

DELAWARE VITAL STATISTICS ANNUAL REPORT INFANT MORTALITY, 2018



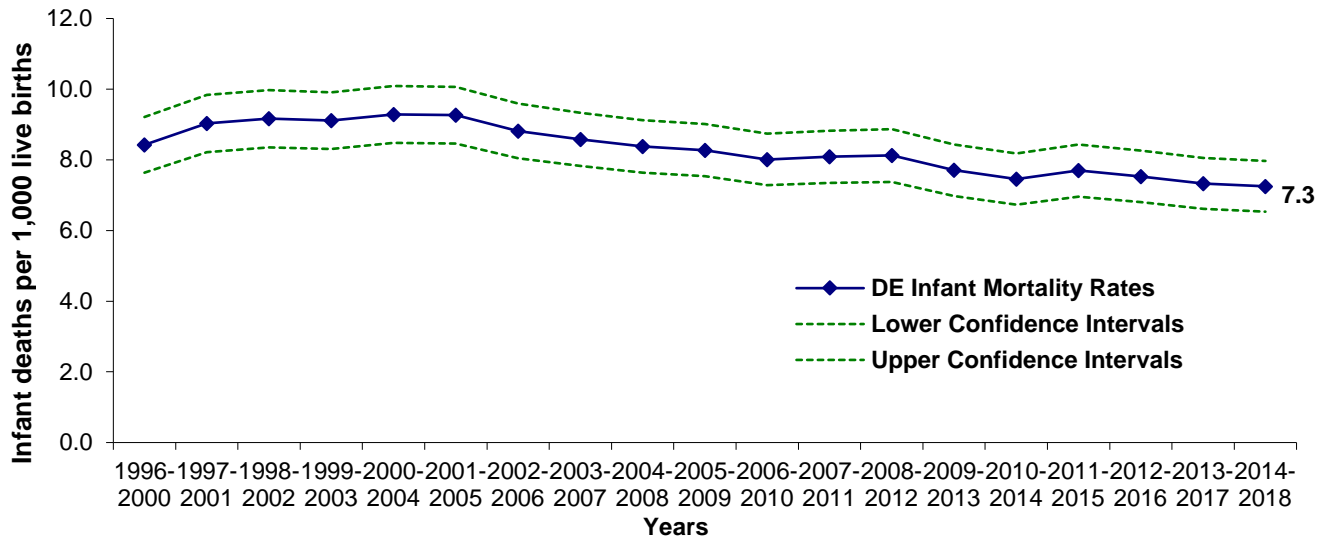
Suggested Citation:

Delaware Health Statistics Center. *Delaware Vital Statistics Annual Report, 2018*.
Delaware Department of Health and Social Services, Division of Public Health: 2020.

INFANT MORTALITY

In 2014-2018, Delaware's infant mortality rate (IMR) was 7.3 infant deaths per 1,000 live births, resulting in a total decline of 21.5 percent from the 2000-2004 rate of 9.3 infant deaths per 1,000 live births.

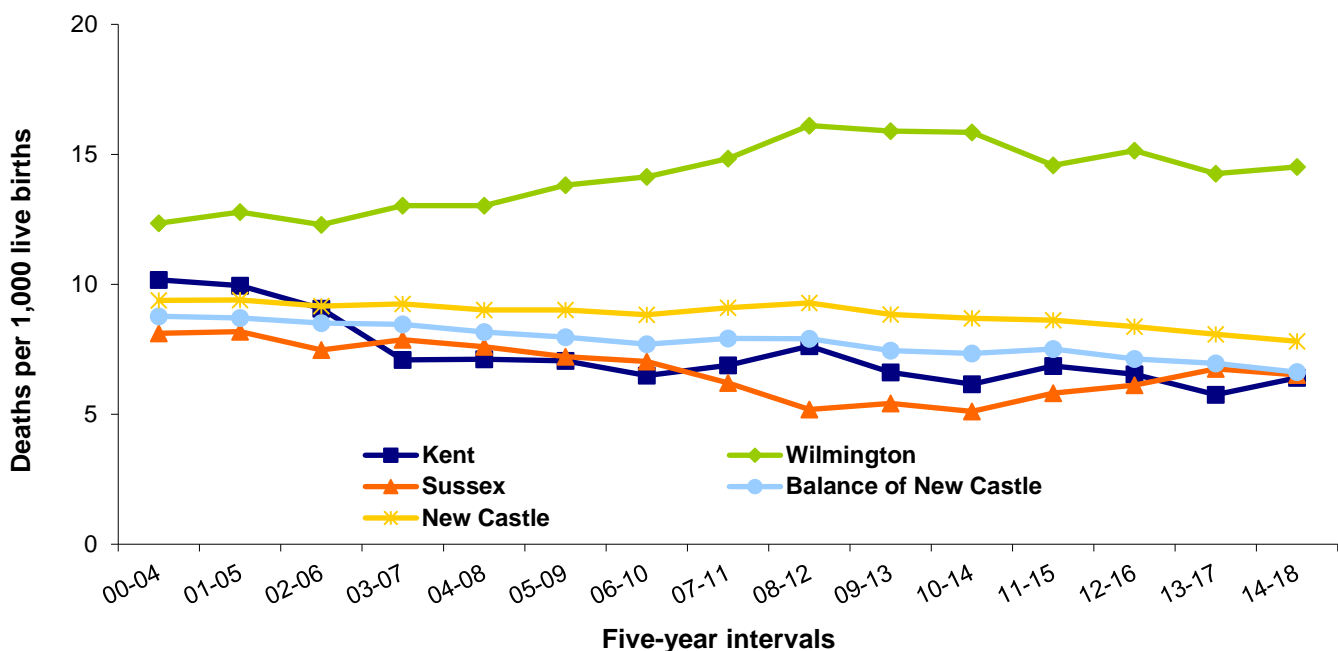
Figure 27. Five-year Average Infant Mortality Rates with Confidence Intervals, Delaware, 1996-2018



Source: Delaware Department of 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 high 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 at 7.8 infant deaths per 1,000 live births. In 2014-2018 Kent County's IMR remained the lowest at 6.4 infant deaths per 1,000 live births. During the same time period the balance of New Castle County's IMR was 6.6 infant deaths per 1,000 live births; Wilmington's IMR was 14.5 infant deaths per 1,000 live births; and Sussex County's IMR was 6.5 infant deaths per 1,000 live births.

Figure 28. Five-year Average Infant Mortality Rates, Delaware Counties and City of Wilmington, Delaware, 2000-2018

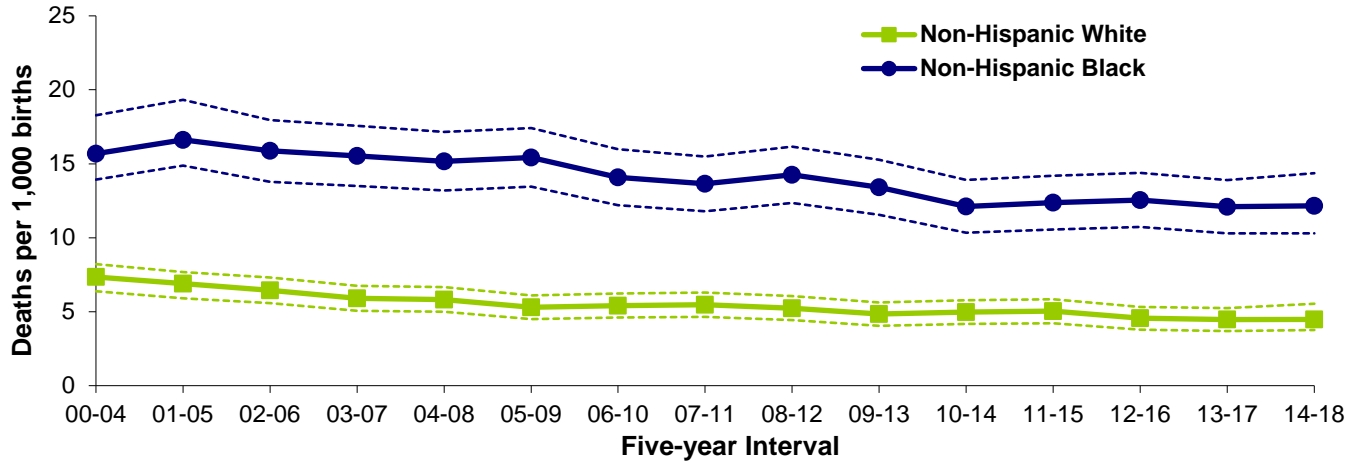


Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

INFANT MORTALITY

Non-Hispanic black infants experienced a lower percentage of decrease in mortality rates than non-Hispanic white infants. In 2014-2018 the non-Hispanic black IMR of 12.2 infant deaths per 1,000 live births was a 22 percent decrease from the 15.7 rate in 2000-2004. Non-Hispanic white IMR decreased 39 percent from 7.3 in 2000-2004 to 4.5 infant deaths per 1,000 live births in 2014-2018.

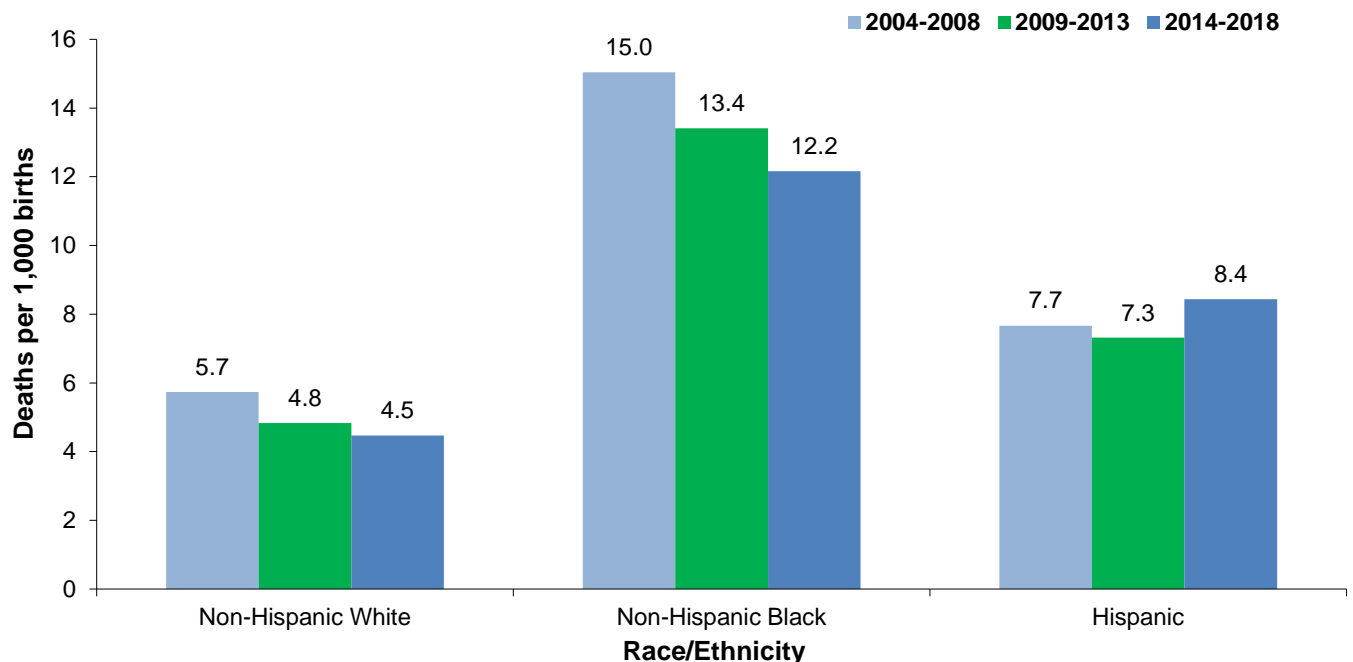
Figure 29. Five-year Average Infant Mortality Rates by Race with Confidence Intervals, Delaware, 2000-2018



Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center
 Note: Dashes represent upper or lower confidence intervals

Significant disparities existed between non-Hispanic black and non-Hispanic white infant mortality rates. Hispanic IMRs were nearly two times higher than the non-Hispanic white IMRs in 2014-2018. Non-Hispanic black IMRs were highest in all three time periods depicted below with the highest rate of 15.0 infant deaths per 1,000 live births in 2004-2008. The non-Hispanic black rate in 2014-2018 was nearly three times that of the non-Hispanic white rate but 1.5 times higher than the Hispanic rate of 8.4 infant deaths per 1,000 live births. From 2004-2008 to 2014-2018 the Hispanic IMR increased nine percent (7.7 to 8.4 infant deaths per 1,000 live births).

Figure 30. Five-year Average Infant Mortality Rates by Race and Hispanic Origin, Delaware 2004-2018

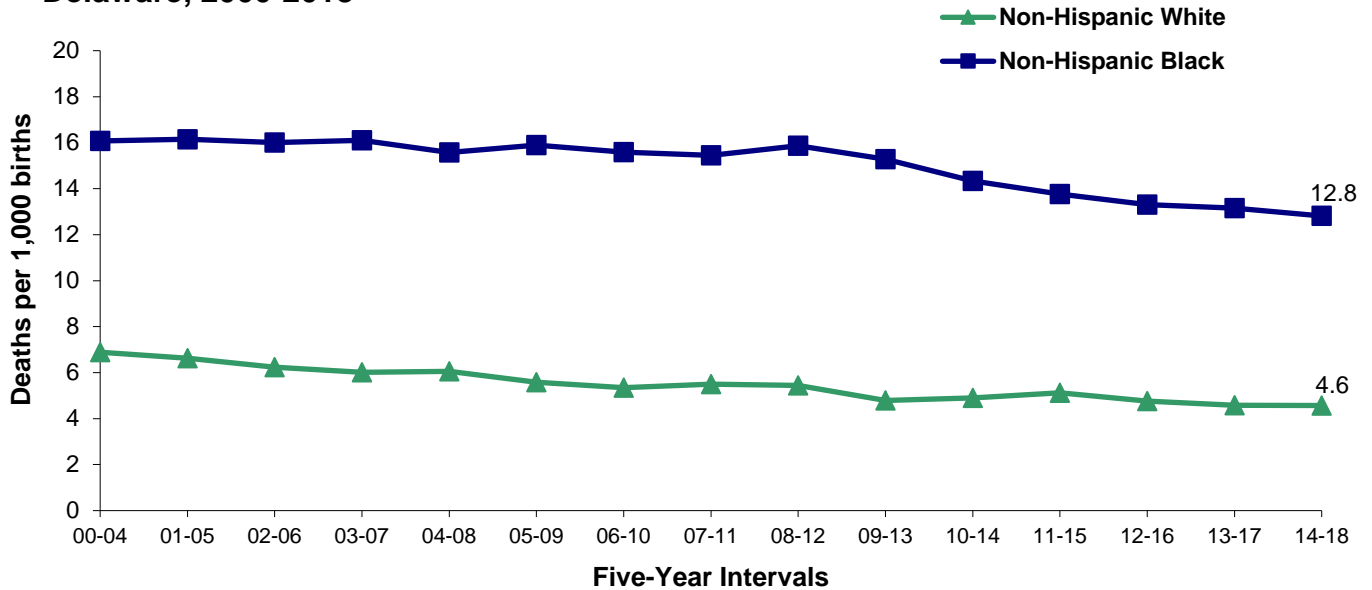


Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

INFANT MORTALITY- Leading Causes of Death

In 2014-2018, New Castle County had the highest IMRs and Kent County had the lowest. Non-Hispanic black IMRs in New Castle County were stable at 16 infant deaths per 1,000 live births from 2000 to 2012, and decreased the last six time periods to 12.8 infant deaths per 1,000 live births. Disparity between the races is evident in all three counties, with the New Castle non-Hispanic black rate 178% higher than the non-Hispanic white rate for 2014-2018.

