



**2010  
South Carolina  
Residence Data**



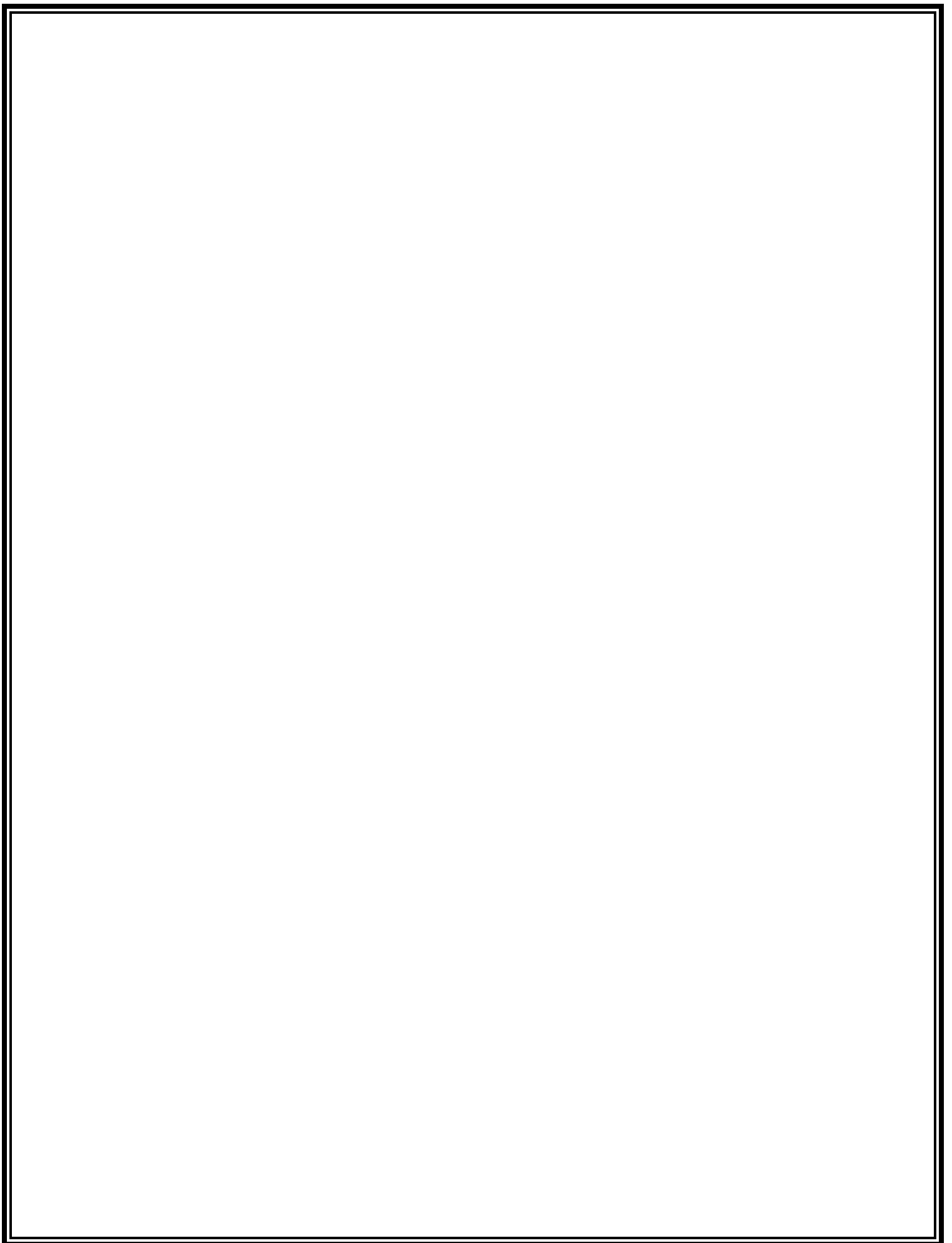
**Infant Mortality  
Highlights**

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# Highlights of 2010 Infant Mortality

## 1. Changes from 2009 to 2010 in SC:

The 2010 South Carolina infant mortality rate is 7.4 infant deaths per 1,000 live births, a 4.2% increase from previous year's rate of 7.1. This overall rate is due to a 5.8% increase of infant death in White race group from 5.2 per 1,000 live births in 2009 to 5.5 in 2010 and a 3.8% increase in Black and Other group from a rate of 10.5 per 1,000 live births in 2009 to 10.9 per 1,000 live births in 2010.

The neonatal mortality rate for White infants increased by 6.5% from the last year. The neonatal mortality rate for Black & Other increased by 7.7%. Thus, the neonatal mortality for all races increased by 7.0% from 4.3 in 2009 to 4.6 in 2010.

