of infectious origin	9	0	1	0	10	90.0	90.0
Accidents (unintentional injuries)	1	0	7	0	8	12.5	12.5
Bacterial sepsis of newborn	3	1	3	0	7	42.9	57.1
Assault (homicide)	0	0	7	0	7	0.0	0.0
Intrauterine hypoxia and birth asphyxia	2	0	4	0	6	33.3	33.3
Influenza and pneumonia	0	1	3	0	4	0.0	25.0
involving the immune mechanism	1	1	1	0	3	33.3	66.7
Newborn affected by other complications of labor and delivery	3	0	0	0	3	100.0	100.0
Hydrops fetalis not due to hemolytic disease	2	1	0	0	3	66.7	100.0
Septicemia	1	0	1	0	2	50.0	50.0
Volume depletion, disorders of fluid, electrolyte and acid-base balance	1	0	0	1	2	50.0	50.0
Slow fetal growth and fetal malnutrition	2	0	0	0	2	100.0	100.0
Interstitial emphysema and related conditions originating in the perinatal period	2	0	0	0	2	100.0	100.0
All other causes	27	5	27	0	59	45.8	54.2
TOTAL	238	37	126	1	402	59.2	68.4

Notes:

1. Leading causes of infant death are categorized using NCHS rankable causes of infant death, specific ICD-10 codes are shown in Appendix D.
2. Very preterm is defined as less than 32 weeks of gestation.
3. Moderately preterm is defined as between 32 and 36 weeks of gestation.
4. Term is defined as 37 and greater weeks of gestation.
5. The percent born preterm includes both the very preterm and moderately preterm groups.

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

TABLE E-9. FIVE-YEAR AVERAGE INFANT MORTALITY RATES BY RACE AND SELECTED RISK MARKERS, DELAWARE , 1994-2014 LIVE BIRTH COHORT