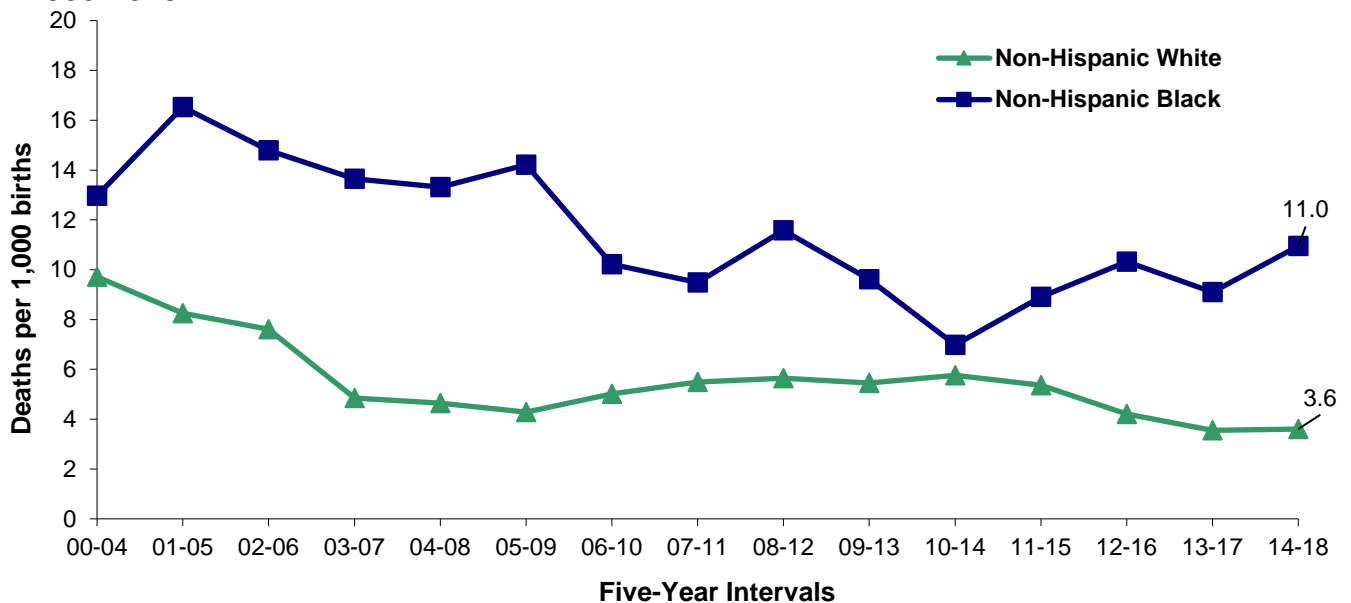
Figure 31. Five-year Average Infant Mortality Rates by Race, New Castle County, Delaware, 2000-2018



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

Non-Hispanic black IMRs in Kent County peaked at 16.5 infant deaths per 1,000 live births in 2001-2005. The IMR decreased 33 percent to 11.0 infant death per 1,000 live births in 2014-2018. The non-Hispanic white IMR had a 63 percent decrease from its peak in 2000-2004 (9.7 to 3.6 infant deaths per 1,000 live births). The non-Hispanic Black IMR was 206 percent higher than the non-Hispanic white IMR.

Figure 32. Five-year Average Infant Mortality Rates by Race, Kent County, Delaware, 2000-2018

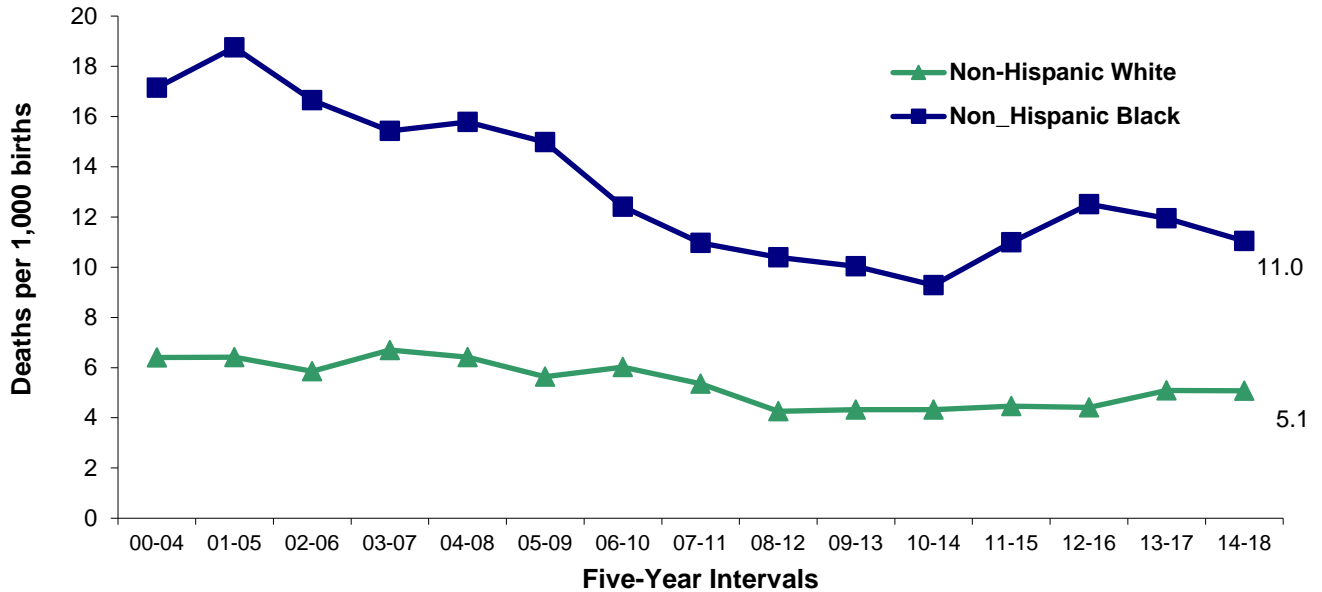


Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

INFANT MORTALITY- Leading Causes of Death

Sussex County's non-Hispanic black IMR decreased to 11.0 infant deaths per 1,000 live births in 2014-2018, a 42 percent reduction from the 2001-2005 peak of 19 infant deaths per 1,000 live births. Sussex County's non-Hispanic white IMR had a 24 percent decrease from its peak in 2003-2007 to 2014-2018 (6.7 to 5.1 infant deaths per 1,000 live births). Sussex County had the smallest disparity between the races with non-Hispanic black IMRs 116 percent higher than non-Hispanic white IMRs in 2014-2018.

Figure 33. Five-year Average Infant Mortality Rates by Race, Sussex County, Delaware, 2000-2018



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

INFANT MORTALITY- Leading Causes of Death

In 2014-2018 there were 395 infant deaths. The five leading causes of infant death in Delaware were:

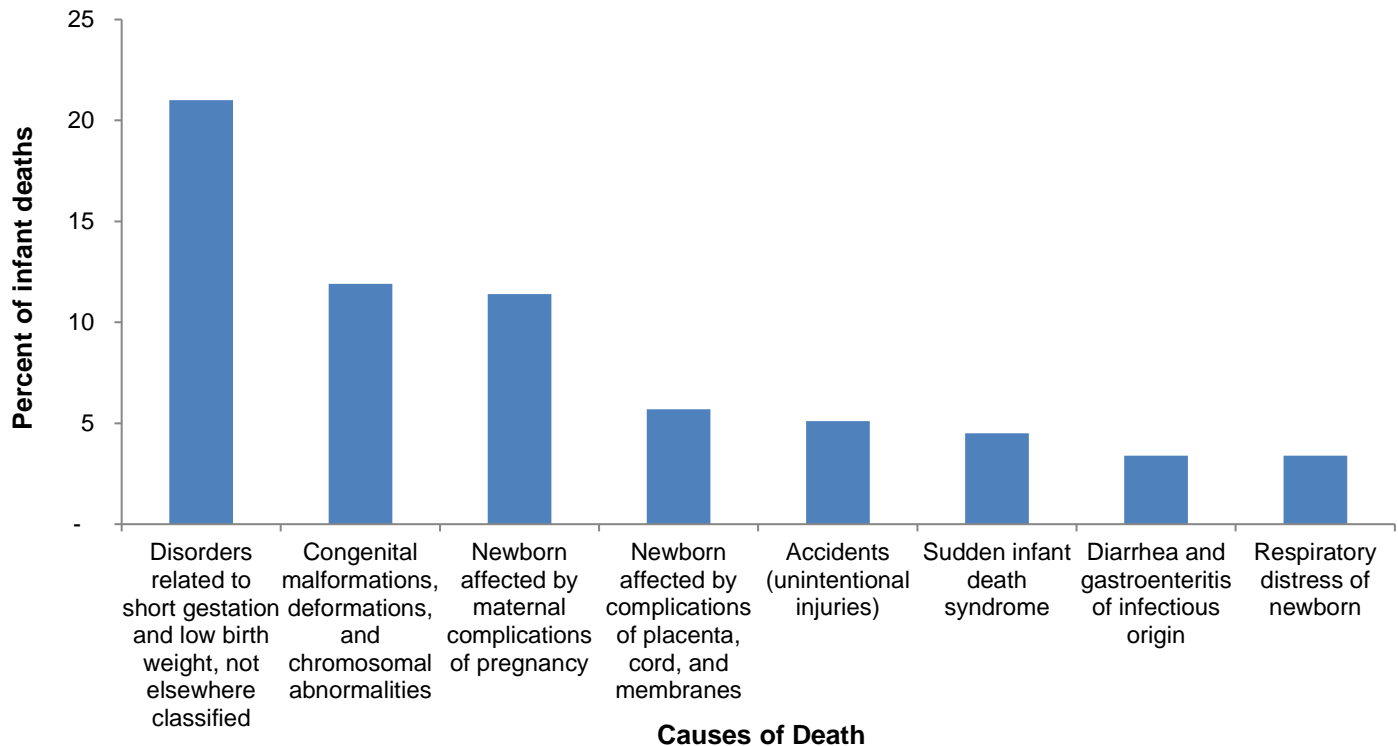
- Disorders related to short gestation and low birthweight, which accounted for 19.5 percent of infant deaths.
- Congenital anomalies (birth defects), which accounted for 15.4 percent of infant deaths.
- Newborns affected by maternal complications of pregnancy, which accounted for 12.2 percent of infant deaths. Of the 48 deaths attributed to this cause, 42 were due to the newborn being affected by incompetent cervix and premature rupture of membranes
- Sudden infant death syndrome (SIDS), which accounted for 4.6 percent of all infant deaths.
- Newborn affected by complications of placenta, cord, and membranes, which accounted for 4.1 percent of infant deaths.

In sum, the five most common causes of infant death accounted for 56 percent, or 220 of the 395 total infant deaths.

The most frequent causes of death by race are shown in Figures 34-36. Birth defects, disorders related to short gestation and low birthweight, and newborn affected by maternal complications of pregnancy were the top three most frequent causes of death for non-Hispanic black, non-Hispanic white, and Hispanic infants.

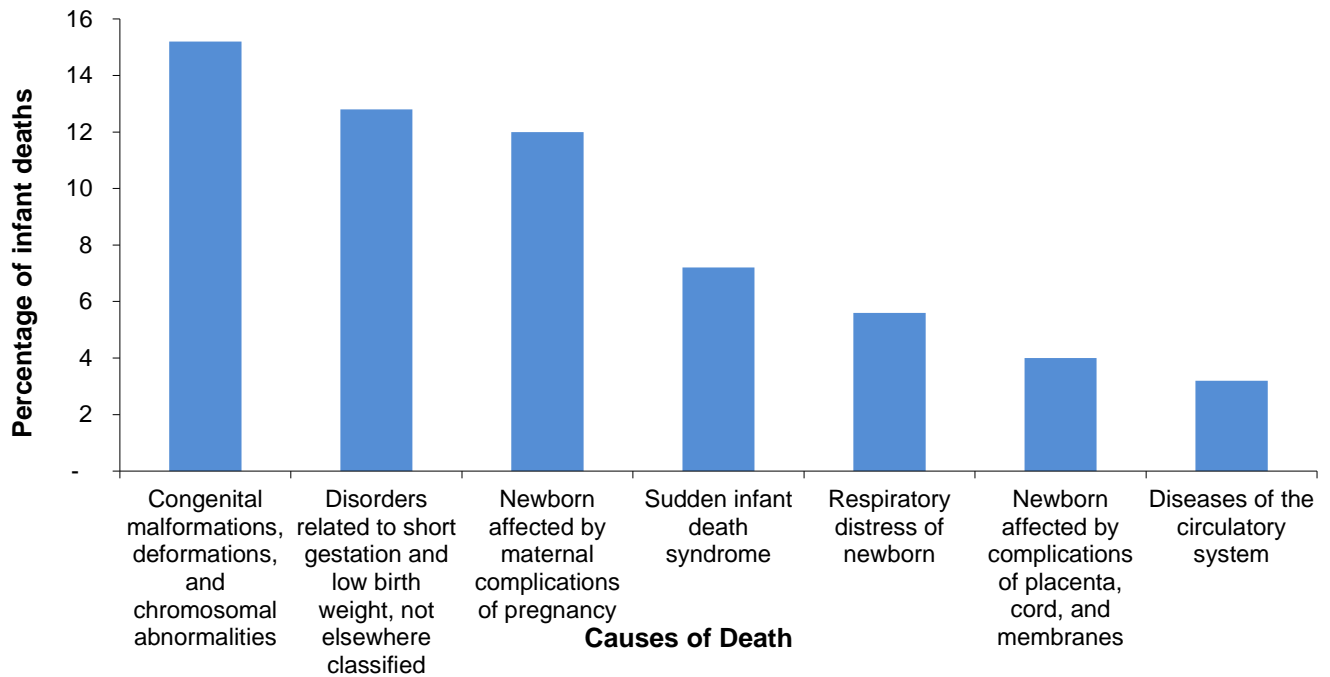
Though the proportions of deaths by race were similar for many of the causes of death, notable exceptions were accidents and disorders due to prematurity and low birthweight. In 2014-2018, while accidents were responsible for one percent of all non-Hispanic white infant deaths, they accounted for five percent of non-Hispanic black infant deaths. In 2014-2018, infant deaths due to disorders related to prematurity and low birthweight also accounted for larger percentages of non-Hispanic black infant deaths (21 percent) than non-Hispanic white infant deaths (13 percent).

