



**2006
South Carolina
Residence Data**



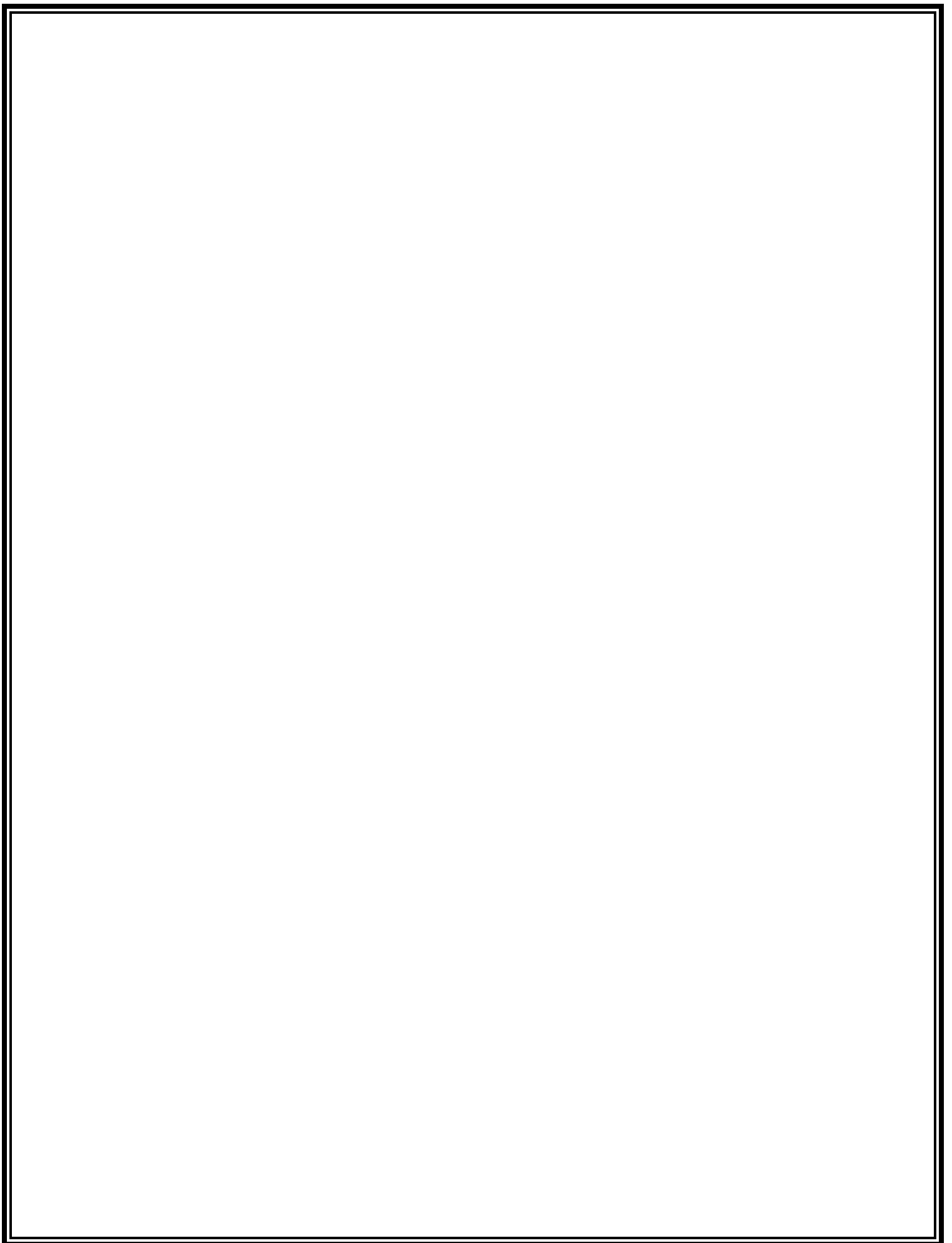
**Infant Mortality
Highlights**

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Highlights of 2006 Infant Mortality

1. Changes from 2005 to 2006 in SC:

The 2006 South Carolina infant mortality rate is 8.4 infant deaths per 1,000 live births, an 11.6% decrease from previous year's rate of 9.5. This overall rate is due to an 18.6% decrease of infant death in White race group from 7.0 per 1,000 live births in 2005 to 5.7 in 2006 and a 7.7% decrease in Black and Other group from a rate of 14.3 per 1,000 live births in 2005 to 13.2 per 1,000 live births in 2006.

