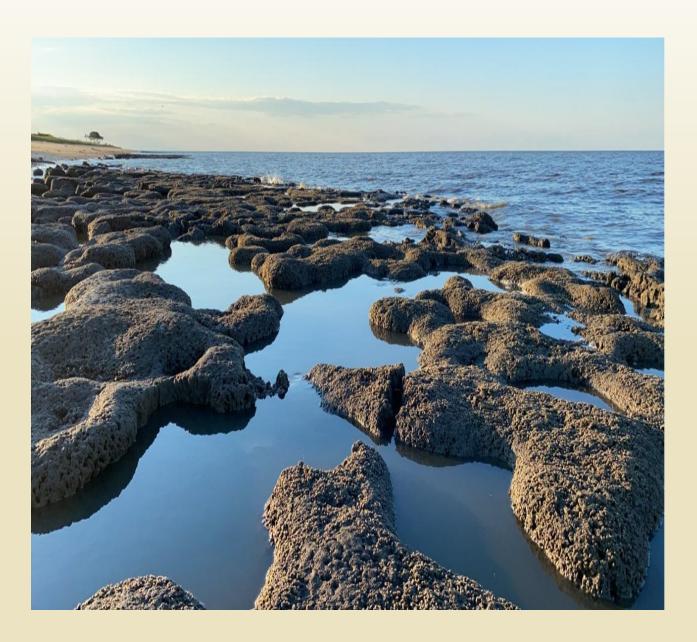
DELAWARE VITAL STATISTICS ANNUAL REPORT INFANT MORTALITY, 2019

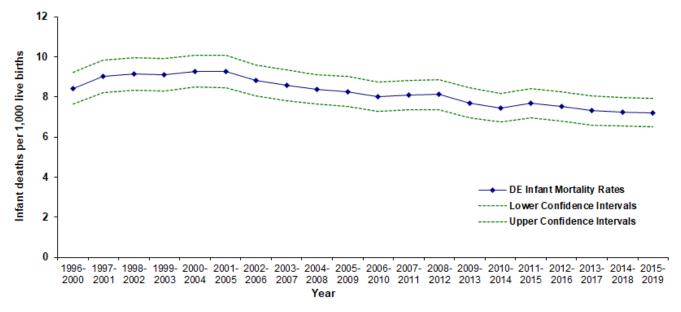


Suggested Citation:

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In 2015-2019, Delaware's infant mortality rate (IMR) was 7.2 infant deaths per 1,000 live births, resulting in a total decline of 22.6 percent from the 2000-2004 rate of 9.3 infant deaths per 1,000 live births.

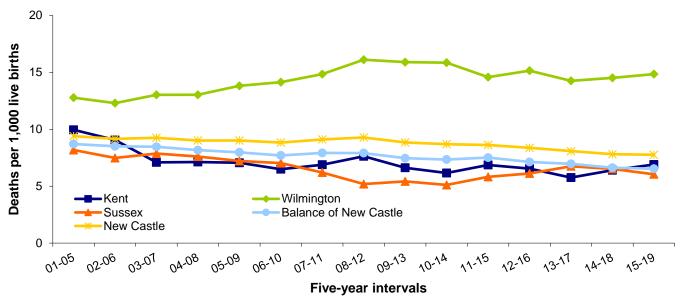
Figure 27. Five-year Average Infant Mortality Rates with Confidence Intervals, Delaware, 1996-2019



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

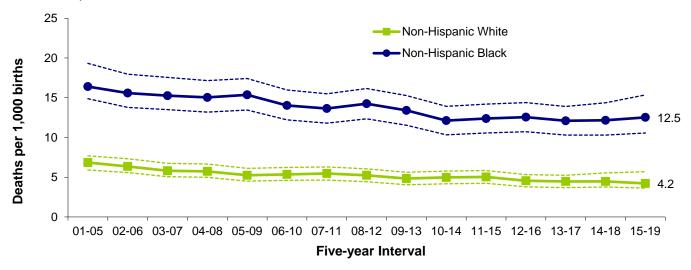
Wilmington's IMR continued to be the highest in Delaware. The combination of Wilmington's high IMR and a high IMR in the balance of New Castle County resulted in New Castle County's IMR being higher than the IMRs of both Kent and Sussex counties at 7.8 infant deaths per 1,000 live births. In 2015-2019 Sussex County's IMR remained the lowest at 6.0 infant deaths per 1,000 live births. During the same time period the balance of New Castle County's IMR was 6.5 infant deaths per 1,000 live births; Wilmington's IMR was 14.8 infant deaths per 1,000 live births; and Kent County's IMR was 6.9 infant deaths per 1,000 live births.

Figure 28. Five-year Average Infant Mortality Rates, Delaware Counties and City of Wilmington, Delaware, 2001-2019



Non-Hispanic black infants experienced a lower percentage of decrease in mortality rates than non-Hispanic white infants. In 2015-2019 the non-Hispanic black IMR of 12.5 infant deaths per 1,000 live births was a 24 percent decrease from the 16.4 rate in 2001-2005. Non-Hispanic white IMR decreased 38 percent from 6.8 in 2001-2005 to 4.2 infant deaths per 1,000 live births in 2015-2019.

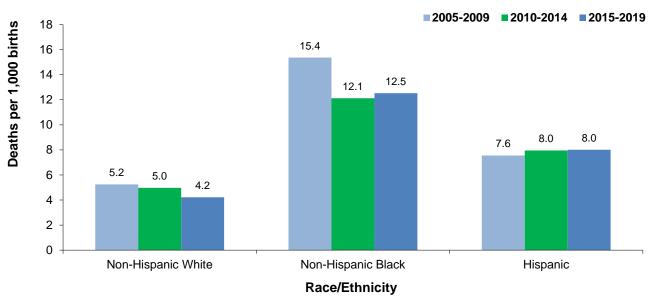
Figure 29. Five-year Average Infant Mortality Rates by Race with Confidence Intervals, Delaware, 2001-2019



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

Significant disparities existed between non-Hispanic black and non-Hispanic white infant mortality rates. Non-Hispanic black IMRs were three times higher than the non-Hispanic white IMRs in 2015-2019. Non-Hispanic black IMRs were highest in all three time periods depicted below with the highest rate of 15.4 infant deaths per 1,000 live births in 2005-2009. The non-Hispanic black rate in 2015-2019 was 1.6 times higher than the Hispanic rate of 8.0 infant deaths per 1,000 live births. From 2005-2009 to 2015-2019 the Hispanic IMR increased five percent (7.6 to 8.0 infant deaths per 1,000 live births).

Figure 30. Five-year Average Infant Mortality Rates by Race and Hispanic Origin, Delaware 2005-2019



In 2015-2019, New Castle County had the highest IMRs and Sussex 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 18 percent to 13.1 infant deaths per 1,000 live births in 2015-2019. Disparity between the races is evident in all three counties, with the New Castle non-Hispanic black rate three times higher than the non-Hispanic white rate for 2015-2019.

