



**2008
South Carolina
Residence Data**



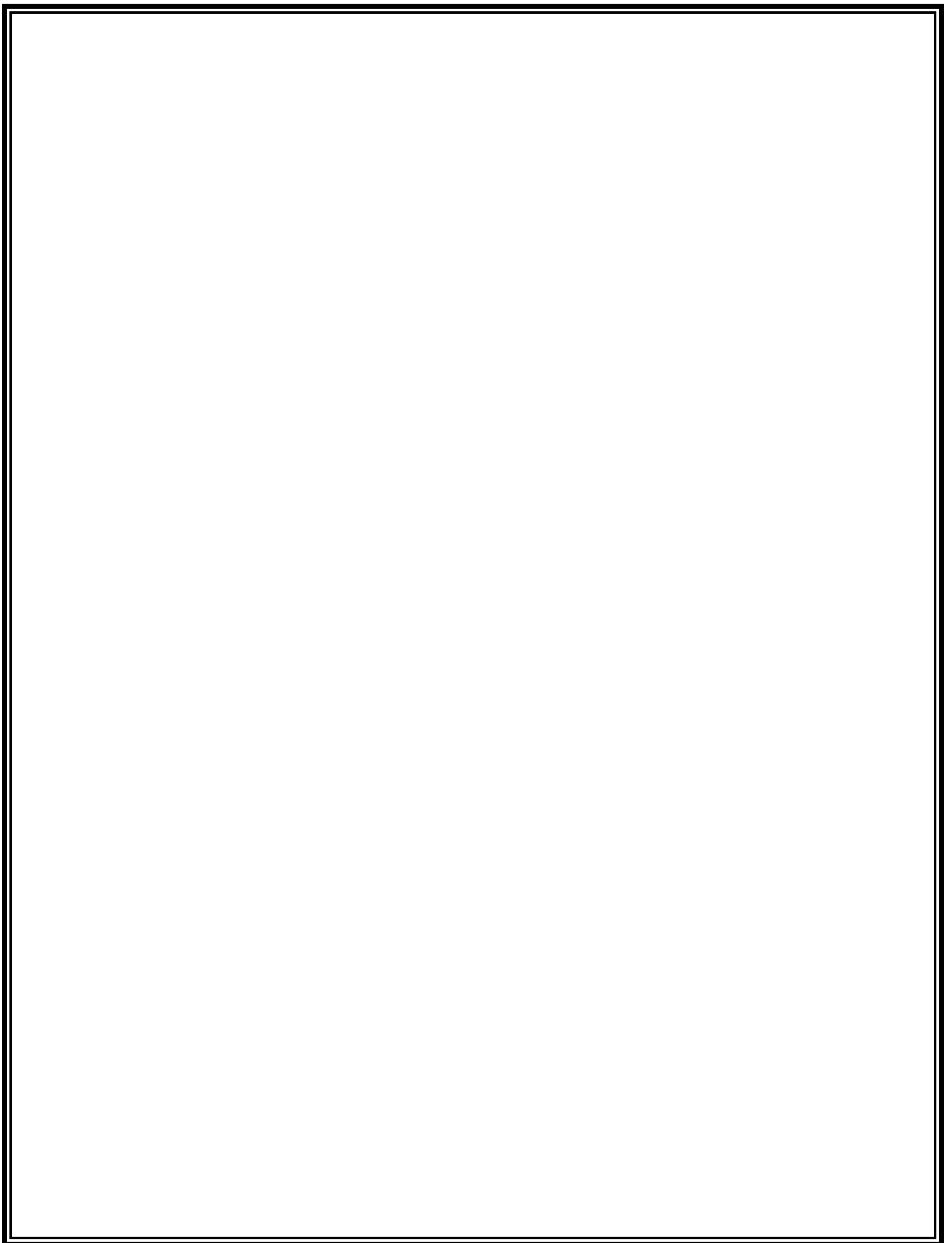
**Infant Mortality
Highlights**

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Highlights of 2008 Infant Mortality

1. Changes from 2007 to 2008 in SC:

The 2008 South Carolina infant mortality rate is 8.0 infant deaths per 1,000 live births, a 5.9% decrease from previous year's rate of 8.5. This overall rate is due to an 1.6% decrease of infant death in White race group from 6.2 per 1,000 live births in 2007 to 6.1 in 2008 and an 11.6% decrease in Black and Other group from a rate of 12.9 per 1,000 live births in 2007 to 11.4 per 1,000 live births in 2008.

The neonatal mortality rate for White infants decreased by 12.2% from the last year. The neonatal mortality rate for Black & Other decreased by 15.1%. Thus, the neonatal mortality for all races decreased by 14.0% from 5.7 in 2007 to 4.9 in 2008.

The postneonatal mortality rate for White infants increased by 19.0% and the postneonatal mortality for Black and Other decreased by 4.7% from 2007. The overall postneonatal mortality for all races increased by 6.9% from 2.9 to 3.1 deaths per 1,000 live births in 2008.

