

Delaware Vital Statistics Annual Report, 2007



Infant Mortality

Photo courtesy of the Delaware Tourism Office

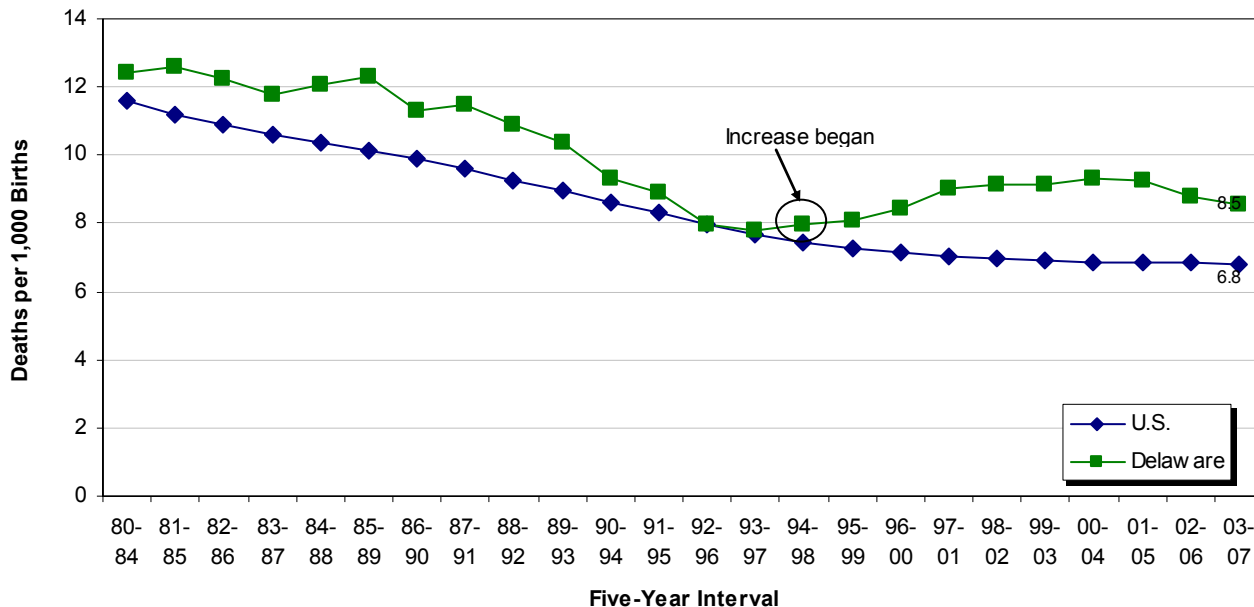
Suggested citation:

Delaware Health Statistics Center. *Delaware Vital Statistics Annual Report, 2007*.
Delaware Department of Health and Social Services, Division of Public Health: 2010.

INFANT MORTALITY

Delaware's infant mortality rate (IMR) decreased for the second consecutive time period. From 2002-2006 to 2003-2007, it declined 3 percent, from 8.8 infant deaths per 1000 live births in 2002-2006 to 8.5 in 2003-2007. The U.S. rate held steady at 6.8, and remained significantly lower than the Delaware rate.

**Five-year Average Infant Mortality Rates
Delaware and U.S., 1980-2007**

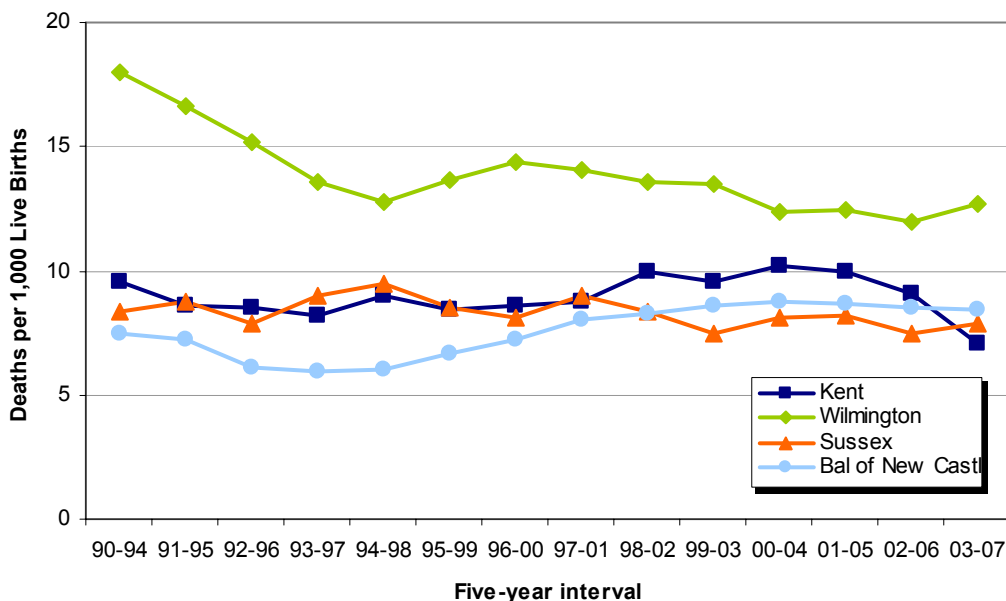


Source: Delaware health Statistics Center

IMRs for Sussex County and the city of Wilmington increased from 2002-2006 to 2003-2007. Kent County's IMR declined for the third consecutive time period, making it the lowest of the three counties at 7.1 infant deaths per 1,000 live births.

IMRs for the balance of New Castle County and the County as a whole changed very little from 2002-2006 to 2003-2007.

**Five-year Average Infant Mortality Rates
Delaware Counties and City of Wilmington, Delaware, 1990-2007**

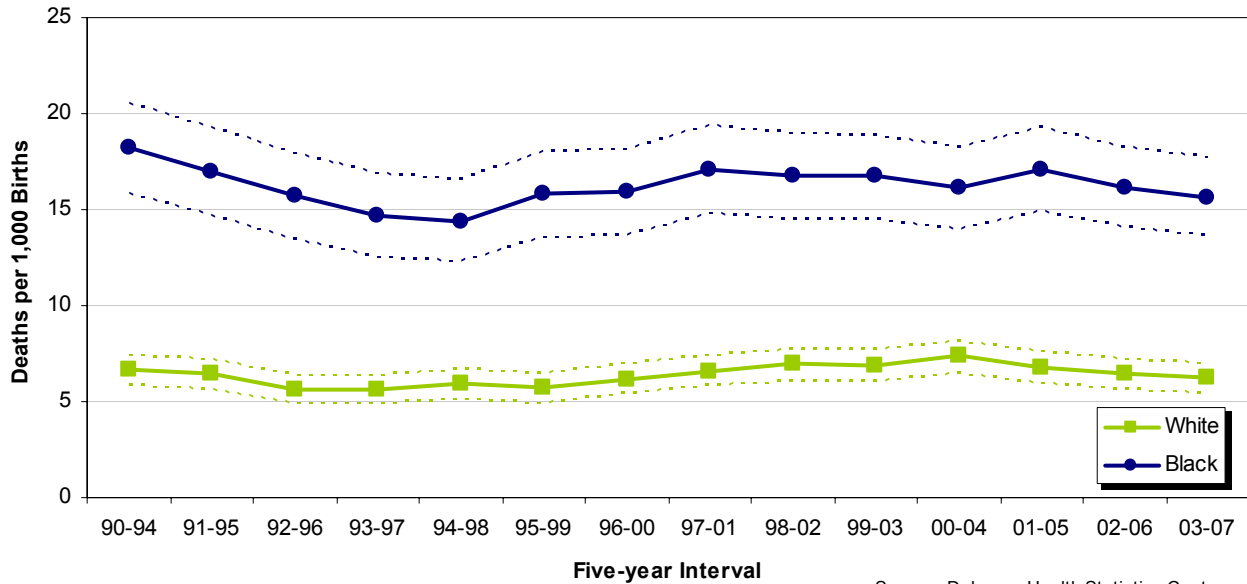


Source: Delaware health Statistics Center

INFANT MORTALITY

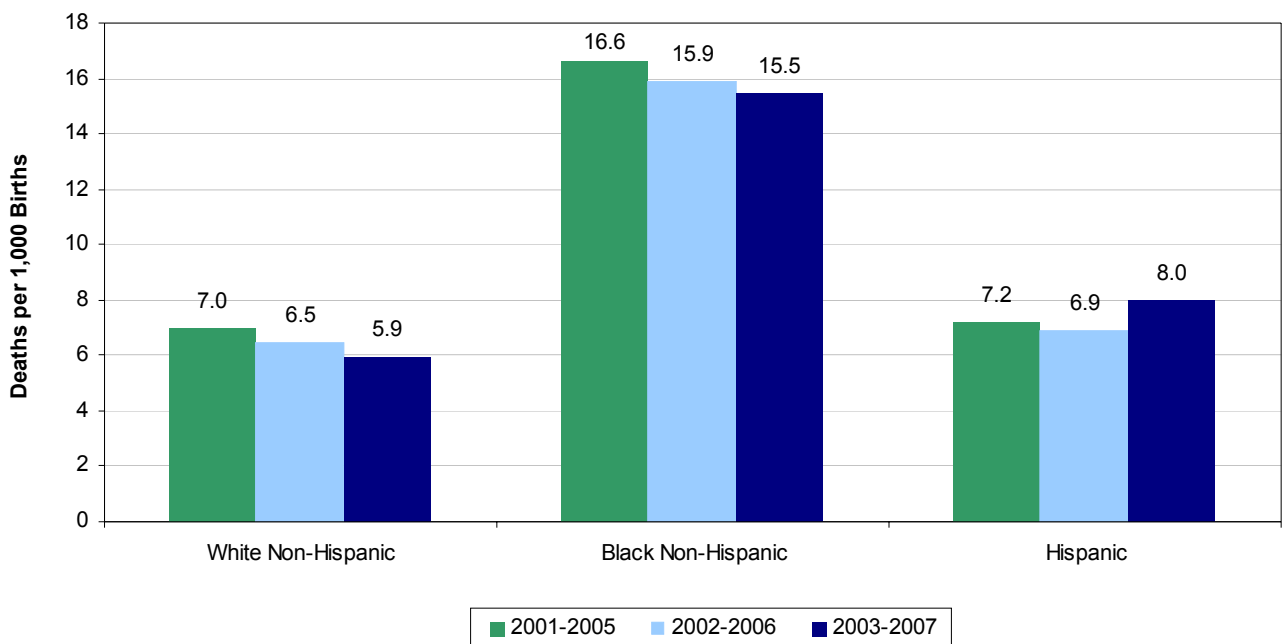
From 2002-2006 to 2003-2007, the five-year IMR decreased very slightly due to decreases in both the white IMR (from 6.4 to 6.2) and the black IMR (from 16.1 to 15.6). As shown in the graph below, black infants experienced significantly higher mortality rates than white infants, and from 1990-1994 to 2003-2007, black IMRs were anywhere from 2.2 to 2.8 times that of white IMRs.

**Five-year Average Black and White Infant Mortality Rates with Confidence Intervals
Delaware, 1990-2007**



Significant disparities existed between black non-Hispanic IMRs and each of the two other groups, white non-Hispanic and Hispanic. Black non-Hispanics had the highest IMRs in all three time periods, and their rate of 15.5 deaths per 1,000 live births in 2003-2007, was 2.6 times the white non-Hispanic rate of 5.9 and nearly twice the Hispanic rate of 8.0.

**Five-year Average Infant Mortality Rates by Race and Hispanic Origin
Delaware, 2001-2007**



INFANT MORTALITY

Not only did IMRs vary between counties, but also between races within each county. Black IMRs were consistently higher than white IMRs in all three counties, for every time period. To gauge the disparity between black and white IMRs, disparity ratios¹ were used. However, as is shown in the graphs to the right, both the disparity ratio and the rates should be considered when examining the issue of infant mortality.

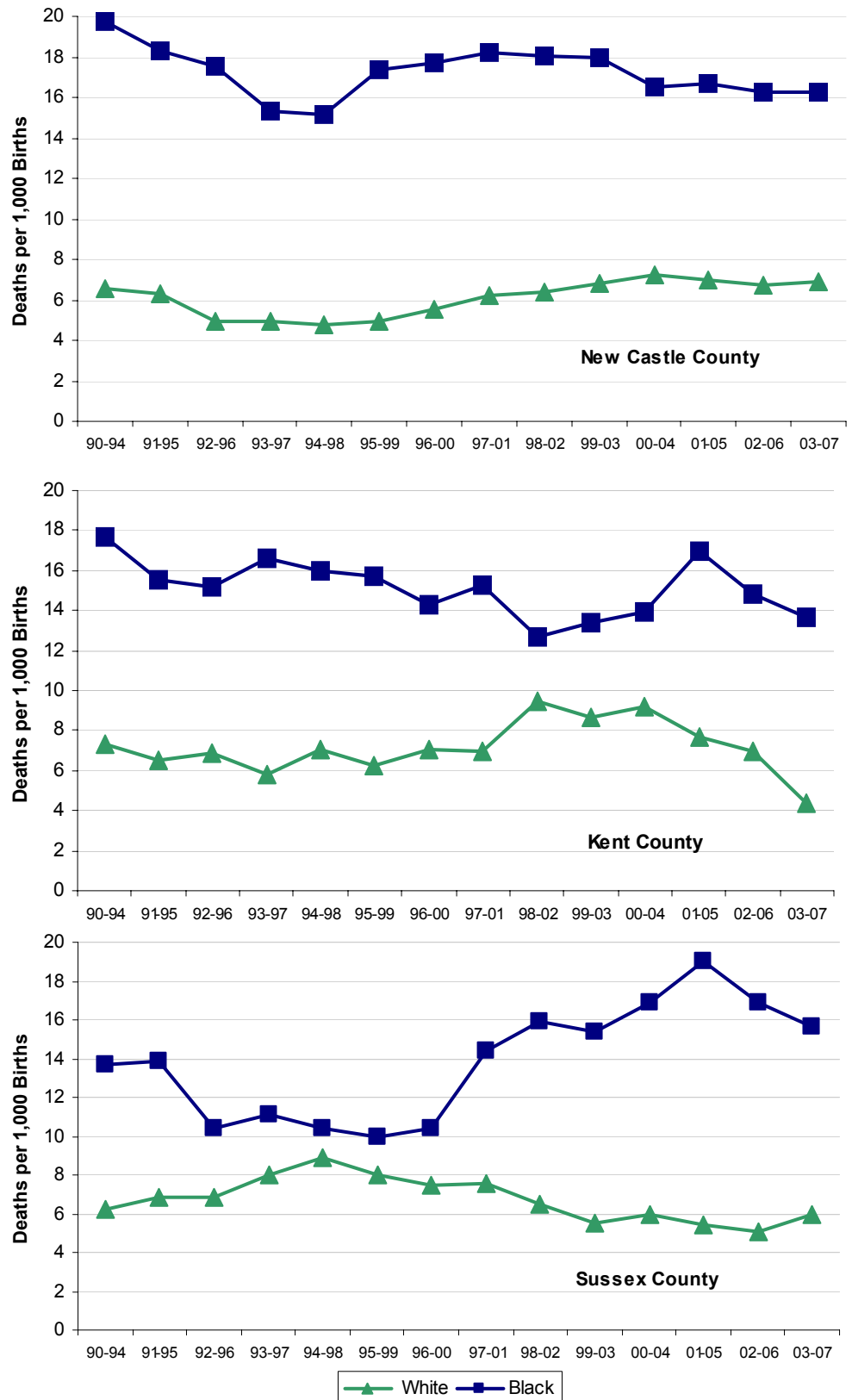
In New Castle County, rates for both races changed very little from 2002-2006 to 2003-2007, and the disparity ratio remained stable at 2.3.