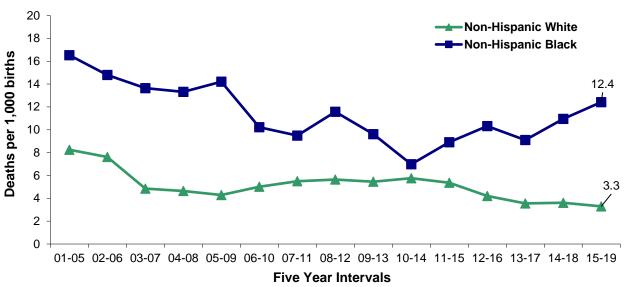
Non-Hispanic White 20 Non-Hispanic Black Deaths per 1,000 Births 18 16 13.1 14 12 10 8 6 4.3 4 2 01-05 02-06 03-07 04-08 05-09 06-10 07-11 08-12 09-13 10-14 11-15 12-16 13-17 14-18 15-19**Five Year Intervals**

Figure 31. Five-year Average Infant Mortality Rates by Race, New Castle County, Delaware, 2001-2019

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

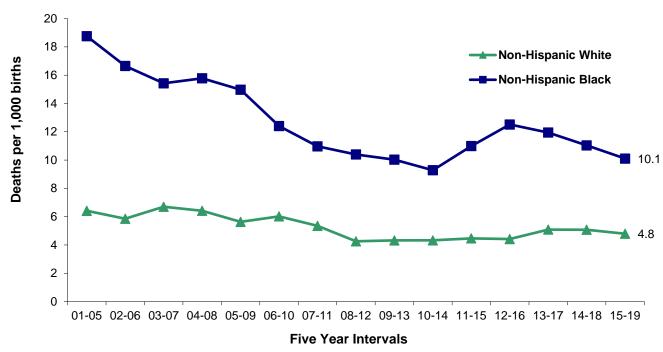
Non-Hispanic black IMRs in Kent County peaked at 16.5 infant deaths per 1,000 live births in 2001-2005. The non-Hispanic black IMR decreased 25 percent to 12.4 infant death per 1,000 live births in 2015-2019. The non-Hispanic white IMR had a 60 percent decrease from 2001-2005 to 2015-2019 (8.2 to 3.3 infant deaths per 1,000 live births). The non-Hispanic Black IMR was almost four times higher than the non-Hispanic white IMR.





Sussex County's non-Hispanic black IMR decreased to 10.1 infant deaths per 1,000 live births in 2015-2019, a 46 percent reduction from the 2001-2005 peak of 18.8 infant deaths per 1,000 live births. Sussex County's non-Hispanic white IMR had a 25 percent decrease from its peak in 2003-2007 to 2015-2019 (6.4 to 4.8 infant deaths per 1,000 live births). Sussex County had the smallest disparity between the races with non-Hispanic black IMRs two times higher than non-Hispanic white IMRs in 2015-2019.

Figure 33. Five-year Average Infant Mortality Rates by Race, Sussex County, Delaware, 2001-2019



In 2015-2019 there were 389 infant deaths. The five leading causes of infant death in Delaware were:

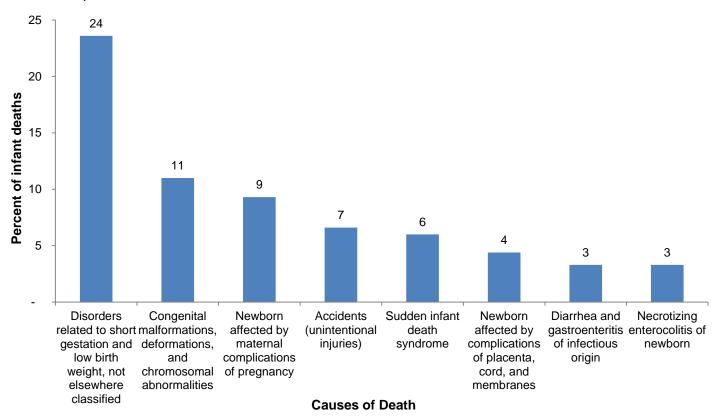
- Disorders related to short gestation and low birthweight, which accounted for 21.3 percent of infant deaths.
- o Congenital anomalies (birth defects), which accounted for 14.9 percent of infant deaths.
- Newborns affected by maternal complications of pregnancy, which accounted for 11.1 percent of infant deaths. Of the 43 deaths attributed to this cause, 36 were due to the newborn being affected by incompetent cervix and premature rupture of membranes
- o Sudden infant death syndrome (SIDS), which accounted for 4.4 percent of all infant deaths.
- Accidents (unintentional injuries), which accounted for 3.9 percent of infant deaths.

In sum, the five most common causes of infant death accounted for 56 percent, or 216 of the 389 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 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 2015-2019, while accidents were responsible for one percent of all non-Hispanic white infant deaths, they accounted for seven percent of non-Hispanic black infant deaths. In 2015-2019, infant deaths due to disorders related to prematurity and low birthweight also accounted for larger percentages of non-Hispanic black infant deaths (24 percent) than non-Hispanic white infant deaths (15 percent).

Figure 34. Percentage of the Most Frequent Causes of Non-Hispanic Black Infant Death, Delaware, 2015-2019



16 14.9 14.9 13.2 14 Percentage of infant deaths 12 10 4.4 4.4 3.5 2.6 Newborn Sudden infant Respiratory Bacterial sepsis Diseases of the Disorders Congenital related to short malformations, affected by death syndrome distress of of newborn circulatory gestation and deformations, maternal newborn system low birth weight, and complications of not elsewhere chromosomal pregnancy classified abnormalities **Causes of Death**

Figure 35. Percentage of the Most Frequent Causes of Non- Hispanic White Infant Death, Delaware 2015-2019

In 1989-1993, Hispanic births 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 quadrupled. In the most recent five-year period, 2015-2019, 15.5 percent of all live births were to Hispanic mothers, and 17.2 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.

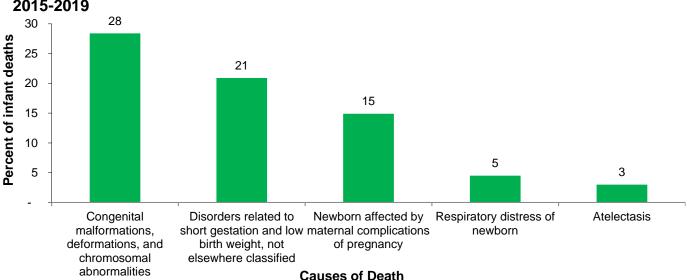


Figure 36. Percentage of the Most Frequent Causes of Hispanic Infant Death, Delaware, 2015-2019

In 2015-2019, approximately 94 percent of all infant deaths occurred within the first six months of life, 70.4 percent occurred within the first 28 days of life, and 41 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).

Number of Deaths 0 50 100 Disorders related to short gestation and low birth weight, not elsewhere classified Congenital malformations, deformations, and chromosomal abnormalities Newborn affected by maternal complications of pregnancy Sudden infant death syndrome Accidents (unintentional injuries) Newborn affected by complications of placenta, cord, and membranes Respiratory distress of newborn Bacterial sepsis of newborn Necrotizing enterocolitis of newborn Diarrhea and gastroenteritis of infectious origin Diseases of the circulatory system Septicemia Intrauterine hypoxia and birth asphyxia Atelectasis Neonatal hemorrhage Assault (homicide) Volume depletion, disorders of fluid, electrolyte and acid-base balance ■<28 days
</p> Hematological disorders 28-364 days Hydrops fetalis not due to hemolytic disease Dis. of blood,blood-forming organs, certain disorders involving immune mechanism

Figure. 37 Most Frequent Causes of Infant Death, Delaware, 2015-2019

- Prematurity and low birthweight accounted for the greatest number of infant deaths in 2015-2019; 98 percent of these deaths occurred in the neonatal period.
- Sudden infant death syndrome (SIDS) was one of the top five causes of death. The majority of these deaths occurred in the postneonatal period, with a mean age at death of 78 days. SIDS deaths decreased 59 percent from 2010-2014 to 2015-2019 (41 to 17 SIDS deaths). The number of infant deaths in 2015-2019 (389) decreased six percent from the number of infant deaths in 2010-2014 (412).
- Sixty-five percent (11 out of 17) of the SIDS deaths were associated with co-sleeping and/or sleeping on soft surfaces, such as couches and adult beds.
- In 2015-2019, there were 16 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, seven percent of all infant deaths were associated with co-sleeping and/or unsafe sleep practices.

Although only 1 percent of all live births in 2014-2018 were infants weighing less than 1,000 grams, they accounted for over half (56 percent) of all infant deaths. In total, nine percent of all live births in 2014-2018 were infants of low birthweight (under 2,500 grams) and 73.4 percent of infant deaths were low birthweight.

< 500 **Infant Deaths** Live Births 500-999 1,000-1,499 0.7% 0.2% 0.8% 1,500-1,999 1.7% 2500+ <500 26.2% 2,000-2,499 31.7% 5.5% 2,500+ 2000-2499 91.1% 7.6% 500-999 24.1% 1500-1999 5.0% 1,000-1,499 5.0%

Figure 38. Percent Distribution by Birthweight in Grams, Delaware, Live Birth Cohort, 2014-2018

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 2014-2018 were less than 28 weeks gestation at birth, but they accounted for 55.2 percent of all infant deaths. In total, 12.6 percent of all live births in 2014-2018 were born preterm (<37 weeks of gestation) and 71.5 percent of infant deaths were preterm.