The neonatal mortality rate for White infants decreased by 16.7% from the last year. The neonatal mortality rate for Black & other infant did not change. Thus, the neonatal mortality for all races decreased by 6.8% from 5.9 in 2005 to 5.5 in 2006.

The postneonatal mortality rate for White infants decreased by 21.4% and the postneonatal mortality for Black and Other decreased by 21.6% from 2005. Thus, the postneonatal mortality for all races decreased by 19.4% from 3.6 in 2005 to 2.9 in 2006.

Table 1. Neonatal and Postneonatal mortality

| Neonatal Mortality | | | |
|------------------------|--------|--------|---------------|
| Year | Total | White | Black & Other |
| 2005 | 5.9 | 4.2 | 9.2 |
| 2006 | 5.5 | 3.5 | 9.2 |
| Percent Change | -6.8% | -16.7% | 0.0% |
| Postneonatal Mortality | | | |
| Year | Total | White | Black & Other |
| 2005 | 3.6 | 2.8 | 5.1 |
| 2006 | 2.9 | 2.2 | 4.0 |
| Percent Change | -19.4% | -21.4% | -21.6% |

Notes: Rates are per 1,000 live births;
Race of mother is used

2. IMR Disparity and Trends in US and Select States:

Table 1. IMR by race in US and select states

| | 2003 | | | 2004 | | | 2005 | | | 2006 | | |
|----------------|------------|------------|---------------|------------|------------|---------------|------------|------------|---------------|------------|------------|---------------|
| | Total | White | Black | Total | White | Black | Total | White | Black | Total | White | Black |
| United States | 6.7 | 5.8 | 14.1 | 6.8 | 5.7 | 13.8 | 6.9 | 5.7 | 13.7 | 6.7 | 5.6 | 13.3 |
| South Carolina | 8.3 | 5.9 | 12.8** | 9.3 | 6.7 | 14.1** | 9.5 | 7.0 | 14.3** | 8.4 | 5.7 | 13.2** |
| Alabama | 8.7 | 6.5 | 14.1 | 8.7 | 6.7 | 13.3 | 9.3 | 7.2 | 14.4 | 9.0 | 6.7 | 14.3 |
| Georgia | 8.5 | 6.2 | 13.8 | 8.5 | 6.1 | 12.9 | 8.0 | 5.7 | 12.4 | 8.1 | 6.0 | 12.8 |
| Mississippi | 10.7 | 6.8 | 15.4 | 9.7 | 6.1 | 14.2 | 11.4 | 6.6 | 17.0** | 10.5 | 6.9 | 14.4** |
| North Carolina | 8.2 | 5.9 | 14.0* | 8.8 | 6.2 | 15.6* | 8.8 | 6.4 | 14.9** | 8.1 | 6.0 | 13.6** |
| Tennessee | 9.2 | 7.0 | 18.0 | 8.6 | 6.4 | 17.4 | 8.8 | 7.1 | 15.3 | 8.7 | 6.6 | 16.8 |

*Includes unknown race

** Includes other race

3. Leading cause of infant deaths in 2006:

The top two leading causes of infant death remain the same as in 2005, but their order is changed. In descending order for 2006, they are,

- “Congenital malformations, deformations, etc. (ICD-10 codes Q00-Q99)”
- “Disorders related to short gestation and low birthweight (ICD-10 code P07)”

Infant death caused by “Congenital malformations, deformations, etc. (ICD-10 codes Q00-Q99)” increased by 24.1% in 2006 from 79 in 2005 to 98 in 2006, which moved from the second place in the previous year to the leading first cause of infant death in 2006. The cause “Disorders related to short gestation and low birthweight (ICD-10 code P07)” decreased by 1.2% from 81 in 2005 to 80 in 2006, and thus moved to the second place in 2006.

The third leading cause in 2006 is

- “Sudden infant death syndrome (ICD-10 code R95)”

The number of Infant deaths caused by “Sudden infant death syndrome (ICD-10 code R95)” decreased by 8.3% from 48 in 2005 to 44 in 2006.