Parameter/ Race	1994 -1998	1995 -1999	1996 -2000	1997 -2001	1998 -2002	1999 -2003	2000 -2004	2001 -2005	2002 -2006	2003 -2007	2004 -2008	2005 -2009	2006 -2010	2007 -2011	2008 -2012	2009 -2013	2010 -2014
BIRTHWEIGHT																	
2500+																	
All Races	2.5	2.4	2.4	2.5	2.3	2.4	2.5	2.2	2.2	2.3	2.0	1.9	2.2	2.2	2.2	2.2	2.2
White	2.4	2.4	2.3	2.4	2.1	2.0	2.1	1.9	1.7	1.9	1.8	1.7	2.1	2.3	2.2	2.3	2.2
Black	2.8	2.8	2.8	3.0	3.0	3.6	3.9	3.5	3.6	3.5	2.9	2.8	2.7	2.3	2.5	2.5	2.4
<2500																	
All Races	64.8	66.5	69.5	75.2	76.4	74.2	73.1	74.5	69.9	68.8	69.2	70.6	65.5	67.1	68.2	64.6	61.7
White	55.4	53.9	55.9	63.2	68.7	67.4	68.8	68.4	64.3	60.8	60.0	58.5	55.6	54.9	52.8	50.1	50.0
Black	78.8	86.0	88.2	93.7	90.5	88.3	83.0	88.0	80.9	82.2	83.9	89.5	81.6	85.9	89.1	83.1	76.0
<1500																	
All Races	258.5	262.7	270.9	304.8	316.2	302.4	306.2	313.9	289.4	285.8	286.8	279.3	260.8	264.7	267.6	258.6	253.1
White	223.2	219.3	231.5	281.9	303.4	297.2	316.8	321.2	295.3	289.0	280.2	262.0	242.2	233.3	222.0	216.6	219.9
Black	296.8	315.8	312.1	329.8	335.5	317.0	301.5	315.7	289.4	286.0	291.9	298.9	283.9	295.1	309.2	295.4	275.4
GESTATION																	
37+ weeks																	
All Races	2.6	2.6	2.5	2.5	2.3	2.3	2.4	2.2	2.2	2.3	2.0	2.0	2.4	2.6	2.6	2.5	2.6
White	2.6	2.6	2.4	2.3	2.1	1.9	2.0	1.7	1.8	1.9	1.8	1.8	2.4	2.7	2.7	2.6	2.6
Black	2.8	2.7	2.8	3.1	2.9	3.7	4.0	3.4	3.4	3.4	2.9	2.7	2.8	2.7	2.8	2.7	2.8
<37 weeks																	
All Races	45.6	45.9	48.2	53.0	54.3	52.8	52.6	53.5	49.1	47.1	47.0	47.3	43.6	44.3	45.5	44.0	41.5
White	35.4	33.6	35.7	41.8	45.5	45.1	46.5	45.2	40.5	37.5	36.2	34.9	33.0	32.3	30.9	30.3	29.5
Black	64.1	69.6	70.5	73.5	72.5	70.5	67.7	72.7	68.2	66.9	68.3	71.1	64.0	66.3	69.7	65.4	59.8
<32 weeks																	
All Races	199.8	201.3	214.9	238.1	249.6	238.7	239.4	249.1	232.4	220.4	220.4	216.9	195.0	195.7	198.7	190.8	178.9
White	179.4	174.0	191.5	228.4	249.2	238.2	244.0	248.3	223.0	202.7	193.2	184.8	159.9	153.0	144.2	140.1	134.2
Black	222.2	235.6	238.7	250.4	255.4	246.3	239.8	259.4	250.0	246.4	255.2	258.8	237.4	240.9	250.4	234.6	215.0
PLURALITY																	
Single																	
All Races	6.7	6.8	6.9	7.3	7.3	7.3	7.5	7.4	7.1	7.2	7.0	7.0	7.0	7.0	6.9	6.7	6.3
White	5.1	5.1	4.9	5.2	5.4	5.2	5.6	5.4	5.1	5.2	5.2	4.9	5.4	5.4	5.1	4.9	4.7
Black	11.5	12.2	12.9	13.4	13.4	13.8	13.5	13.6	13.0	12.8	12.2	12.7	11.8	11.6	11.7	11.3	10.4
Plural																	
All Races	39.3	41.6	45.4	53.1	52.9	52.3	50.3	52.0	47.0	44.0	40.3	41.0	32.6	34.2	35.0	34.5	36.1
White	30.4	28.6	35.1	43.4	48.0	50.3	49.2	49.9	44.0	36.6	29.6	30.6	23.0	23.5	23.2	25.6	30.5
Black	68.7	84.6	73.0	80.7	68.5	60.8	54.1	64.6	59.1	63.5	67.7	69.5	54.4	55.5	60.4	50.4	44.5
SMOKING DURING PREGNANCY																	
No																	
All Races	7.1	7.4	7.6	8.1	8.0	8.2	8.2	8.2	7.9	7.7	7.4	7.6	7.4	7.4	7.4	7.2	6.7
White	5.2	5.3	5.3	5.7	5.8	5.9	6.2	6.1	6.0	5.7	5.4	5.3	5.6	5.5	5.4	5.2	4.9
Black	12.7	14.0	14.3	15.3	14.8	15.0	14.3	14.7	13.7	13.4	13.2	13.9	12.9	12.9	13.2	12.3	11.3
Yes																	
All Races	10.6	10.6	11.3	13.4	15.1	14.1	14.8	15.1	13.4	13.9	13.3	12.1	10.7	10.8	10.0	9.7	10.7
White	9.4	9.3	9.8	12.2	14.2	12.7	13.3	13.0	10.2	10.7	10.7	8.9	8.2	8.9	7.6	7.2	9.3
Black	15.3	16.3	17.3	18.0	18.9	19.4	19.5	22.0	23.9	23.8	21.2	21.5	17.5	15.8	15.9	15.7	14.1

**TABLE E-9. FIVE-YEAR AVERAGE INFANT MORTALITY RATES BY RACE AND SELECTED RISK MARKERS, DELAWARE , 1994-2014
LIVE BIRTH COHORT (continued)**