Though both black and white IMRs declined in Kent County, from 14.8 to 13.6 and from 7.0 to 4.4, the change was greater for whites, causing its disparity ratio to increase to 3.1, the largest of the three counties.

Sussex County's disparity ratio narrowed due to a continued decrease in the black IMR and an increase in the white IMR.

Of the three counties, New Castle had the highest IMR (16.2 infant deaths per 1,000 live births to black mothers), while Kent had the lowest (4.4 infant deaths per 1,000 live births to white mothers).

Five-year Average Infant Mortality Rates by Race
Delaware Counties, 1990-2007



Source: Delaware Health Statistics Center

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

INFANT MORTALITY- Leading Cause of Death

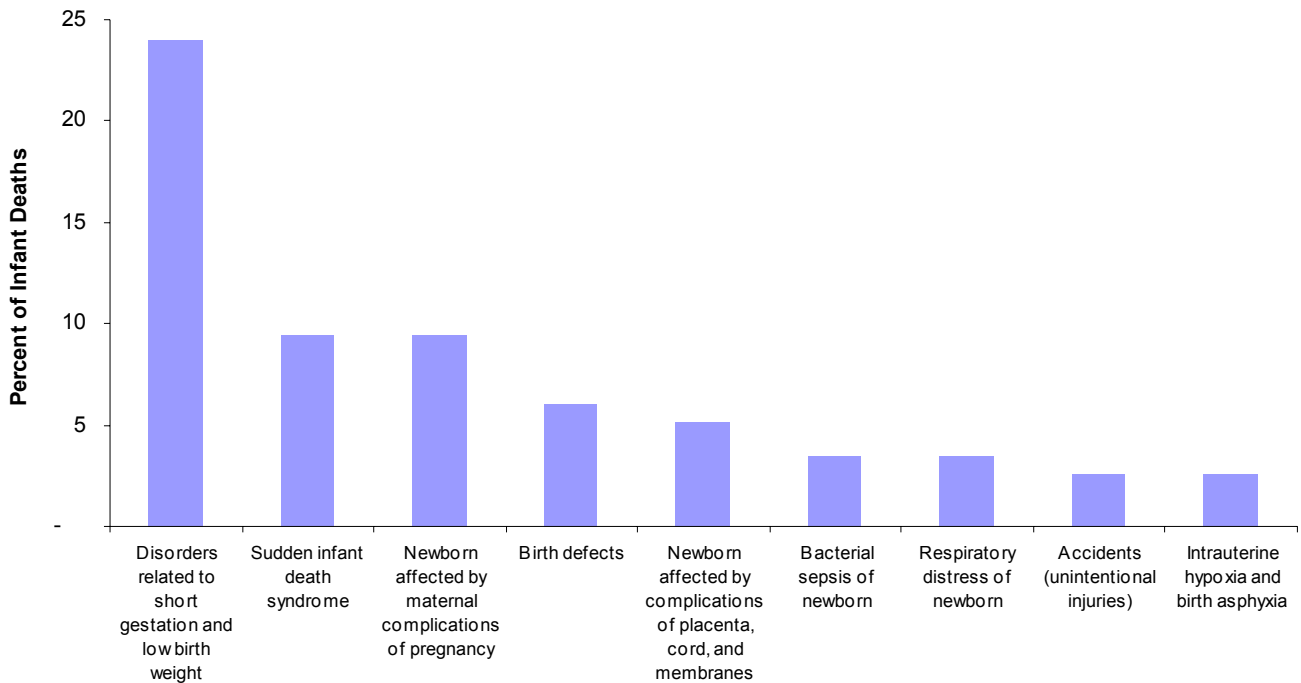
In 2003-2007 the three leading causes of infant death were:

- Disorders related to short gestation and fetal malnutrition (prematurity and low birthweight), which accounted for 22.3 percent of infant deaths,
- Congenital anomalies (birth defects), which accounted for 12.5 percent of infant deaths, and
- Newborn affected by maternal complications of pregnancy, which accounted for 8.7 percent of infant deaths. Of the 43 deaths attributed to this cause, 39 were due to the newborn being affected by incompetent cervix and premature rupture of membranes.

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

Though the proportions of deaths by race were similar for many of the causes of death, a notable exception was birth defects. While birth defects were responsible for 17.1 percent of all white infant deaths, they accounted for only 6 percent of black infant deaths.

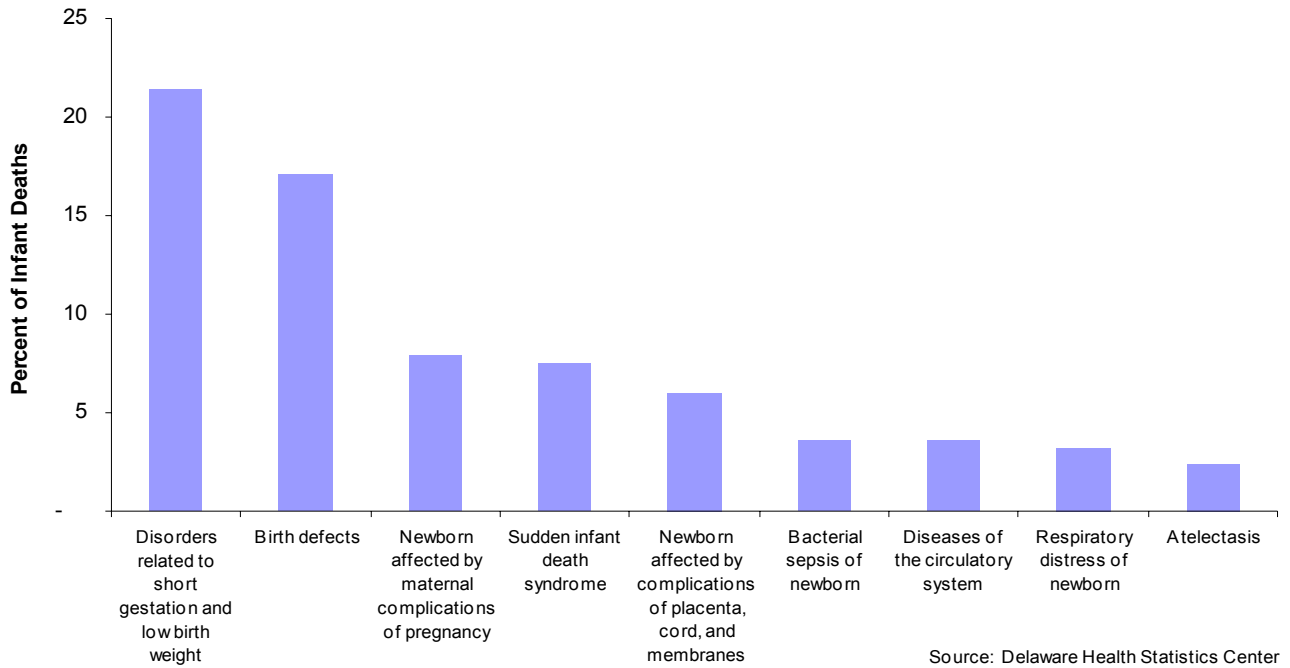
**Most Frequent Causes of Black Infant Death
Delaware, 2003-2007**



Source: Delaware Health Statistics Center

INFANT MORTALITY- Leading Cause of Death

**Most Frequent Causes of White Infant Death
Delaware, 2003-2007**

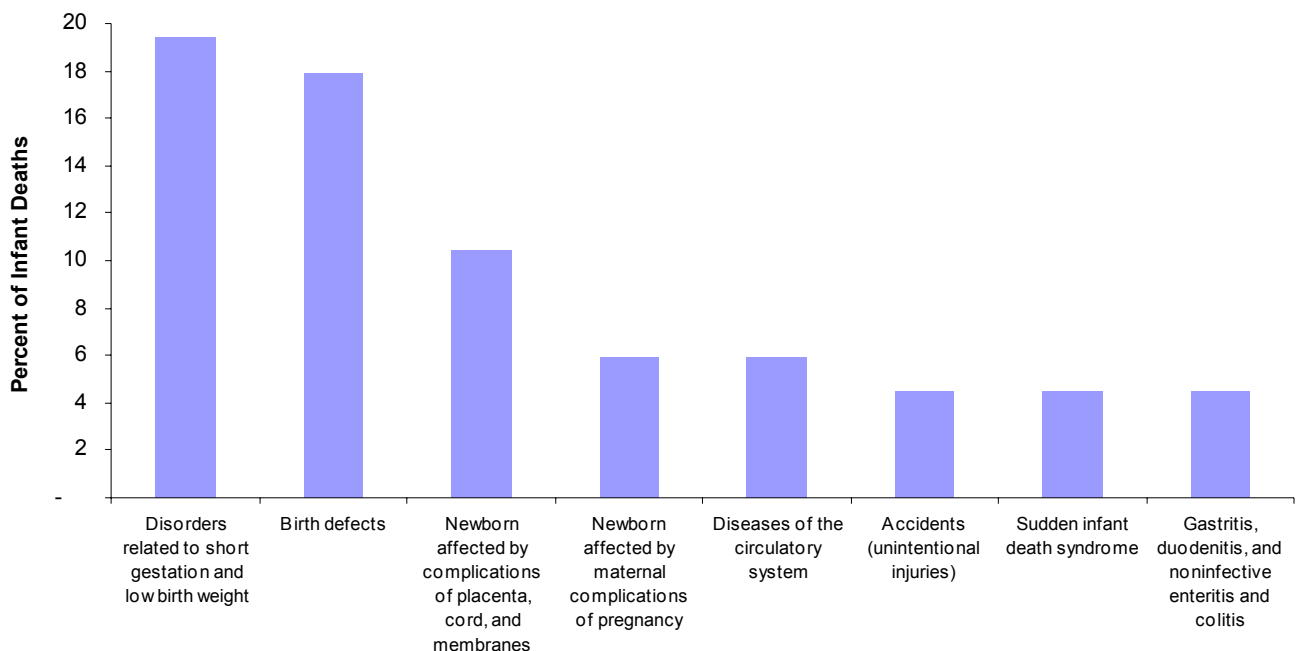


Source: Delaware Health Statistics Center

In the 1989-1993 time period, Hispanics accounted for 3.6 percent of all live births and 3.4 percent of infant deaths, since that time the proportion of births to Hispanic mothers has been increasing. In the most recent five year period, 2003-2007, 14.4 percent of all live births were to Hispanic mothers, and 13.5 percent of all infant deaths were of Hispanic origin.

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

**Most Frequent Causes of Hispanic Infant Death
Delaware, 2003-2007**



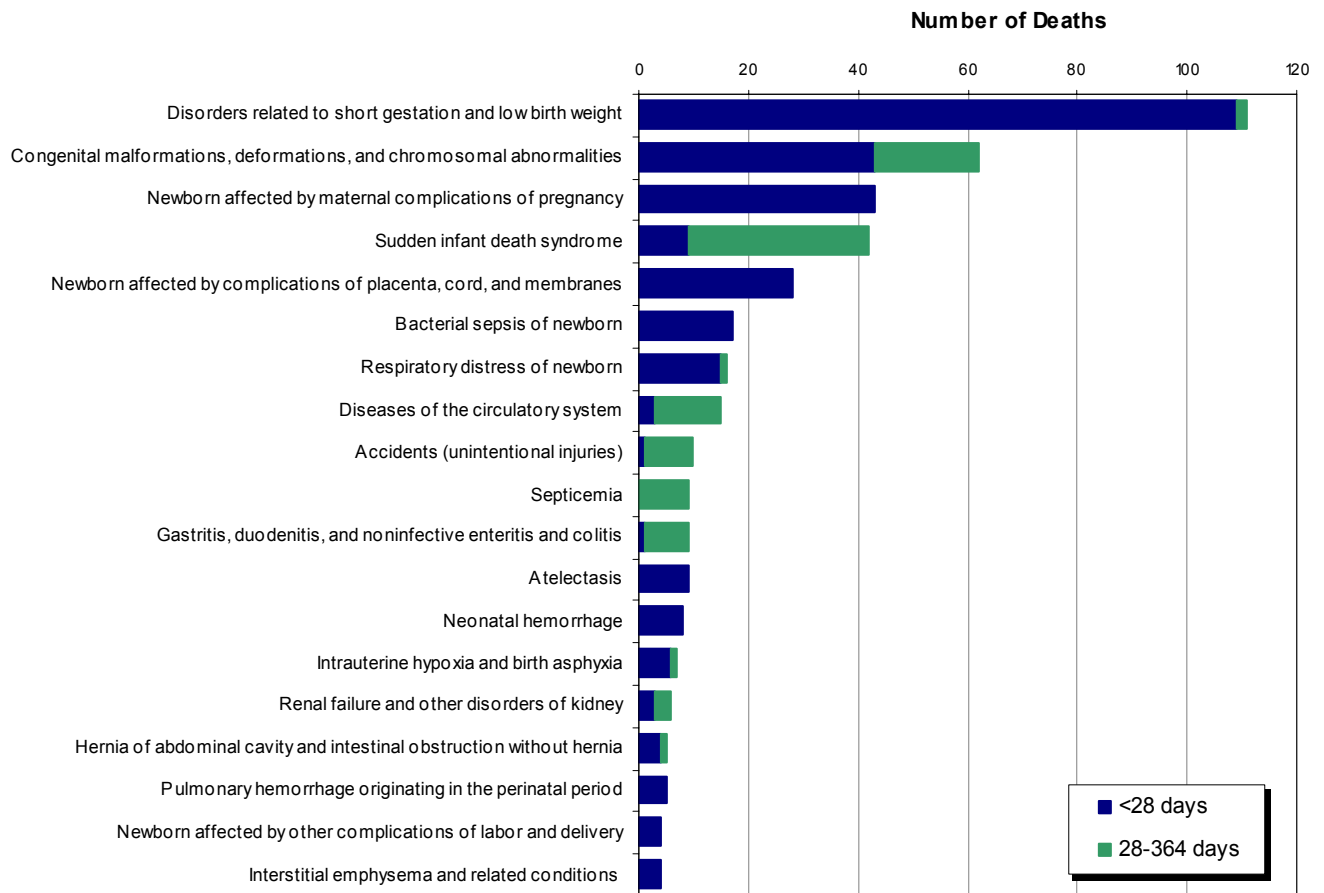
Source: Delaware Health Statistics Center

INFANT MORTALITY - Leading Cause of Death

Approximately 95 percent of all infant deaths occurred within the first six months of life, 71 percent of all infant deaths occurred within the first 28 days of life, and 39 percent occurred within 24 hours of birth.