Figure 34. Percentage of the Most Frequent Causes of Non-Hispanic Black Infant Death, Delaware, 2014-2018



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

Figure 35. Percentage of the Most Frequent Causes of Non- Hispanic White Infant Death, Delaware 2014-2018

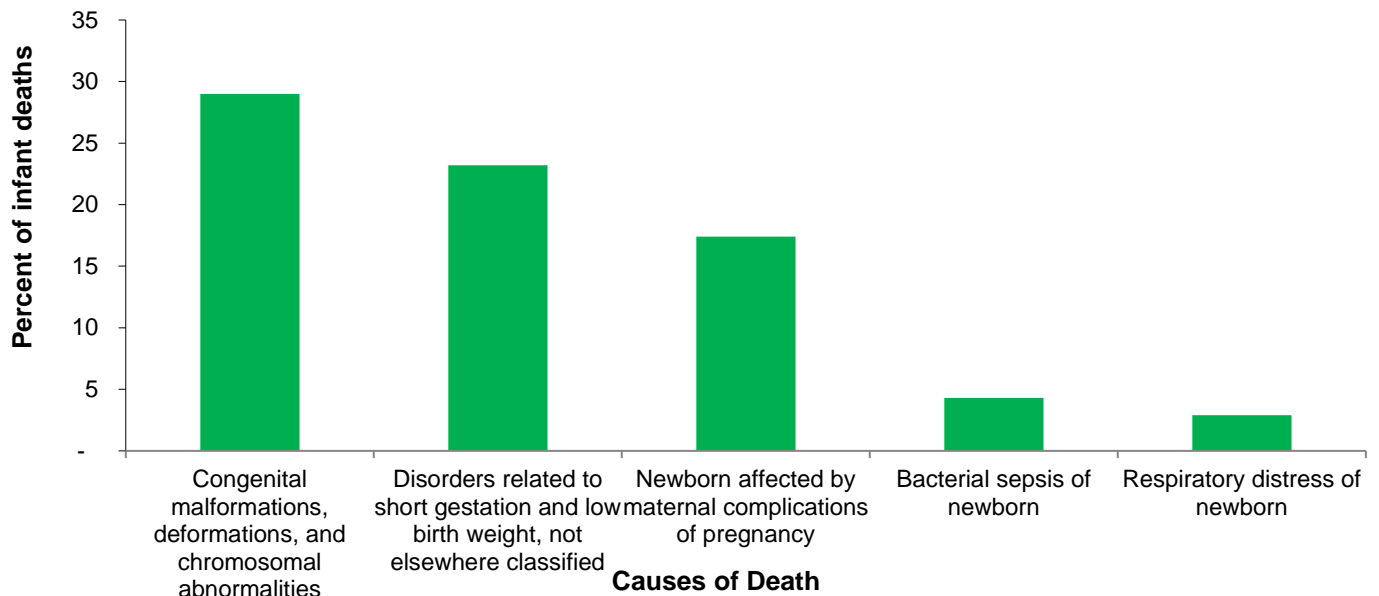


Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

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, 2014-2018, 15.0 percent of all live births were to Hispanic mothers, and 17.4 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.

Figure 36. Percentage of the Most Frequent Causes of Hispanic Infant Death, Delaware, 2014-2018



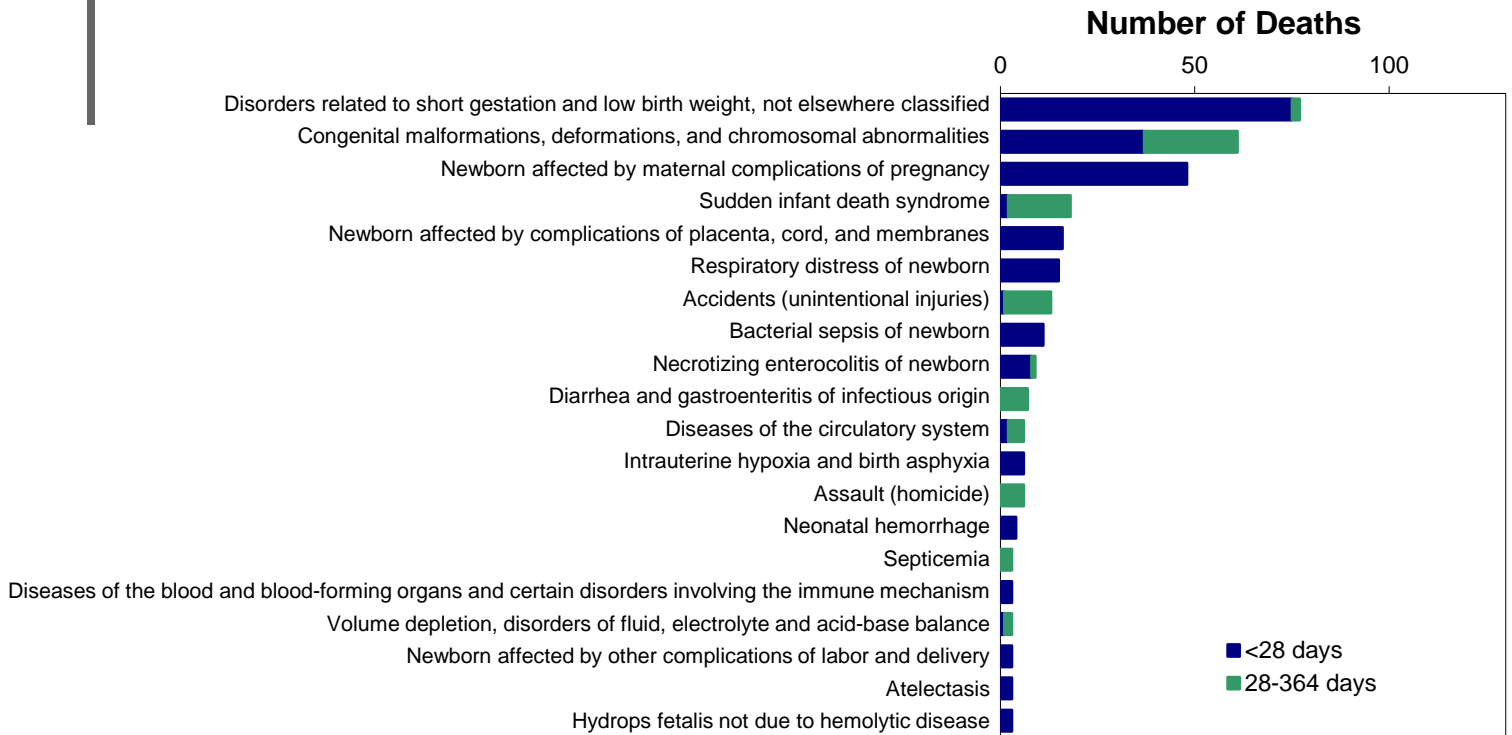
Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

INFANT MORTALITY- Leading Causes of Death

In 2014-2018, approximately 95 percent of all infant deaths occurred within the first six months of life, 72 percent occurred within the first 28 days of life, and 43 percent occurred within 24 hours of birth.

Figure 37 displays deaths by specific cause and the infant's age classification at death: neonatal (<28 days), or postneonatal (28-364 days).

Figure. 37 Most Frequent Causes of Infant Death, Delaware, 2014-2018



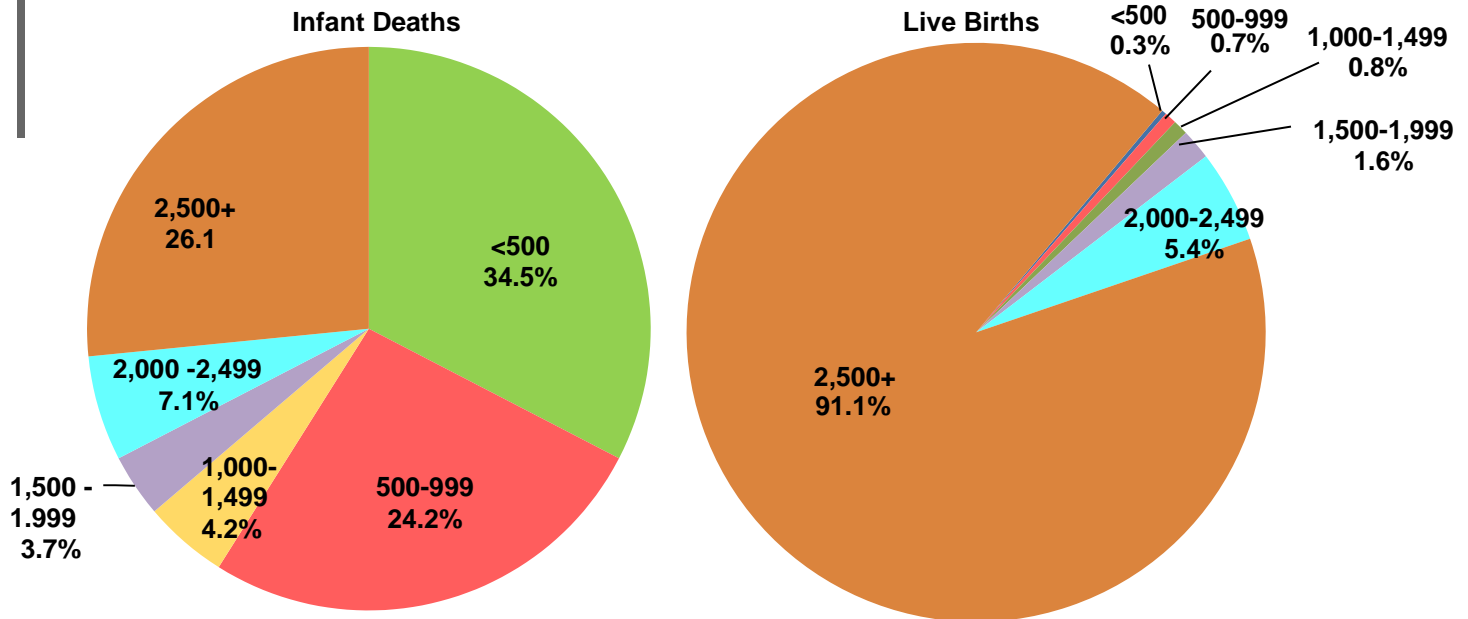
Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

- Prematurity and low birthweight accounted for the greatest number of infant deaths in 2014-2018; 97.4 percent 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 84 days. SIDS deaths decreased 63 percent from 2009-2013 to 2014-2018 (48 to 18 SIDS deaths). The number of infant deaths in 2014-2018 (395) decreased 8 percent from the number of infant deaths in 2009-2013 (429).
- Sixty-seven percent (12 out of 18) of the SIDS deaths were associated with co-sleeping and/or sleeping on soft surfaces, such as couches and adult beds.
- In 2014-2018, there were 23 additional infant deaths, coded under a different cause of death that were associated with co-sleeping and/or sleeping on a soft surface. In total, 9 percent of all infant deaths were associated with co-sleeping and/or unsafe sleep practices.

INFANT MORTALITY - Live Birth Cohort

Although only 1 percent of all live births in 2013-2017 were infants weighing less than 1,000 grams, they accounted for over half (59 percent) of all infant deaths. In total, 8.8 percent of all live births in 2013-2017 were infants of low birthweight (under 2,500 grams) and 73.7 percent of infant deaths were low birthweight.

Figure 38. Percent Distribution by Birthweight in Grams, Delaware, Live Birth Cohort, 2013-2017

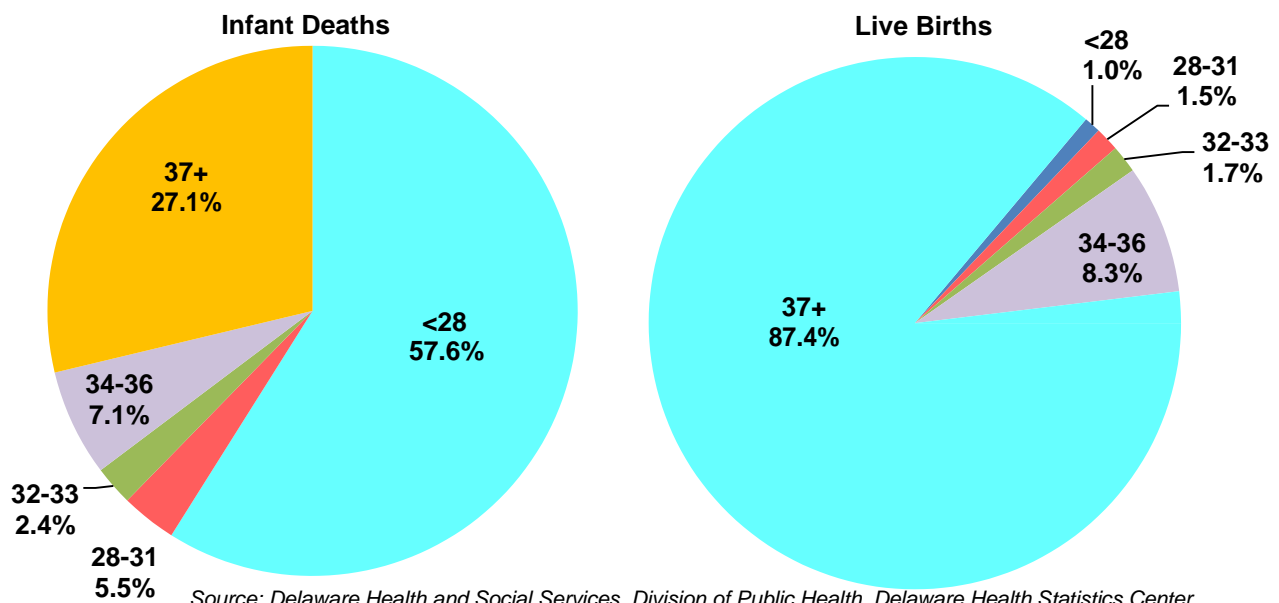


Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

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 2013-2017 were less than 28 weeks gestation at birth, but they accounted for 57.6 percent of all infant deaths. In total, 12.5 percent of all live births in 2013-2017 were born preterm (<37 weeks of gestation) and 72.6 percent of infant deaths were preterm.