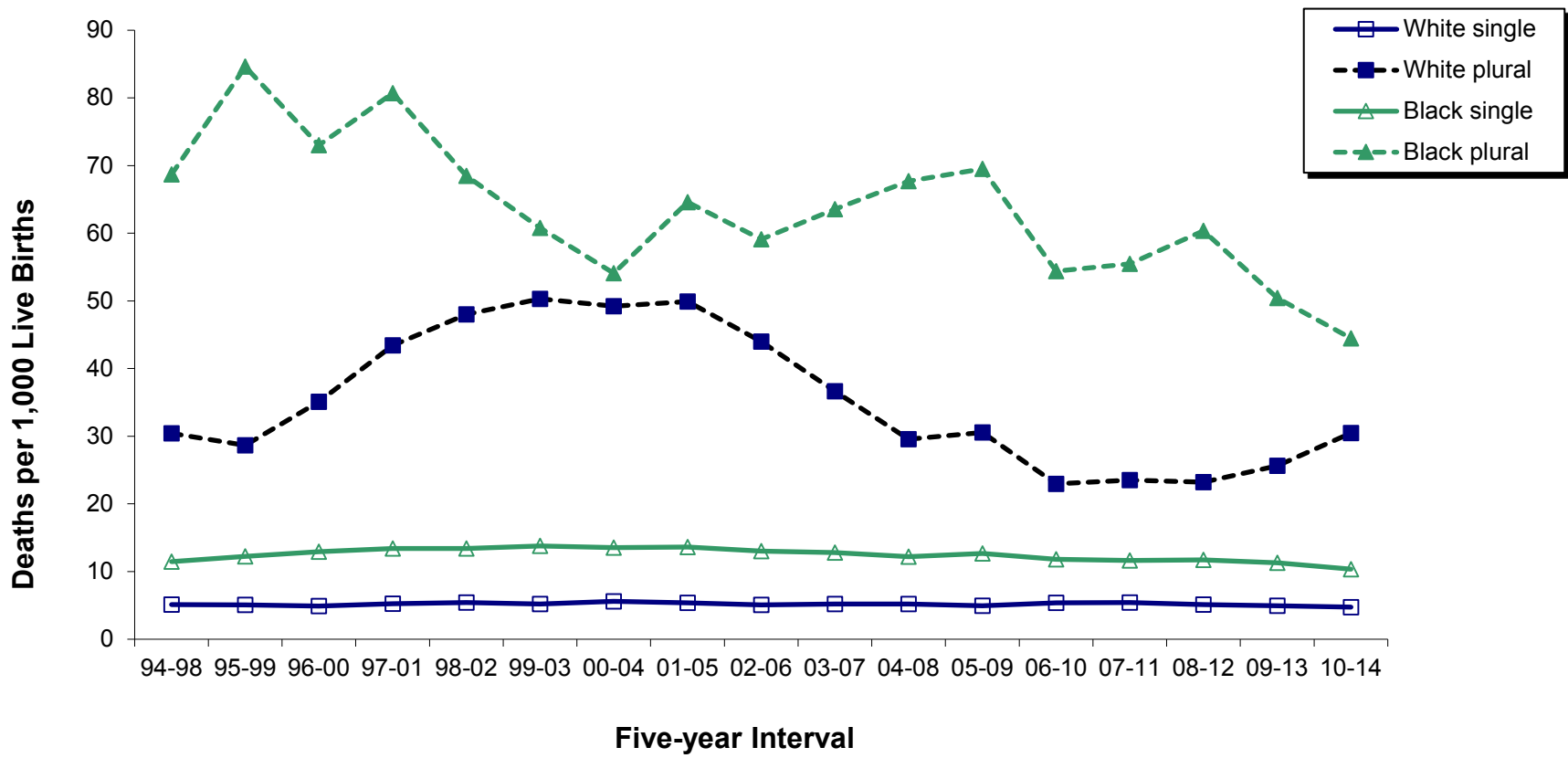
Parameter/ Race	1994 -1998	1995 -1999	1996 -2000	1997 -2001	1998 -2002	1999 -2003	2000 -2004	2001 -2005	2002 -2006	2003 -2007	2004 -2008	2005 -2009	2006 -2010	2007 -2011	2008 -2012	2009 -2013	2010 -2014
EDUCATION																	
HS Grad or less																	
All Races	9.9	10.4	10.3	11.1	11.5	11.4	11.4	11.1	10.7	10.8	10.1	10.0	10.0	10.0	9.5	9.5	8.8
White	8.0	8.0	7.8	8.4	9.1	8.8	9.1	8.7	8.3	8.4	7.8	7.6	7.7	7.6	6.7	6.7	6.4
Black	14.3	15.8	15.6	16.8	16.9	17.2	16.9	17.2	16.6	16.4	15.4	15.4	14.8	14.8	15.1	14.7	13.3
1+ yrs college																	
All Races	4.9	4.9	5.5	6.1	6.0	6.0	6.0	6.3	5.8	5.4	5.6	5.9	5.6	5.8	6.2	5.7	5.7
White	3.7	3.6	4.1	4.6	4.7	4.7	5.0	5.0	4.5	4.1	4.2	4.1	4.3	4.6	4.9	4.6	4.7
Black	10.5	11.8	13.5	13.9	12.6	12.2	11.0	12.0	11.1	10.9	11.4	13.1	11.2	10.8	11.0	9.6	8.9
PAYMENT FOR DELIVERY																	
Medicaid																	
All Races	10.3	10.9	9.9	10.6	10.1	9.5	9.8	10.2	9.6	10.4	10.2	9.9	9.5	9.3	8.8	8.5	8.2
White	8.8	9.1	7.7	8.6	8.3	7.1	7.5	7.7	7.1	8.0	8.0	7.5	7.5	7.0	6.3	6.0	6.1
Black	12.7	13.6	13.1	13.8	13.0	13.3	13.7	14.7	14.0	14.4	14.1	14.1	13.0	13.3	13.3	12.8	11.8
Private Insurance																	
All Races	5.5	5.7	6.5	6.8	7.4	7.7	7.8	7.6	7.4	6.7	6.4	6.6	6.4	6.4	6.6	6.4	6.2
White	4.2	4.3	4.9	5.2	5.7	5.9	6.1	5.8	5.6	5.0	4.6	4.5	4.7	5.0	4.9	4.9	4.7
Black	12.8	13.7	14.8	15.6	16.5	17.1	16.9	17.0	16.6	15.3	15.0	16.4	14.8	13.7	14.6	13.0	11.7