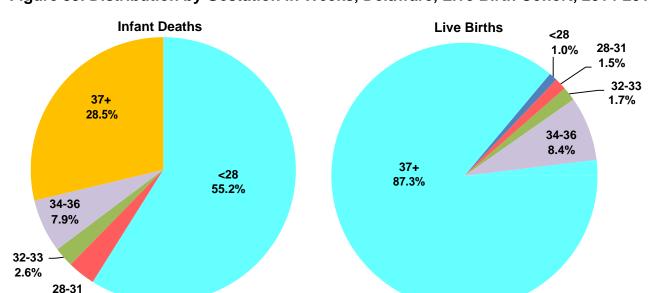


Figure 39. Distribution by Gestation in Weeks, Delaware, Live Birth Cohort, 2014-2018

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

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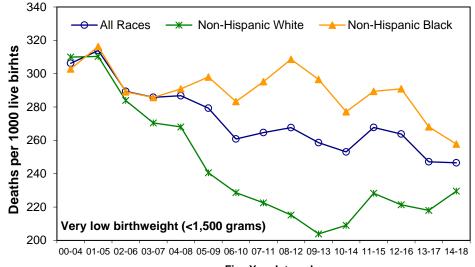
Birthweight and gestation are considered to be the most important predictors of infant health and mortality risk. Infants born too small or too early have a much greater risk of mortality than those who reach a normal birthweight (2,500+ grams) or full-term gestation (37+ weeks).

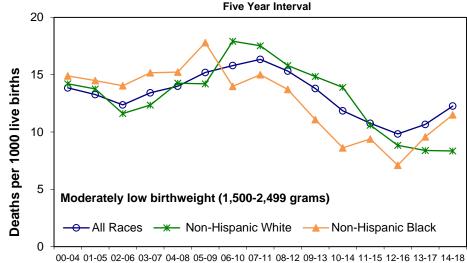
Although the IMRs decreased for both non-Hispanic white and non-Hispanic black for very low birthweight (VLBW) (<1,500 grams) since 2001-2005, the non-Hispanic black IMR of 257.8 was significantly higher than the non-Hispanic white IMR of 229.6 infant deaths per 1,000 live births in 2014-2018.

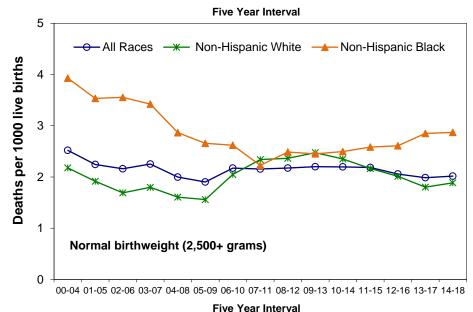
IMRs for moderately low birthweight infants of all races decreased 25 percent from its high point in 2007-2011 to 2014-2018. During that time, non-Hispanic white IMRs decreased 53 percent while the non-Hispanic black IMR decreased by 23 percent, making the non-Hispanic black IMR higher than the non-Hispanic white IMR (11.5 vs 8.3).

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 2014-2018, the non-Hispanic white IMR decreased 17 percent to 1.9 but 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, 2000-2018 Live Birth Cohort







95 96 97 98 99 00 01 02

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 17 percent from 32.6 to 38.0 infant deaths per 1,000 live births. IMRs for singleton births decreased 19 percent from 2001-2005 to 2014-2018. In 2014-2018, the infant mortality rate for plural births was more than six times that of singleton births (38.0 versus 6.0 infant deaths per 1,000 live births, respectively).

60 Single Plural Deaths per 1,000 Births 50 40 38.0 30 32.6 20 7.0 7.4 6.0 10 0 89- 90- 91- 92- 93-94- 95- 96- 97- 98-99-00-01-02-03-04-05-06-07-08-09-10-11-12-

Figure 41. Five-year Average Infant Mortality Rates by Plurality, Delaware, Live Birth Cohort, 1989-2018

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

Five-year Interval

03 04 05 06 07 08 09 10 11

12 13

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 nearly two times greater for plural births.

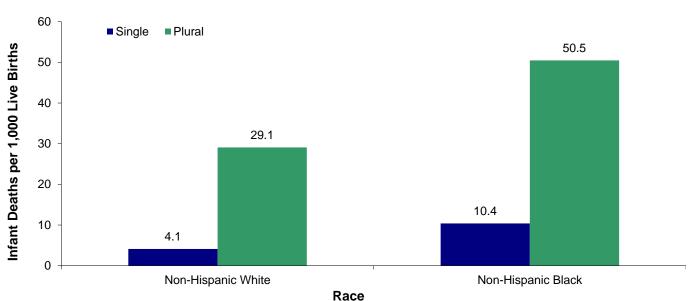


Figure 42. Five-year Average Infant Mortality Rates by Plurality and Race, Delaware, Live Birth Cohort, 2014-2018

TABLE E-1. NUMBER OF INFANT DEATHS BY RACE, COUNTY, AND CITY OF WILMINGTON, U.S., DELAWARE, 2002-2019

							,				, ,							T T
Area/																		
Race	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
U.S. All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	27970 13327 8031 1289	27995 13228 7836 1331	27860 13001 7869 1334	28384 13134 7958 1380	28509 12884 8241 1368	29153 13005 8351 1516	28075 12509 7894 1452	26408 11785 7560 1397	24572 11192 6758 1324	24001 10886 6670 1338	23654 10759 6528 1363	23446 10766 6488 1280	23211 10515 6435 1273	23458 10444 6624 1401	23157 10204 6545 1380	22341 9520 6390 1402	N/A N/A N/A N/A	N/A N/A N/A N/A
Delaware All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	96 52 35 3	107 41 49 1	97 43 44 2	106 36 53 3	99 39 44 4	91 33 38 1	101 37 49 0	91 24 52 7	88 38 35 4	98 39 38 10	84 24 43 6	68 22 33 1	74 27 29 6	100 38 38 6	87 23 39 8	72 18 37 3	62 19 33 2	68 16 35 7
Kent All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	27 22 5 0	16 8 7 0	17 8 8 1	21 6 14 1	13 7 5 1	9 4 4 1	18 7 7 0	18 6 12 0	15 11 3 0	17 10 3 1	17 5 10 0	6 5 1 0	13 8 4 0	23 8 9 1	14 2 8 1	8 0 7 0	13 5 7 1	17 5 9 2
New Castle All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	55 26 22 3	78 27 37 1	60 25 27 0	68 23 30 2	68 22 35 2	60 19 27 0	70 25 36 0	57 13 33 5	58 17 29 3	74 24 34 9	58 16 28 6	48 12 27 1	49 14 20 6	54 19 23 4	62 16 27 7	48 11 26 3	37 9 23 0	44 8 23 5
Wilmington All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	12 1 10 0	18 1 13 0	12 1 8 0	18 1 14 0	16 1 14 0	17 1 14 0	19 2 10 0	18 0 15 2	18 1 13 0	17 2 15 0	20 4 11 1	14 0 11 0	14 3 7 1	10 2 4 1	18 0 14 2	15 1 10 2	13 1 12 0	13 2 7 0
Balance of NC County All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	43 25 12 3	60 26 24 1	48 24 19 0	50 22 16 2	52 21 21 2	43 18 13 0	51 23 26 0	39 13 18 3	40 16 16 3	57 22 19 9	38 12 17 5	34 12 16 1	35 11 13 5	44 17 19 3	44 16 13 5	33 10 16 1	24 8 11 0	31 6 16 5
Sussex All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	14 4 8 0	13 6 5 0	20 10 9 1	17 7 9 0	18 10 4 1	22 10 7 0	13 5 6 0	16 5 7 2	15 10 3 1	7 5 1 0	9 3 5 0	14 5 5 0	12 5 5 0	23 11 6 1	11 5 4 0	16 7 4 0	12 5 3 1	7 3 3 0

Sources: National Center for Health Statistics

 ^{*}Based on NCHS estimate.