Figure 39. Distribution by Gestation in Weeks, Delaware, Live Birth Cohort, 2013-2017



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

INFANT MORTALITY - Live Birth Cohort

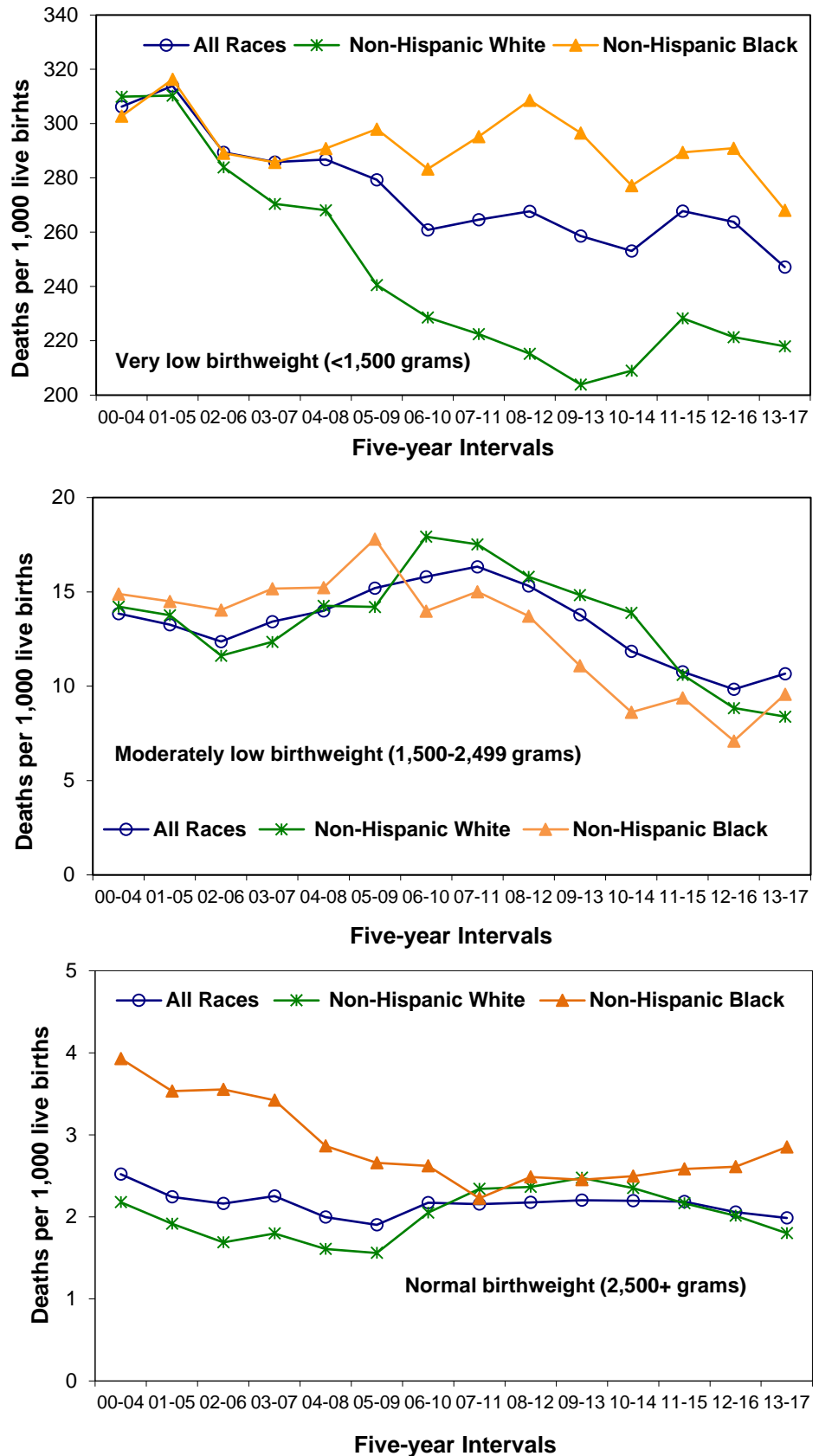
Birthweight and gestation are considered to be the most important predictors of infant health and mortality risk. Infants born too small or too early have a much greater risk of mortality than those who reach a normal birthweight (2,500+ grams) or full-term gestation (37+ weeks).

Although the IMRs decreased for both non-Hispanic white and non-Hispanic black for very low birthweight (VLBW) (<1,500 grams) since 2001-2005, the non-Hispanic black IMR of 268.1 was significantly higher than the non-Hispanic white IMR of 218.0 infant deaths per 1,000 live births in 2013-2017.

IMRs for moderately low birthweight infants of all races decreased 34 percent from its high point in 2007-2011 to 2013-2017. During that time, non-Hispanic white IMRs decreased 52 percent while the non-Hispanic black IMR decreased by 36 percent, making the non-Hispanic black IMR higher than the non-Hispanic white IMR (9.6 vs 8.4).

In 2007-2011 IMRs for normal birthweight non-Hispanic white and non-Hispanic black infants were nearly the same at 2.3 and 2.2, respectively. By 2013-2017, the non-Hispanic white IMR decreased 22 percent to 1.8 whereas the non-Hispanic black IMR increased 32 percent to 2.9 infant deaths per 1,000 live births. The IMR for all races had a 9 percent decrease for the same time period.

Figure 40. Five-year Average Infant Mortality Rates by Birthweight and Race, Delaware, 2000-2017 Live Birth Cohort

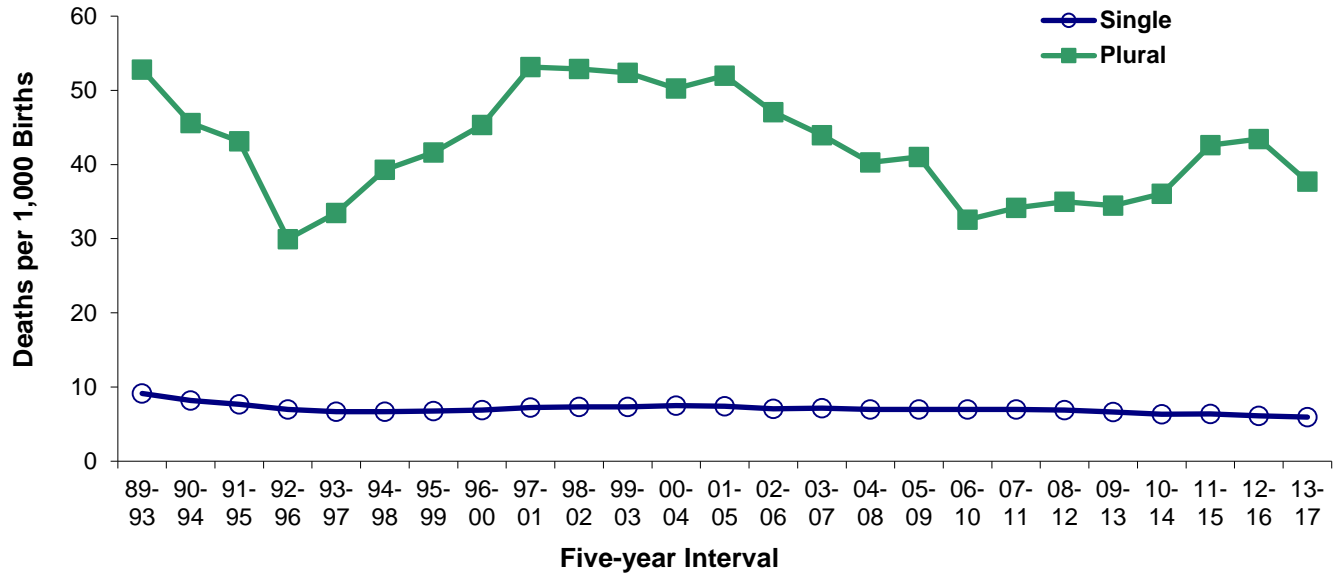


Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

INFANT MORTALITY - Live Birth Cohort

From 2001-2005 to 2006-2010, IMRs for plural births decreased 37 percent, from 52 to 33 infant deaths per 1,000 live births. Since 2006-2010, IMRs for plural births increased 16 percent from 32.6 to 37.7 infant deaths per 1,000 live births. IMRs for singleton births decreased 20 percent from 2001-2005 to 2013-2017. In 2013-2017, the infant mortality rate for plural births was more than six times that of singleton births (37.7 versus 5.9 infant deaths per 1,000 live births, respectively).

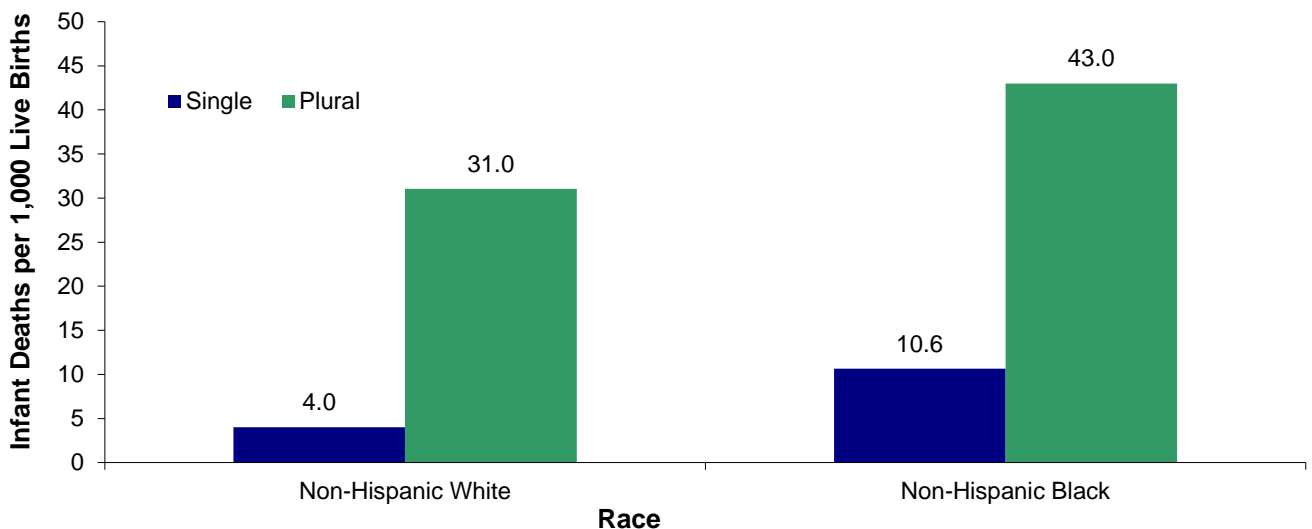
Figure 41. Five-year Average Infant Mortality Rates by Plurality, Delaware, Live Birth Cohort, 1989-2017



Source: Delaware Department of 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 non-Hispanic black IMR was more than twice the non-Hispanic white IMR for singleton births and 1.4 times greater for plural births.

Figure 42. Five-year Average Infant Mortality Rates by Plurality and Race, Delaware, Live Birth Cohort, 2013-2017



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

TABLE E-1. NUMBER OF INFANT DEATHS BY RACE, COUNTY, AND CITY OF WILMINGTON, U.S., DELAWARE, 2001-2018

Area/ Race	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
U.S.																		
All Races	27,523	27,970	27,995	27,860	28,384	28,509	29,153	28,075	26,408	24,572	24,001	23,654	23,446	23,211	23,458	23,157	22,341	N/A
Non-Hispanic White	13,300	13,327	13,228	13,001	13,134	12,884	13,005	12,509	11,785	11,192	10,886	10,759	10,766	10,515	10,444	10,204	9,520	N/A
Non-Hispanic Black	7,938	8,031	7,836	7,869	7,958	8,241	8,351	7,894	7,560	6,758	6,670	6,528	6,488	6,435	6,624	6,545	6,390	N/A
Non-Hispanic Other	1,274	1,289	1,331	1,334	1,380	1,368	1,516	1,452	1,397	1,324	1,338	1,363	1,280	1,273	1,401	1,380	1,402	N/A
Delaware																		
All Races	114	96	107	97	106	99	91	101	91	88	98	84	68	74	100	87	72	62
Non-Hispanic White	55	52	41	43	36	39	33	37	24	38	39	24	22	27	38	23	18	19
Non-Hispanic Black	50	35	49	44	53	44	38	49	52	35	38	43	33	29	38	39	37	33
Non-Hispanic Other	1	3	1	2	3	4	1	0	7	4	10	6	1	6	6	8	3	2
Kent																		
All Races	19	27	16	17	21	13	9	18	18	15	17	17	6	13	23	14	8	13
Non-Hispanic White	10	22	8	8	6	7	4	7	6	11	10	5	5	8	8	2	0	5
Non-Hispanic Black	8	5	7	8	14	5	4	7	12	3	3	10	1	4	9	8	7	7
Non-Hispanic Other	0	0	0	1	1	1	1	0	0	0	1	0	0	0	1	1	0	1
New Castle																		
All Races	72	55	78	60	68	68	60	70	57	58	74	58	48	49	54	62	48	37
Non-Hispanic White	32	26	27	25	23	22	19	25	13	17	24	16	12	14	19	16	11	9
Non-Hispanic Black	33	22	37	27	30	35	27	36	33	29	34	28	27	20	23	27	26	23
Non-Hispanic Other	0	3	1	0	2	2	0	0	5	3	9	6	1	6	4	7	3	0
Wilmington																		
All Races	17	12	18	12	18	16	17	19	18	18	17	20	14	14	10	18	15	13
Non-Hispanic White	1	1	1	1	1	1	1	2	0	1	2	4	0	3	2	0	1	1
Non-Hispanic Black	14	10	13	8	14	14	14	10	15	13	15	11	11	7	4	14	10	12
Non-Hispanic Other	0	0	0	0	0	0	0	0	2	0	0	1	0	1	1	2	2	0
Balance of NC County																		
All Races	55	43	60	48	50	52	43	51	39	40	57	38	34	35	44	44	33	24
Non-Hispanic White	31	25	26	24	22	21	18	23	13	16	22	12	12	11	17	16	10	8
Non-Hispanic Black	19	12	24	19	16	21	13	26	18	16	19	17	16	13	19	13	16	11
Non-Hispanic Other	0	3	1	0	2	2	0	0	3	3	9	5	1	5	3	5	1	0
Sussex																		
All Races	23	14	13	20	17	18	22	13	16	15	7	9	14	12	23	11	16	12
Non-Hispanic White	13	4	6	10	7	10	10	5	5	10	5	3	5	5	11	5	7	5
Non-Hispanic Black	9	8	5	9	9	4	7	6	7	3	1	5	5	5	6	4	4	3
Non-Hispanic Other	1	0	0	1	0	1	0	0	2	1	0	0	0	0	1	0	0	1

Notes:

1. 2017 U.S. data based on NCHS estimate.
2. Infant deaths refer to deaths to children under one year of age.