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

Most Frequent Causes of Infant Death Delaware, 2003-2007

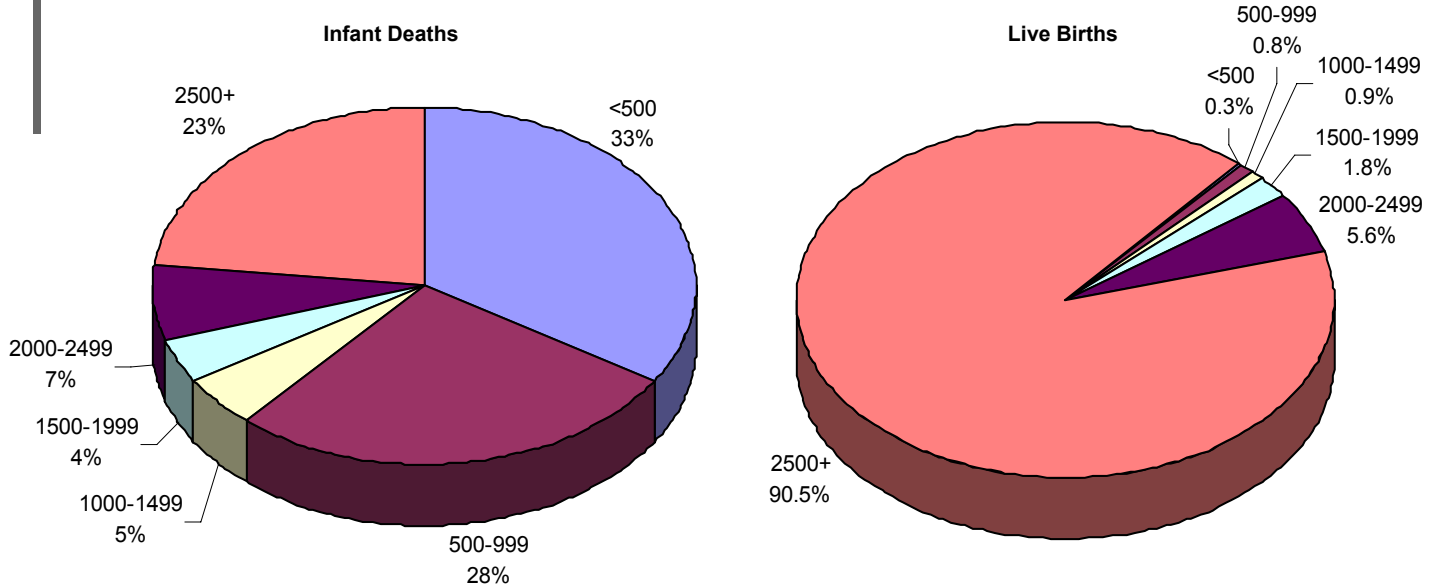


- Disorders related to short gestation and fetal malnutrition accounted for the greatest number of infant deaths in 2003-2007; all but two of these deaths occurred in the neonatal period.
- Sudden infant death syndrome (SIDS) was the only one of the top five causes of death that had the majority of deaths occurring in the postneonatal period, with a mean age at death of 75 days.
 - ⇒ 40 percent (17 out of 42) of the SIDS deaths were associated with co-sleeping with adults and/or sleeping on soft surfaces, such as couches and adult beds.
- During that same time period, there were 22 additional infant deaths, coded under a different cause of death, that were associated with co-sleeping and/or sleeping on a soft surface. In total, 7.8 percent of all infant deaths in 2003-2007 were associated with co-sleeping and/or sleeping on a soft surface.

INFANT MORTALITY - Live Birth Cohort

Just over 1 percent of all live births were infants weighing less than 1000 grams, but they accounted for over half (61.2 percent) of all infant deaths in 2002-2006. In total, 9.4 percent of all live births in 2002-2006 were infants of low birthweight (under 2500 grams) and 76.5 percent of infant deaths were low birthweight.

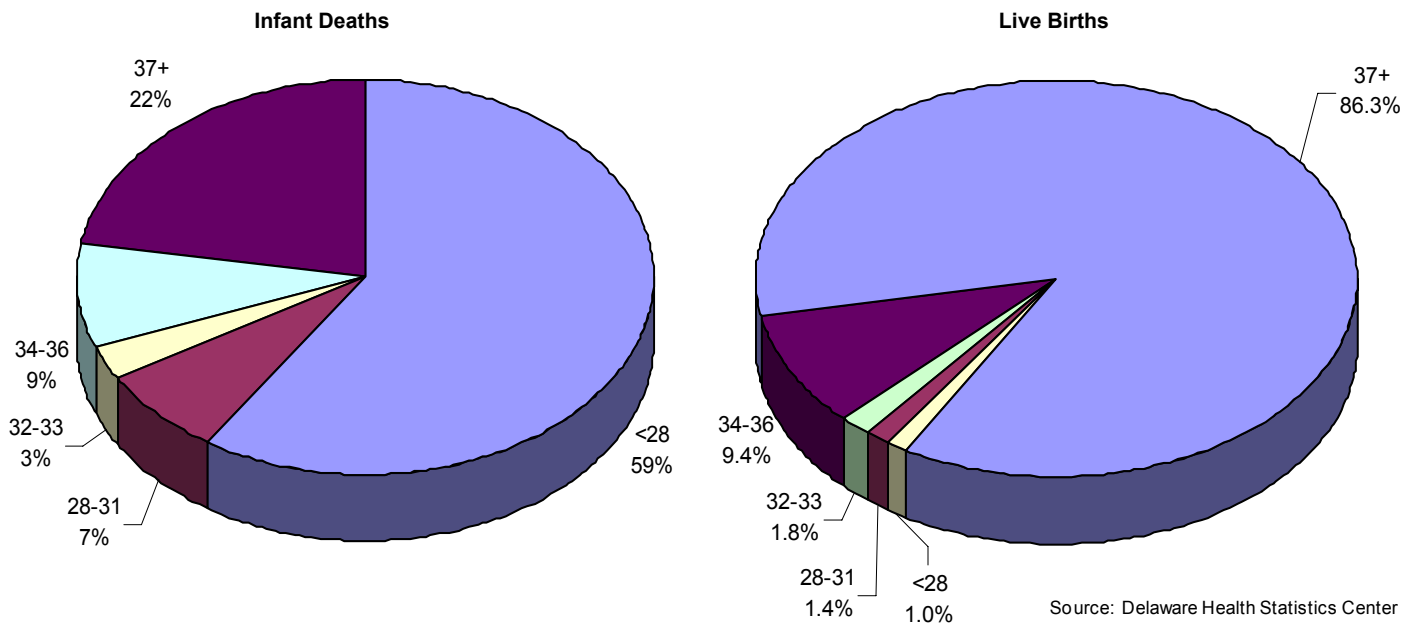
Distribution by Birthweight, Delaware Live Birth Cohort, 2002-2006



Source: Delaware Health Statistics Center

One percent of live births in 2002-2006 were less than 28 weeks gestation at birth, but they accounted for 59 percent of all infant deaths. In total, 13.7 percent of all live births in 2002-2006 were born preterm (<37 weeks of gestation) and 77.7 percent of infant deaths were born preterm.

Distribution by Gestation, Delaware Live Birth Cohort, 2002-2006



Source: Delaware Health Statistics Center

INFANT MORTALITY - Live Birth Cohort

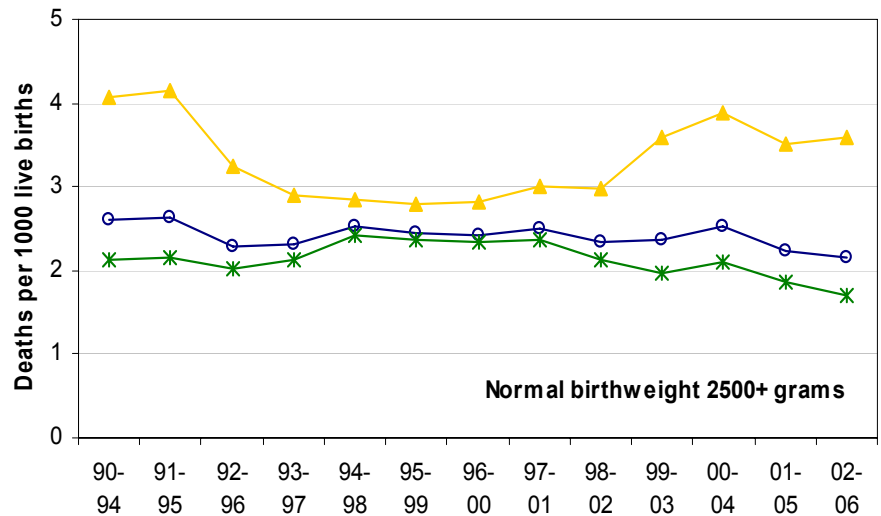
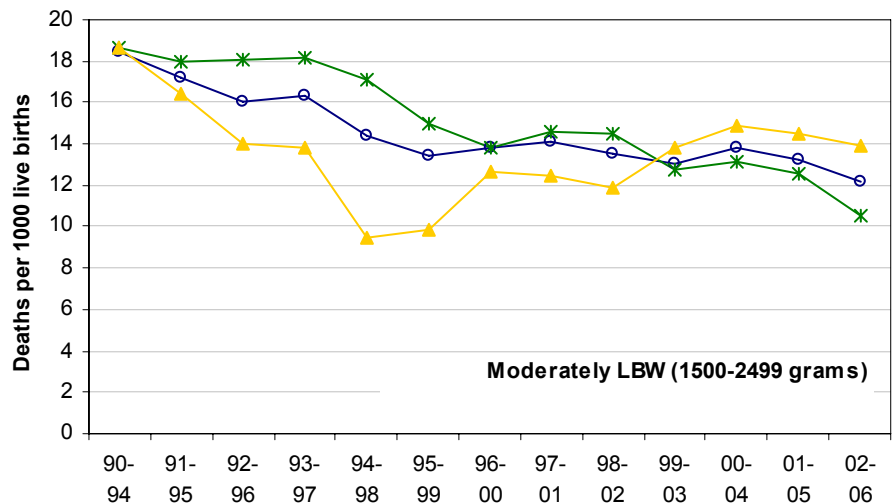
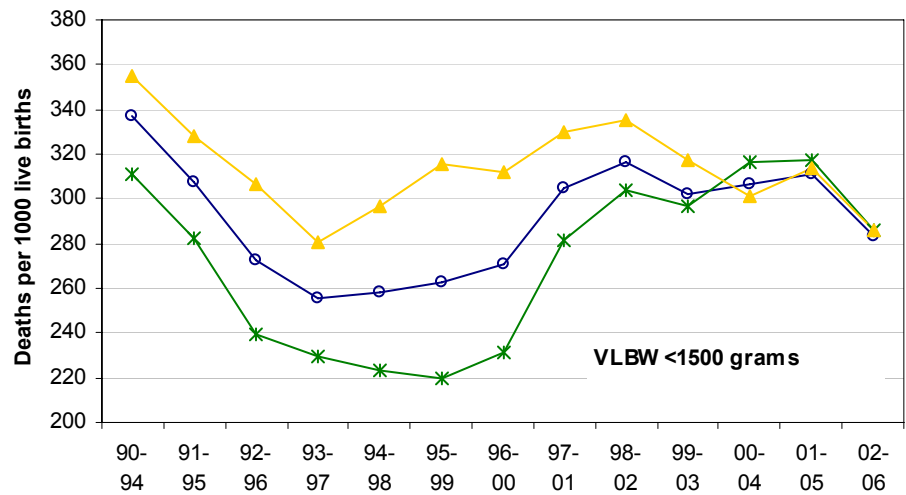
Birthweight and gestation are considered to be the most important predictors of infant health and mortality risk. Infants born too small or too early have a much greater risk of mortality than those who reach a normal birthweight (2500+ grams) or full-term gestation (37+ weeks).

As a result of the 11 percent decrease from 2001-2005 to 2002-2006, IMRs for VLBW white infants experienced little overall change since 1997-2001. IMRs for black VLBW infants declined 13 percent between 1997-2001 and 2002-2006; in 2002-2006 both black and white VLBW infants had an IMR of 286 deaths per 1,000 live births.

IMRs of moderately LBW infants moved in a different manner, with white rates declining 28 percent between 1997-2001 and 2002-2006, and black rates rising 11 percent during the same time, which made their rates 32 percent higher than white rates in 2002-2006 (13.9 vs. 10.5).

From 1997-2001 forward, the IMR trends for normal birthweight infants followed that of the moderately LBW infants, with white IMRs decreasing by 28 percent and black IMRs increasing by 19 percent. The divergent movement in black and white rates widened the black/white disparity ratio, and in 2002-2006, the black IMR for normal birthweight infants was more than double that of whites (3.6 vs. 1.7).

Five-year Average Infant Mortality Rate by Birthweight and Race Delaware, 1990-2006 Live Birth Cohort



—○— All Races —*— White —▲— Black

1. VLBW—very low birthweight, is defined as less than 1500 grams .

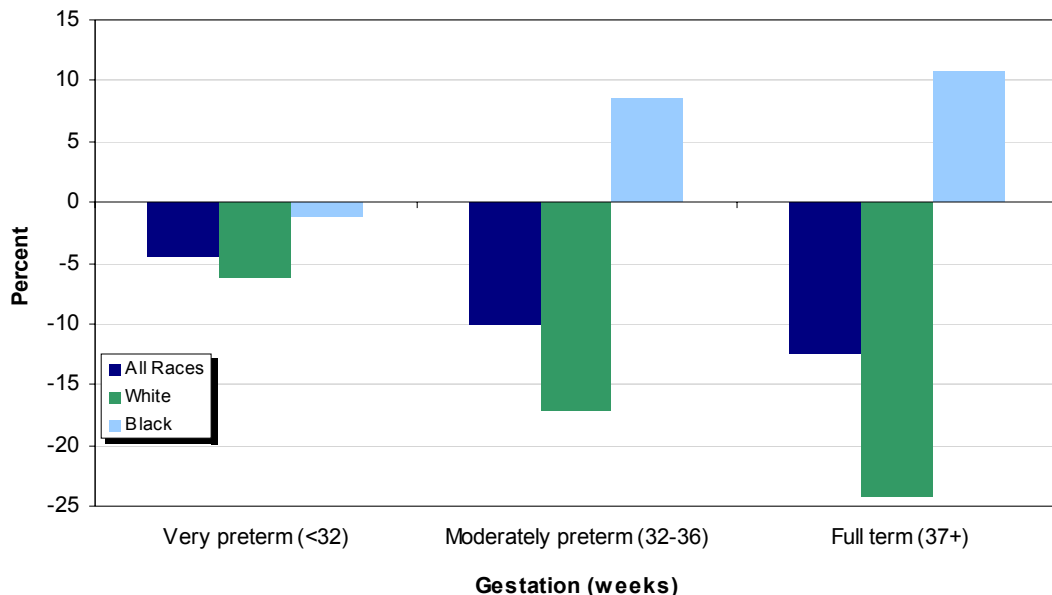
Source: Delaware Health Statistics Center

INFANT MORTALITY - Live Birth Cohort

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

IMRs for very preterm infants of both races experienced a slight overall decline during the same time period.