Notes:

1. See the Basic Definitions' section for definitions of birthweight, gestation, prenatal care attainment, and plurality.
2. "-" indicates rate does not meet standards of reliability or precision; based on fewer than 20 deaths in the numerator.
3. Primary source of payment for delivery not available prior to 1991.

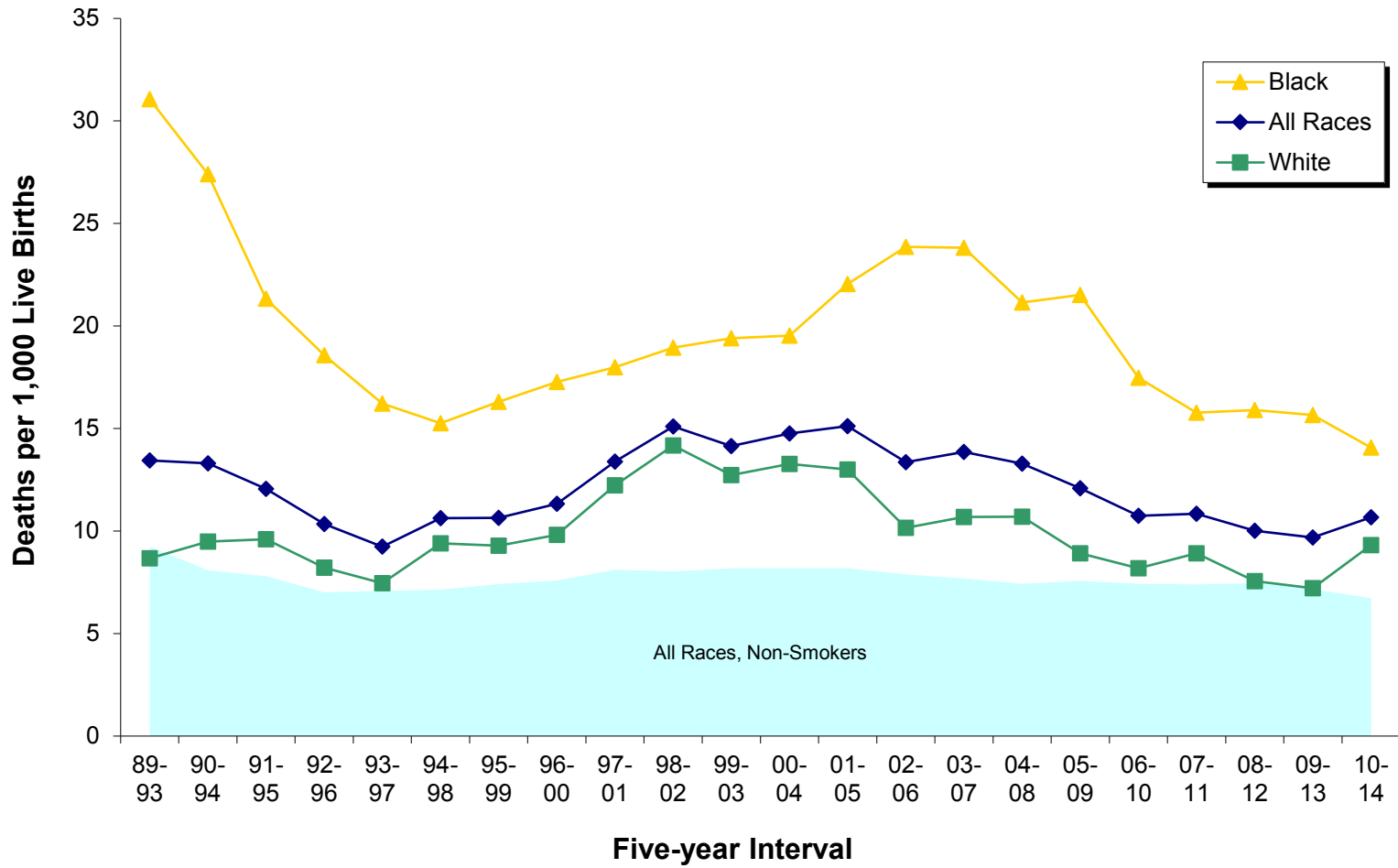
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Figure E-5. Five-year Average Infant Mortality Rates by Race and Plurality, Delaware, 1994-2014 Live Birth Cohort