Table 1. Neonatal and Postneonatal mortality

Neonatal Mortality			
Year	Total	White	Black & Other
2007	5.7	4.1	8.6
2008	4.9	3.6	7.3
Percent Change	-14.0%	-12.2%	-15.1%
Postneonatal Mortality			
Year	Total	White	Black & Other
2007	2.9	2.1	4.3
2008	3.1	2.5	4.1
Percent Change	6.9%	19.0%	-4.7%

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

	2005			2006			2007			2008		
	Total	White	Black	Total	White	Black	Total	White	Black	Total	White	Black
United States	6.9	5.7	13.7	6.7	5.6	13.3	6.8	5.7	12.9			
South Carolina	9.5	7.0	14.3**	8.4	5.7	13.2**	8.5	6.2	12.9**	8.0	6.1	11.4**
Alabama	9.3	7.2	14.4	9.0	6.7	14.3	10.0	8.0	14.6	9.5	7.6	14.1
Georgia	8.0	5.7	12.4	8.1	6.0	12.8	7.9	5.8	12.8			
Mississippi	11.4	6.6	17.0**	10.5	6.9	14.4**	10.1	6.6	14.1**			
North Carolina	8.8	6.4	14.9**	8.1	6.0	13.6**	8.5	6.3	13.9**	8.2	6.0	13.5**
Tennessee	8.8	7.1	15.3	8.7	6.6	16.8	8.3	6.2	16.4			

*Includes unknown race

** Includes other race

3. Leading cause of infant deaths in 2008:

The top two leading causes of infant death remain the same as in 2007, but their order is changed. In descending order for 2008, 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 “Disorders related to short gestation and low birthweight (ICD-10 code P07)” decreased by 21.6% from 88 in 2007 to 69 in 2008, which moved from the leading first place in the previous year to the second cause of infant death in 2008. The cause “Congenital malformations, deformations, etc. (ICD-10 codes Q00-Q99)” decreased by 1.2% in 2008 from 85 in 2007 to 84 in 2008, and moved to the leading first place in 2008.

The third leading cause in 2008 is again

- “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 23.9% from 46 in 2007 to 57 in 2008.

Table 3. Leading causes of death comparison

Cause of Infant Death Ranked by 2008 Data (ICD-10 Codes)	2007	2008	% Change
Total Infant Death	538	504	-6.3%
Congenital malformations, deformations, etc. (Q00-Q99)	85	84	-1.2%
Disorders related to short gestation and low birthweight, NEC (P07)	88	69	-21.6%
Sudden infant death syndrome (R95)	46	57	23.9%
Fetus and newborn affected by maternal complications of pregnancy (P01)	38	53	39.5%
Accidents (V01-X59, Y85-Y86)	43	41	-4.7%
Diseases of circulatory system (I00-I99)	10	14	40.0%
Bacterial sepsis of newborn (P36)	15	14	-6.7%
Newborn affected by complication of placenta, ect. (P02)	17	12	-29.4%
Respiratory distress of newborn (P22)	11	12	9.1%
Neonatal hemorrhage (P50-P52, P54)	7	8	14.3%
Necrotizing enterocolitis of newborn (P77)	10	8	-20.0%
All other causes	168	132	-21.4%

4. Infant Mortality Rate to Hispanic Mother

Infant mortality rate to Hispanic mother in 2008 is 5.9 per 1,000 live births, a 12.3% increase from the previous year.

Table 4. Infant mortality rate to Hispanic mother

Year	Births	Deaths	Rate
2007	6,237	33	5.3
2008	6,229	37	5.9
Percent Change	-0.1%	12.1%	12.3%

5. Breakdown of Infant Deaths due to Accidents

Table 5. Breakdown of Infant Deaths due to Accidents

	2002	2003	2004	2005	2006	2007	2008	Total (2002-2008)
Accidental suffocation and strangulation in bed	8	10	10	14	22	34	37	135
Other accidental threats to breathing	6	2	6	4	5	2	2	27
Transportation	3	0	1	3	1	3	1	12
Drowning	0	0	0	4	2	0	0	6
Poison	0	1	0	2	1	1	0	5
Other accidents	1	0	4	1	2	3	1	12

6. Trends in Multiple Births in SC

Table 6. Multiple birth trends in SC, 2004–2008, 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*
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
2007	60,783	473	7.8	2,059	63	30.6	91	1	11.0	62,933	538	8.5
2008	60,954	420	6.9	2,071	75	36.2	52	9	173.1	63,077	504	8.0
Total	292,193	2,249	7.7	9,721	337	34.7	367	26	70.8	302,282	2635	8.7

* 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 2007 to 2008:

Table 7.