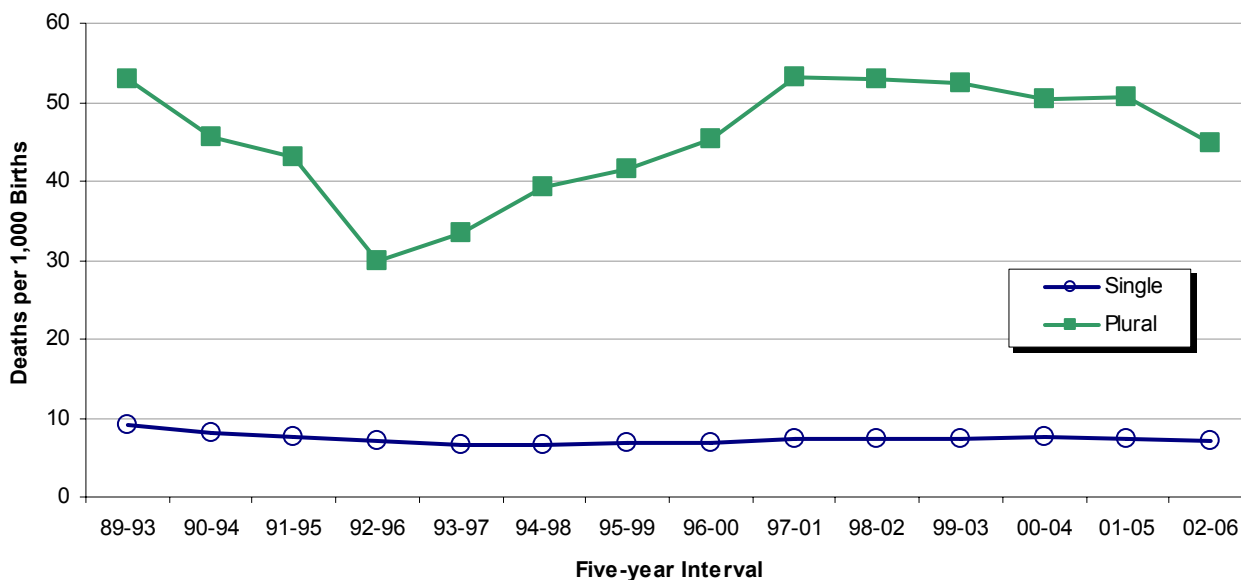
Percent Change in Five-year Average Infant Mortality by Gestation and Race
Delaware, Live Birth Cohort, 1997-2001 to 2002-2006



Source: Delaware Health Statistics Center

From 1992-1996 to 1997-2001, IMRs for plural births increased 77 percent, to 53.1 deaths per 1000 live births; during the same time, IMRs for singleton births increased by 4 percent. Since then, plural IMRs have decreased a total of 16 percent, with most of that occurring in the most recent time period. The decrease in IMRs for singleton births was slight and occurred only in the most recent time period. In 2002-2006, infant mortality rates for plural births were over 6 times that of singleton births (44.7 vs. 7.0).

Five-year Average Infant Mortality Rates by Plurality
Delaware Live Birth Cohort, 1989-2006



Source: Delaware Health Statistics Center

TABLE E-1
NUMBER OF INFANT DEATHS BY RACE

U.S., DELAWARE, COUNTIES AND CITY OF WILMINGTON, 1990-2007

Area/ Race	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
U.S.																		
All Races	38351	36766	34628	33466	31710	29583	28237	28045	28371	27937	28035	27568	28034	28025	27936	28440	28527	29241*
White	24883	23657	22164	21497	20504	19490	18749	18539	18561	18067	18144	17955	18369	18440	18231	18514	18403	19049*
Black	12290	11994	11348	10887	10072	9118	8490	8496	8726	8822	8771	8498	8524	8402	8494	8695	8858	8793*
Other	1178	1115	1116	1082	1134	975	998	1010	1084	1048	1120	1115	1141	1183	1211	1231	1266	1399*
Delaware																		
All Races	110	136	93	94	70	79	77	81	103	81	102	114	96	107	97	104	99	90
White	58	79	44	44	40	46	43	42	54	31	65	60	57	53	51	46	50	52
Black	52	55	49	50	27	32	32	36	49	49	37	53	35	53	44	55	44	37
Other	0	2	0	0	3	1	2	3	0	1	0	1	4	1	2	3	5	1
Kent																		
All Races	30	18	19	11	15	18	17	14	18	10	21	19	27	16	17	21	13	9
White	17	9	12	5	10	10	11	4	13	4	16	10	22	8	8	6	7	4
Black	13	8	7	6	5	7	6	10	5	6	5	9	5	8	8	14	5	4
Other	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	1
New Castle																		
All Races	68	98	66	68	37	45	48	48	65	61	67	72	55	78	60	66	68	59
White	33	59	29	32	20	24	21	26	27	22	40	37	30	37	33	33	31	33
Black	35	38	37	36	15	21	26	20	38	38	27	35	22	40	27	31	35	26
Other	0	1	0	0	2	0	1	2	0	1	0	0	3	1	0	2	2	0
Wilmington																		
All Races	25	34	27	24	15	11	19	14	18	20	16	17	12	18	12	16	16	17
White	2	11	4	4	3	2	1	4	2	4	4	2	2	4	4	1	2	3
Black	23	23	23	20	11	9	18	10	16	16	12	15	10	14	8	15	14	14
Other	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Balance of NC County																		
All Races	43	64	39	44	22	34	29	34	47	41	51	55	43	60	48	50	52	42
White	31	48	25	28	17	22	20	22	25	18	36	35	28	33	29	32	29	30
Black	12	15	14	16	4	12	8	10	22	22	15	20	12	26	19	16	21	12
Other	0	1	0	0	1	0	1	2	0	1	0	0	3	1	0	2	2	0
Sussex																		
All Races	12	20	8	15	18	16	12	19	20	10	14	23	14	13	20	17	18	22
White	8	11	3	7	10	12	11	12	14	5	9	13	5	8	10	7	12	15
Black	4	9	5	8	7	4	0	6	6	5	5	9	8	5	9	10	4	7
Other	0	0	0	0	1	0	1	1	0	0	0	1	1	0	1	0	2	0

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 Statistics Center

INFANT1

TABLE E-2
NUMBER OF NEONATAL DEATHS BY RACE

U.S., DELAWARE, COUNTIES AND CITY OF WILMINGTON, 1990-2007

Area/ Race	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
U.S.																		
All Races	24309	22978	21849	21174	20250	19155	18326	18524	18918	18728	18776	18265	18749	18893	18593	18770	18989	18867*
White	15751	14698	13915	13506	13100	12644	12252	12269	12406	12164	12201	12013	12354	12495	12238	12239	12302	12340*
Black	7905	7677	7296	7044	6499	5940	5483	5637	5824	5920	5843	5585	5646	5640	5495	5740	5876	5648*
Other	653	603	638	624	651	571	591	618	688	644	732	667	749	758	860	791	811	879*
Delaware																		
All Races	76	90	64	69	48	47	53	55	74	58	71	82	79	75	63	77	72	64
White	40	55	33	33	28	26	28	26	33	21	45	44	48	36	33	34	36	37
Black	36	34	31	36	18	20	24	27	41	37	26	37	28	38	28	40	33	27
Other	0	1	0	0	2	1	1	2	0	0	0	1	3	1	2	3	3	0
Kent																		
All Races	19	12	11	6	7	10	13	10	9	8	15	15	22	8	11	14	7	6
White	13	5	9	2	3	6	7	1	6	3	11	10	18	3	5	3	4	3
Black	6	6	2	4	4	3	6	9	3	5	4	5	4	5	5	10	3	3
Other	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0
New Castle																		
All Races	46	66	47	56	28	26	33	33	47	44	50	54	47	56	39	52	52	42
White	20	43	21	27	17	12	14	19	15	14	29	27	26	27	21	26	22	23
Black	26	23	26	29	9	14	18	13	32	30	21	27	19	28	18	24	28	19
Other	0	0	0	0	2	0	1	1	0	0	0	0	2	1	0	2	2	0
Wilmington																		
All Races	20	22	19	17	10	6	14	6	12	14	13	14	9	10	9	13	12	10
White	2	10	3	2	3	0	1	3	1	2	4	1	1	1	3	1	1	1
Black	18	12	16	15	6	6	13	3	11	12	9	13	8	9	6	12	11	9
Other	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Balance of NC County																		
All Races	26	44	28	39	18	20	19	27	35	30	37	40	38	46	30	39	40	32
White	18	33	18	25	14	12	13	16	14	12	25	26	25	26	18	25	21	22
Black	8	11	10	14	3	8	5	10	21	18	12	14	11	19	12	12	17	10
Other	0	0	0	0	1	0	1	1	0	0	0	0	2	1	0	2	2	0
Sussex																		
All Races	11	12	6	7	13	11	7	12	18	6	6	13	10	11	13	11	13	16
White	7	7	3	4	8	8	7	6	12	4	5	7	4	6	7	5	10	11
Black	4	5	3	3	5	3	0	5	6	2	1	5	5	5	5	6	2	5
Other	0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	0	1	0

Notes:

- *Based on NCHS estimate.
- Neonatal deaths refer to deaths of children under 28 days of age.

Sources:

National Center for Health Statistics
Delaware Health Statistics Center

INFANT2

TABLE E-3
NUMBER OF POSTNEONATAL DEATHS BY RACE

U.S., DELAWARE, COUNTIES AND CITY OF WILMINGTON, 1990-2007

Area/ Race	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
U.S.																		
All Races	14042	13788	12779	12292	11460	10428	9911	9521	9453	9209	9259	9303	9285	9132	9343	9670	9538	10374*
White	9132	8959	8249	7991	7404	6846	6497	6270	6155	5903	5943	5942	6015	5945	5993	6275	6101	6709*
Black	4385	4317	4052	3843	3573	3178	3007	2859	2902	2902	2928	2913	2878	2762	2999	2955	2982	3145*
Other	525	512	478	458	483	404	407	392	396	404	388	448	392	425	351	440	455	520*
Delaware																		
All Races	34	46	29	25	22	32	24	26	29	23	31	32	17	32	34	27	27	26
White	18	24	11	11	12	20	15	16	21	10	20	16	9	17	18	12	14	15
Black	16	21	18	14	9	12	8	9	8	12	11	16	7	15	16	15	11	10
Other	0	1	0	0	1	0	1	1	0	1	0	0	1	0	0	0	2	1
Kent																		
All Races	11	6	8	5	8	8	4	4	9	2	6	4	5	8	6	7	6	3
White	4	4	3	3	7	4	4	3	7	1	5	0	4	5	3	3	3	1
Black	7	2	5	2	1	4	0	1	2	1	1	4	1	3	3	4	2	1
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
New Castle																		
All Races	22	32	19	12	9	19	15	15	18	17	17	18	8	22	21	14	16	17
White	13	16	8	5	3	12	7	7	12	8	11	10	4	10	12	7	9	10
Black	9	15	11	7	6	7	8	7	6	8	6	8	3	12	9	7	7	7
Other	0	1	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0
Wilmington																		
All Races	5	12	8	7	5	5	5	8	6	6	3	3	3	8	3	3	4	7
White	0	1	1	2	0	2	0	1	1	2	0	1	1	3	1	0	1	2
Black	5	11	7	5	5	3	5	7	5	4	3	2	2	5	2	3	3	5
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	17	20	11	5	4	14	10	7	12	11	14	15	5	14	18	11	12	10
White	13	15	7	3	3	10	7	6	11	6	11	9	3	7	11	7	8	8
Black	4	4	4	2	1	4	3	0	1	4	3	6	1	7	7	4	4	2
Other	0	1	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0
Sussex																		
All Races	1	8	2	8	5	5	5	7	2	4	8	10	4	2	7	6	5	6
White	1	4	0	3	2	4	4	6	2	1	4	6	1	2	3	2	2	4
Black	0	4	2	5	2	1	0	1	0	3	4	4	3	0	4	4	2	2
Other	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0

Notes:

1. *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 Health Statistics Center

INFANTS

TABLE E- 4
FIVE-YEAR AVERAGE INFANT MORTALITY RATES BY RACE
U.S., DELAWARE, COUNTIES AND CITY OF WILMINGTON, 1987-2007

Area/ Race	1987 -1991	1988 -1992	1989 -1993	1990 -1994	1991 -1995	1992 -1996	1993 -1997	1994 -1998	1995 -1999	1996 -2000	1997 -2001	1998 -2002	1999 -2003	2000 -2004	2001 -2005	2002 -2006	2003 -2007
U.S.																	
All Races	9.6	9.3	9.0	8.6	8.3	8.0	7.7	7.5	7.3	7.1	7.0	7.0	6.9	6.9	6.9	6.8	6.8
White	8.0	7.7	7.3	7.0	6.8	6.5	6.4	6.2	6.0	5.9	5.8	5.8	5.7	5.7	5.7	5.7	N/A
Black	17.9	17.7	17.5	17.0	16.4	15.8	15.3	14.8	14.6	14.4	14.2	14.3	14.2	14.0	14.0	13.8	N/A
Delaware																	
All Races	11.5+	10.9+	10.3+	9.3	8.9	7.9	7.8	7.9	8.1+	8.4+	9.0+	9.2+	9.1+	9.3+	9.2+	8.8+	8.5+
White	8.9	8.2	7.5	6.6	6.4	5.6-	5.6	5.9	5.7	6.2	6.6	6.9+	6.9+	7.3+	6.8+	6.4	6.2
Black	20.0	19.8	19.9	18.2	17.0	15.8	14.7	14.4	15.8	15.9	17.1+	16.7+	16.7+	16.1	17.1+	16.1+	15.6
Kent																	
All Races	11.3	11.3	9.7	9.5	8.6	8.6	8.2	9.0	8.4	8.6	8.7	9.9	9.5	10.2	10.0	9.1	7.1
White	9.0	8.8	7.3	7.3	6.5	6.8	5.8	7.1	6.3	7.0	6.9	9.5	8.6	9.2	7.6	7.0	4.4
Black	18.9	19.9	17.9	17.6	15.5	15.2	16.6	15.9	15.7	14.3	15.2	12.7	13.4	13.9	17.0	14.8	13.6
New Castle																	
All Races	11.3	10.8	10.7	9.5	9.0	7.8	7.3	7.3	7.9	8.5	9.1	9.2	9.5	9.4	9.3	9.1	9.2
White	8.6	7.9	7.5	6.5	6.3	5.0	4.9	4.8	4.9	5.6	6.2	6.4	6.8	7.3	7.0	6.7	6.9
Black	20.8	20.8	21.7	19.8	18.3	17.5	15.3	15.1	17.4	17.7	18.2	18.0	18.0	16.5	16.7	16.3	16.2
Wilmington																	
All Races	20.4	19.6	19.4	18.0	16.6	15.2	13.6	12.8	13.7	14.4	14.0	13.5	13.5	12.4	12.4	12.0	12.7
White	14.1	12.3	11.2	9.7	10.1	---	---	---	---	---	---	---	---	---	---	---	---
Black	24.1	23.7	24.3	22.7	20.4	20.5	17.8	16.8	18.0	18.7	18.0	17.9	17.6	15.9	17.0	16.3	17.3
Balance of NC County																	
All Races	9.0	8.6	8.5	7.5	7.2	6.1	5.9	6.0	6.7	7.2	8.1	8.3	8.6	8.8	8.7	8.5	8.4
White	8.1	7.4	7.1	6.2	5.9	4.8	4.8	4.7	4.8	5.4	6.1	6.4	6.8	7.3	7.2	6.9	7.0
Black	16.5	17.1	18.6	16.3	16.0	14.4	12.9	13.6	16.8	16.8	18.5	18.1	18.2	17.0	16.6	16.3	15.6
Sussex																	
All Races	12.2	10.7	9.7	8.3	8.7	7.9	9.0	9.5	8.5	8.1	9.0	8.3	7.4	8.1	8.2	7.5	7.9
White	10.1	8.8	7.8	6.2	6.8	6.8	8.0	8.9	8.0	7.5	7.6	6.5	5.5	5.9	5.5	5.0	5.9
Black	18.0	16.1	15.3	13.7	13.8	10.4	11.1	10.4	9.9	10.4	14.4	15.9	15.4	16.9	19.0	16.9	15.6

Notes:

1. 2003-2007 US data are based on NCHS estimates.
2. N/A indicates data not available.
3. Infant mortality rates represent the number of deaths of children under one year of age per 1000 live births.
4. '+' 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.
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.