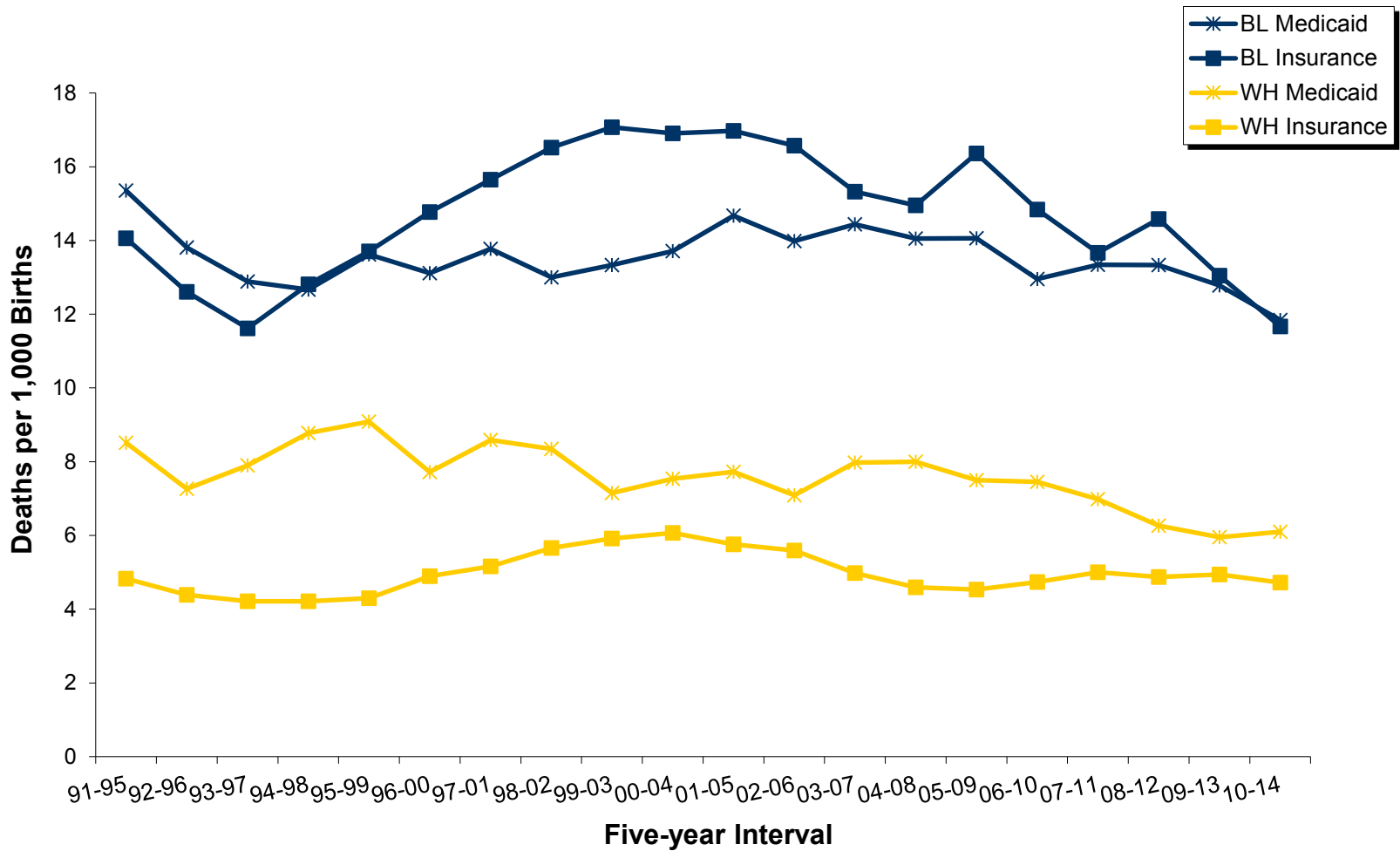
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Figure E-6. Five-year Average Infant Mortality Rates by Race of Mothers who Smoked during Pregnancy versus all Non-smoking Mothers, Delaware, 1989-2014 Live Birth Cohort