Table 3. Leading causes of death comparison

| Cause of Infant Death Ranked by 2006 Data (ICD-10 Codes) | 2005 | 2006 | % Change |
|---|------------|------------|--------------|
| Total Infant Death | 549 | 520 | -5.3% |
| Congenital malformations, deformations, etc. (Q00-Q99) | 79 | 98 | 24.1% |
| Disorders related to short gestation and low birthweight, NEC (P07) | 81 | 80 | -1.2% |
| Sudden infant death syndrome (R95) | 48 | 44 | -8.3% |
| Fetus and newborn affected by maternal complications of pregnancy (P01) | 28 | 42 | 50.0% |
| Accidents (V01-X59, Y85-Y86) | 28 | 33 | 17.9% |
| Newborn affected by complication of placenta, ect. (P02) | 25 | 25 | 0.0% |
| Bacterial sepsis of newborn (P36) | 18 | 16 | -11.1% |
| Diseases of Circulatory System (I00-I99) | 12 | 15 | 25.0% |
| Respiratory distress of newborn (P22) | 25 | 15 | -40.0% |
| Neonatal hemorrhage (P50-P52, P54) | 13 | 13 | 0.0% |
| Necrotizing Enterocolitis of newborn (P77) | 18 | 13 | -27.8% |

4. Infant Mortality Rate to Hispanic Mother

Infant mortality rate to Hispanic mother in 2006 is 6.3 per 1,000 live births, a 27.5% decrease from the previous year.

Table 4. Infant mortality rate to Hispanic mother

| Year | Births | Deaths | Rate |
|-----------------------|--------|--------|--------|
| 2005 | 4,970 | 43 | 8.7 |
| 2006 | 5,863 | 37 | 6.3 |
| Percent Change | 18.0% | -14.0% | -27.5% |

5. Breakdown of Infant Deaths due to Accidents

Table 5. Breakdown of Infant Deaths due to Accidents

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | Total (2000-2006) |
|---|------|------|------|------|------|------|------|----------------------|
| Accidental suffocation and strangulation in bed | 4 | 7 | 8 | 10 | 10 | 14 | 22 | 75 |
| Other accidental threats to breathing | 7 | 15 | 6 | 2 | 6 | 4 | 5 | 45 |
| Transportation | 7 | 3 | 3 | 0 | 1 | 3 | 1 | 18 |
| Drowning | 2 | 0 | 0 | 0 | 0 | 4 | 2 | 8 |
| Poison | 1 | 1 | 0 | 1 | 0 | 2 | 1 | 6 |
| Other accidents | 1 | 2 | 1 | 0 | 4 | 1 | 2 | 11 |

6. Trends in Multiple Births in SC

Table 6. Multiple birth trends in SC, 2002–2006, All Race

| Year | Singleton Births | Singleton Deaths | Infant Mortality Rate* | Twin Births*** | Twin Deaths | Infant Mortality Rate* | Higher Order (3+) Births | Higher Order (3+) Deaths | Infant Mortality Rate* | Total Births** | Total Deaths** | Infant Mortality Rate* |
|-------|------------------|------------------|------------------------|----------------|-------------|------------------------|--------------------------|--------------------------|------------------------|----------------|----------------|------------------------|
| 2002 | 52,746 | 431 | 8.2 | 1,620 | 62 | 38.3 | 83 | 10 | 120.5 | 54,453 | 507 | 9.3 |
| 2003 | 53,591 | 392 | 7.3 | 1,779 | 67 | 37.7 | 78 | 2 | 25.6 | 55,461 | 463 | 8.3 |
| 2004 | 54,643 | 439 | 8.0 | 1,802 | 64 | 35.5 | 98 | 4 | 40.8 | 56,543 | 524 | 9.3 |
| 2005 | 55,703 | 463 | 8.3 | 1,771 | 82 | 46.3 | 64 | 4 | 62.5 | 57,538 | 549 | 9.5 |
| 2006 | 60,110 | 454 | 7.6 | 2,018 | 53 | 26.3 | 62 | 8 | 129.0 | 62,191 | 520 | 8.4 |
| Total | 276,793 | 2,179 | 7.9 | 8,990 | 328 | 36.5 | 385 | 28 | 72.7 | 286,186 | 2563 | 9.0 |

