



**2005
South Carolina
Residence Data**



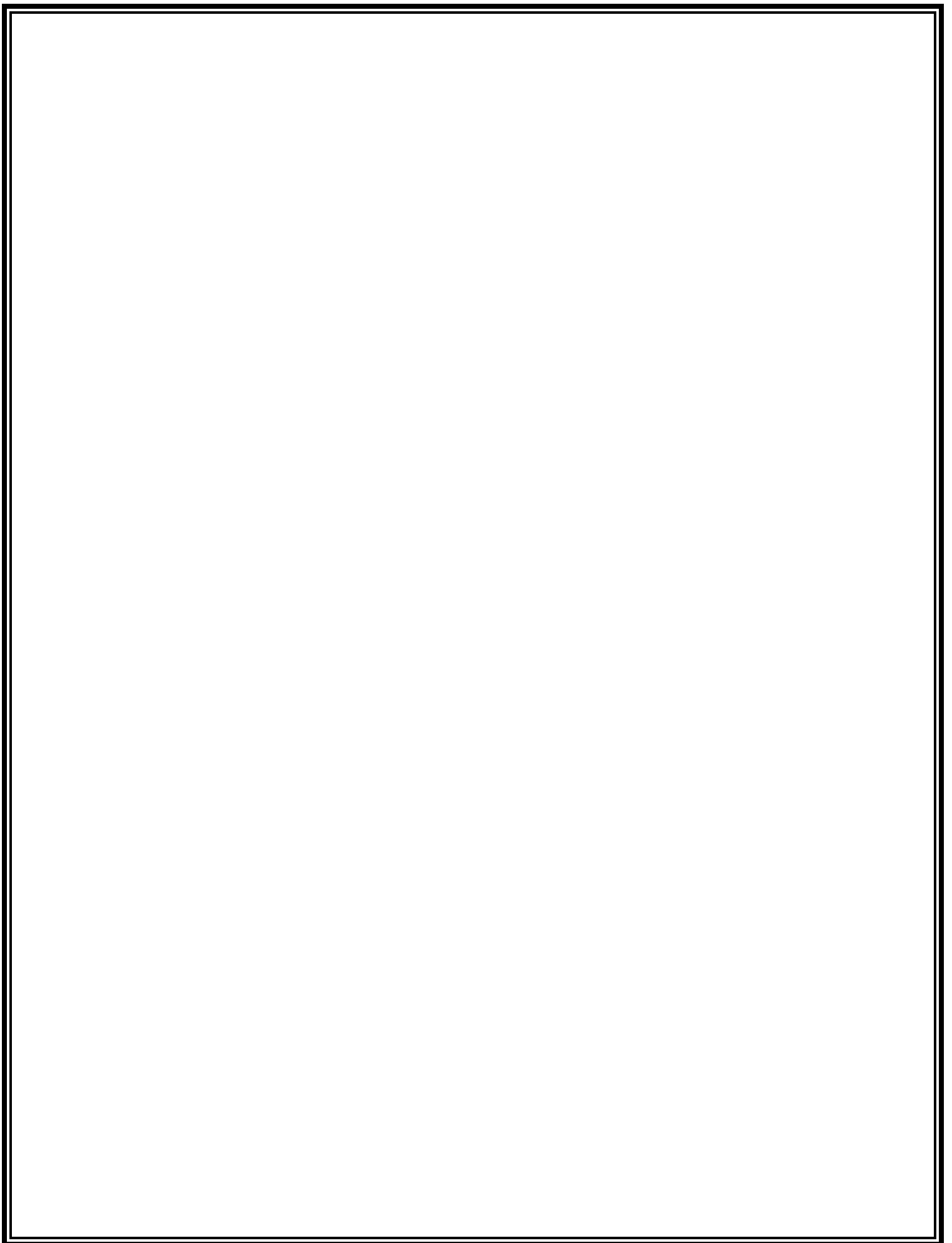
**Infant Mortality
Highlights**

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Highlights of 2005 Infant Mortality

1. Changes from 2004 to 2005 in SC:

The 2005 South Carolina infant mortality rate is 9.5 infant deaths per 1,000 live births, a 2.2% increase from last year's rate of 9.3. This overall rate is due to a 4.5% increase of infant death in White race group from 6.7 per 1,000 live births in 2004 to 7.0 in 2005 and a 1.4% increase in Black and Other group from a rate of 14.1 per 1,000 live births in 2004 to 14.3 per 1,000 live births in 2005.

The neonatal mortality rates for White and Black & other infant decreased by 8.7% and 7.1% respectively from the last year. Thus, the neonatal mortality for all races decreased by 7.8% from 6.4 in 2004 to 5.9 in 2005.

The postneonatal mortality rate for White infant increased by 33.3% and the postneonatal mortality for Black and Other increased by 21.4% from 2004. Thus, the postneonatal mortality for all races increased by 24.1% from 2.9 in 2004 to 3.6 in 2005.