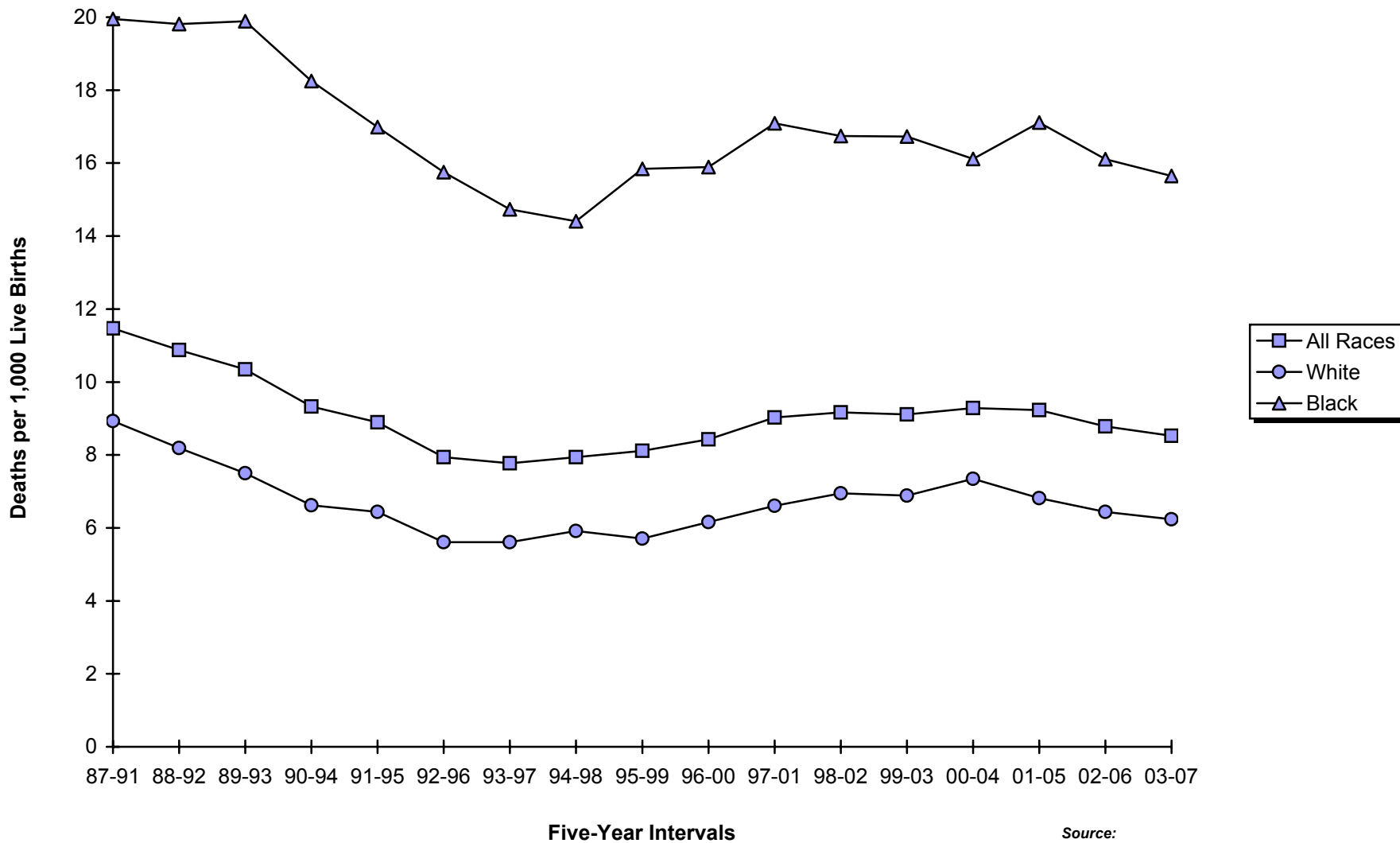
Sources:

National Center for Health Statistics
Delaware Health Statistics Center

INFANT4

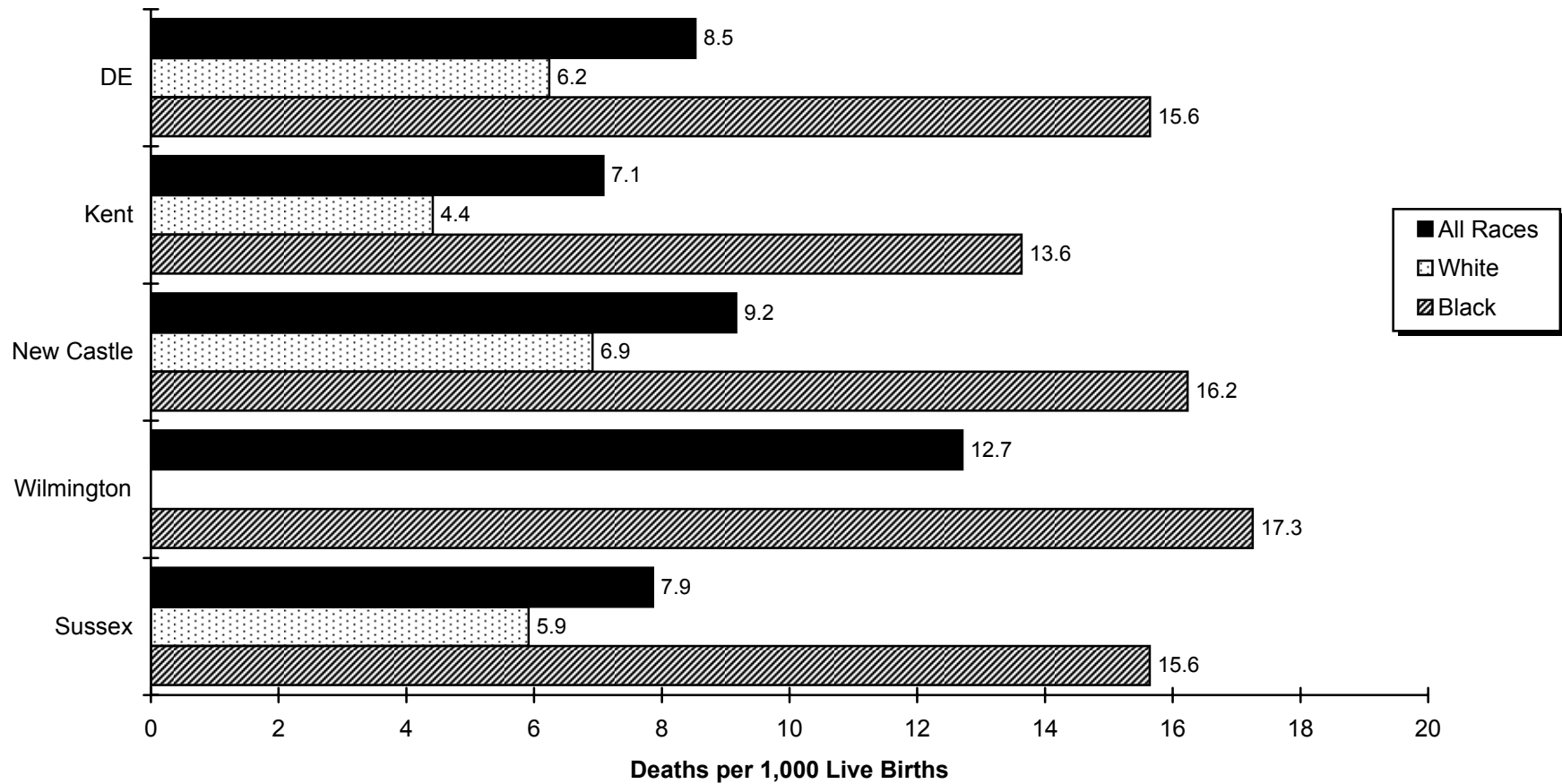
Figure E-1
Five-Year Average Infant Mortality Rates by Race

Delaware, 1987-2007



Source:
 Delaware Health Statistics Center

Figure E-2
Five-Year Average Infant Mortality Rates by Race
Delaware, Counties and the City of Wilmington, 2003-2007



Source:
 Delaware Health Statistics Center

TABLE E-5
 FIVE-YEAR AVERAGE NEONATAL MORTALITY RATES BY RACE
 U.S., DELAWARE, COUNTIES AND CITY OF WILMINGTON, 1987-2007

Area/ Race	1987 -1991	1988 -1992	1989 -1993	1990 -1994	1991 -1995	1992 -1996	1993 -1997	1994 -1998	1995 -1999	1996 -2000	1997 -2001	1998 -2002	1999 -2003	2000 -2004	2001 -2005	2002 -2006	2003 -2007
U.S.																	
All Races	6.1	5.9	5.7	5.4	5.3	5.1	5.0	4.9	4.8	4.7	4.7	4.7	4.6	4.6	4.6	4.6	4.5
White	5.1	4.8	4.6	4.4	4.3	4.2	4.1	4.0	4.0	3.9	3.9	3.9	3.9	3.8	3.8	3.8	N/A
Black	11.6	11.4	11.3	10.9	10.6	10.2	9.9	9.7	9.6	9.5	9.5	9.5	9.5	9.3	9.2	9.1	N/A
Delaware																	
All Races	8.1+	7.6+	7.2+	6.4+	6.0+	5.4	5.3	5.4	5.5+	5.9+	6.4+	6.7+	6.7+	6.7+	6.7+	6.4+	6.0+
White	6.4+	5.9+	5.5+	4.7	4.5	3.8	3.7	3.7	3.5	4.0	4.4	5.0+	5.0+	5.3+	5.0+	4.7+	4.4
Black	13.7+	13.5+	13.2	12.1	11.1	10.7	10.4	10.6	11.9+	12.1+	12.8+	12.7+	12.2+	11.4+	12.2+	11.6+	11.1
Kent																	
All Races	7.2	6.6	5.6	5.6	4.9	5.0	5.0	5.4	5.5	5.9	6.1	7.2	7.0	7.2	7.0	6.0	4.3
White	5.7	5.2	4.4	4.4	3.6	3.8	---	3.4	3.4	4.1	4.6	7.0	6.5	6.8	5.5	4.5	---
Black	12.2	11.2	9.6	10.0	---	---	12.7	12.1	12.0	12.1	11.3	8.9	9.3	9.2	11.2	10.0	9.1
New Castle																	
All Races	8.4	7.9	7.9	6.9	6.4	5.6	5.2	5.0	5.4	6.1	6.6	6.9	7.1	7.0	7.0	6.8	6.7
White	6.4	5.9	5.7	4.8	4.6	3.6	3.6	3.1	3.0	3.7	4.3	4.5	5.0	5.3	5.2	5.0	4.9
Black	15.2	15.0	15.8	13.9	12.6	12.4	10.8	10.8	13.0	13.5	14.2	14.5	13.9	12.4	12.5	12.3	11.9
Wilmington																	
All Races	15.9	15.0	14.3	12.7	11.1	10.5	8.7	8.0	8.7	9.8	9.7	10.1	9.8	9.1	9.1	8.6	8.7
White	13.3	11.5	9.6	8.1	---	---	---	---	---	---	---	---	---	---	---	---	---
Black	17.6	17.0	17.0	15.2	13.0	14.2	11.2	10.2	11.8	12.5	12.5	13.8	13.4	12.1	13.1	12.3	12.5
Balance of NC County																	
All Races	6.4	6.1	6.3	5.5	5.3	4.5	4.5	4.3	4.7	5.3	6.0	6.3	6.6	6.5	6.6	6.5	6.3
White	5.7	5.3	5.2	4.5	4.3	3.5	3.5	3.1	3.0	3.6	4.2	4.6	5.1	5.4	5.5	5.2	5.1
Black	12.1	12.4	14.3	12.3	12.1	10.6	10.3	11.4	14.1	14.4	15.6	15.1	14.2	12.5	12.1	12.3	11.6
Sussex																	
All Races	7.8	7.7	6.3	5.6	5.5	5.0	5.6	6.8	6.0	5.3	5.8	5.5	4.6	5.1	5.5	5.3	5.6
White	6.9	6.8	6.1	4.6	4.8	4.8	5.1	6.2	5.5	5.0	4.9	4.5	3.6	3.8	3.7	3.8	4.4
Black	10.3	10.2	---	8.3	---	---	---	---	---	---	---	---	---	9.9	12.1	10.8	10.3

INFANTS

Notes:

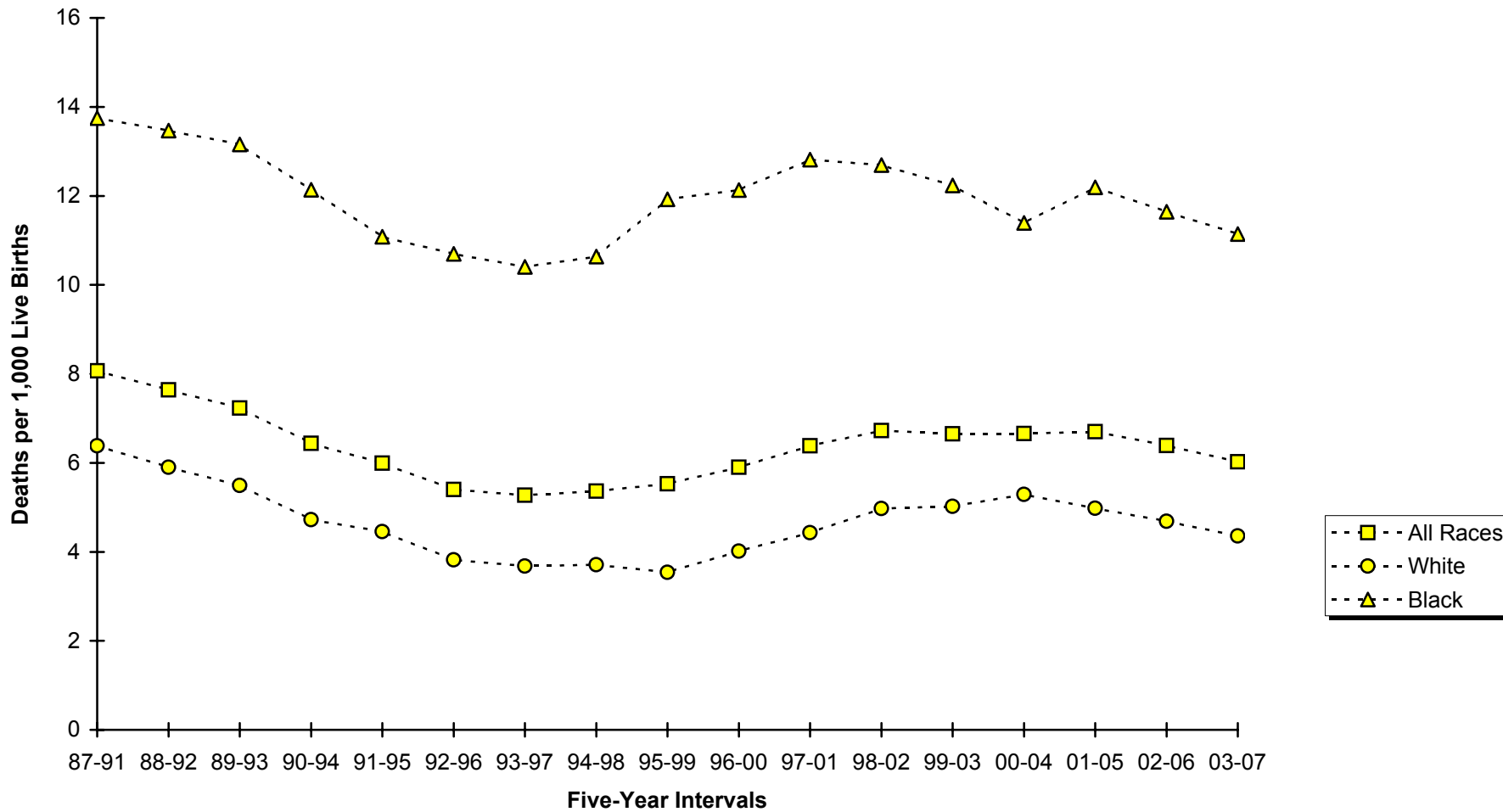
1. 2003-2007 US data are based on NCHS estimates.
2. N/A indicates data not available.
3. Neonatal mortality rates represent the number of deaths of children under 28 days of age per 1000 live births.
4. '+' indicates that the Delaware rate is significantly higher than the U.S. rate.
5. "----" Indicates 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 Statistics Center