^{2.} Infant deaths refer to deaths to children under one year of age.

TABLE E-2. NUMBER OF NEONATAL DEATHS BY RACE, COUNTY, AND CITY OF WILMINGTON, U.S., DELAWARE, 2002-2019

Area/																		
Race	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
U.S. All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	18791 8853 5399 856	18935 8797 5335 861	18602 8499 5283 851	18782 8452 5332 895	19041 8410 5525 885	19094 8329 5484 982	18238 7936 5159 916	17261 7515 4957 909	16193 7251 4395 867	16065 7103 4437 893	15887 7070 4354 912	15893* 7119* 4355* 869*	15737 6923 4361 869	15672 6724 4348 937	15303 6486 4323 925	14844 6191 4150 924	N/A N/A N/A N/A	N/A N/A N/A N/A
Delaware All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	78 44 28 2	76 29 36 1	63 28 28 2	79 25 39 3	72 28 33 3	65 25 28 0	68 23 35 0	66 15 39 7	58 24 25 4	73 24 35 7	66 16 34 6	47 12 25 1	55 18 20 5	79 32 31 3	57 10 27 7	48 14 22 3	43 12 23 2	46 12 20 4
Kent All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	22 18 4 0	8 3 4 0	11 5 5 1	14 3 10 1	7 4 3 0	6 3 3 0	12 4 5 0	14 4 10 0	11 8 2 0	13 6 3 1	12 3 8 0	3 3 0 0	10 7 2 0	17 7 6 0	9 1 5 1	5 0 5 0	9 3 5 1	15 4 8 2
New Castle All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	46 22 19 2	57 22 27 1	39 16 18 0	54 17 23 2	52 15 28 2	43 14 20 0	48 16 27 0	42 9 23 5	36 8 22 3	57 16 32 6	47 12 21 6	34 6 22 1	37 7 16 5	49 17 23 3	43 7 20 6	36 11 16 3	27 6 17 0	28 7 11 2
Wilmington All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	9 1 8 0	11 0 10 0	9 1 6 0	15 1 11 0	12 0 11 0	10 1 9 0	10 0 6 0	14 0 11 2	10 0 9 0	14 1 13 0	18 4 9 1	11 0 8 0	12 3 5 1	10 2 4 1	15 0 11 2	9 1 5 2	9 1 8 0	6 2 2 0
Balance of NC County All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	37 21 11 2	46 22 17 1	30 15 12 0	39 16 12 2	40 15 17 2	33 13 11 0	38 16 21 0	28 9 12 3	26 8 13 3	43 15 19 6	29 8 12 5	23 6 14 1	25 4 11 4	39 15 19 2	28 7 9 4	27 10 11 1	18 5 9 0	22 5 9 2
Sussex All Races Non-Hispanic White Non-Hispanic Black Non-Hispanic Other	10 4 5 0	11 4 5 0	13 7 5 1	11 5 6 0	13 9 2 1	16 8 5 0	8 3 3 0	10 2 6 2	11 8 1 1	3 2 0 0	7 1 5 0	10 3 3 0	8 4 2 0	13 8 2 0	5 2 2 0	7 3 1 0	7 3 1 1	3 1 1 0

Sources: National Center for Health Statistics,

 ^{*}Based on NCHS estimate.

^{2.} Neonatal deaths refer to deaths of children under 28 days of age.

TABLE E-3. NUMBER OF POSTNEONATAL DEATHS BY RACE, COUNTY, AND CITY OF WILMINGTON, U.S., DELAWARE 2002-2019

A === /	1	1	1	1	1	- i			1	1	1	<u> </u>	1	1	1	1	1	
Area/ Race	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	2002	2003	2004	2000	2000	2007	2000	2003	2010	2011	2012	2010	2014	2010	2010	2017	2010	2013
U.S. All Races	9179	0000	9258	0000	0.400	10059	9837	9147	8379	7936	7767	7553*	7474	7786	7054	7497	N/A	NI/A
Non-Hispanic White	9179 4474	9060 4431	9258 4502	9602 4682	9468 4474	4676	983 <i>1</i> 4573	9147 4270	3941	3783	3689	7553° 3647*	3592	3720	7854 3718	3329	N/A N/A	N/A N/A
Non-Hispanic White	2632	2501	2586	2626	2716	2867	2735	2603	2363	2233	2174	2133*	2074	2276	2222	2240	N/A N/A	N/A N/A
Non-Hispanic Other	433	470	483	485	483	534	536	488	457	445	451	411*	404	464	455	478	N/A	N/A
Delaware																		
All Races	18	31	34	27	27	26	33	25	30	25	18	21	19	21	30	24	19	22
Non-Hispanic White	8	12	15	11	11	8	14	9	14	15	8	10	9	6	13	4	7	4
Non-Hispanic Black	7 1	13 0	16 0	14 0	11 1	10 1	14 0	13 0	10 0	3	9	8 0	9	7 3	12 1	15 0	10 0	15 3
Non-Hispanic Other	'	U	U	U	'	'	U	U	U	3	U	U	'	3	'	U	U	3
Kent All Races	_	0	0	7	0	2	0	4	4	4	_	2	2	0	_	0	4	0
Non-Hispanic White	5 4	8 5	6 3	7 3	6 3	3 1	6 3	4 2	4	4 4	5 2	3 2	3	6 1	5 1	3 0	4 2	2
Non-Hispanic Black	1	3	3	4	2	1	2	2	1	0	2	1	2	3	3	2	2	1
Non-Hispanic Other	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0
New Castle																		
All Races	9	21	21	14	16	17	22	15	22	17	11	14	12	5	19	12	10	16
Non-Hispanic White	4	5	9	6 7	7 7	5 7	9	4 10	9 7	8	4 7	6 5	7 4	2 0	9 7	0 10	3 6	1
Non-Hispanic Black Non-Hispanic Other	3	10 0	9	0	0	0	9	0	0	2	0	5 0	4	1	1	0	0	12 3
·	· ·	· ·	Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	Ŭ	Ü	Ö	J	Ŭ	·	· ·	· ·	J	J	Ŭ
Wilmington All Races	3	7	3	3	4	7	9	4	8	3	2	3	2	0	3	6	4	7
Non-Hispanic White	0	1	0	0	1	0	2	0	1	1	0	0	0	0	0	0	0	0
Non-Hispanic Black	2	3	2	3	3	5	4	4	4	2	2	3	2	0	3	5	4	5
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	6	14	18	11	12	10	13	11	14	14	9	11	10	5	16	6	6	9
Non-Hispanic White	4	4	9	6	6	5	7	4	8	7	4	6	7	2	9	0	3	1
Non-Hispanic Black	1	7	7	4	4	2	5	6	3	0	5	2	2	0	4	5	2	7
Non-Hispanic Other	1	0	0	0	0	0	0	0	0	3	0	0	1	1	1	0	0	1
Sussex																		
All Races	4	2	7	6	5	6	5	6	4	4	2	4	4	10	6	9	5	4
Non-Hispanic White Non-Hispanic Black	0	2	3 4	2	1	2	2	3 1	2 2	3 1	2	2 2	1 3	3 4	3 2	4	2 2	2
Non-Hispanic Other	0	0	0	0	2	0	0	0	0	0	0	0	ა 0	1	0	0	0	2 2 0
	J	J	J	J	J	J	<u> </u>	J	3	3	,	J	3	'	9	<u> </u>	,	J

Sources: National Center for Health Statistics

 ^{*}Based on NCHS estimate.

^{2.} Postneonatal deaths refer to deaths of children 28 to 364 days of age.