* Rates are per 1,000 births. Rates calculated with 20 or fewer deaths are unreliable and should be used cautiously

** Includes Unknown Birth Number

*** Twin births do not include twin fetal deaths

7. Statistically significant changes in maternal characteristics by Race¹ in SC from 2005 to 2006:

Table 7.

| | 2005 | | 2006 | | Z-TEST | p-Value |
|--|---------|--------|---------|--------|---------|---------|
| | Percent | Number | Percent | Number | | |
| <5 PRENATAL CARE VISITS | | | | | | |
| TOTAL ² | 6.16 | 3,547 | 7.36 | 4,576 | 8.2037 | 0.0000 |
| White | 5.14 | 1,919 | 6.40 | 2,558 | 7.5404 | 0.0000 |
| Black & Other | 8.04 | 1,614 | 9.06 | 2,004 | 3.7344 | 0.0002 |
| PRENATAL CARE BEGAN FIRST TRIMESTER | | | | | | |
| TOTAL ² | 69.33 | 39,889 | 67.20 | 41,792 | -7.8971 | 0.0000 |
| White | 73.23 | 27,364 | 70.57 | 28,193 | -8.2181 | 0.0000 |
| Black & Other | 62.17 | 12,484 | 61.23 | 13,548 | -1.9900 | 0.0466 |
| KESSNER INDEX: ADEQUATE | | | | | | |
| TOTAL ² | 60.52 | 34,821 | 58.33 | 36,276 | -7.7030 | 0.0000 |
| White | 64.24 | 24,004 | 61.35 | 24,509 | -8.3038 | 0.0000 |
| Black & Other | 53.71 | 10,784 | 52.97 | 11,721 | -1.5089 | 0.1313 |
| KESSNER INDEX: LESS THAN ADEQUATE | | | | | | |
| TOTAL ² | 35.35 | 20,341 | 37.84 | 23,535 | 8.9368 | 0.0000 |
| White | 31.80 | 11,884 | 34.95 | 13,963 | 9.2716 | 0.0000 |
| Black & Other | 41.87 | 8,408 | 42.97 | 9,509 | 2.2878 | 0.0221 |
| KOTELCHUCK INDEX: ADEQUATE PLUS | | | | | | |
| TOTAL ² | 43.97 | 25,299 | 42.42 | 26,382 | -5.4040 | 0.0000 |
| White | 43.70 | 16,329 | 41.48 | 16,570 | -6.2451 | 0.0000 |
| Black & Other | 44.50 | 8,935 | 44.17 | 9,774 | -0.6707 | 0.5024 |
| KOTELCHUCK INDEX: ADEQUATE | | | | | | |
| TOTAL ² | 27.21 | 15,656 | 26.94 | 16,753 | -1.0578 | 0.2901 |
| White | 30.16 | 11,269 | 29.80 | 11,907 | -1.0702 | 0.2845 |
| Black & Other | 21.79 | 4,376 | 21.79 | 4,821 | -0.0123 | 0.9901 |
| KOTELCHUCK INDEX: INADEQUATE | | | | | | |
| TOTAL ² | 19.22 | 11,061 | 21.46 | 13,346 | 9.5948 | 0.0000 |
| White | 16.29 | 6,086 | 19.06 | 7,615 | 10.0954 | 0.0000 |
| Black & Other | 24.62 | 4,943 | 25.73 | 5,694 | 2.6390 | 0.0083 |

¹ Race of Mother

² Includes unknown races

Table 7 on previous page is about maternal characteristics selected from table 9 in “South Carolina 2005 Infant Mortality and Birth Characteristics”(a more detailed publication by the Division of Biostatistics).

Z-test in table 7 in the second to the last column indicates the change in 2006 vs. 2005 is either increase or decrease. If Z-test value is positive, then there was an increase in 2006 vs. 2005; and a decrease otherwise.

The *P* value in the last column is for statistical evaluation. If *P* value is less than 0.05, then the conclusion of “a statistically significant change (either decrease or increase)” can be derived.

For example, in “Kotelchuck Index: Inadequate” category, there was a statistically significant increase in percent of mothers with Inadequate Kotelchuck Index in 2006 vs. 2005 for All Races, White and Black & Other race groups, with *P* values of 0.0000 for All races and *P* values of 0.0000 and 0.0083 for White and Black & Other race groups respectively.