Figure E-3
Five-Year Average Neonatal Mortality Rates by Race

Delaware, 1987-2007



Source:
 Delaware Health Statistics
 Center

TABLE E-6
 FIVE-YEAR AVERAGE POSTNEONATAL MORTALITY RATES BY RACE
 U.S., DELAWARE, COUNTIES AND CITY OF WILMINGTON, 1987-2007

Area/ Race	1987 -1991	1988 -1992	1989 -1993	1990 -1994	1991 -1995	1992 -1996	1993 -1997	1994 -1998	1995 -1999	1996 -2000	1997 -2001	1998 -2002	1999 -2003	2000 -2004	2001 -2005	2002 -2006	2003 -2007
U.S.																	
All Races	3.5	3.4	3.3	3.2	3.0	2.9	2.7	2.6	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3
White	2.9	2.8	2.7	2.6	2.5	2.4	2.3	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	N/A
Black	6.3	6.3	6.3	6.0	5.8	5.6	5.4	5.1	5.0	4.8	4.8	4.8	4.7	4.8	4.8	4.7	N/A
Delaware																	
All Races	3.4	3.2	3.1	2.9	2.9	2.5	2.5	2.6	2.6	2.5	2.6	2.4	2.5	2.6	2.5	2.4	2.5
White	2.5	2.3-	2.0-	1.9-	2.0-	1.8-	1.9	2.2	2.2	2.2	2.2	2.0	1.9	2.1	1.8	1.8	1.9
Black	6.2	6.3	6.7	6.1	5.9	5.1	4.3	3.8-	3.9	3.8	4.3	4.1	4.5	4.7	4.9	4.5	4.5
Kent																	
All Races	4.1	4.7	4.1	3.9	3.7	3.5	3.2	3.6	3.0	2.7	2.7	2.7	2.6	2.9	3.0	3.1	2.8
White	3.3	3.6	2.9	2.9	3.0	3.0	3.1	3.7	---	2.9	---	---	---	---	---	---	---
Black	---	8.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
New Castle																	
All Races	3.0	2.9	2.8	2.7	2.6	2.2	2.1	2.3	2.5	2.4	2.5	2.2	2.3	2.4	2.3	2.3	2.5
White	2.2	2.0	1.8	1.7	1.7	1.4	1.4	1.7	1.9	1.8	2.0	1.8	1.8	1.9	1.8	1.7	2.0
Black	5.6	5.8	5.9	5.9	5.7	5.1	4.5	4.3	4.4	4.2	4.0	3.5	4.1	4.2	4.2	4.0	4.3
Wilmington																	
All Races	4.5	4.6	5.2	5.3	5.5	4.8	4.9	4.8	5.0	4.6	4.3	3.4	3.7	3.3	3.3	3.4	4.0
White	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Black	6.6	6.7	7.2	7.5	7.3	6.3	6.5	6.6	6.3	6.2	5.5	---	---	---	---	---	---
Balance of NC County																	
All Races	2.6	2.5	2.2	2.0	1.9	1.6	1.5	1.7	1.9	1.9	2.1	2.0	2.0	2.3	2.1	2.0	2.2
White	2.3	2.1	1.9	1.7	1.6	1.3	1.3	1.6	1.8	1.8	1.9	1.8	1.6	1.9	1.7	1.6	1.9
Black	---	---	---	---	---	---	---	---	---	---	---	---	4.0	4.4	4.4	4.0	4.0
Sussex																	
All Races	4.4	3.0	3.4	2.7	3.2	2.9	3.4	2.7	2.5	2.8	3.3	2.9	2.8	3.0	2.7	2.2	2.3
White	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Black	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:

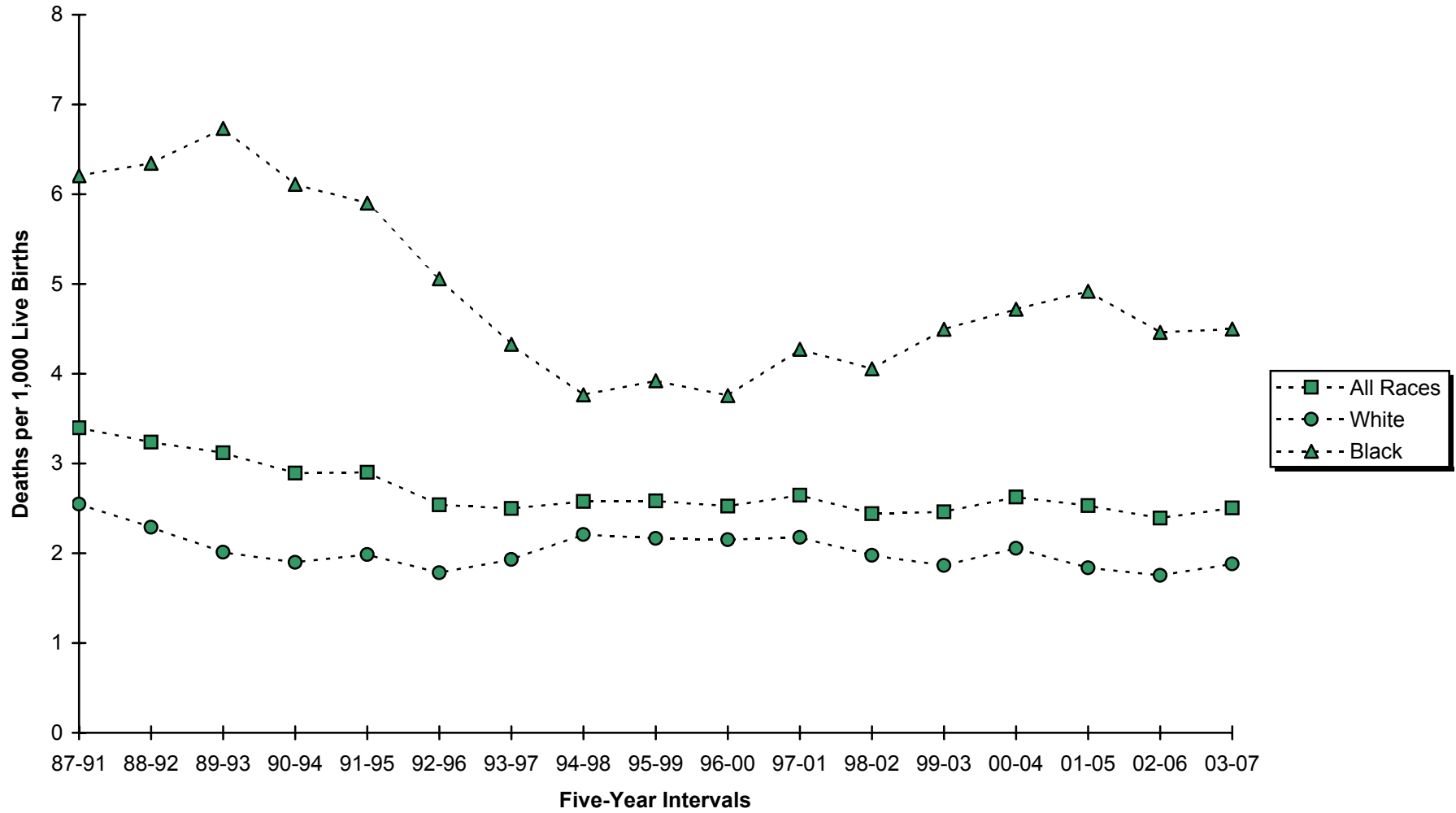
1. 2003-2007 US data based on NCHS estimates.
2. N/A indicates data not available.
3. Postneonatal mortality rates represent the number of deaths of children 28 to 364 days of age per 1000 live births.
4. '-' indicates that the Delaware rate is significantly lower than the U.S. rate.
5. "----" indicates 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 Statistics Center

INFANT6

Figure E-4
Five-Year Average Postneonatal Mortality Rates by Race
Delaware, 1987-2007



Source:
 Delaware Health Statistics Center

TABLE E-7
FIVE-YEAR AVERAGE PERINATAL MORTALITY RATES BY RACE

DELAWARE AND COUNTIES, 1989-2007

Area/ Race	1989 -1993	1990 -1994	1991 -1995	1992 -1996	1993 -1997	1994 -1998	1995 -1999	1996 -2000	1997 -2001	1998 -2002	1999 -2003	2000 -2004	2001 -2005	2002 -2006	2003 -2007
Delaware															
All Races	9.8	8.8	8.0	7.1	6.9	6.9	7.0	7.1	7.6	8.1	8.1	8.0	8.2	8.0	7.5
White	7.6	6.8	6.3	5.7	5.6	5.7	5.4	5.6	5.8	6.2	6.3	6.3	6.2	6.1	5.9
Black	16.9	15.2	13.2	11.4	10.8	10.9	12.0	12.4	14.0	14.7	14.5	13.7	14.6	13.5	12.6
Kent															
All Races	8.4	8.2	7.6	7.7	6.7	7.3	7.6	7.5	7.4	9.1	9.0	8.5	9.0	8.2	5.9
White	7.8	7.5	6.4	6.4	4.8	5.6	5.8	6.0	6.2	8.3	7.9	7.5	7.1	6.0	3.6
Black	10.5	9.9	10.3	11.2	12.7	12.5	13.3	12.9	12.2	12.2	12.9	11.5	14.6	14.0	11.8
New Castle															
All Races	10.4	9.2	8.3	7.3	6.9	6.7	7.0	7.3	8.0	8.4	8.5	8.4	8.5	8.2	8.1
White	7.6	6.7	6.3	5.5	5.5	5.3	5.0	5.3	5.6	5.8	6.2	6.3	6.3	6.2	6.3
Black	19.7	17.5	14.8	13.2	11.3	11.3	13.1	13.7	15.4	16.4	16.0	15.0	15.1	14.1	13.3
Sussex															
All Races	8.9	8.1	7.2	5.9	7.0	7.3	6.6	6.3	6.7	6.5	6.0	6.3	6.7	6.9	7.3
White	7.5	6.5	6.2	6.2	6.8	7.2	6.5	6.1	5.7	5.5	5.1	5.3	5.2	6.0	6.6
Black	13.1	12.3	10.4	5.6	7.5	7.6	6.6	6.6	10.2	10.1	9.6	10.3	12.5	10.3	10.7

PERI_RACE

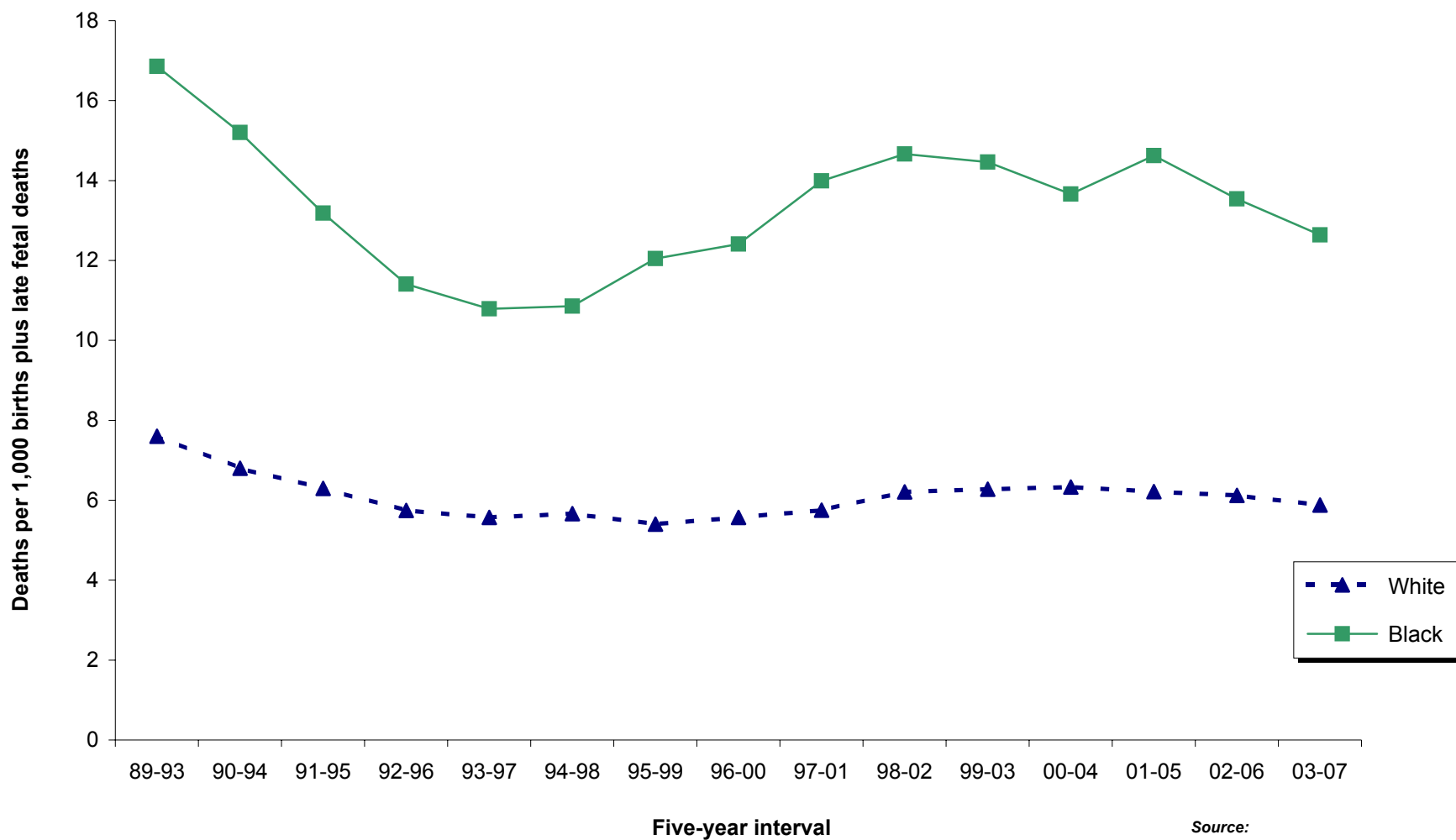
Notes:

1. Perinatal relates to the period surrounding the birth event.
2. The perinatal mortality rate is the sum of late fetal deaths (28+ weeks gestation) and early infant deaths (<7 days of age) per 1,000 live births and late fetal deaths.