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

TABLE E-2. NUMBER OF NEONATAL DEATHS BY RACE, COUNTY, AND CITY OF WILMINGTON, U.S., DELAWARE, 2001-2018

Area/ Race	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
U.S.																		
All Races	18,275	18,791	18,935	18,602	18,782	19,041	19,094	18,238	17,261	16,193	16,065	15,887	15893*	15,737	15,672	15,303	14,844	N/A
Non-Hispanic White	8,817	8,853	8,797	8,499	8,452	8,410	8,329	7,936	7,515	7,251	7,103	7,070	7119*	6,923	6,724	6,486	6,191	N/A
Non-Hispanic Black	5,293	5,399	5,335	5,283	5,332	5,525	5,484	5,159	4,957	4,395	4,437	4,354	4355*	4,361	4,348	4,323	4,150	N/A
Non-Hispanic Other	754	856	861	851	895	885	982	916	909	867	893	912	869*	869	937	925	924	N/A
Delaware																		
All Races	82	78	76	63	79	72	65	68	66	58	73	66	47	55	79	57	48	43
Non-Hispanic White	41	44	29	28	25	28	25	23	15	24	24	16	12	18	32	10	14	12
Non-Hispanic Black	35	28	36	28	39	33	28	35	39	25	35	34	25	20	31	27	22	23
Non-Hispanic Other	1	2	1	2	3	3	0	0	7	4	7	6	1	5	3	7	3	2
Kent																		
All Races	15	22	8	11	14	7	6	12	14	11	13	12	3	10	17	9	5	9
Non-Hispanic White	10	18	3	5	3	4	3	4	4	8	6	3	3	7	7	1	0	3
Non-Hispanic Black	4	4	4	5	10	3	3	5	10	2	3	8	0	2	6	5	5	5
Non-Hispanic Other	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	1	0	1
New Castle																		
All Races	54	46	57	39	54	52	43	48	42	36	57	47	34	37	49	43	36	27
Non-Hispanic White	24	22	22	16	17	15	14	16	9	8	16	12	6	7	17	7	11	6
Non-Hispanic Black	26	19	27	18	23	28	20	27	23	22	32	21	22	16	23	20	16	17
Non-Hispanic Other	0	2	1	0	2	2	0	0	5	3	6	6	1	5	3	6	3	0
Wilmington																		
All Races	14	9	11	9	15	12	10	10	14	10	14	18	11	12	10	15	9	9
Non-Hispanic White	1	1	0	1	1	0	1	0	0	0	1	4	0	3	2	0	1	1
Non-Hispanic Black	12	8	10	6	11	11	9	6	11	9	13	9	8	5	4	11	5	8
Non-Hispanic Other	0	0	0	0	0	0	0	0	2	0	0	1	0	1	1	2	2	0
Balance of NC County																		
All Races	40	37	46	30	39	40	33	38	28	26	43	29	23	25	39	28	27	18
Non-Hispanic White	23	21	22	15	16	15	13	16	9	8	15	8	6	4	15	7	10	5
Non-Hispanic Black	14	11	17	12	12	17	11	21	12	13	19	12	14	11	19	9	11	9
Non-Hispanic Other	0	2	1	0	2	2	0	0	3	3	6	5	1	4	2	4	1	0
Sussex																		
All Races	13	10	11	13	11	13	16	8	10	11	3	7	10	8	13	5	7	7
Non-Hispanic White	7	4	4	7	5	9	8	3	2	8	2	1	3	4	8	2	3	3
Non-Hispanic Black	5	5	5	5	6	2	5	3	6	1	0	5	3	2	2	2	1	1
Non-Hispanic Other	1	0	0	1	0	1	0	0	2	1	0	0	0	0	0	0	0	1

Notes:

1. 2017 U.S. data based on NCHS estimate.
2. Neonatal deaths refer to deaths of children under 28 days of age.

Sources: National Center for Health Statistics,

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

TABLE E-3. NUMBER OF POSTNEONATAL DEATHS BY RACE, COUNTY, AND CITY OF WILMINGTON, U.S., DELAWARE 2001-2018

Area/ Race	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
U.S.																		
All Races	9,248	9,179	9,060	9,258	9,602	9,468	10,059	9,837	9,147	8,379	7,936	7,767	7,553	7,474	7,786	7,854	7,497	N/A
Non-Hispanic White	4,483	4,474	4,431	4,502	4,682	4,474	4,676	4,573	4,270	3,941	3,783	3,689	3,647	3,592	3,720	3,718	3,329	N/A
Non-Hispanic Black	2,645	2,632	2,501	2,586	2,626	2,716	2,867	2,735	2,603	2,363	2,233	2,174	2,133	2,074	2,276	2,222	2,240	N/A
Non-Hispanic Other	520	433	470	483	485	483	534	536	488	457	445	451	411	404	464	455	478	N/A
Delaware																		
All Races	32	18	31	34	27	27	26	33	25	30	25	18	21	19	21	30	24	19
Non-Hispanic White	14	8	12	15	11	11	8	14	9	14	15	8	10	9	6	13	4	7
Non-Hispanic Black	15	7	13	16	14	11	10	14	13	10	3	9	8	9	7	12	15	10
Non-Hispanic Other	0	1	0	0	0	1	1	0	0	0	3	0	0	1	3	1	0	0
Kent																		
All Races	4	5	8	6	7	6	3	6	4	4	4	5	3	3	6	5	3	4
Non-Hispanic White	0	4	5	3	3	3	1	3	2	3	4	2	2	1	1	1	0	2
Non-Hispanic Black	4	1	3	3	4	2	1	2	2	1	0	2	1	2	3	3	2	2
Non-Hispanic Other	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0
New Castle																		
All Races	18	9	21	21	14	16	17	22	15	22	17	11	14	12	5	19	12	10
Non-Hispanic White	8	4	5	9	6	7	5	9	4	9	8	4	6	7	2	9	0	3
Non-Hispanic Black	7	3	10	9	7	7	7	9	10	7	2	7	5	4	0	7	10	6
Non-Hispanic Other	0	1	0	0	0	0	0	0	0	0	3	0	0	1	1	1	0	0
Wilmington																		
All Races	3	3	7	3	3	4	7	9	4	8	3	2	3	2	0	3	6	4
Non-Hispanic White	0	0	1	0	0	1	0	2	0	1	1	0	0	0	0	0	0	0
Non-Hispanic Black	2	2	3	2	3	3	5	4	4	4	2	2	3	2	0	3	5	4
Non-Hispanic 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	15	6	14	18	11	12	10	13	11	14	14	9	11	10	5	16	6	6
Non-Hispanic White	8	4	4	9	6	6	5	7	4	8	7	4	6	7	2	9	0	3
Non-Hispanic Black	5	1	7	7	4	4	2	5	6	3	0	5	2	2	0	4	5	2
Non-Hispanic Other	0	1	0	0	0	0	0	0	0	0	3	0	0	1	1	1	0	0
Sussex																		
All Races	10	4	2	7	6	5	6	5	6	4	4	2	4	4	10	6	9	5
Non-Hispanic White	6	0	2	3	2	1	2	2	3	2	3	2	2	1	3	3	4	2
Non-Hispanic Black	4	3	0	4	3	2	2	3	1	2	1	0	2	3	4	2	3	2
Non-Hispanic Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

Notes:

1. 2017 U.S. data based on NCHS estimate.
2. Postneonatal deaths refer to deaths of children 28 to 364 days of age.

Sources: National Center for Health Statistics

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

TABLE E- 4. FIVE-YEAR AVERAGE INFANT MORTALITY RATES BY RACE, COUNTY, AND CITY OF WILMINGTON, U.S., DELAWARE 2001-2018

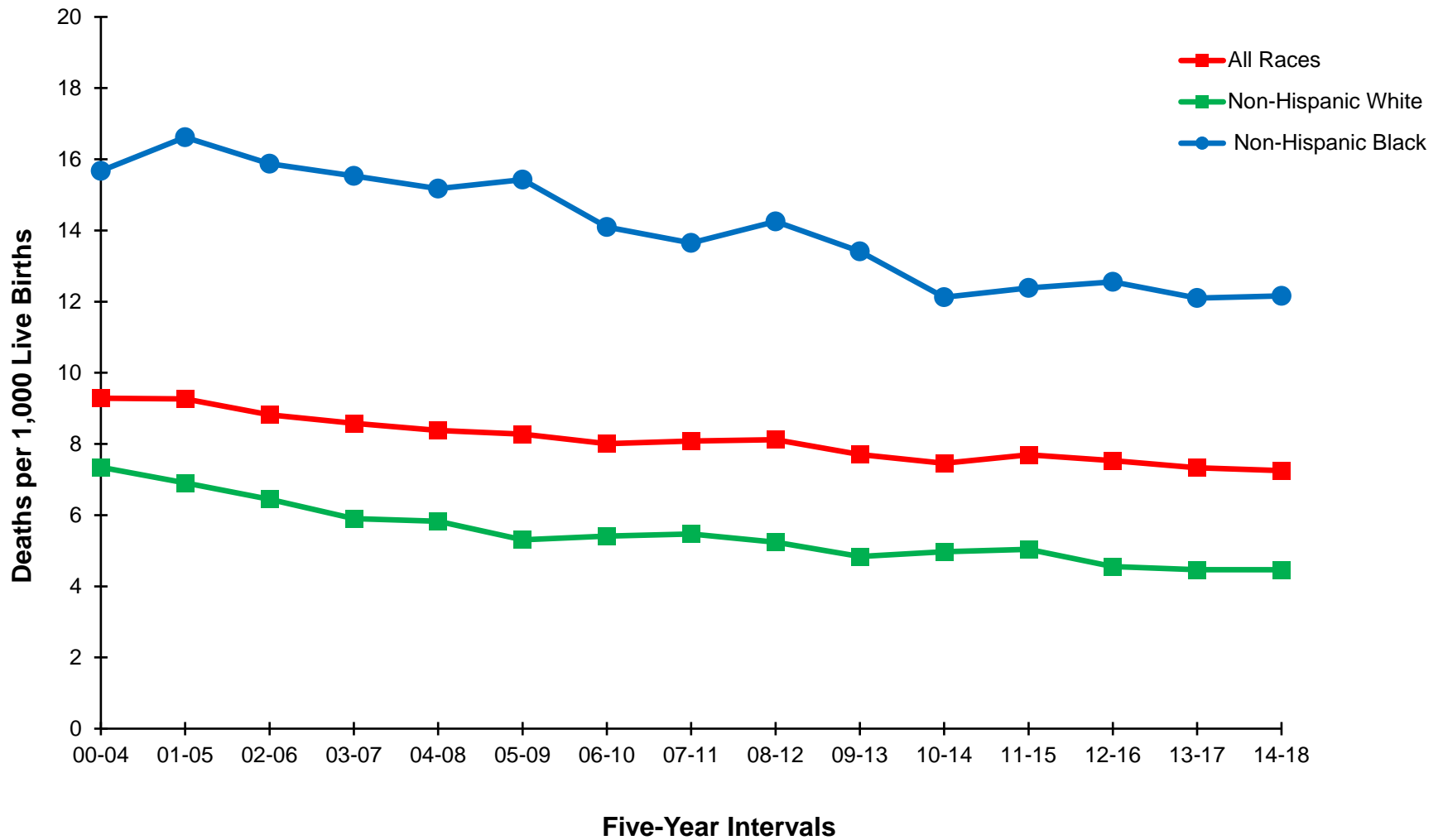
Area/ Race	2001 -2005	2002 -2006	2003 -2007	2004 -2008	2005 -2009	2006 -2010	2007 -2011	2008 -2012	2009 -2013	2010 -2014	2011 -2015	2012 -2016	2013 -2017	2014 -2018
U.S.														
All Races	6.9	6.8	6.8	6.7	6.7	6.5	6.4	6.2	6.1	6.0	5.9	5.9	5.9	N/A
Non-Hispanic White	5.7	5.7	5.7	5.6	5.6	5.4	5.3	5.2	5.1	5.0	5.0	5.0	4.9	N/A
Non-Hispanic Black	13.6	13.6	13.5	13.3	13.1	12.7	12.3	11.8	11.5	11.2	11.2	11.1	11.1	N/A
Delaware														
All Races	9.3+	8.8+	8.6+	8.4+	8.3+	8.0+	8.1+	8.1+	7.7+	7.5+	7.7+	7.5+	7.3+	7.3
Non-Hispanic White	6.9+	6.4	5.9	5.8	5.3	5.4	5.5	5.2	4.8	5.0	5.0	4.6	4.5	4.5
Non-Hispanic Black	16.6+	15.9+	15.5	15.2	15.4+	14.1	13.6	14.3+	13.4	12.1	12.4	12.6	12.1	12.2
Kent														
All Races	10.0	9.1	7.1	7.1	7.1	6.5	6.9	7.6	6.6	6.2	6.9	6.5	5.8	6.4
Non-Hispanic White	8.2	7.6	4.8	4.6	4.3	5.0	5.5	5.6	5.5	5.8	5.4	4.2	3.6	3.6
Non-Hispanic Black	16.5	14.8	13.6	13.3	14.2	10.2	9.5	11.6	9.6	7.0	8.9	10.3	9.1	11.0
New Castle														
All Races	9.4	9.2	9.2	9.0	9.0	8.8	9.1	9.3	8.8	8.7	8.6	8.4	8.1	7.8
Non-Hispanic White	6.6	6.2	6.0	6.1	5.6	5.3	5.5	5.4	4.8	4.9	5.1	4.8	4.6	4.6
Non-Hispanic Black	16.2	16.0	16.1	15.6	15.9	15.6	15.5	15.9	15.3	14.3	13.8	13.3	13.2	12.8
Wilmington														
All Races	12.8	12.3	13.0	13.0	13.8	14.1	14.8	16.1	15.9	15.8	14.6	15.1	14.3	14.5
Non-Hispanic White	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Non-Hispanic Black	16.2	15.9	16.9	15.7	17.1	17.4	18.5	18.7	20.2	19.2	16.3	16.4	16.3	16.9
Balance of NC County														
All Races	8.7	8.5	8.5	8.2	8.0	7.7	7.9	7.9	7.5	7.3	7.5	7.1	7.0	6.6
Non-Hispanic White	6.8	6.4	6.2	6.1	5.7	5.5	5.6	5.4	4.8	4.7	4.9	4.6	4.6	4.4
Non-Hispanic Black	16.1	16.0	15.6	15.5	15.1	14.5	13.8	14.4	12.9	12.2	12.6	11.9	11.8	11.1
Sussex														
All Races	8.2	7.5	7.9	7.6	7.2	7.0	6.2	5.2	5.4	5.1	5.8	6.1	6.7	6.5
Non-Hispanic White	6.4	5.9	6.7	6.4	5.6	6.0	5.4	4.3	4.3	4.3	4.5	4.4	5.1	5.1
Non-Hispanic Black	18.8	16.7	15.4	15.8	15.0	12.4	11.0	10.4	10.0	---	11.0	12.5	11.9	11.0

Notes:

1. 2013-2017 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.
'-' 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.