Table 1. Neonatal and Postneonatal mortality

| Neonatal Mortality | | | |
|------------------------|-------|-------|---------------|
| Year | Total | White | Black & Other |
| 2004 | 6.4 | 4.6 | 9.9 |
| 2005 | 5.9 | 4.2 | 9.2 |
| Percent Change | -7.8% | -8.7% | -7.1% |
| Postneonatal Mortality | | | |
| Year | Total | White | Black & Other |
| 2004 | 2.9 | 2.1 | 4.2 |
| 2005 | 3.6 | 2.8 | 5.1 |
| Percent Change | 24.1% | 33.3% | 21.4% |

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

| | 2002 | | | 2003 | | | 2004 | | | 2005 | | |
|----------------|------------|------------|-------------|------------|------------|---------------|------------|------------|---------------|------------|------------|---------------|
| | Total | White | Black | Total | White | Black | Total | White | Black | Total | White | Black |
| United States | 7.0 | 5.8 | 14.3 | 6.7 | 5.8 | 14.1 | 6.8 | 5.7 | 13.8 | 6.9 | 5.8 | 13.7 |
| South Carolina | 9.3 | 5.9 | 15.4 | 8.3 | 5.9 | 12.8** | 9.3 | 6.7 | 14.1** | 9.5 | 7.0 | 14.3** |
| Alabama | 9.1 | 7.0 | 13.7 | 8.7 | 6.5 | 14.1 | 8.7 | 6.7 | 13.3 | 9.3 | 7.2 | 14.4 |
| Georgia | 8.9 | 6.6 | 13.7 | 8.5 | 6.2 | 13.8 | 8.5 | 6.1 | 12.9 | 8.0 | 5.7 | 12.4 |
| Mississippi | 10.3 | 6.8 | 14.4 | 10.7 | 6.8 | 15.4 | 9.7 | 6.1 | 14.2 | 11.4 | 6.6 | 17.0 |
| North Carolina | 8.2 | 5.9 | 14.2* | 8.2 | 5.9 | 14.0* | 8.8 | 6.2 | 15.6* | 8.8 | 6.4 | 14.9** |
| Tennessee | 9.4 | 7.1 | 18.4 | 9.2 | 7.0 | 18.0 | 8.6 | 6.4 | 17.4 | 8.8 | 7.1 | 15.3 |

*Includes unknown race.

** Includes others.

3. Leading cause of infant deaths in 2005:

The top two leading causes of infant death remain the same as in 2004, but their order is changed. In descending order for 2005, they are,

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

Infant death caused by “Congenital malformations, deformations, etc. (ICD-10 codes Q00-Q99)” decreased by 16.0% in 2005 from 94 in 2004 to 79 in 2005, which moved from the leading first place in the previous year to the second cause of infant death in 2005. The cause “Disorders related to short gestation and low birthweight (ICD-10 code P07)” decreased by 11.0% from 91 in 2004 to 81 in 2005, and thus moved to the leading first place in 2005.

The third leading cause in 2005 is

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

The number of Infant deaths caused by “Sudden infant death syndrome (ICD-10 code R95)” increased by 65.5% from 29 in 2004 to 48 in 2005.

Table 3. Leading causes of death comparison

| Cause of Infant Death Ranked by 2005 Data (ICD-10 Codes) | 2004 | 2005 | % Change |
|---|------------|------------|-------------|
| Total Infant Death | 524 | 549 | 4.8% |
| Disorders related to short gestation and low birthweight, NEC (P07) | 91 | 81 | -11.0% |
| Congenital malformations, deformations, etc. (Q00-Q99) | 94 | 79 | -16.0% |
| Sudden infant death syndrome (R95) | 29 | 48 | 65.5% |
| Fetus and newborn affected by maternal complications of pregnancy (P01) | 38 | 28 | -26.3% |
| Accidents (V01-X59, Y85-Y86) | 21 | 28 | 33.3% |
| Newborn affected by complication of placenta, ect. (P02) | 22 | 25 | 13.6% |
| Respiratory distress of newborn (P22) | 23 | 25 | 8.7% |
| Bacterial sepsis of newborn (P36) | 22 | 18 | -18.2% |
| Necrotizing Enterocolitis of newborn (P77) | 9 | 18 | 100.0% |
| Neonatal hemorrhage (P50-P52, P54) | 9 | 13 | 44.4% |
| All other causes | 166 | 186 | 12.0% |

4. Infant Mortality Rate to Hispanic Mother

Infant mortality rate to Hispanic mother in 2005 is 8.7 per 1,000 live births, a 20.8% increase from the previous year.