8. Infant death leading causes of death, 2004 to 2006:

Table 8.1 South Carolina Infant Death, Resident Data, 2004-2006, All races

| Rank | Cause of death | Number | Mortality rate* |
|-------------|---|---------------|------------------------|
| |Total Infant Deaths..... | 1593 | 9.0 |
| 1 | Congenital Malformations, Etc. (Q00-Q99)..... | 271 | 1.5 |
| 2 | Disorders Related To Short Gestation, Etc. (P07)..... | 252 | 1.4 |
| 3 | Sudden Infant Death Syndrome (R95)..... | 121 | 0.7 |
| 4 | Newborn Affected By Maternal Comp Of Pregnancy (P01)..... | 108 | 0.6 |
| 5 | Accidents (V01-X59,Y85-Y86)..... | 82 | 0.5 |
| 6 | Newborn Affected By Comp Of Placenta, Etc. (P02)..... | 72 | 0.4 |
| 7 | Respiratory Distress Of Newborn (P22)..... | 63 | 0.4 |
| 8 | Bacterial Sepsis Of Newborn (P36)..... | 56 | 0.3 |
| 9 | Necrotizing Enterocolitis of Newborn (P77)..... | 40 | 0.2 |
| 10 | Disease Of Circulatory System (I00-I99)..... | 38 | 0.2 |
| |All Other Causes..... | 490 | 2.8 |

Table 8.2 South Carolina Infant death, Resident Data, 2004-2006,White

| Rank | Cause of death | Number | Mortality rate* |
|-------------|---|---------------|------------------------|
| |All White Infant Deaths..... | 729 | 6.4 |
| 1 | Congenital Malformations, Etc. (Q00-Q99)..... | 165 | 1.4 |
| 2 | Disorders Related To Short Gestation, Etc. (P07)..... | 81 | 0.7 |
| 3 | Sudden Infant Death Syndrome (R95)..... | 63 | 0.6 |
| 4 | Accidents (V01-X59,Y85-Y86)..... | 49 | 0.4 |
| 5 | Newborn Affected By Maternal Comp Of Pregnancy (P01)..... | 44 | 0.4 |
| 6 | Respiratory Distress Of Newborn (P22)..... | 29 | 0.3 |
| 7 | Newborn Affected By Comp Of Placenta, Etc. (P02)..... | 28 | 0.2 |
| 8 | Disease Of Circulatory System (I00-I99)..... | 21 | 0.2 |
| 9 | Bacterial Sepsis Of Newborn (P36)..... | 21 | 0.2 |
| 10 | Intrauterine Hypoxia And Birth Asphyxia (P20-P21)..... | 18 | 0.2 |
| |All Other Causes..... | 210 | 1.8 |

Table 8.3 South Carolina Infant death, Resident Data, 2004-2006,Black and Others

| Rank | Cause of death | Number | Mortality rate* |
|-------------|---|---------------|------------------------|
| |All Black And Other Infant Deaths..... | 862 | 13.9 |
| 1 | Disorders Related To Short Gestation, Etc. (P07)..... | 171 | 2.8 |
| 2 | Congenital Malformations, Etc. (Q00-Q99)..... | 106 | 1.7 |
| 3 | Newborn Affected By Maternal Comp Of Pregnancy (P01)..... | 64 | 1.0 |
| 4 | Sudden Infant Death Syndrome (R95)..... | 58 | 0.9 |
| 5 | Newborn Affected By Comp Of Placenta, Etc. (P02)..... | 44 | 0.7 |
| 6 | Bacterial Sepsis Of Newborn (P36)..... | 35 | 0.6 |
| 7 | Respiratory Distress Of Newborn (P22)..... | 34 | 0.5 |
| 8 | Accidents (V01-X59,Y85-Y86)..... | 33 | 0.5 |
| 9 | Necrotizing Enterocolitis of Newborn (P77)..... | 28 | 0.5 |
| 10 | Neonatal Hemorrhage (P50-P52,P54)..... | 19 | 0.3 |
| |All Other Causes..... | 270 | 4.4 |

* Rates are per 1,000 live births.

(End Of This Highlight Package)