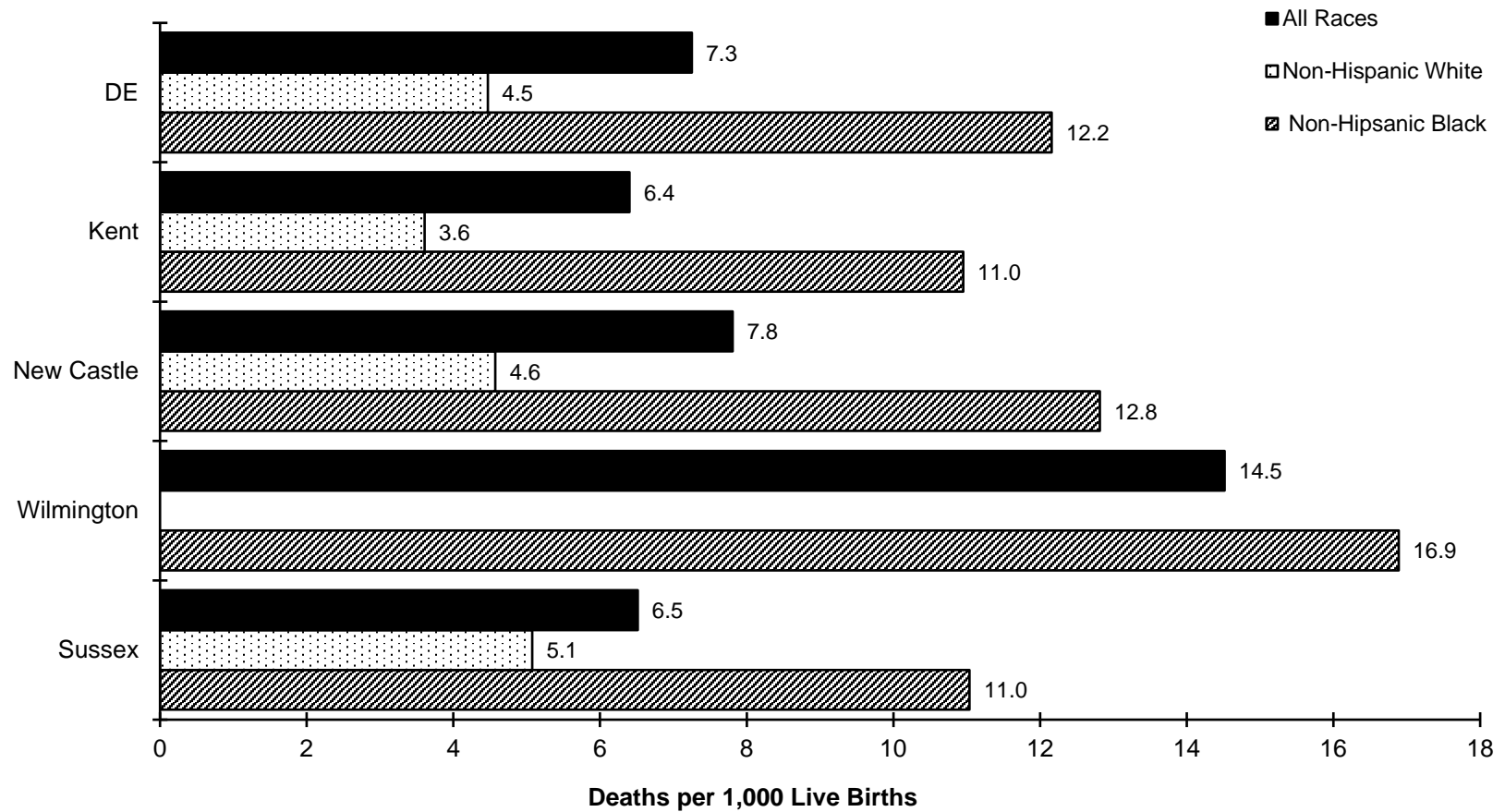
Sources: National Center for Health Statistics,
Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Figure E-1. Five-Year Average Infant Mortality Rates by Race, Delaware, 2000-2018



Source: Delaware Department of 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, 2014-2018



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

TABLE E-5. FIVE-YEAR AVERAGE NEONATAL MORTALITY RATES BY RACE, COUNTY, AND CITY OF WILMINGTON, U.S., DELAWARE 2001-2018

Area/ Race	2001 -2005	2002 -2006	2003 -2007	2004 -2008	2005 -2009	2006 -2010	2007 -2011	2008 -2012	2009 -2013	2010 -2014	2011 -2015	2012 -2016	2013 -2017	2014 -2018
U.S.														
All Races	4.6	4.6	4.5	4.4	4.4	4.3	4.2	4.1	4.1	4.0	4.0	4.0	3.9	N/A
Non-Hispanic White	3.8	3.7	3.7	3.6	3.6	3.5	3.4	3.4	3.3	3.3	3.3	3.2	3.2	N/A
Non-Hispanic Black	9.2	9.2	9.0	8.8	8.6	8.3	8.1	7.8	7.6	7.5	7.5	7.4	7.3	N/A
Delaware														
All Races	6.7+	6.4+	6.1+	5.9+	5.9+	5.6+	5.7+	5.8+	5.6+	5.4+	5.8+	5.5+	5.2	5.2
Non-Hispanic White	5.1+	4.7+	4.2	4.0	3.6	3.6	3.5	3.3	3.0	3.1	3.4	3.0	3	3.1
Non-Hispanic Black	11.9+	11.6+	11.2+	10.8+	11.4+	10.3+	10.4+	11.0+	10.5+	9.5+	9.9+	9.5+	8.6	8.5
Kent														
All Races	7.0	6.0	4.3	4.6	4.7	4.4	5.0	5.6	4.8	4.4	5.0	4.6	4.0	4.5
Non-Hispanic White	6.0	4.9	---	---	---	3.3	3.6	3.6	3.5	4.0	3.9	3.2	---	---
Non-Hispanic Black	10.6	9.9	9.0	9.1	10.5	7.6	7.5	9.3	7.6	---	---	6.8	---	7.2
New Castle														
All Races	7.1	6.9	6.8	6.5	6.7	6.2	6.4	6.7	6.5	6.4	6.8	6.5	6.2	6.0
Non-Hispanic White	5.0	4.7	4.4	4.1	3.9	3.5	3.5	3.5	3.0	2.9	3.5	3.0	3.1	3.2
Non-Hispanic Black	12.2	12.2	12.0	11.7	11.9	11.7	12.1	12.4	12.1	11.7	11.9	10.9	10.4	9.9
Wilmington														
All Races	9.6	9.1	9.2	8.9	9.6	9.0	9.7	11.6	12.2	12.4	12.6	13.2	11.4	11.4
Non-Hispanic White	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Non-Hispanic Black	12.9	12.4	12.6	11.2	12.3	12.1	13.2	14.0	15.6	14.8	13.3	12.9	11.7	11.9
Balance of NC County														
All Races	6.5	6.5	6.3	6.0	6.0	5.6	5.8	5.8	5.3	5.3	5.7	5.3	5.2	5.0
Non-Hispanic White	5.2	4.8	4.5	4.3	4.1	3.7	3.7	3.5	2.9	2.6	3.2	2.7	2.9	2.9
Non-Hispanic Black	11.8	12.0	11.6	11.9	11.7	11.4	11.4	11.6	10.5	10.4	11.3	9.9	9.8	9.1
Sussex														
All Races	5.5	5.3	5.6	5.2	4.9	4.9	4.1	3.4	3.6	3.5	3.7	3.8	3.8	3.5
Non-Hispanic White	4.3	4.6	5.1	4.9	4.1	4.5	3.5	---	---	---	---	---	3.1	3.1
Non-Hispanic Black	12.2	10.9	10.4	9.5	10.0	---	---	---	---	---	---	---	---	---

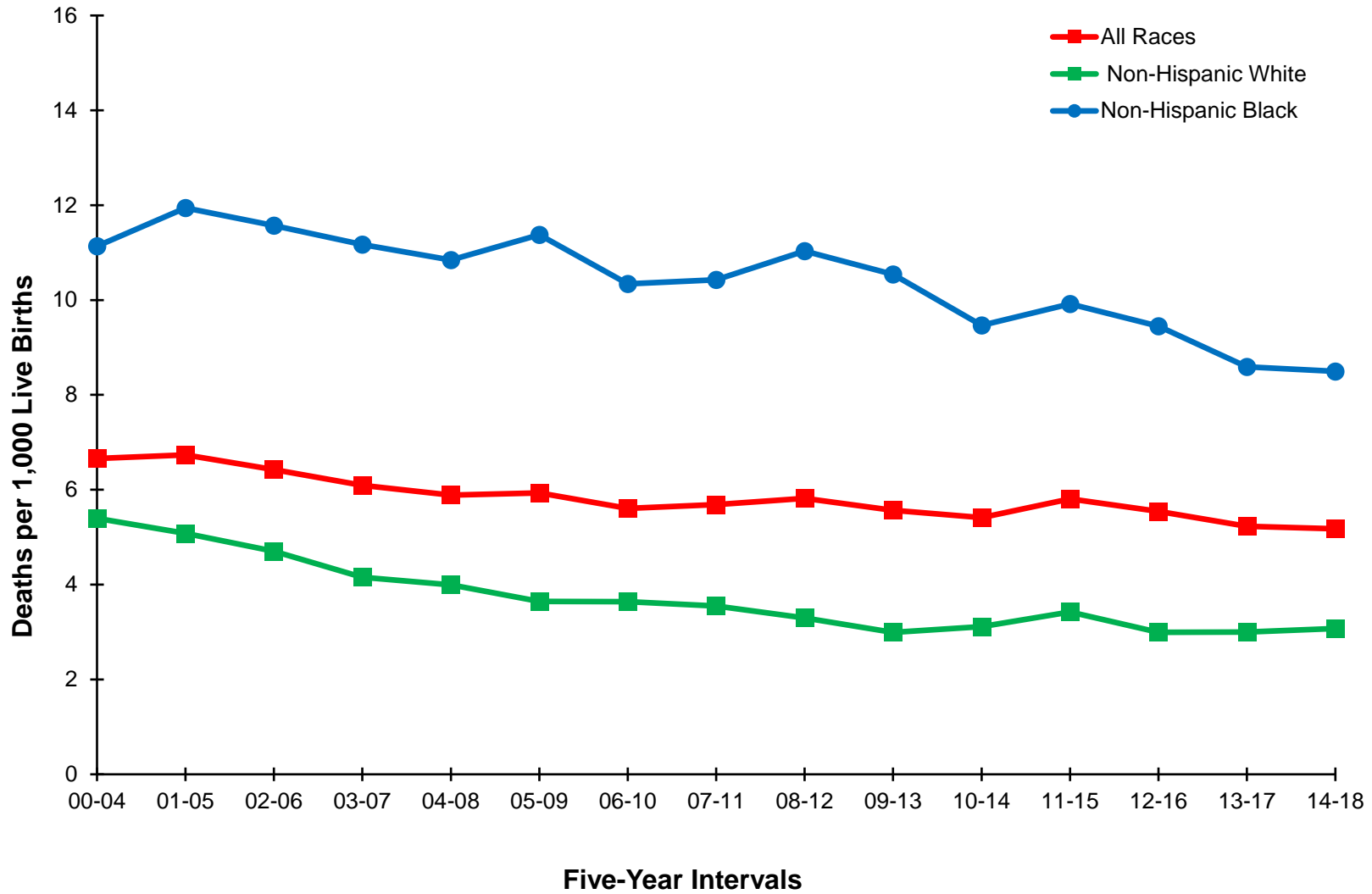
Notes:

1. 2013-2017 U.S. data are based on NCHS estimates.
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 Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Figure E-3. Five-Year Average Neonatal Mortality Rates by Race, Delaware, 2000-2018



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

TABLE E-6. FIVE-YEAR AVERAGE POSTNEONATAL MORTALITY RATES BY RACE, COUNTY, AND CITY OF WILMINGTON, U.S., DELAWARE, 2001-2018

Area/ Race	2002 -2006	2003 -2007	2004 -2008	2005 -2009	2006 -2010	2007 -2011	2008 -2012	2009 -2013	2010 -2014	2011 -2015	2012 -2016	2013 -2017	2014 -2018
U.S.													
All Races	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.9	N/A
Non-Hispanic White	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.7	1.7	1.7	1.7	N/A
Non-Hispanic Black	4.5	4.5	4.5	4.4	4.3	4.2	4.1	3.9	3.7	3.7	3.7	3.7	N/A
Delaware													
All Races	2.4	2.5	2.5	2.3	2.4	2.4	2.3	2.1	2.0	1.9	2.0	2.1	2.1
White Non-Hispanic	1.7	1.8	1.8	1.7	1.8	1.9	1.9	1.8	1.9	1.6	1.6	1.5	1.4
Black Non-Hispanic	4.3	4.4	4.3	4.1	3.7	3.2-	3.2	2.9-	2.7-	2.5-	3.1	3.5	3.7
Kent													
All Races	3.1	2.8	2.6	2.3	2.0	1.9	2.1	1.8	---	1.9	2.0	1.8	1.9
Non-Hispanic White	---	---	---	---	---	---	---	---	---	---	---	---	---
Non-Hispanic Black	---	---	---	---	---	---	---	---	---	---	---	---	---
New Castle													
All Races	2.3	2.5	2.5	2.3	2.6	2.7	2.5	2.4	2.3	1.8	1.9	1.9	1.8
Non-Hispanic White	1.6	1.7	1.9	1.7	1.9	2.0	2.0	1.8	2.0	1.6	1.7	1.5	1.4
Non-Hispanic Black	3.8	4.1	3.9	3.9	3.9	3.4	3.5	3.1	2.6	---	2.4	2.8	2.9
Wilmington													
All Races	3.2	3.9	4.1	4.2	5.1	5.2	4.6	3.7	---	---	---	---	---
Non-Hispanic White	---	---	---	---	---	---	---	---	---	---	---	---	---
Non-Hispanic Black	---	---	---	---	5.3	---	---	---	---	---	---	---	---
Balance of NC County													
All Races	2.1	2.2	2.1	1.9	2.1	2.1	2.1	2.1	2.1	1.8	1.9	1.8	1.6
Non-Hispanic White	1.6	1.7	1.9	1.6	1.8	1.9	1.9	1.8	2.1	1.7	1.9	1.7	1.5
Non-Hispanic Black	4.0	4.0	3.6	3.4	3.1	---	---	---	---	---	---	---	---
Sussex													
All Races	2.2	2.3	2.4	2.3	2.2	2.1	1.8	1.8	---	2.1	2.3	2.9	3.0
Non-Hispanic White	---	---	---	---	---	---	---	---	---	---	---	---	---
Non-Hispanic Black	---	---	---	---	---	---	---	---	---	---	---	---	---

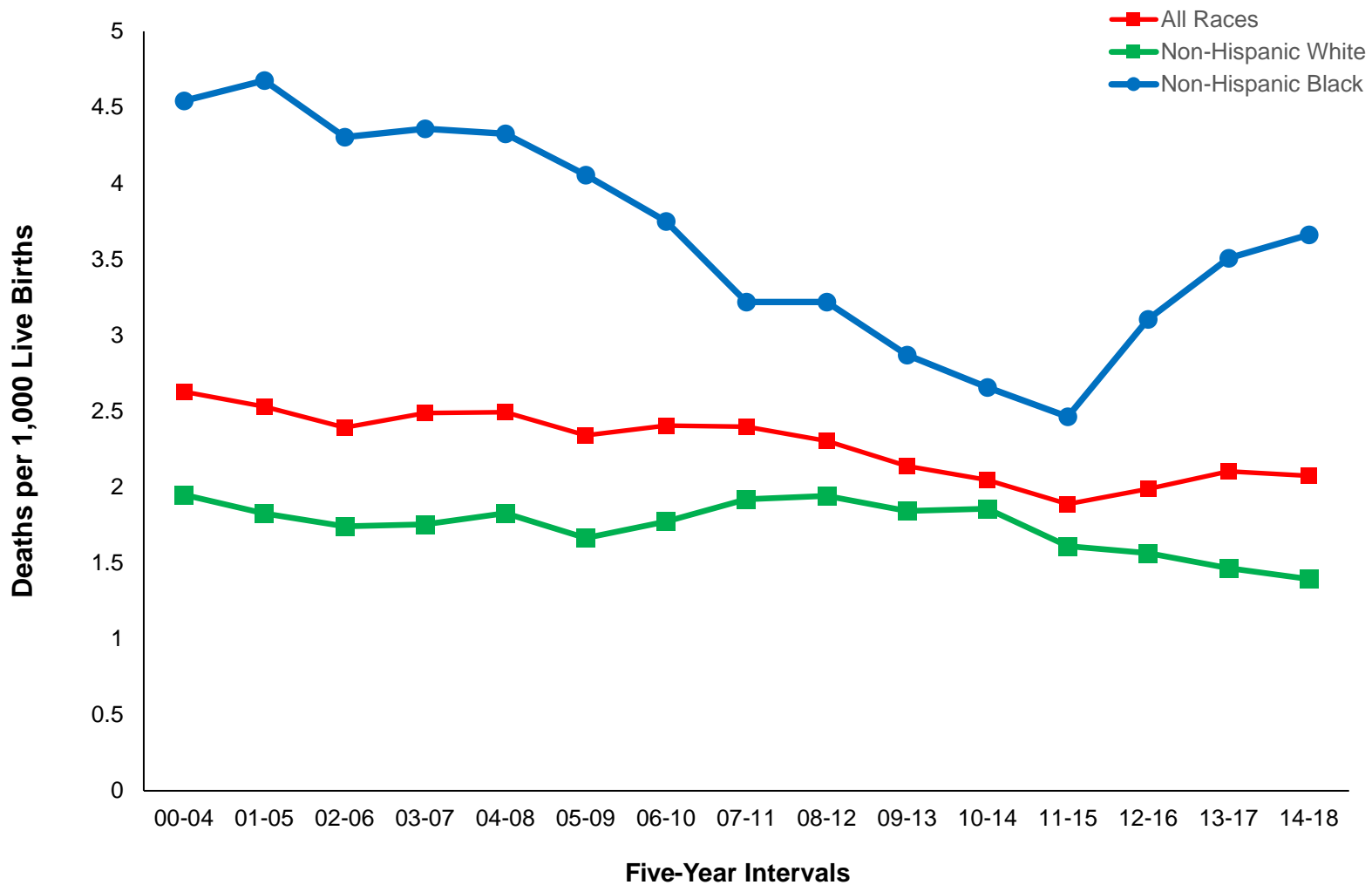
Notes:

1. 2013-2017 U.S. data are based on NCHS estimates.
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 Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Figure E-4. Five-Year Average Postneonatal Mortality Rates by Race, Delaware, 2000-2018



Source: Delaware Department of 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, 2013-2017 LIVE BIRTH COHORT

Risk Factor	Non-Hispanic		
	All	White	Black
Birth Weight of Child			
<2500	58.2	44.2	71.0
<1500	247.2	218.0	268.1
1500-2499	10.7	---	---
2500+	2.0	1.8	2.9
Age of Mother			
<20	7.5	---	---
20-24	8.8	7.2	13.0
25-29	6.8	4.7	10.8
30+	6.1	3.8	12.6
Marital Status of Mother			
Married	42.4	3.4	8.2
Single	53.0	7.5	13.4
Education of Mother			
<12 years	7.8	7.4	11.1
H.S. diploma	10.0	7.2	15.1
1+ years college	5.1	3.6	9.1
Interval Since Last Live Birth			
<18 months	9.5	---	---
18+ months	4.5	3.1	8.6

Notes:

1. Infant mortality rates represent the number of deaths to children under one year of age per 1,000 live births.
2. "----" indicates rate does not meet standard of reliability or precision; based on fewer than 20 deaths in the numerator

Source: Delaware Department of 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, 2013-2017 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	80	0	1	0	81	98.8	98.8
Newborn affected by maternal complications of pregnancy	47	2	1	0	50	94.0	98.0
Congenital malformations, deformations, and chromosomal abnormalities	10	14	24	0	48	20.8	50.0
Respiratory distress of newborn	16	0	1	0	17	94.1	94.1
Sudden infant death syndrome	0	2	15	0	17	0.0	11.8
Newborn affected by complications of placenta, cord, and membranes	16	0	0	0	16	100.0	100.0
Accidents (unintentional injuries)	1	2	9	0	12	8.3	25.0
Diarrhea and gastroenteritis of infectious origin	10	0	0	0	10	100.0	100.0
Bacterial sepsis of newborn	6	1	2	0	9	66.7	77.8
Diseases of the circulatory system	0	1	6	0	7	0.0	14.3
Intrauterine hypoxia and birth asphyxia	4	1	2	0	7	57.1	71.4
Volume depletion, disorders of fluid, electrolyte and acid-base balance	3	0	1	1	5	60.0	60.0
Necrotizing enterocolitis of newborn	4	0	1	0	5	80.0	80.0
Assault (homicide)	0	1	4	0	5	0.0	20.0
Septicemia	4	0	0	0	4	100.0	100.0
Atelectasis	4	0	0	0	4	100.0	100.0
Newborn affected by other complications of labor and delivery	3	0	0	0	3	100.0	100.0
Neonatal hemorrhage	1	2	0	0	3	33.3	100.0
involving the immune mechanism	1	0	1	0	2	50.0	50.0
Anoxic brain damage, not elsewhere classified	0	0	2	0	2	0.0	0.0
All other causes	9	1	3	0	13	69.2	76.9
TOTAL	219	27	73	1	320	68.4	76.9

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 Department of 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 LIVE BIRTH COHORT, 2001-2017

Parameter/ Race	2001 -2005	2002 -2006	2003 -2007	2004 -2008	2005 -2009	2006 -2010	2007 -2011	2008 -2012	2009 -2013	2010 -2014	2011 -2015	2012 -2016	2013 -2017
BIRTHWEIGHT													
2500+													
All Races	2.2	2.2	2.3	2.0	1.9	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.0
Non-Hispanic White	1.9	1.7	1.8	1.6	1.6	2.0	2.3	2.4	2.5	2.4	2.2	2.0	1.8
Non-Hispanic Black	3.5	3.6	3.4	2.9	2.7	2.6	2.2	2.5	2.5	2.5	2.6	2.6	2.9
<2500													
All Races	74.5	69.9	68.8	69.2	70.6	65.5	67.1	68.2	64.6	61.7	64.6	62.2	58.2
Non-Hispanic White	67.3	62.9	58.4	59.8	55.5	54.5	52.3	51.1	46.9	47.1	49.4	48.1	44.2
Non-Hispanic Black	88.1	81.1	82.6	84.2	90.1	82.1	86.5	88.9	83.3	76.3	79.6	74.7	71.0
<1500													
All Races	313.9	289.4	285.8	286.8	279.3	260.8	264.7	267.6	258.6	253.1	267.7	263.8	247.2
Non-Hispanic White	310.3	283.9	270.5	268.1	240.6	228.6	222.5	215.2	203.9	209.0	228.3	221.4	218.0
Non-Hispanic Black	316.3	289.1	285.7	290.9	298.0	283.3	295.2	308.6	296.5	277.2	289.4	290.9	268.1
GESTATION													
37+ weeks													
All Races	2.2	2.2	2.3	2.0	2.0	2.4	2.6	2.6	2.5	2.6	2.5	2.2	2.2
Non-Hispanic White	1.8	1.7	1.9	1.8	1.7	2.3	2.7	2.7	2.7	2.8	2.3	2.0	1.7
Non-Hispanic Black	3.4	3.4	3.4	2.8	2.6	2.7	2.6	2.7	2.7	2.9	3.1	3.0	3.4
<37 weeks													
All Races	53.5	49.1	47.1	47.0	47.3	43.6	44.3	45.5	44.0	41.5	44.8	43.3	40.4
Non-Hispanic White	45.4	40.5	36.8	36.8	35.0	34.2	33.0	32.3	31.2	28.9	32.8	33.0	30.4
Non-Hispanic Black	73.0	68.4	67.3	68.5	71.5	64.4	66.8	69.6	65.6	60.1	63.0	58.5	55.6
<32 weeks													
All Races	249.1	232.4	220.4	220.4	216.9	195.0	195.7	198.7	190.8	178.9	189.6	186.9	177.0
Non-Hispanic White	241.7	215.6	192.6	191.1	178.3	160.1	154.9	146.2	137.7	130.1	144.2	144.6	141.8
Non-Hispanic Black	260.3	249.2	245.6	254.0	258.1	236.5	241.2	249.6	235.5	216.0	226.1	225.0	212.5
PLURALITY													
Single													
All Races	7.4	7.1	7.2	7.0	7.0	7.0	7.0	6.9	6.7	6.3	6.4	6.1	5.9
Non-Hispanic White	5.6	5.2	5.2	5.1	4.7	5.3	5.4	5.2	5.1	4.8	4.6	4.4	4.0
Non-Hispanic Black	13.7	13.0	12.8	12.2	12.6	11.8	11.7	11.8	11.5	10.6	10.9	10.4	10.6
Plural													
All Races	52.0	47.0	44.0	40.3	41.0	32.6	34.2	35.0	34.5	36.1	42.6	43.4	37.7
Non-Hispanic White	42.6	37.3	30.2	26.5	26.2	21.0	20.8	22.0	22.2	27.0	33.3	35.2	31.0
Non-Hispanic Black	65.0	59.7	64.4	68.6	70.4	54.9	54.9	56.6	46.6	40.5	47.5	50.4	43.0
SMOKING DURING PREGNANCY													
No													
All Races	8.2	7.9	7.7	7.4	7.6	7.4	7.4	7.4	7.2	6.7	6.9	6.6	6.4
Non-Hispanic White	5.9	5.8	5.3	5.1	4.9	5.5	5.4	5.5	5.3	4.9	4.7	4.5	4.0
Non-Hispanic Black	14.8	13.7	13.5	13.2	13.8	12.8	13.0	13.3	12.5	11.6	12.0	11.2	11.1
Yes													
All Races	15.1	13.4	13.9	13.3	12.1	10.7	10.8	10.0	9.7	10.7	11.5	12.1	11.9
Non-Hispanic White	13.4	10.4	10.8	10.8	8.7	8.2	8.5	7.3	6.9	8.8	10.0	10.4	10.0
Non-Hispanic Black	22.3	24.2	24.2	21.6	21.9	17.8	16.1	16.2	16.0	14.4	15.0	17.6	18.3

TABLE E-9. FIVE-YEAR AVERAGE INFANT MORTALITY RATES BY RACE AND SELECTED RISK MARKERS, DELAWARE, LIVE BIRTH COHORT, 2001-2017 (continued)

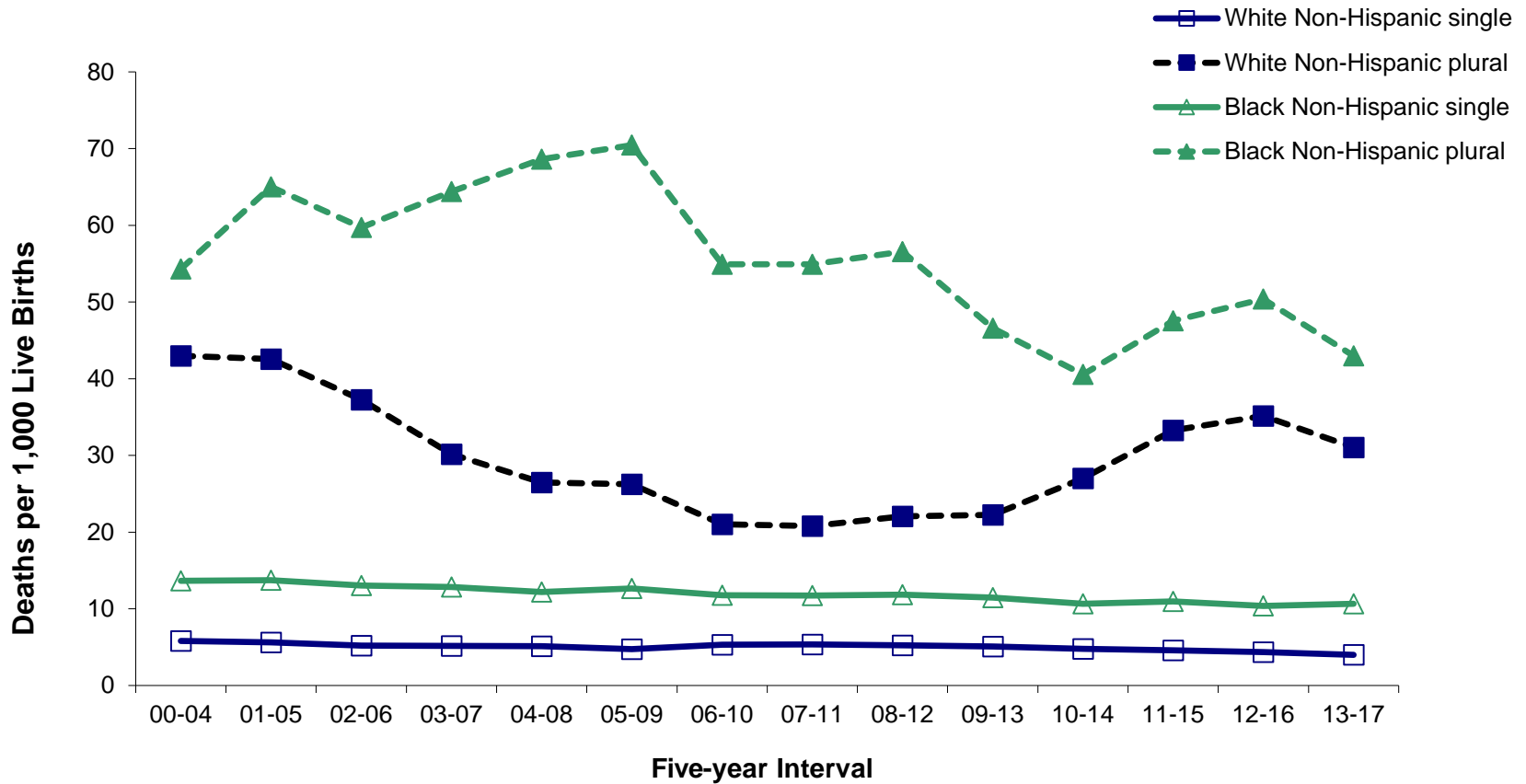
Parameter/ Race	2001 -2005	2002 -2006	2003 -2007	2004 -2008	2005 -2009	2006 -2010	2007 -2011	2008 -2012	2009 -2013	2010 -2014	2011 -2015	2012 -2016	2013 -2017
EDUCATION													
HS Grad or less													
All Races	11.1	10.7	10.8	10.1	10.0	10.0	10.0	9.5	9.5	8.8	9.3	8.9	9.2
Non-Hispanic White	9.3	8.9	8.8	8.5	8.1	8.6	8.3	7.8	7.7	7.2	7.8	7.5	7.3
Non-Hispanic Black	17.4	16.6	16.4	15.3	15.4	14.8	15.0	15.3	15.1	13.7	14.2	13.3	13.9
1+ yrs college													
All Races	6.3	5.8	5.4	5.6	5.9	5.6	5.8	6.2	5.7	5.7	5.9	5.7	5.1
Non-Hispanic White	5.1	4.3	4.0	4.0	3.8	4.1	4.5	4.7	4.4	4.5	4.3	4.1	3.6
Non-Hispanic Black	12.1	11.2	11.1	11.5	13.1	11.2	10.8	11.0	9.7	9.2	9.6	9.5	9.1
PAYMENT FOR DELIVERY													
Medicaid													
All Races	10.2	9.6	10.4	10.2	9.9	9.5	9.3	8.8	8.5	8.2	8.7	8.7	8.2
Non-Hispanic White	9.2	8.5	8.9	9.2	8.2	8.4	7.3	7.1	6.7	6.8	7.1	7.6	6.8
Non-Hispanic Black	14.8	13.9	14.5	14.1	14.0	12.9	13.5	13.5	13.0	12.2	12.6	11.8	11.2
Private Insurance													
All Races	7.6	7.4	6.7	6.4	6.6	6.4	6.4	6.6	6.4	6.2	6.2	5.9	5.8
Non-Hispanic White	5.6	5.3	4.7	4.5	4.3	4.6	5.1	4.9	4.9	4.6	4.5	4.0	3.8
Non-Hispanic Black	17.1	16.7	15.5	14.9	16.3	14.8	13.4	13.9	12.6	11.3	12.2	12.0	13.0

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.