Table 4. Infant mortality rate to Hispanic mother

| Year | Births | Deaths | Rate |
|-----------------------|--------|--------|-------|
| 2004 | 4,332 | 31 | 7.2 |
| 2005 | 4,970 | 43 | 8.7 |
| Percent Change | 14.7% | 38.7% | 20.8% |

5. Breakdown of Infant Deaths due to Accidents

Table 5. Breakdown of Infant Deaths due to Accidents

| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | Total (99-05) |
|---|------|------|------|------|------|------|------|---------------|
| Accidental suffocation and strangulation in bed | 6 | 4 | 7 | 8 | 10 | 10 | 14 | 59 |
| Other accidental threats to breathing | 12 | 7 | 15 | 6 | 2 | 6 | 4 | 52 |
| Transportation | 3 | 7 | 3 | 3 | 0 | 1 | 3 | 20 |
| Drowning | 2 | 2 | 0 | 0 | 0 | 0 | 4 | 8 |
| Poison | 0 | 1 | 1 | 0 | 1 | 0 | 2 | 5 |
| Other accidents | 1 | 1 | 2 | 1 | 0 | 4 | 1 | 10 |

6. Trends in Multiple Births in SC

Table 6. Multiple birth trends in SC, 2000–2004, 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* |
|-------|------------------|------------------|------------------------|----------------|-------------|------------------------|--------------------------|--------------------------|------------------------|----------------|----------------|------------------------|
| 2001 | 53,954 | 432 | 8.0 | 1,706 | 56 | 32.8 | 81 | 4 | 49.4 | 55,748 | 496 | 8.9 |
| 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 |
| Total | 270,637 | 2,157 | 8.0 | 8,678 | 331 | 38.1 | 404 | 24 | 59.4 | 279,743 | 2539 | 9.1 |

* 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 2004 to 2005:

Table 7.

| | 2004 | | 2005 | | Z-TEST | p-Value |
|--|---------|--------|---------|--------|---------|---------|
| | Percent | Number | Percent | Number | | |
| <5 PRENATAL CARE VISITS | | | | | | |
| TOTAL ² | 5.91 | 3,340 | 6.16 | 3,547 | 1.8266 | 0.0678 |
| White | 4.78 | 1,761 | 5.14 | 1,919 | 2.2568 | 0.0240 |
| Black & Other | 8.03 | 1,575 | 8.04 | 1,614 | 0.0318 | 0.9746 |
| PRENATAL CARE BEGAN FIRST TRIMESTER | | | | | | |
| TOTAL ² | 68.41 | 38,681 | 69.33 | 39,889 | 3.3426 | 0.0008 |
| White | 72.71 | 26,811 | 73.23 | 27,364 | 1.5850 | 0.1130 |
| Black & Other | 60.36 | 11,841 | 62.17 | 12,484 | 3.6959 | 0.0002 |
| KESSNER INDEX: ADEQUATE | | | | | | |
| TOTAL ² | 59.93 | 33,886 | 60.52 | 34,821 | 2.0311 | 0.0422 |
| White | 63.87 | 23,550 | 64.24 | 24,004 | 1.0473 | 0.2949 |
| Black & Other | 52.57 | 10,312 | 53.71 | 10,784 | 2.2674 | 0.0234 |
| KESSNER INDEX: LESS THAN ADEQUATE | | | | | | |
| TOTAL ² | 35.83 | 20,261 | 35.35 | 20,341 | -1.6952 | 0.0900 |
| White | 31.98 | 11,791 | 31.80 | 11,884 | -0.5108 | 0.6095 |
| Black & Other | 43.06 | 8,446 | 41.87 | 8,408 | -2.3865 | 0.0170 |
| KOTELCHUCK INDEX: ADEQUATE PLUS | | | | | | |
| TOTAL ² | 42.26 | 23,896 | 43.97 | 25,299 | 5.8226 | 0.0000 |
| White | 42.09 | 15,519 | 43.70 | 16,329 | 4.4319 | 0.0000 |
| Black & Other | 42.61 | 8,358 | 44.50 | 8,935 | 3.7948 | 0.0001 |
| KOTELCHUCK INDEX: ADEQUATE | | | | | | |
| TOTAL ² | 28.44 | 16,081 | 27.21 | 15,656 | -4.6370 | 0.0000 |
| White | 31.42 | 11,584 | 30.16 | 11,269 | -3.7162 | 0.0002 |
| Black & Other | 22.89 | 4,490 | 21.79 | 4,376 | -2.6229 | 0.0087 |
| KOTELCHUCK INDEX: INADEQUATE | | | | | | |
| TOTAL ² | 18.89 | 10,681 | 19.22 | 11,061 | 1.4351 | 0.1513 |
| White | 15.75 | 5,806 | 16.29 | 6,086 | 2.0084 | 0.0446 |
| Black & Other | 24.76 | 4,856 | 24.62 | 4,943 | -0.3206 | 0.7485 |

¹ Race of Mother

² Includes unknown races

Table 7 on previous page is about maternal characteristics selected from table 9 in “South Carolina 2004 Infant Mortality and Birth Characteristics”(another more detailed publication from us).