TABLE E- 4. FIVE-YEAR AVERAGE INFANT MORTALITY RATES BY RACE, COUNTY, AND CITY OF WILMINGTON, U.S., DELAWARE 2002-2019

DELAWARE 2002														
Area/	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Race	-2006	-2007	-2008	-2009	-2010	-2011	-2012	-2013	-2014	-2015	-2016	-2017	-2018	-2019
U.S.														
All Races	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	N/A
Non-Hispanic White	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	N/A
Non-Hispanic Black	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	N/A
Delaware														
All Races	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	7.2
Non-Hispanic White	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	4.2
Non-Hispanic Black	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	12.5
Kent														
All Races	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	6.9
Non-Hispanic White	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	3.3
Non-Hispanic Black	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	12.4
New Castle														
All Races	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	7.8
Non-Hispanic White	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	4.3
Non-Hispanic Black	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	13.1
Wilmington														
All Races	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	14.8
Non-Hispanic White														
Non-Hispanic Black	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	17.1
Balance of														
NC County														
All Races	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	6.5
Non-Hispanic White	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	4.2
Non-Hispanic Black	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	11.4
Sussex														
All Races	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	6.0
Non-Hispanic White	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	4.8
Non-Hispanic Black	16.7	15.4	15.8	15.0	12.4	11.0	10.4	10.0		11.0	12.5	11.9	11.0	10.1

Sources: National Center for Health Statistics,

^{1.} 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. &#}x27;+' indicates that the Delaware rate is significantly higher than the U.S. rate.

^{&#}x27;-' indicates that the Delaware rate is significantly lower than the U.S. rate.

^{4. &}quot;---" 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.

Figure E-1. Five-Year Average Infant Mortality Rates by Race, Delaware, 2002-2019

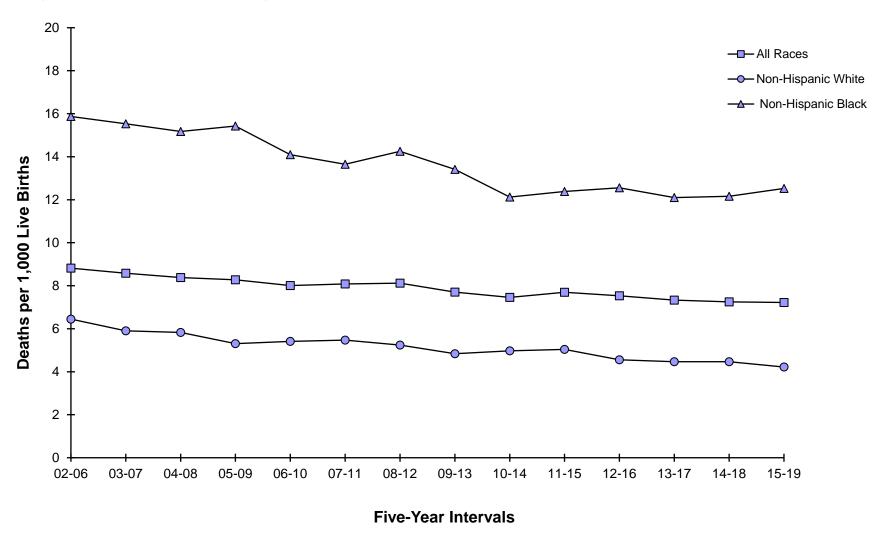


Figure E-2. Five-Year Average Infant Mortality Rates by Race, Delaware, Counties and the City of Wilmington, 2015-2019

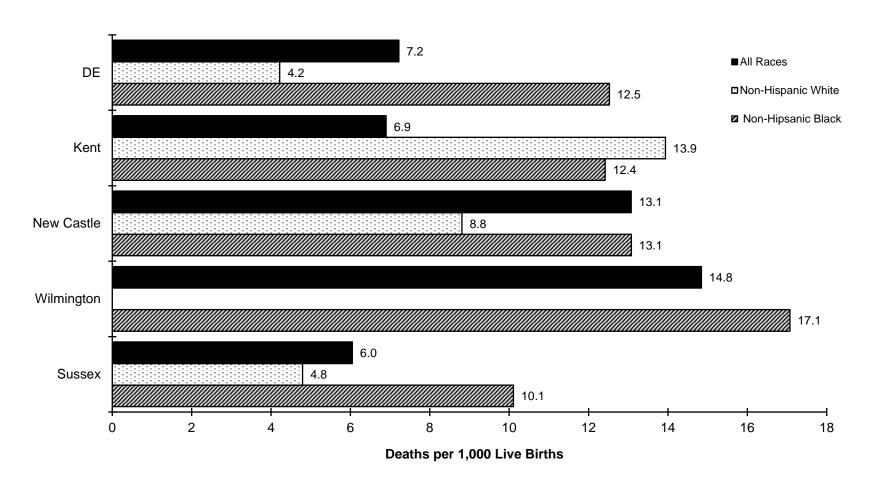


TABLE E-5. FIVE-YEAR AVERAGE NEONATAL MORTALITY RATES BY RACE, COUNTY, AND CITY OF WILMINGTON, U.S., DELAWARE 2002-2019

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	2015 -2019
Race	-2006	-2007	-2006	-2009	-2010	-2011	-2012	-2013	-2014	-2015	-2010	-2017	-2016	-2019
U.S.														
All Races	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	N/A
Non-Hispanic White	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	N/A
Non-Hispanic Black	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	N/A
Delaware														
All Races	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	5.1
Non-Hispanic White	4.7+	4.2	4.0	3.6	3.6	3.5	3.3	3.0	3.1	3.4	3.0	3.0	3.1	3
Non-Hispanic Black	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	8.5
Kent														
All Races	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	5.1
Non-Hispanic White	4.9				3.3	3.6	3.6	3.5	4.0	3.9	3.2			
Non-Hispanic Black	9.9	9.0	9.1	10.5	7.6	7.5	9.3	7.6			6.8		7.2	9.0
New Castle														
All Races	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	5.8
Non-Hispanic White	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	3.3
Non-Hispanic Black	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	9.3
Wilmington														
All Races	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	10.5
Non-Hispanic White														
Non-Hispanic Black	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	10.9
Balance of														
NC County														
All Races	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	5.0
Non-Hispanic White	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	3.1
Non-Hispanic Black	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	8.7
Sussex														
All Races	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	3.1
Non-Hispanic White	4.6	5.1	4.9	4.1	4.5	3.5						3.1	3.1	
Non-Hispanic Black	10.9	10.4	9.5	10.0										

Sources: National Center for Health Statistics

^{1. 2006-2010} 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. &#}x27;+' indicates that the Delaware rate is significantly higher than the U.S. rate.

^{4. &}quot;---" 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.

Figure E-3. Five-Year Average Neonatal Mortality Rates by Race, Delaware, 2002-2019

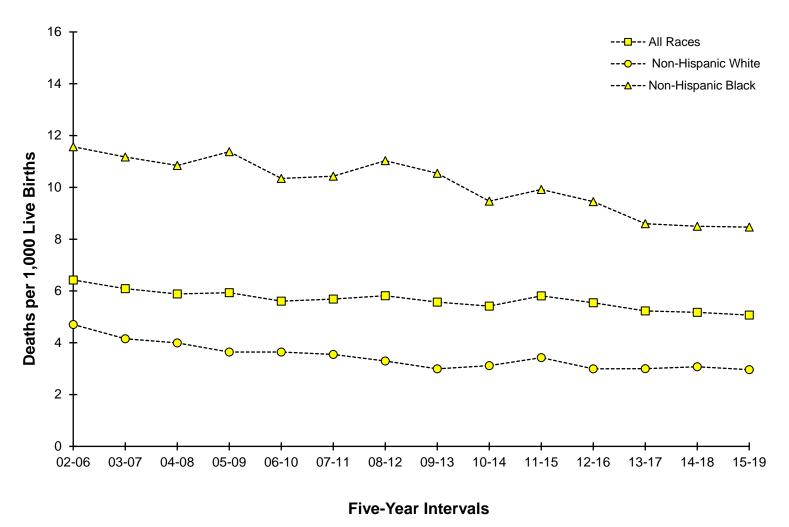


TABLE E-6. FIVE-YEAR AVERAGE POSTNEONATAL MORTALITY RATES BY RACE, COUNTY, AND CITY OF WILMINGTON, U.S., DELAWARE, 2002-2019

Area/	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Race	-2006	-2007	-2008	-2009	-2010	-2011	-2012	-2013	-2014	-2015	-2016	-2017	-2018	-2019
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	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	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	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	2.2
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	1.3
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	4.1
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	1.8
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	2.0
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	3.8
Wilmington														
All Races	3.2	3.9	4.1	4.2	5.1	5.2	4.6	3.7						4.3
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	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	3.0
Non-Hispanic White														
Non-Hispanic Black														

Sources: National Center for Health Statistics

^{1. 2006-2010} U.S. data are based on NCHS estimates.