Source:

Delaware Health Statistics Center

Figure E-5
Five-year Average Perinatal Mortality Rates by Race
Delaware, 1989-2007



Source:
 Delaware Health Statistics Center

TABLE E-8
FIVE-YEAR AVERAGE INFANT MORTALITY
RATES BY SELECTED RISK MARKERS AND RACE OF MOTHER

DELAWARE, 2002-2006 LIVE BIRTH COHORT

Risk Factor	Race		
	All Races	White	Black
Birth Weight of Child			
<2500	68.6	62.0	80.3
<1500	283.6	286.0	286.3
1500-2499	12.1	10.5	13.9
2500+	2.2	1.7	3.6
Age of Mother			
<20	11.0	11.0	11.6
20-24	8.9	6.4	14.0
25-29	8.8	5.6	19.2
30+	7.2	5.9	14.3
Marital Status of Mother			
Married	6.2	5.1	13.1
Single	11.5	8.7	15.6
Education of Mother			
<12 years	9.5	8.2	13.3
H.S. diploma	11.3	7.9	18.5
1+ years college	5.7	4.4	11.1
Trimester Care Received			
Late/No PNC ²	21.3	16.2	33.0
First	7.8	5.9	13.8
Interval Since Last Live Birth			
<18 months	13.4	9.7	20.5
18+ months	6.6	4.2	13.6

COHRATES

Notes:

1. Infant mortality rates represent the number of deaths to children under one year of age per 1,000 live births.
2. Defined as receiving no care or care in the third trimester.

Source:

Delaware Health Statistics Center

TABLE E-9
LEADING CAUSES OF INFANT DEATH BY GESTATIONAL AGE CATEGORY
DELAWARE, 2002-2006 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	104	0	1	1	106	98.1	98.1
Congenital malformations, deformations, and chromosomal abnormalities	26	16	22	0	64	40.6	65.6
Newborn affected by maternal complications of pregnancy	44	1	0	0	45	97.8	100.0
Sudden infant death syndrome	2	7	28	0	37	5.4	24.3
Newborn affected by complications of placenta, cord, and membranes	24	1	0	0	25	96.0	100.0
Respiratory distress of newborn	21	0	0	0	21	100.0	100.0
Bacterial sepsis of newborn	15	1	1	0	17	88.2	94.1
Diseases of the circulatory system	4	3	8	0	15	26.7	46.7
Atelectasis	8	1	0	0	9	88.9	100.0
Accidents (unintentional injuries)	1	3	5	0	9	11.1	44.4
Intrauterine hypoxia and birth asphyxia	4	2	2	0	8	50.0	75.0
Gastritis, duodenitis, and noninfective enteritis and colitis	7	0	0	0	7	100.0	100.0
Renal failure and other disorders of kidney	5	1	1	0	7	71.4	85.7
Septicemia	2	1	3	0	6	33.3	50.0
Pulmonary hemorrhage originating in the perinatal period	6	0	0	0	6	100.0	100.0
Neonatal hemorrhage	5	0	1	0	6	83.3	83.3
Newborn affected by other complications of labor and delivery	4	0	0	0	4	100.0	100.0
Slow fetal growth and fetal malnutrition	4	0	0	0	4	100.0	100.0
perinatal period	4	0	0	0	4	100.0	100.0
Necrotizing enterocolitis of newborn	2	1	1	0	4	50.0	75.0
All other causes	29	18	34	0	81	35.8	58.0
TOTAL	321	56	107	1	485	66.2	77.7

INFLCOD

Notes:

1. Leading causes of infant death are categorized using the 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 Statistics Center

TABLE E-10
FIVE-YEAR AVERAGE INFANT MORTALITY RATES BY RACE AND SELECTED RISK MARKERS

DELAWARE LIVE BIRTH COHORT, 1989-2006

Parameter/ Race	1989 -1993	1990 -1994	1991 -1995	1992 -1996	1993 -1997	1994 -1998	1995 -1999	1996 -2000	1997 -2001	1998 -2002	1999 -2003	2000 -2004	2001 -2005	2002 -2006
BIRTHWEIGHT														
2500+														
All Races	2.8	2.6	2.6	2.3	2.3	2.5	2.4	2.4	2.5	2.3	2.4	2.5	2.2	2.2
White	2.3	2.1	2.1	2.0	2.1	2.4	2.4	2.3	2.4	2.1	2.0	2.1	1.9	1.7
Black	4.7	4.1	4.1	3.3	2.9	2.8	2.8	2.8	3.0	3.0	3.6	3.9	3.5	3.6
<2500														
All Races	94.4	83.8	76.4	68.7	65.4	64.8	66.5	69.5	75.2	76.4	74.2	73.1	73.9	68.6
White	82.6	69.9	66.3	58.4	56.9	55.4	53.9	55.9	63.2	68.7	67.4	68.8	67.8	62.0
Black	110.9	102.9	91.1	85.3	78.9	78.8	86.0	88.2	93.7	90.5	88.3	83.0	87.5	80.3
<1500														
All Races	364.7	337.3	307.1	272.9	255.2	258.5	262.7	270.9	304.8	316.2	302.4	306.2	311.1	283.6
White	361.0	311.4	282.1	239.3	229.8	223.2	219.3	231.5	281.9	303.4	297.2	316.8	317.5	286.0
Black	366.2	355.0	328.4	306.1	280.3	296.8	315.8	312.1	329.8	335.5	317.0	301.5	313.6	286.3
GESTATION														
37+ weeks														
All Races	3.0	2.6	2.7	2.3	2.4	2.6	2.6	2.5	2.5	2.3	2.3	2.4	2.2	2.2
White	2.5	2.1	2.3	2.2	2.3	2.6	2.6	2.4	2.3	2.1	1.9	2.0	1.7	1.7
Black	4.7	3.9	3.8	2.8	2.8	2.8	2.7	2.8	3.1	2.9	3.7	4.0	3.4	3.4
<37 weeks														
All Races	68.2	62.9	56.2	50.3	47.1	45.6	45.9	48.2	53.0	54.3	52.8	52.6	53.1	48.2
White	58.9	51.3	45.6	38.1	37.2	35.4	33.6	35.7	41.8	45.5	45.1	46.5	44.8	39.0
Black	81.5	79.8	73.4	72.3	65.3	64.1	69.6	70.5	73.5	72.5	70.5	67.7	72.3	67.7
<32 weeks														
All Races	267.6	260.6	238.6	212.4	196.5	199.8	201.3	214.9	238.1	249.6	238.7	239.4	246.9	227.7
White	283.3	259.5	231.0	186.3	177.7	179.4	174.0	191.5	228.4	249.2	238.2	244.0	245.5	214.2
Black	254.4	258.2	242.8	239.1	215.4	222.2	235.6	238.7	250.4	255.4	246.3	239.8	257.8	247.5
PLURALITY														
Single														
All Races	9.1	8.2	7.7	7.0	6.7	6.7	6.8	6.9	7.3	7.3	7.3	7.5	7.4	7.0
White	6.1	5.4	5.4	5.0	5.0	5.1	5.1	4.9	5.2	5.4	5.2	5.6	5.4	5.0
Black	18.8	16.8	14.8	13.3	12.1	11.5	12.2	12.9	13.4	13.4	13.8	13.5	13.6	13.0
Plural														
All Races	52.8	45.6	43.1	30.0	33.5	39.3	41.6	45.4	53.1	52.9	52.3	50.3	50.6	44.7
White	49.8	41.9	37.9	24.5	28.9	30.4	28.6	35.1	43.4	48.0	50.3	49.2	48.5	41.2
Black	65.2	---	---	---	---	68.7	84.6	73.0	80.7	68.5	60.8	54.1	62.8	57.4
SMOKING DURING PREGNANCY														
No														
All Races	9.2	8.1	7.8	7.0	7.1	7.1	7.4	7.6	8.1	8.0	8.2	8.2	8.1	7.8
White	6.7	5.5	5.4	5.0	5.3	5.2	5.3	5.3	5.7	5.8	5.9	6.2	6.0	5.8
Black	17.1	15.9	15.0	13.4	12.6	12.7	14.0	14.3	15.3	14.8	15.0	14.3	14.6	13.6
Yes														
All Races	13.4	13.3	12.1	10.3	9.2	10.6	10.6	11.3	13.4	15.1	14.1	14.8	15.1	13.2
White	8.7	9.5	9.6	8.2	7.4	9.4	9.3	9.8	12.2	14.2	12.7	13.3	13.0	9.9
Black	31.1	27.4	21.3	18.6	16.2	15.3	16.3	17.3	18.0	18.9	19.4	19.5	22.0	23.8

TABLE E-10 (continued)
 FIVE-YEAR AVERAGE INFANT MORTALITY RATES BY RACE AND SELECTED RISK MARKERS

DELAWARE LIVE BIRTH COHORT, 1989-2006

Parameter/ Race	1989 -1993	1990 -1994	1991 -1995	1992 -1996	1993 -1997	1994 -1998	1995 -1999	1996 -2000	1997 -2001	1998 -2002	1999 -2003	2000 -2004	2001 -2005	2002 -2006
EDUCATION														
HS Grad or less														
All Races	11.8	10.6	10.4	9.5	9.4	9.9	10.4	10.3	11.1	11.5	11.4	11.4	11.0	10.5
White	8.4	7.4	7.6	6.9	7.2	8.0	8.0	7.8	8.4	9.1	8.8	9.1	8.6	8.0
Black	19.8	17.8	16.8	15.7	14.3	14.3	15.8	15.6	16.8	16.9	17.2	16.9	17.1	16.5
1+ yrs college														
All Races	7.2	6.5	5.7	5.0	4.9	4.9	4.9	5.5	6.1	6.0	6.0	6.0	6.3	5.7
White	5.5	4.6	4.2	4.0	3.9	3.7	3.6	4.1	4.6	4.7	4.7	5.0	5.0	4.4
Black	18.1	16.9	13.0	9.9	10.2	10.5	11.8	13.5	13.9	12.6	12.2	11.0	12.0	11.1
PRENATAL CARE ATTAINMENT														
First														
All Races	9.1	8.0	7.4	6.7	6.5	6.9	7.3	7.7	8.2	8.3	8.2	8.3	8.2	7.8
White	6.7	5.6	5.5	5.1	5.1	5.3	5.5	5.8	6.2	6.4	6.2	6.6	6.3	5.9
Black	19.9	18.0	15.0	13.5	12.3	12.6	14.2	14.6	15.2	14.8	15.0	14.2	14.5	13.8
Late or no														
All Races	26.4	23.8	27.2	24.0	25.2	21.9	19.4	15.5	20.1	21.7	25.8	25.0	25.4	21.3
White	20.8	24.3	29.6	20.5	24.9	22.3	16.7	11.5	17.4	19.6	24.2	22.1	19.7	16.2
Black	31.1	24.3	26.3	28.5	25.5	21.5	21.2	19.0	23.0	25.8	30.6	31.8	38.0	33.0
PAYMENT FOR DELIVERY														
Medicaid														
All Races	NA	NA	11.7	10.1	10.0	10.3	10.9	9.9	10.6	10.1	9.5	9.8	10.1	9.5
White	NA	NA	8.5	7.3	7.9	8.8	9.1	7.7	8.6	8.3	7.1	7.5	7.6	6.9
Black	NA	NA	15.4	13.8	12.9	12.7	13.6	13.1	13.8	13.0	13.3	13.7	14.7	14.0
Private Insurance														
All Races	NA	NA	6.1	5.5	5.3	5.5	5.7	6.5	6.8	7.4	7.7	7.8	7.5	7.3
White	NA	NA	4.8	4.4	4.2	4.2	4.3	4.9	5.2	5.7	5.9	6.1	5.8	5.4
Black	NA	NA	14.1	12.6	11.6	12.8	13.7	14.8	15.6	16.5	17.1	16.9	16.8	16.3

COTREND

Notes:

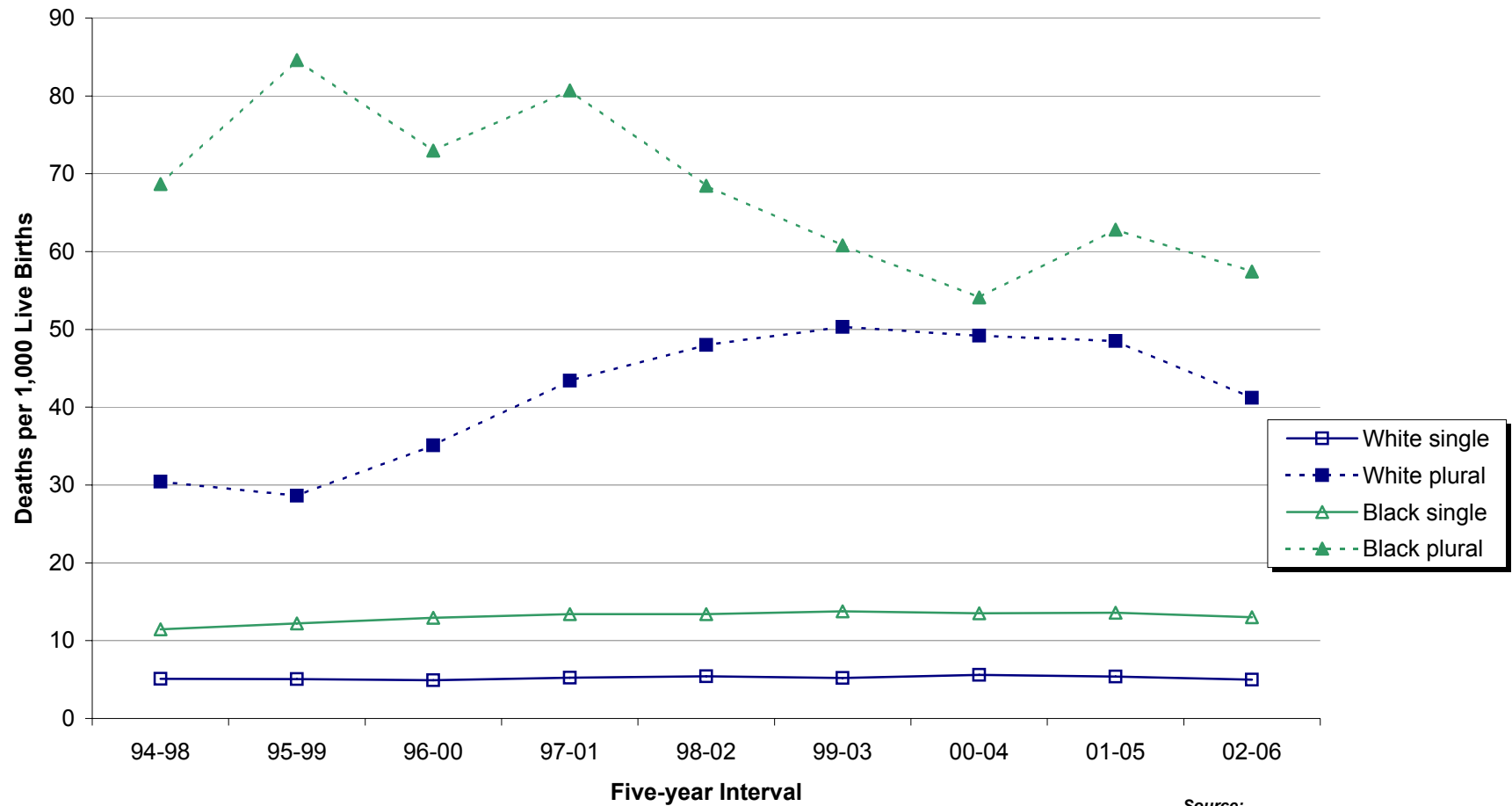
1. See the Basic Definitions section for definitions of birthweight, gestation, prenatal care attainment, and plurality.
2. "—" indicates rate does not meet standards of reliability or precision; based on fewer than 20 deaths in the numerator.
3. Primary source of payment for delivery not available prior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