	2007		2008		Z-TEST	p-Value
	Percent	Number	Percent	Number		
MARITAL STATUS: UNMARRIED						
TOTAL ²	46.38	29,187	47.24	29,797	3.0633	0.0022
White	31.81	12,927	32.42	13,199	1.8688	0.0617
Black & Other	72.99	16,247	74.31	16,586	3.1537	0.0016
VERY LOW BIRTHWEIGHT						
TOTAL ²	2.06	1,294	1.87	1,180	-2.3722	0.0177
White	1.31	532	1.25	508	-0.7777	0.4367
Black & Other	3.41	758	3.00	669	-2.4481	0.0144
PREMATURE BIRTHS (< 37 WEEKS)						
TOTAL ²	12.21	7,682	11.78	7,428	-2.3524	0.0187
White	10.54	4,282	10.40	4,233	-0.6475	0.5173
Black & Other	15.23	3,390	14.29	3,190	-2.7927	0.0052
KOTELCHUCK INDEX: ADEQUATE, ADEQUATE PLUS						
TOTAL ²	70.98	44,671	71.63	45,185	2.5617	0.0104
White	73.07	29,698	74.29	30,244	3.9246	0.0001
Black & Other	67.19	14,956	66.82	14,916	-0.8214	0.4114
KOTELCHUCK INDEX: INTERMEDIATE						
TOTAL ²	7.78	4,896	7.24	4,565	-3.6540	0.0003
White	8.38	3,405	7.59	3,092	-4.1226	0.0000
Black & Other	6.69	1,489	6.59	1,470	-0.4398	0.6601

¹ Race of Mother

² Includes unknown races

Table 7 on previous page is about maternal characteristics selected from table 9 in “South Carolina 2008 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 2008 vs. 2007 is either increase or decrease. If Z-test value is positive, then there was an increase in 2008 vs. 2007; 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 “VERY LOW BIRTHWEIGHT” category, there was a statistically significant decrease in percent of mothers whose babies birthweight was very low in 2008 vs. 2007 for All Races with *P* values of 0.0177.

8. Infant death leading causes of death, 2006 to 2008:

Table 8.1 South Carolina Infant Death, Resident Data, 2006-2008, All races

Rank	Cause of death	Number	Mortality rate*
	.....Total Infant Deaths.....	1562	8.3
1	Congenital Malformations, etc. (Q00-Q99).....	267	1.4
2	Disorders Related to Short Gestation, etc. (P07).....	237	1.3
3	Sudden Infant Death Syndrome (R95).....	147	0.8
4	Newborn Affected by Maternal Comp of Pregnancy (P01).....	133	0.7
5	Accidents (V01-X59,Y85-Y86).....	117	0.6
6	Newborn Affected by Comp of Placenta, etc. (P02).....	54	0.3
7	Bacterial Sepsis of Newborn (P36).....	45	0.2
8	Disease of Circulatory System (I00-I99).....	39	0.2
9	Respiratory Distress of Newborn (P22).....	38	0.2
10	Necrotizing Enterocolitis of Newborn (P77).....	31	0.2
	.....All Other Causes.....	454	2.4

Table 8.2 South Carolina Infant death, Resident Data, 2006-2008, White

Rank	Cause of death	Number	Mortality rate*
	.....All White Infant Deaths.....	719	5.9
1	Congenital Malformations, Etc. (Q00-Q99).....	177	1.5
2	Sudden Infant Death Syndrome (R95).....	80	0.7
3	Disorders Related To Short Gestation, Etc. (P07).....	77	0.6
4	Accidents (V01-X59,Y85-Y86).....	63	0.5
5	Newborn Affected By Maternal Comp Of Pregnancy (P01).....	41	0.3
6	Bacterial Sepsis of Newborn (P36).....	20	0.2
7	Disease of Circulatory System (I00-I99).....	18	0.1
8	Newborn Affected by Comp of Placenta, etc. (P02).....	17	0.1
9	Respiratory Distress of Newborn (P22).....	16	0.1
10	Intrauterine Hypoxia And Birth Asphyxia (P20-P21).....	15	0.1
	.....All Other Causes.....	195	1.6

Table 8.3 South Carolina Infant death, Resident Data, 2006-2008, Black and Others

Rank	Cause of death	Number	Mortality rate*
	.....All Black And Other Infant Deaths.....	841	12.6
1	Disorders Related To Short Gestation, Etc. (P07).....	160	2.4
2	Newborn Affected By Maternal Comp Of Pregnancy (P01).....	92	1.4
3	Congenital Malformations, Etc. (Q00-Q99).....	89	1.3
4	Sudden Infant Death Syndrome (R95).....	67	1.0
5	Accidents (V01-X59,Y85-Y86).....	54	0.8
6	Newborn Affected By Comp Of Placenta, Etc. (P02).....	37	0.6
7	Bacterial Sepsis Of Newborn (P36).....	25	0.4
8	Necrotizing Enterocolitis of Newborn (P77).....	24	0.4
9	Respiratory Distress of Newborn (P22).....	22	0.3
10	Disease Of Circulatory System (I00-I99).....	21	0.3
	.....All Other Causes.....	250	3.7

* Rates are per 1,000 live births.

(End Of This Highlight Package)