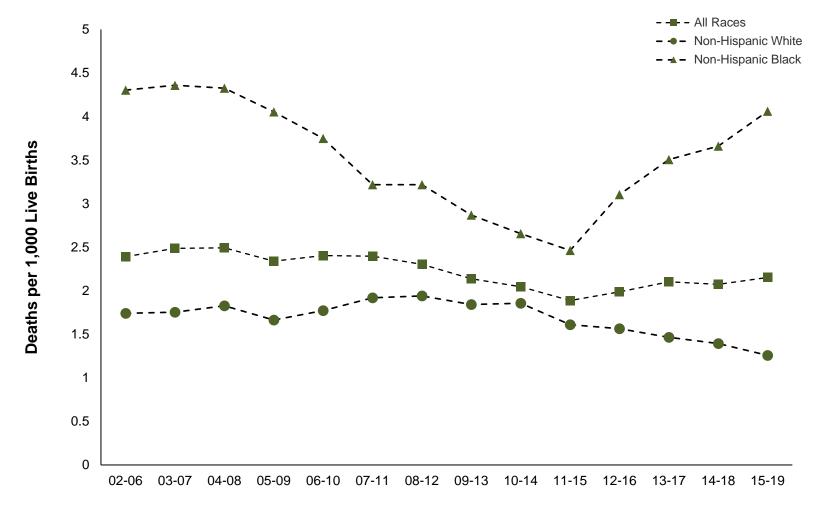
^{2.} Postneonatal mortality rates represent the number of deaths of children 28 to 364 days of age per 1000 live births.

^{3. &#}x27;-' indicates that the Delaware rate is significantly lower than the U.S. rate.

^{4. &}quot;---" 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.

Figure E-4. Five-Year Average Postneonatal Mortality Rates by Race, Delaware, 2002-2019



Five-Year Intervals

TABLE E-7. FIVE-YEAR AVERAGE INFANT MORTALITY RATES BY SELECTED RISK MARKERS AND RACE OF MOTHER, DELAWARE, 2014-2018 LIVE BIRTH COHORT

Risk		Non-H	ispanic
Factor	All	White	Black
Birth Weight of Child <2500 <1500 1500-2499 2500+	57.7 254.0 10.5 2.0	43.6 229.6 1.9	69.0 257.8 2.9
Age of Mother <20 20-24 25-29 30+	7.8 8.5 7.1 6.3	 5.7 4.6 4.2	 13.7 11.7 11.6
Marital Status of Mother Married Single	4.6 9.7	3.6 7.3	9.1 13.0
Education of Mother <12 years H.S. diploma 1+ years college	8.2 9.9 5.2	7.5 7.2 3.7	11.0 14.6 9.4
Interval Since Last Live Birth <18 months 18+ months	11.3 4.9	 3.4	 8.9

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

TABLE E-8. LEADING CAUSES OF INFANT DEATH BY GESTATIONAL AGE CATEGORY, DELAWARE, 2014-2018 LIVE BIRTH COHORT

		Gestation	al Age C	Category			
Leading causes of death	Very preterm	Moderately preterm	Term	Unknown	Total	% Born Very Preterm	% Born Preterm
Disorders related to short gestation and low birth weight, not elsewhere	75	0	1	0	76	98.7	98.7
Newborn affected by maternal complications of pregnancy	42	2	1	0	45	93.3	97.8
Newborn affected by complications of placenta, cord, and membranes	15	0	0	0	15	100.0	100.0
Congenital malformations, deformations, and chromosomal abnormalities	15	14	29	0	58	25.9	50.0
Respiratory distress of newborn	14	0	0	0	14	100.0	100.0
Bacterial sepsis of newborn	8	1	2	0	11	72.7	81.8
Diarrhea and gastroenteritis of infectious origin	7	0	0	0	7	100.0	100.0
Necrotizing enterocolitis of newborn	5	1	1	0	7	71.4	85.7
Septicemia	3	0	1	0	4	75.0	75.0
Intrauterine hypoxia and birth asphyxia	3	1	2	0	6	50.0	66.7
Atelectasis	3	0	0	0	3	100.0	100.0
Diseases of the blood and blood-forming organs and certain disorders invo	2	0	1	0	3	66.7	66.7
Volume depletion, disorders of fluid, electrolyte and acid-base balance	2	0	1	0	3	66.7	66.7
Newborn affected by other complications of labor and delivery	2	0	0	0	2	100.0	100.0
Neonatal hemorrhage	2	2	0	0	4	50.0	100.0
Newborn affected by maternal hypertensive disorders	1	0	0	0	1	100.0	100.0
Newborn affected by noxious influences transmitted via placenta or breast	1	0	0	0	1	100.0	100.0
Slow fetal growth and fetal malnutrition	1	0	0	0	1	100.0	100.0
Interstitial emphysema and related conditions originating in the perinata	1	0	1	0	2	50.0	50.0
Pulmonary hemorrhage originating in the perinatal period	1	0	0	0	1	100.0	100.0
All other causes	5	9	33	0	47	10.6	29.8
TOTAL	208	30	73	0	311	66.9	76.5

- 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.

TABLE E-9. FIVE-YEAR AVERAGE INFANT MORTALITY RATES BY RACE AND SELECTED RISK MARKERS DELAWARE LIVE BIRTH COHORT 2002-2018