Source:

Delaware Health Statistics Center

Figure E-6
Five-year Average Infant Mortality Rates by Race and Plurality

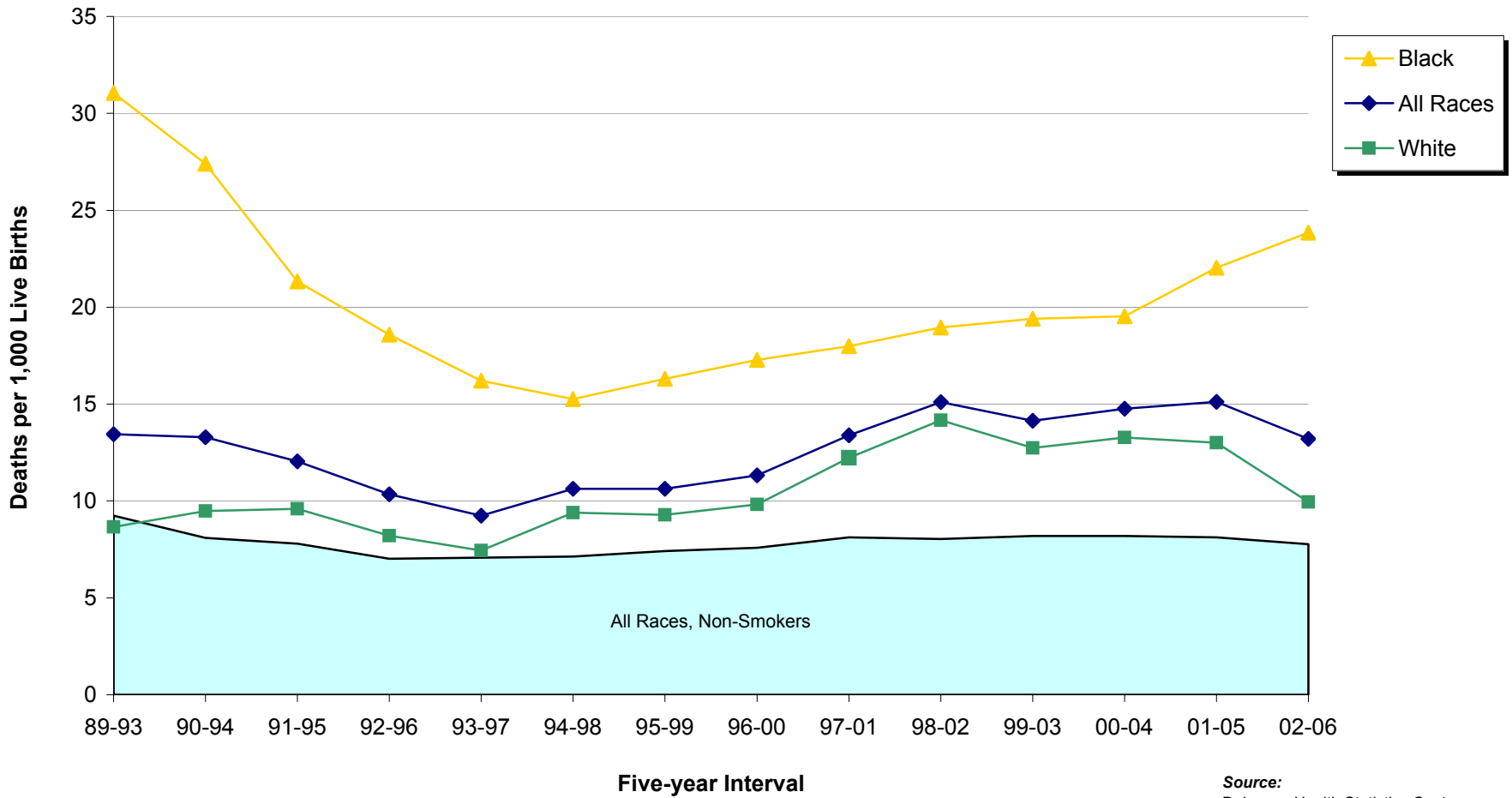
Delaware, 1994-2006 Live Birth Cohort



Source:
 Delaware Health Statistics Center

Figure E-7
Five-year Average Infant Mortality Rates by Race of Mothers who Smoked during Pregnancy versus all Non-smoking Mothers

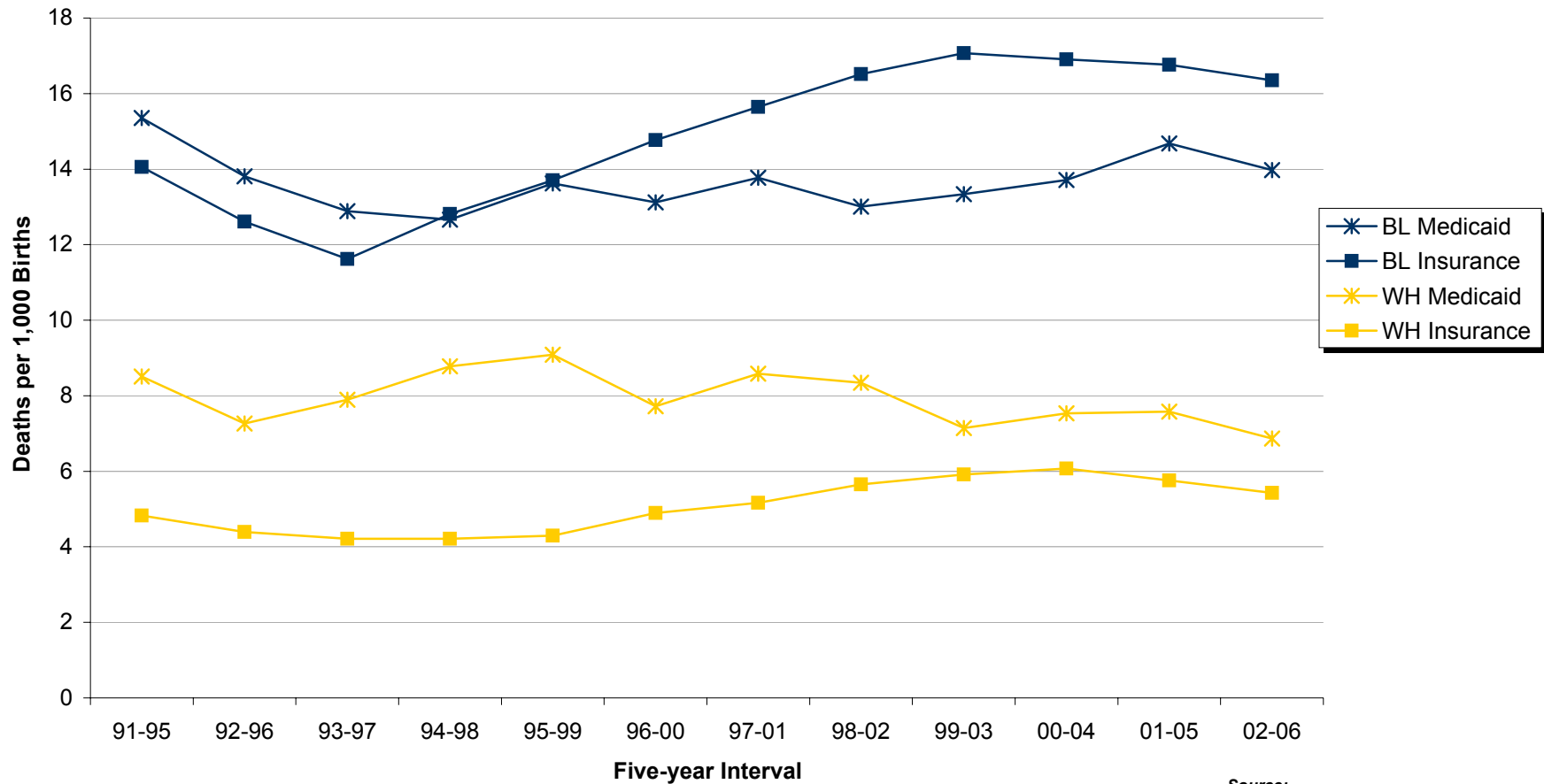
Delaware, 1989-2006 Live Birth Cohort



Source:
 Delaware Health Statistics Center

Figure E-8
Five-year Average Infant Mortality Rates by Race and
Source of Payment for Delivery

Delaware, 1991-2006 Live Birth Cohort



Source:
 Delaware Health Statistics Center

TABLE E-11
NUMBER OF INFANT DEATHS BY PLURALITY, BIRTH WEIGHT IN GRAMS, RACE OF MOTHER AND SEX OF CHILD
DELAWARE, 2002-2006 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	Female
All Births	485	263	222	253	137	116	213	118	95	19	8	11
<2500	371	198	173	189	102	87	168	91	77	14	5	9
<1500	319	176	143	163	91	72	146	82	64	10	3	7
<500	164	89	75	73	45	28	85	43	42	6	1	5
500-999	133	71	62	72	34	38	58	36	22	3	1	2
1000-1499	22	16	6	18	12	6	3	3	0	1	1	0
1500-1999	19	12	7	10	7	3	8	4	4	1	1	0
2000-2499	33	10	23	16	4	12	14	5	9	3	1	2
2500+	112	64	48	63	35	28	44	26	18	5	3	2
2500-2999	40	26	14	27	17	10	11	8	3	2	1	1
3000-3499	46	23	23	19	8	11	24	13	11	3	2	1
3500-3999	17	8	9	11	4	7	6	4	2	0	0	0
4000-4499	6	5	1	4	4	0	2	1	1	0	0	0
4500+	3	2	1	2	2	0	1	0	1	0	0	0
Unknown	2	1	1	1	0	1	1	1	0	0	0	0
Single Births	388	207	181	192	97	95	179	103	76	17	7	10
<2500	277	144	133	130	64	66	134	76	58	13	4	9
<1500	229	125	104	106	55	51	113	67	46	10	3	7
<500	115	65	50	44	29	15	65	35	30	6	1	5
500-999	98	48	50	49	17	32	46	30	16	3	1	2
1000-1499	16	12	4	13	9	4	2	2	0	1	1	0
1500-1999	17	10	7	9	6	3	8	4	4	0	0	0
2000-2499	31	9	22	15	3	12	13	5	8	3	1	2
2500+	109	62	47	61	33	28	44	26	18	4	3	1
2500-2999	37	24	13	25	15	10	11	8	3	1	1	0
3000-3499	46	23	23	19	8	11	24	13	11	3	2	1
3500-3999	17	8	9	11	4	7	6	4	2	0	0	0
4000-4499	6	5	1	4	4	0	2	1	1	0	0	0
4500+	3	2	1	2	2	0	1	0	1	0	0	0
Unknown	2	1	1	1	0	1	1	1	0	0	0	0
Plural Births	97	56	41	61	40	21	34	15	19	2	1	1
<2500	94	54	40	59	38	21	34	15	19	1	1	0
<1500	90	51	39	57	36	21	33	15	18	0	0	0
<500	49	24	25	29	16	13	20	8	12	0	0	0
500-999	35	23	12	23	17	6	12	6	6	0	0	0
1000-1499	6	4	2	5	3	2	1	1	0	0	0	0
1500-1999	2	2	0	1	1	0	0	0	0	1	1	0
2000-2499	2	1	1	1	1	0	1	0	1	0	0	0
2500+	3	2	1	2	2	0	0	0	0	1	0	1
2500-2999	3	2	1	2	2	0	0	0	0	1	0	1
3000-3499	0	0	0	0	0	0	0	0	0	0	0	0
3500-3999	0	0	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:
Infant deaths refer to deaths of children under one year of age.

Source:
Delaware Health Statistics Center

PLBWRCSX

TABLE E-12
NUMBER OF NEONATAL DEATHS BY PLURALITY, BIRTH WEIGHT IN GRAMS, RACE OF MOTHER AND SEX OF CHILD
DELAWARE, 2002-2006 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	Female
All Births	358	199	159	188	105	83	157	90	67	13	4	9
<2500	315	173	142	164	92	72	140	79	61	11	2	9
<1500	292	160	132	151	84	67	132	74	58	9	2	7
<500	164	89	75	73	45	28	85	43	42	6	1	5
500-999	111	59	52	63	29	34	45	29	16	3	1	2
1000-1499	17	12	5	15	10	5	2	2	0	0	0	0
1500-1999	8	6	2	5	4	1	3	2	1	0	0	0
2000-2499	15	7	8	8	4	4	5	3	2	2	0	2
2500+	41	25	16	23	13	10	16	10	6	2	2	0
2500-2999	19	13	6	13	9	4	5	3	2	1	1	0
3000-3499	15	8	7	6	2	4	8	5	3	1	1	0
3500-3999	5	3	2	3	1	2	2	2	0	0	0	0
4000-4499	1	1	0	1	1	0	0	0	0	0	0	0
4500+	1	0	1	0	0	0	1	0	1	0	0	0
Unknown	2	1	1	1	0	1	1	1	0	0	0	0
Single Births	269	147	122	131	68	63	125	75	50	13	4	9
<2500	228	123	105	109	57	52	108	64	44	11	2	9
<1500	206	111	95	97	50	47	100	59	41	9	2	7
<500	115	65	50	44	29	15	65	35	30	6	1	5
500-999	80	38	42	43	14	29	34	23	11	3	1	2
1000-1499	11	8	3	10	7	3	1	1	0	0	0	0
1500-1999	8	6	2	5	4	1	3	2	1	0	0	0
2000-2499	14	6	8	7	3	4	5	3	2	2	0	2
2500+	39	23	16	21	11	10	16	10	6	2	2	0
2500-2999	17	11	6	11	7	4	5	3	2	1	1	0
3000-3499	15	8	7	6	2	4	8	5	3	1	1	0
3500-3999	5	3	2	3	1	2	2	2	0	0	0	0
4000-4499	1	1	0	1	1	0	0	0	0	0	0	0
4500+	1	0	1	0	0	0	1	0	1	0	0	0
Unknown	2	1	1	1	0	1	1	1	0	0	0	0
Plural Births	89	52	37	57	37	20	32	15	17	0	0	0
<2500	87	50	37	55	35	20	32	15	17	0	0	0
<1500	86	49	37	54	34	20	32	15	17	0	0	0
<500	49	24	25	29	16	13	20	8	12	0	0	0
500-999	31	21	10	20	15	5	11	6	5	0	0	0
1000-1499	6	4	2	5	3	2	1	1	0	0	0	0
1500-1999	0	0	0	0	0	0	0	0	0	0	0	0
2000-2499	1	1	0	1	1	0	0	0	0	0	0	0
2500+	2	2	0	2	2	0	0	0	0	0	0	0
2500-2999	2	2	0	2	2	0	0	0	0	0	0	0
3000-3499	0	0	0	0	0	0	0	0	0	0	0	0
3500-3999	0	0	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 Health Statistics Center

NEOPLBW