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

Figure E-7. Five-year Average Infant Mortality Rates by Race and Source of Payment for Delivery, Delaware, 1991-2014 Live Birth Cohort



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

TABLE E-10. NUMBER OF INFANT DEATHS BY PLURALITY, BIRTH WEIGHT IN GRAMS, RACE OF MOTHER, AND SEX OF CHILD, DELAWARE, 2010-2014 LIVE BIRTH COHORT

Plurality/ Birth Weight	Race and Sex										
	All Races			White			Black			Other	
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male
All Births	402	220	182	202	104	98	177	101	76	23	15
<2500	289	170	119	124	74	50	145	83	62	20	13
<1500	245	150	95	95	60	35	133	80	53	17	10
<500	122	69	53	38	21	17	73	42	31	11	6
500-999	106	71	35	45	32	13	56	36	20	5	3
1000-1499	17	10	7	12	7	5	4	2	2	1	1
1500-1999	19	10	9	13	8	5	4	0	4	2	2
2000-2499	25	10	15	16	6	10	8	3	5	1	1
2500+	111	49	62	76	29	47	32	18	14	3	2
2500-2999	42	18	24	29	12	17	12	5	7	1	1
3000-3499	41	15	26	26	7	19	13	7	6	2	1
3500-3999	21	12	9	16	8	8	5	4	1	0	0
4000-4499	7	4	3	5	2	3	2	2	0	0	0
4500+	0	0	0	0	0	0	0	0	0	0	0
Unknown	2	1	1	2	1	1	0	0	0	0	0
Single Births	338	182	156	169	86	83	150	84	66	19	12
<2500	234	135	99	99	59	40	119	66	53	16	10
<1500	193	117	76	72	47	25	108	63	45	13	7
<500	97	51	46	32	17	15	57	30	27	8	4
500-999	84	59	25	32	25	7	47	31	16	5	3
1000-1499	12	7	5	8	5	3	4	2	2	0	0
1500-1999	18	9	9	12	7	5	4	0	4	2	2
2000-2499	23	9	14	15	5	10	7	3	4	1	1
2500+	102	46	56	68	26	42	31	18	13	3	2
2500-2999	40	17	23	28	11	17	11	5	6	1	1
3000-3499	36	14	22	21	6	15	13	7	6	2	1
3500-3999	19	11	8	14	7	7	5	4	1	0	0
4000-4499	7	4	3	5	2	3	2	2	0	0	0
4500+	0	0	0	0	0	0	0	0	0	0	0
Unknown	2	1	1	2	1	1	0	0	0	0	0
Plural Births	64	38	26	33	18	15	27	17	10	4	3
<2500	55	35	20	25	15	10	26	17	9	4	3
<1500	52	33	19	23	13	10	25	17	8	4	3
<500	25	18	7	6	4	2	16	12	4	3	2
500-999	22	12	10	13	7	6	9	5	4	0	0
1000-1499	5	3	2	4	2	2	0	0	0	1	1
1500-1999	1	1	0	1	1	0	0	0	0	0	0
2000-2499	2	1	1	1	1	0	1	0	1	0	0
2500+	9	3	6	8	3	5	1	0	1	0	0
2500-2999	2	1	1	1	1	0	1	0	1	0	0
3000-3499	5	1	4	5	1	4	0	0	0	0	0
3500-3999	2	1	1	2	1	1	0	0	0	0	0
4000-4499	0	0	0	0	0	0	0	0	0	0	0
4500+	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0