MARKERS, DELA	WARE L	IVE BIR	TH COH	ORT, 20	02-2018								
Parameter/	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Race	-2006	-2007	-2008	-2009	-2010	-2011	-2012	-2013	-2014	-2015	-2016	-2017	-2018
					BIRTHV	VEIGHT							
2500+ All Races Non-Hispanic White Non-Hispanic Black	2.2 1.7 3.6	2.3 1.8 3.4	2.0 1.6 2.9	1.9 1.6 2.7	2.2 2.0 2.6	2.2 2.3 2.2	2.2 2.4 2.5	2.2 2.5 2.5	2.2 2.4 2.5	2.2 2.2 2.6	2.1 2.0 2.6	2.0 1.8 2.9	2.0 1.9 2.9
<2500 All Races Non-Hispanic White Non-Hispanic Black	69.9 62.9 81.1	68.8 58.4 82.6	69.2 59.8 84.2	70.6 55.5 90.1	65.5 54.5 82.1	67.1 52.3 86.5	68.2 51.1 88.9	64.6 46.9 83.3	47.1	64.6 49.4 79.6	62.2 48.1 74.7	58.2 44.2 71.0	57.7 43.6 69.0
<1500 All Races Non-Hispanic White Non-Hispanic Black	289.4 283.9 289.1	285.8 270.5 285.7	286.8 268.1 290.9	279.3 240.6 298.0	260.8 228.6 283.3	264.7 222.5 295.2	267.6 215.2 308.6	258.6 203.9 296.5		267.7 228.3 289.4	263.8 221.4 290.9	247.2 218.0 268.1	246.5 229.6 257.8
					GEST	ATION							
37+ weeks All Races Non-Hispanic White Non-Hispanic Black	2.2 1.7 3.4	2.3 1.9 3.4	2.0 1.8 2.8	2.0 1.7 2.6	2.4 2.3 2.7	2.6 2.7 2.6	2.6 2.7 2.7	2.5 2.7 2.7	2.6 2.8 2.9	2.5 2.3 3.1	2.2 2.0 3.0	2.2 1.7 3.4	2.3 1.8 3.6
<37 weeks All Races Non-Hispanic White Non-Hispanic Black	49.1 40.5 68.4	47.1 36.8 67.3	47.0 36.8 68.5	47.3 35.0 71.5	43.6 34.2 64.4	44.3 33.0 66.8	45.5 32.3 69.6	44.0 31.2 65.6	41.5 28.9 60.1	44.8 32.8 63.0	43.3 33.0 58.5	40.4 30.4 55.6	39.9 30.1 54.2
<32 weeks All Races Non-Hispanic White Non-Hispanic Black	232.4 215.6 249.2	220.4 192.6 245.6	220.4 191.1 254.0	216.9 178.3 258.1	195.0 160.1 236.5	195.7 154.9 241.2	198.7 146.2 249.6	190.8 137.7 235.5	178.9 130.1 216.0	189.6 144.2 226.1	186.9 144.6 225.0	177.0 141.8 212.5	174.0 144.0 205.3
					PLUR.	ALITY							
Single All Races Non-Hispanic White Non-Hispanic Black	7.1 5.2 13.0	7.2 5.2 12.8	7.0 5.1 12.2	7.0 4.7 12.6	7.0 5.3 11.8	7.0 5.4 11.7	6.9 5.2 11.8	6.7 5.1 11.5	6.3 4.8 10.6	6.4 4.6 10.9	6.1 4.4 10.4	5.9 4.0 10.6	6.0 4.1 10.4
Plural All Races Non-Hispanic White Non-Hispanic Black	47.0 37.3 59.7	44.0 30.2 64.4	40.3 26.5 68.6	41.0 26.2 70.4	32.6 21.0 54.9	34.2 20.8 54.9	35.0 22.0 56.6	34.5 22.2 46.6	27.0	42.6 33.3 47.5	43.4 35.2 50.4	37.7 31.0 43.0	38.0 29.1 50.5
				SMOK	ING DURIN	IG PREGI	NANCY						
No All Races Non-Hispanic White Non-Hispanic Black	7.9 5.8 13.7	7.7 5.3 13.5	7.4 5.1 13.2	7.6 4.9 13.8	7.4 5.5 12.8	7.4 5.4 13.0	7.4 5.5 13.3	7.2 5.3 12.5	4.9	6.9 4.7 12.0	6.6 4.5 11.2	6.4 4.0 11.1	6.4 4.0 11.0
Yes All Races Non-Hispanic White Non-Hispanic Black	13.4 10.4 24.2	13.9 10.8 24.2	13.3 10.8 21.6	12.1 8.7 21.9	10.7 8.2 17.8	10.8 8.5 16.1	10.0 7.3 16.2	9.7 6.9 16.0	8.8		12.1 10.4 17.6	11.9 10.0 18.3	13.4 10.7 20.0

TABLE E-9. FIVE-YEAR AVERAGE INFANT MORTALITY RATES BY RACE AND SELECTED RISK MARKERS, DELAWARE LIVE BIRTH COHORT, 2002-2018 (continued)

Parameter/	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Race	-2006	-2007	-2008	-2009	-2010	-2011	-2012	-2013	-2014	-2015	-2016	-2017	-2018
		EDUCAT	ION										
HS Grad or less													
All Races	10.7	10.8	10.1	10.0	10.0	10.0	9.5	9.5	8.8	9.3	8.9	9.2	9.3
Non-Hispanic White	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	16.6	16.4	15.3	15.4	14.8	15.0	15.3	15.1	13.7	14.2	13.3	13.9	13.6
1+ yrs college													
All Races	5.8	5.4	5.6	5.9	5.6	5.8	6.2	5.7	5.7	5.9	5.7	5.1	5.2
Non-Hispanic White	4.3	4.0	4.0	3.8	4.1	4.5	4.7	4.4	4.5	4.3	4.1	3.6	3.7
Non-Hispanic Black	11.2	11.1	11.5	13.1	11.2	10.8	11.0	9.7	9.2	9.6	9.5	9.1	9.4
	PAYM	ENT FOR	DELIVE	RY									
Medicaid													
All Races	9.6	10.4	10.2	9.9	9.5	9.3	8.8	8.5	8.2	8.7	8.7	8.2	8.5
Non-Hispanic White	8.5	8.9	9.2	8.2	8.4	7.3	7.1	6.7	6.8	7.1	7.6	6.8	7.1
Non-Hispanic Black	13.9	14.5	14.1	14.0	12.9	13.5	13.5	13.0	12.2	12.6	11.8	11.2	11.3
Private Insurance													
All Races	7.4	6.7	6.4	6.6	6.4	6.4	6.6	6.4	6.2	6.2	5.9	5.8	5.6
Non-Hispanic White	5.3	4.7	4.5	4.3	4.6	5.1	4.9	4.9	4.6	4.5	4.0	3.8	3.7
Non-Hispanic Black	16.7	15.5	14.9	16.3	14.8	13.4	13.9	12.6	11.3	12.2	12.0	13.0	12.6

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.

Figure E-5. Five-year Average Infant Mortality Rates by Race and Plurality, Delaware, 2000-2018 Live Birth Cohort

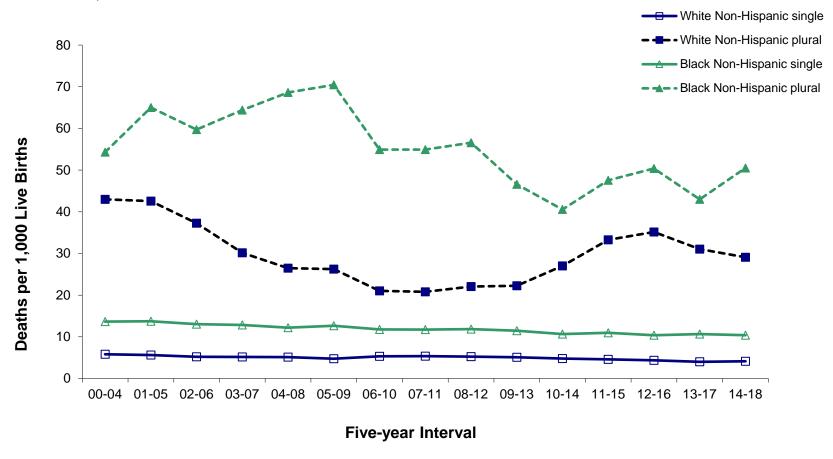
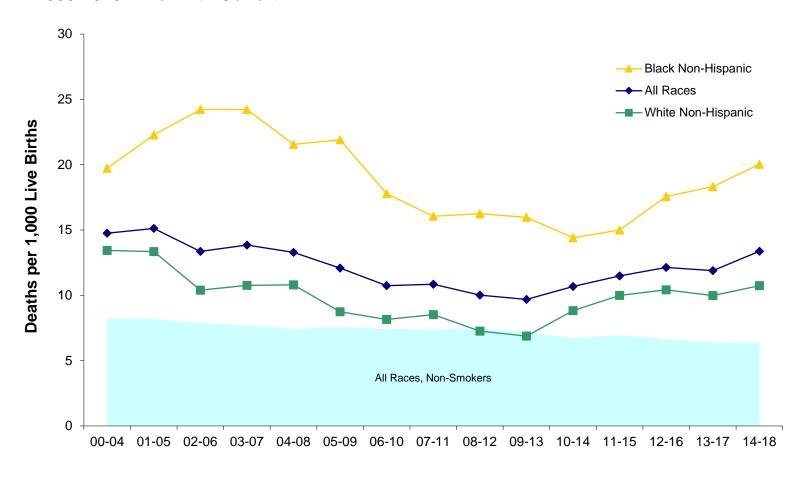


Figure E-6. Five-year Average Infant Mortality Rates by Race of Mothers who Smoked during Pregnancy versus all Non-smoking Mothers, Delaware, 2000-2018 Live Birth Cohort



Five-year Interval

Figure E-7. Five-year Average Infant Mortality Rates by Race and Source of Payment for Delivery, Delaware, 2000-2018 Live Birth Cohort