Z-test in table 7 in the second to the last column indicates the change in 2005 vs. 2004 is either increase or decrease. If Z-test value is positive, then there was an increase in 2005 vs. 2004; 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: Adequate Plus” category, there was a statistically significant increase in percent of mothers with Adequate Plus Kotelchuck Index in 2005 vs. 2004 for All Races, White and Black & Other race group, with *P* values of 0.0000 for All races and *P* values of 0.0000 and 0.0001 for White and Black & Other race group respectively.

8. Infant death leading causes of death, 2003 to 2005:

Table 8.1 South Carolina Infant Death, Resident Data, 2003-2005, All races

| Rank | Cause of death | Number | Mortality rate* |
|-------------|---|---------------|------------------------|
| |Total Infant Deaths..... | 1536 | 9.1 |
| 1 | Disorders Related To Short Gestation, Etc. (P07)..... | 274 | 1.6 |
| 2 | Congenital Malformations, Etc. (Q00-Q99)..... | 244 | 1.4 |
| 3 | Sudden Infant Death Syndrome (R95)..... | 110 | 0.6 |
| 4 | Newborn Affected By Maternal Comp Of Pregnancy (P01)..... | 105 | 0.6 |
| 5 | Newborn Affected By Comp Of Placenta, Etc. (P02)..... | 63 | 0.4 |
| 6 | Accidents (V01-X59,Y85-Y86)..... | 62 | 0.4 |
| 7 | Respiratory Distress Of Newborn (P22)..... | 60 | 0.4 |
| 8 | Bacterial Sepsis Of Newborn (P36)..... | 55 | 0.3 |
| 9 | Disease Of Circulatory System (I00-I99)..... | 36 | 0.2 |
| 10 | Necrotizing Enterocolitis of Newborn (P77) | 33 | 0.2 |
| |All Other Causes..... | 494 | 2.9 |

Table 8.2 South Carolina Infant death, Resident Data, 2003-2005,White

| Rank | Cause of death | Number | Mortality rate* |
|-------------|---|---------------|------------------------|
| |All White Infant Deaths..... | 708 | 6.4 |
| 1 | Congenital Malformations, Etc. (Q00-Q99)..... | 146 | 1.3 |
| 2 | Disorders Related To Short Gestation, Etc. (P07)..... | 91 | 0.8 |
| 3 | Sudden Infant Death Syndrome (R95)..... | 53 | 0.5 |
| 4 | Newborn Affected By Maternal Comp Of Pregnancy (P01)..... | 44 | 0.4 |
| 5 | Accidents (V01-X59,Y85-Y86)..... | 41 | 0.4 |
| 6 | Newborn Affected By Comp Of Placenta, Etc. (P02)..... | 28 | 0.3 |
| 7 | Respiratory Distress Of Newborn (P22)..... | 26 | 0.2 |
| 8 | Bacterial Sepsis Of Newborn (P36)..... | 23 | 0.2 |
| 9 | Disease Of Circulatory System (I00-I99)..... | 22 | 0.2 |
| 10 | Intrauterine Hypoxia And Birth Asphyxia (P20-P21)..... | 17 | 0.2 |
| |All Other Causes..... | 217 | 2.0 |

Table 8.3 South Carolina Infant death, Resident Data, 2003-2005,Black and Others

| Rank | Cause of death | Number | Mortality rate* |
|-------------|---|---------------|------------------------|
| |All Black And Other Infant Deaths..... | 826 | 14.0 |
| 1 | Disorders Related To Short Gestation, Etc. (P07)..... | 183 | 3.1 |
| 2 | Congenital Malformations, Etc. (Q00-Q99)..... | 98 | 1.7 |
| 3 | Newborn Affected By Maternal Comp Of Pregnancy (P01)..... | 61 | 1.0 |
| 4 | Sudden Infant Death Syndrome (R95)..... | 57 | 1.0 |
| 5 | Newborn Affected By Comp Of Placenta, Etc. (P02)..... | 35 | 0.6 |
| 6 | Respiratory Distress Of Newborn (P22)..... | 34 | 0.6 |
| 7 | Bacterial Sepsis Of Newborn (P36)..... | 33 | 0.6 |
| 8 | Accidents (V01-X59,Y85-Y86)..... | 21 | 0.4 |
| 9 | Necrotizing Enterocolitis of Newborn (P77) | 20 | 0.3 |
| 10 | Neonatal Hemorrhage (P50 -P52,P54) | 18 | 0.3 |
| |All Other Causes..... | 266 | 4.5 |

* Rates are per 1,000 live births.

(End Of This Highlight Package)