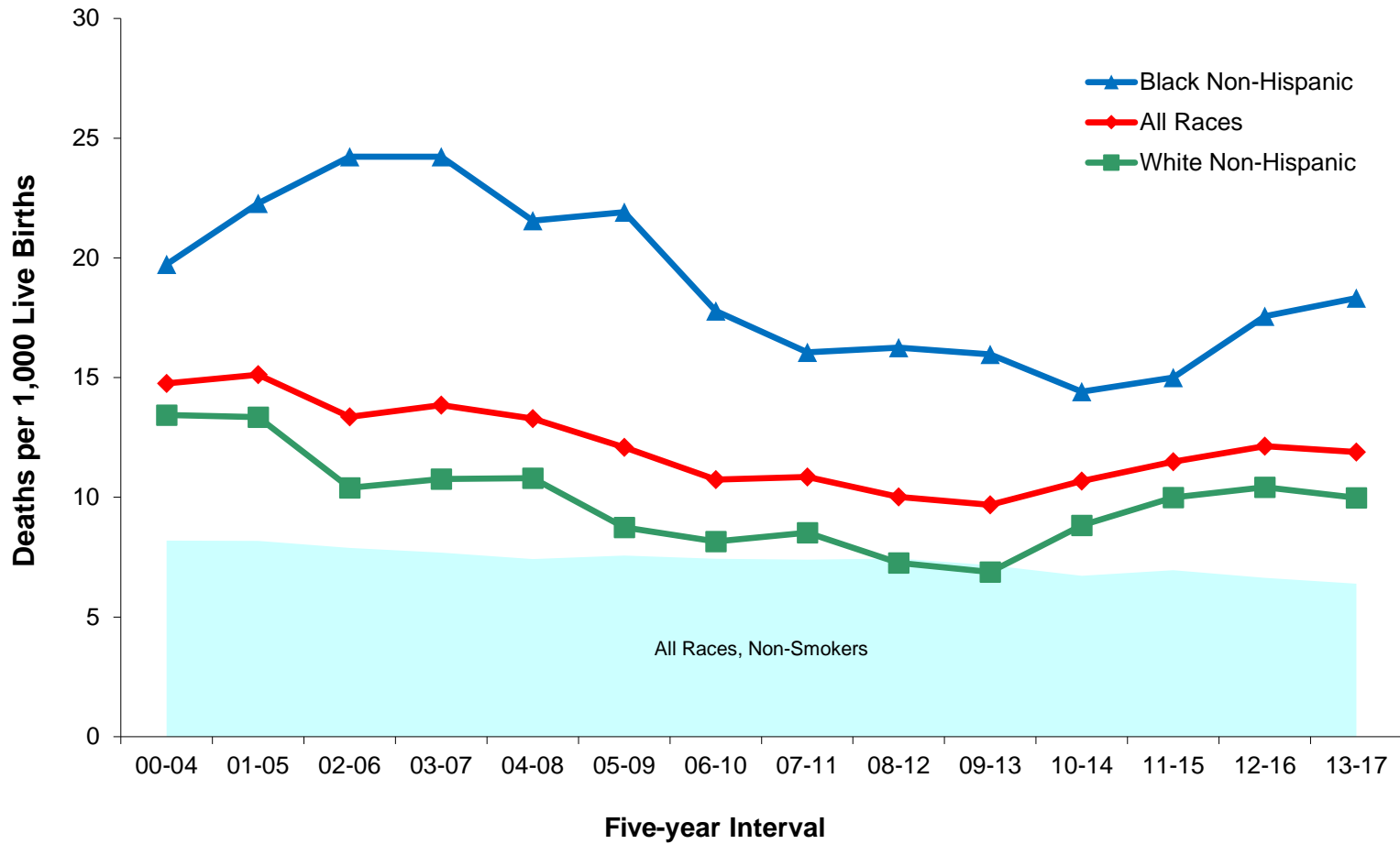
Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Figure E-5. Five-year Average Infant Mortality Rates by Race and Plurality, Delaware, 2000-2017 Live Birth Cohort



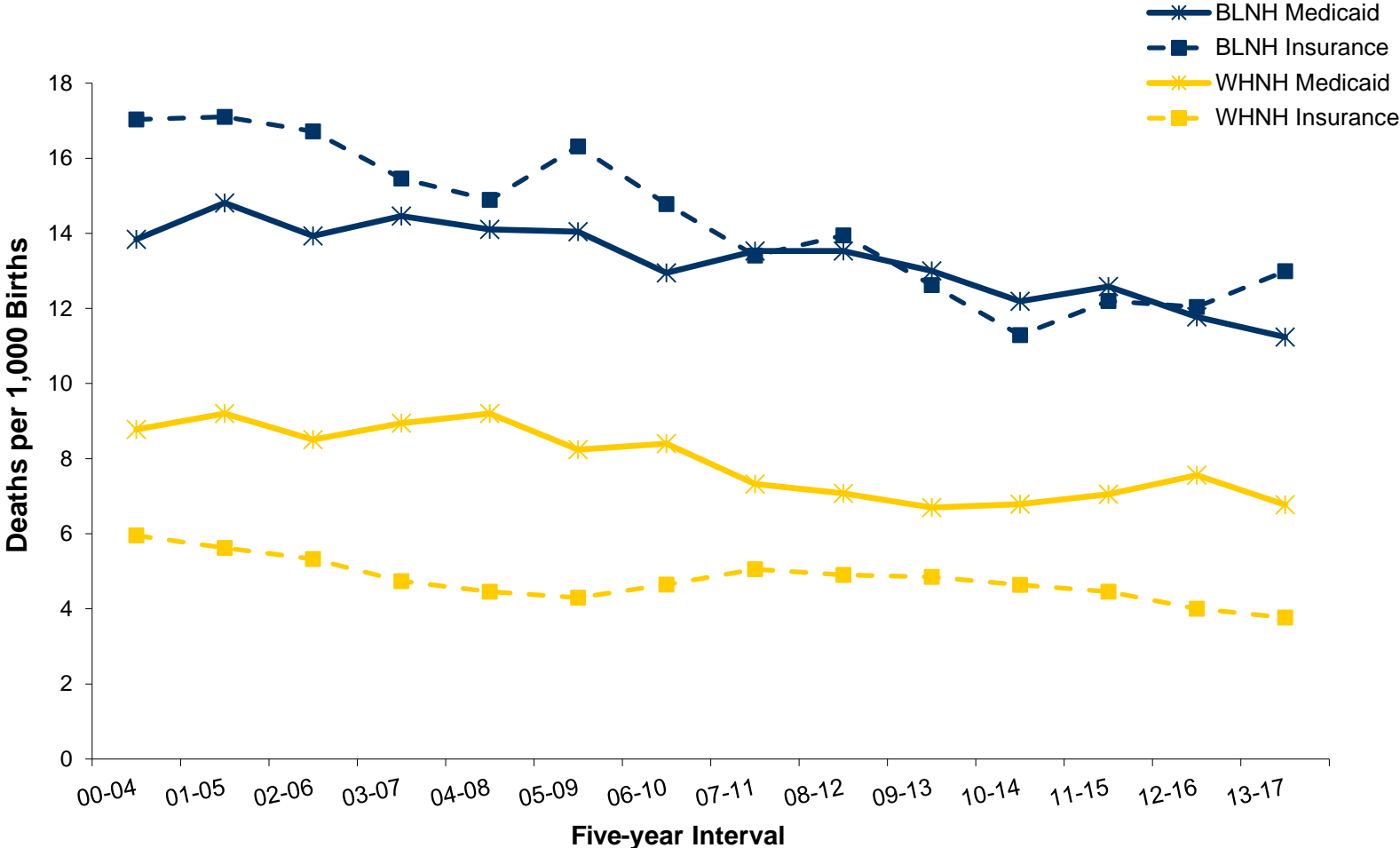
Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Figure E-6. Five-year Average Infant Mortality Rates by Race of Mothers who Smoked during Pregnancy versus all Non-smoking Mothers, Delaware, 2000-2017 Live Birth Cohort



Source: Delaware Department of 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, 2000-2017 Live Birth Cohort



Source: Delaware Department of 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, 2013-2017, LIVE BIRTH COHORT

Plurality/ Birth Weight	Race and Sex											
	All Races			Non-Hispanic White			Non-Hispanic Black			Non-Hispanic Other/Unknown		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
All Births	380	198	182	138	66	72	172	95	77	18	8	10
<2500	280	144	136	89	44	45	136	72	64	14	5	9
<1500	239	127	112	75	36	39	122	67	55	12	5	7
<500	131	65	66	34	14	20	79	41	38	8	3	5
500-999	92	58	34	32	19	13	39	26	13	3	1	2
1000-1499	16	4	12	9	3	6	4	0	4	1	1	0
1500-1999	14	5	9	3	2	1	4	1	3	2	0	2
2000-2499	27	12	15	11	6	5	10	4	6	0	0	0
2500+	99	54	45	48	22	26	36	23	13	4	3	1
2500-2999	40	22	18	21	9	12	11	7	4	2	2	0
3000-3499	33	17	16	12	5	7	16	11	5	2	1	1
3500-3999	14	7	7	7	3	4	5	2	3	0	0	0
4000-4499	10	7	3	7	4	3	3	3	0	0	0	0
4500+	2	1	1	1	1	0	1	0	1	0	0	0
Unknown	1	0	1	1	0	1	0	0	0	0	0	0
Single Births	315	167	148	111	53	58	149	84	65	16	6	10
<2500	221	116	105	66	33	33	114	61	53	12	3	9
<1500	185	102	83	54	27	27	101	57	44	10	3	7
<500	99	49	50	23	9	14	63	33	30	7	2	5
500-999	73	51	22	24	16	8	34	24	10	3	1	2
1000-1499	13	2	11	7	2	5	4	0	4	0	0	0
1500-1999	10	3	7	2	1	1	3	0	3	2	0	2
2000-2499	26	11	15	10	5	5	10	4	6	0	0	0
2500+	93	51	42	44	20	24	35	23	12	4	3	1
2500-2999	38	21	17	21	9	12	10	7	3	2	2	0
3000-3499	30	16	14	9	4	5	16	11	5	2	1	1
3500-3999	13	6	7	6	2	4	5	2	3	0	0	0
4000-4499	10	7	3	7	4	3	3	3	0	0	0	0
4500+	2	1	1	1	1	0	1	0	1	0	0	0
Unknown	1	0	1	1	0	1	0	0	0	0	0	0
Plural Births	65	31	34	27	13	14	23	11	12	2	2	0
<2500	59	28	31	23	11	12	22	11	11	2	2	0
<1500	54	25	29	21	9	12	21	10	11	2	2	0
<500	32	16	16	11	5	6	16	8	8	1	1	0
500-999	19	7	12	8	3	5	5	2	3	0	0	0
1000-1499	3	2	1	2	1	1	0	0	0	1	1	0
1500-1999	4	2	2	1	1	0	1	1	0	0	0	0
2000-2499	1	1	0	1	1	0	0	0	0	0	0	0
2500+	6	3	3	4	2	2	1	0	1	0	0	0
2500-2999	2	1	1	0	0	0	1	0	1	0	0	0
3000-3499	3	1	2	3	1	2	0	0	0	0	0	0
3500-3999	1	1	0	1	1	0	0	0	0	0	0	0
4000-4499	0	0	0	0	0	0	0	0	0	0	0	0
4500+	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	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 Department of 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, 2013-2017 LIVE BIRTH COHORT

Plurality/ Birth Weight	Race and Sex											
	All Races			Non-Hispanic White			Non-Hispanic Black			Non-Hispanic Other		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
All Births	380	198	182	95	47	48	125	71	54	14	6	8
<2500	280	144	136	77	36	41	114	63	51	11	4	7
<1500	239	127	112	69	32	37	111	63	48	11	4	7
<500	131	65	66	34	14	20	79	41	38	8	3	5
500-999	92	58	34	27	16	11	30	22	8	2	0	2
1000-1499	16	4	12	8	2	6	2	0	2	1	1	0
1500-1999	14	5	9	0	0	0	1	0	1	0	0	0
2000-2499	27	12	15	8	4	4	2	0	2	0	0	0
2500+	32	21	11	18	11	7	11	8	3	3	2	1
2500-2999	40	22	18	9	5	4	2	2	0	2	2	0
3000-3499	33	17	16	3	3	0	7	5	2	1	0	1
3500-3999	14	7	7	2	2	0	1	0	1	0	0	0
4000-4499	10	7	3	3	0	3	1	1	0	0	0	0
4500+	2	1	1	1	1	0	0	0	0	0	0	0
Unknown	1	0	1	0	0	0	0	0	0	0	0	0
Single Births	315	167	148	74	37	37	106	61	45	12	4	8
<2500	221	116	105	57	27	30	95	53	42	9	2	7
<1500	185	102	83	50	24	26	92	53	39	9	2	7
<500	99	49	50	23	9	14	63	33	30	7	2	5
500-999	73	51	22	20	13	7	27	20	7	2	0	2
1000-1499	13	2	11	7	2	5	2	0	2	0	0	0
1500-1999	10	3	7	0	0	0	1	0	1	0	0	0
2000-2499	26	11	15	7	3	4	2	0	2	0	0	0
2500+	93	51	42	17	10	7	11	8	3	3	2	1
2500-2999	38	21	17	9	5	4	2	2	0	2	2	0
3000-3499	30	16	14	2	2	0	7	5	2	1	0	1
3500-3999	13	6	7	2	2	0	1	0	1	0	0	0
4000-4499	10	7	3	3	0	3	1	1	0	0	0	0
4500+	2	1	1	1	1	0	0	0	0	0	0	0
Unknown	1	0	1	0	0	0	0	0	0	0	0	0
Plural Births	65	31	34	21	10	11	19	10	9	2	2	0
<2500	59	28	31	20	9	11	19	10	9	2	2	0
<1500	54	25	29	19	8	11	19	10	9	2	2	0
<500	32	16	16	11	5	6	16	8	8	1	1	0
500-999	19	7	12	7	3	4	3	2	1	0	0	0
1000-1499	3	2	1	1	0	1	0	0	0	1	1	0
1500-1999	4	2	2	0	0	0	0	0	0	0	0	0
2000-2499	1	1	0	1	1	0	0	0	0	0	0	0
2500+	6	3	3	1	1	0	0	0	0	0	0	0
2500-2999	2	1	1	0	0	0	0	0	0	0	0	0
3000-3499	3	1	2	1	1	0	0	0	0	0	0	0
3500-3999	1	1	0	0	0	0	0	0	0	0	0	0
4000-4499	0	0	0	0	0	0	0	0	0	0	0	0
4500+	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	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 Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center