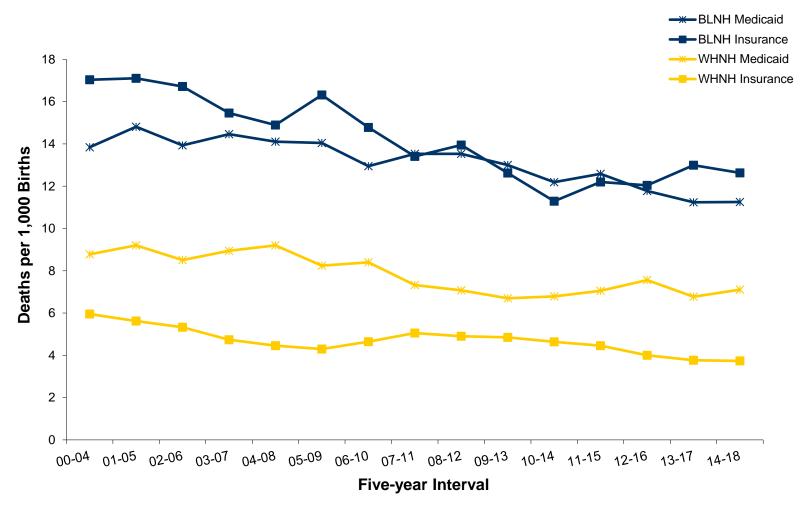


TABLE E-10. NUMBER OF INFANT DEATHS BY PLURALITY, BIRTH WEIGHT IN GRAMS, RACE OF MOTHER, AND SEX OF CHILD, DELAWARE, 2014-2018, LIVE BIRTH COHORT

		<u> </u>	D, DELAW	,		ace and S						
Plurality/		All Race	S		Hispanic	White		Hispanic	Black	Oth	on-Hispa ner/Unkn	
Birth Weight	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
All Births	382	196	186	136	66	70	171	91	80	16	7	9
<2500	280	140	140	87	42	45	133	68	65	12	4	8
<1500	232	120	112	73	35	38	116	61	55	10	4	6
<500	121	57	64	35	15	20	69	33	36	6	2	4
500-999	92	58	34	30	18	12	39	26	13	3	1	2
1000-1499	19	5	14	8	2	6	8	2	6	1	1	0
1500-1999	19	6	13	3	1	2	6	2	4	2	0	2
2000-2499	29	14	15	11	6	5	11	5	6	0	0	0
2500+	100	55	45	49	24	25	36	22	14	4	3	1
2500-2999	37	21	16	17	7	10	12	8	4	2	2	0
3000-3499	34	16	18	14	6	8	15	9	6	2	1	1
3500-3999	17	10	7	10	6	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	2	1	1	0	0	0	2	1	1	0	0	0
Single Births	318	167	151	112	54	58	145	80	65	15	6	9
<2500	223	114	109	66	31	35	110	58	52	11	3	8
<1500	180	96	84	53	25	28	94	52	42	9	3	6
<500	94	45	49	24	10	14	55	27	28	6	2	4
500-999	71	48	23	23	14	9	32	23	9	3	1	2
1000-1499	15	3	12	6	1	5	7	2	5	0	0	0
1500-1999	15	5	10	3	1	2	5	1	4	2	0	2
2000-2499	28	13	15	10	5	5	11	5	6	0	0	0
2500+	94	53	41	46	23	23	34	22	12	4	3	1
2500-2999	34	20	14	17	7	10	10	8	2	2	2	0
3000-3499 3500-3999	32 16	16	16 7	12	6 5	6	15 5	9 2	6	2	1	1
4000-4499	10	9 7	3	9 7	4	4	3	3	3 0	0	0	0
4500+ 4500+	2	1	1	1	1	0	1	0	1	0	0	0
Unknown	1	0	1	Ó	0	0		0		0	0	0
Officiowii	'	Ŭ	,		Ü			, o				
Plural Births	64	29	35	24	12	12	26	11	15	1	1	0
<2500	57	26	31	21	11	10	23	10	13	1	1	0
<1500	52	24	28	20	10	10	22	9	13	1	1	0
<500	27	12	15	11	5	6	14	6	8	0	0	0
500-999	21	10	11	7	4	3	7	3	4	0	0	0
1000-1499	4	2	2	2	1	1	1	0	1	1	1	0
1500-1999 2000-2499	4 1	1	3 0	0	0	0	1 0	1 0	0	0	0	0
2500+ 2500+	6	2	4	3	1	0 2	2	0	2	0	0	0
2500+ 2500-2999	3	1	2	0	0	0	2	0	2	0	0	0
3000-2999	2	0	2	2	0	2	0	0	0	0	0	0
3500-3499	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	1	1	0	0	0	0	1	1	0	ő	0	0

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, 2014-2018 LIVE BIRTH COHORT

THER, AND SE	// O. C	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<i>D</i>	·/,			e and Se					
Plurality/		All Races	;	Non-l	Hispanic			Hispanic	Black	Non-Hispa	nic Other	
Birth Weight	Both			Both			Both			Both		
Ĭ	Sexes	Male	Female	Sexes	Male	Female	Sexes	Male	Female	Sexes	Male	Female
All Births	382	196	186	93	47	46	120	62	58	12	5	7
<2500	280	140	140	77	37	40	108	55	53	9	3	6
<1500	232	120	112	68	32	36	102	53	49	9	3	6
<500	121	57	64	35	15	20	69	33	36	6	2	4
500-999	92	58	34	26	16	10	28	20	8	2	0	2
1000-1499	19	5	14	7	1	6	5	0	5	1	1	0
1500-1999	19	6	13	0	0	0	3	1	2	0	0	0
2000-2499	29	14	15	9	5	4	3	1	2	0	0	0
2500+	29	18	11	16	10	6	10	6	4	3	2	1
2500-2999	37	21	16	9	5	4	1	1	0	2	2	0
3000-3499	34	16	18	3	2	1	7	4	3	1	0	1
3500-3999	17	10	7	2	2	0	1	0	1	0	0	0
4000-4499	10	7	3	1	0	1	1	1	0	0	0	0
4500+	2	1	1	1	1	0	0	0	0	0	0	0
Unknown	2	1	1	0	0	0	2	1	1	0	0	0
Single Births	318	167	151	74	37	37	100	53	47	11	4	7
<2500	223	114	109	58	27	31	89	47	42	8	2	6
<1500	180	96	84	50	23	27	83	45	38	8	2	6
<500	94	45	49	24	10	14	55	27	28	6	2	4
500-999	71	48	23	20	12	8	24	18	6	2	0	2
1000-1499	15	3	12	6	1	5	4	0	4	0	0	0
1500-1999 2000-2499	15 28	5 13	10	0 8	0 4	0	3	1	2	0	0	0
2500+ 2500+	28 94	53	15 41	16	10	4 6	10	1 6	2 4	0	2	1
2500+	34	20	14	9	5	4	10	1	0	3 2	2	0
3000-2999	32	16	16	3	2	1	7	4	3	1	0	1
3500-3499	16	9	7	2	2	0	1	0	1	0	0	Ö
4000-4499	10	7	3	1	0	1	1	1	0	0	0	ő
4500+	2	1	1	1	1	0	0	0	Ö	0	0	Ö
Unknown	1	0	1	0	0	0	1	0	1	0	0	0
Plural Births	64	29	35	19	10	9	20	9	11	1	1	0
<2500	57	26	31	19	10	9	19	8	11	1	1	0
<1500	52	24	28	18	9	9	19	8	11	1	1	0
<500	27	12	15	11	5	6	14	6	8	0	0	0
500-999	21	10	11	6	4	2	4	2	2	0	0	0
1000-1499	4	2	2	1	0	1	1	0	1	1	1	0
1500-1999	4	1	3	0	0	0	0	0	0	0	0	0
2000-2499 2500+	1 6	1 2	0 4	1 0	1 0	0	0	0	0	0	0	0
2500+	3	1	2	0	0	0	0	0	0	0	0	0
3000-3499	2	0	2	0	0	0	0	0	0	0	0	0
3500-3499	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	1	1	0	0	0	0	1	1	0	0	0	0
OHKHOWN	1	1	U	U	U	U	1	1	U	0	0	U

Note.

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