Note: Infant deaths refer to deaths of children under one year of age.

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

TABLE E-11. NUMBER OF NEONATAL DEATHS BY PLURALITY, BIRTH WEIGHT IN GRAMS, RACE OF MOTHER, AND SEX OF CHILD, DELAWARE, 2010-2014 LIVE BIRTH COHORT

Plurality/ Birth Weight	Race and Sex										
	All Races			White			Black			Other	
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male
All Births	294	170	124	130	73	57	143	84	59	21	13
<2500	251	146	105	101	58	43	131	76	55	19	12
<1500	229	138	91	87	52	35	125	76	49	17	10
<500	122	69	53	38	21	17	73	42	31	11	6
500-999	94	62	32	39	26	13	50	33	17	5	3
1000-1499	13	7	6	10	5	5	2	1	1	1	1
1500-1999	11	5	6	7	4	3	3	0	3	1	1
2000-2499	11	3	8	7	2	5	3	0	3	1	1
2500+	42	23	19	28	14	14	12	8	4	2	1
2500-2999	16	10	6	12	7	5	3	2	1	1	1
3000-3499	13	4	9	7	2	5	5	2	3	1	0
3500-3999	8	7	1	5	4	1	3	3	0	0	0
4000-4499	5	2	3	4	1	3	1	1	0	0	0
4500+	0	0	0	0	0	0	0	0	0	0	0
Unknown	1	1	0	1	1	0	0	0	0	0	0
Single Births	241	137	104	105	60	45	119	67	52	17	10
<2500	202	115	87	80	47	33	107	59	48	15	9
<1500	180	107	73	66	41	25	101	59	42	13	7
<500	97	51	46	32	17	15	57	30	27	8	4
500-999	73	50	23	26	19	7	42	28	14	5	3
1000-1499	10	6	4	8	5	3	2	1	1	0	0
1500-1999	11	5	6	7	4	3	3	0	3	1	1
2000-2499	11	3	8	7	2	5	3	0	3	1	1
2500+	38	21	17	24	12	12	12	8	4	2	1
2500-2999	15	9	6	11	6	5	3	2	1	1	1
3000-3499	10	3	7	4	1	3	5	2	3	1	0
3500-3999	8	7	1	5	4	1	3	3	0	0	0
4000-4499	5	2	3	4	1	3	1	1	0	0	0
4500+	0	0	0	0	0	0	0	0	0	0	0
Unknown	1	1	0	1	1	0	0	0	0	0	0
Plural Births	53	33	20	25	13	12	24	17	7	4	3
<2500	49	31	18	21	11	10	24	17	7	4	3
<1500	49	31	18	21	11	10	24	17	7	4	3
<500	25	18	7	6	4	2	16	12	4	3	2
500-999	21	12	9	13	7	6	8	5	3	0	0
1000-1499	3	1	2	2	0	2	0	0	0	1	1
1500-1999	0	0	0	0	0	0	0	0	0	0	0
2000-2499	0	0	0	0	0	0	0	0	0	0	0
2500+	4	2	2	4	2	2	0	0	0	0	0
2500-2999	1	1	0	1	1	0	0	0	0	0	0
3000-3499	3	1	2	3	1	2	0	0	0	0	0
3500-3999	0	0	0	0	0	0	0	0	0	0	0
4000-4499	0	0	0	0	0	0	0	0	0	0	0
4500+	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0

Note: Neonatal deaths refer to deaths of children under 28 days of age.

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