The postneonatal mortality rate for White infants did not change compared to the rate in 2009 and the postneonatal mortality for Black and Other decreased by 2.5% from 2009. The overall postneonatal mortality for all races remained the same and is 2.8 deaths per 1,000 live births in 2010.

**Table 1. Neonatal and Postneonatal mortality**

<b>Neonatal Mortality</b>			
Year	Total	White	Black & Other
2009	4.3	3.1	6.5
2010	4.6	3.3	7.0
<b>Percent Change</b>	7.0%	6.5%	7.7%
<b>Postneonatal Mortality</b>			
Year	Total	White	Black & Other
2009	2.8	2.2	4.0
2010	2.8	2.2	3.9
<b>Percent Change</b>	0.0%	0.0%	-2.5%

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

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

**Table 2. IMR by race in US and select states**

	2007			2008			2009			2010		
	Total	White	Black	Total	White	Black	Total	White	Black	Total	White	Black
<b>United States</b>	6.8	5.7	12.9	6.6	5.5	12.7	6.4	5.3	12.6	6.1	5.2	11.6
<b>South Carolina</b>	<b>8.5</b>	<b>6.2</b>	<b>12.9**</b>	<b>8.0</b>	<b>6.1</b>	<b>11.4**</b>	<b>7.1</b>	<b>5.2</b>	<b>10.5**</b>	<b>7.4</b>	<b>5.5</b>	<b>10.9**</b>
<b>Alabama</b>	10.0	8.0	14.6	9.5	7.6	14.1	8.2	6.2	13.3	8.7	6.6	13.7
<b>Georgia</b>	7.9	5.8	12.8	8.0	7.3	13.8	6.8	4.6	12.5			
<b>Mississippi</b>	10.1	6.6	14.1**	9.9	7.4	12.9**	10.0	7.0	13.6			
<b>North Carolina</b>	8.5	6.3	13.9**	8.2	6.0	13.5**	7.9	5.4	14.1**	7.0	5.3	12.7
<b>Tennessee</b>	8.3	6.2	16.4	8.0	6.1	15.0	8.0	6.0	16.0			

\*Includes unknown race

\*\* Includes other race

### **3. Leading cause of infant deaths in 2010:**

The top two leading causes of infant death remain the same as in 2009. In descending order for 2010, 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 5.6% in 2010 from 71 in 2009 to 75 in 2010. The cause “Disorders related to short gestation and low birthweight (ICD-10 code P07)” decreased by 8.8% from 68 in 2009 to 62 in 2010.

The third leading cause in 2009 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 11.4% from 44 in 2009 to 49 in 2010.

**Table 3. Leading causes of death comparison**

Cause of Infant Death Ranked by 2010 Data (ICD-10 Codes)	2009	2010	% Change
<b>Total Infant Death</b>	<b>430</b>	<b>430</b>	<b>0.0%</b>
Congenital malformations, deformations, etc. (Q00-Q99)	71	75	5.6%
Disorders related to short gestation and low birthweight, NEC (P07)	68	62	-8.8%
Sudden infant death syndrome (R95)	44	49	11.4%
Accidents (V01-X59, Y85-Y86)	33	32	-3.0%
Fetus and newborn affected by maternal complications of pregnancy (P01)	28	19	-32.1%
Diseases of circulatory system (I00-I99)	10	16	60.0%
Newborn affected by complication of placenta, etc. (P02)	13	14	7.7%
Bacterial sepsis of newborn (P36)	14	14	0.0%
Neonatal hemorrhage (P50-P52, P54)	11	12	9.1%
Intrauterine hypoxia and birth asphyxia (P20-P21)	6	10	66.7%
All other causes	129	127	-1.6%

### **4. Infant Mortality Rate to Hispanic Mother**

Infant mortality rate to Hispanic mother in 2010 is 4.8 per 1,000 live births, a 14.5% decrease from the previous year.

**Table 4. Infant mortality rate to Hispanic mother**

Year	Births	Deaths	Rate
2009	5,557	31	5.6
2010	5,034	24	4.8
<b>Percent Change</b>	-9.4%	-22.6%	-14.5%

## **5. Breakdown of Infant Deaths due to Accidents**

**Table 5. Breakdown of Infant Deaths due to Accidents**

	2004	2005	2006	2007	2008	2009	2010	Total (2004-2010)
Accidental suffocation and strangulation in bed	10	14	22	34	37	22	<b>25</b>	164
Other accidental threats to breathing	6	4	5	2	2	3	<b>2</b>	24
Transportation	1	3	1	3	1	5	<b>1</b>	15
Drowning	0	4	2	0	0	0	<b>0</b>	6
Poison	0	2	1	1	0	1	<b>0</b>	5
Other accidents	4	1	2	3	1	2	<b>4</b>	17

## **6. Trends in Multiple Births in SC**

**Table 6. Multiple birth trends in SC, 2006–2010, 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*
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
2009	58,515	377	6.4	2,072	48	23.2	95	4	42.1	60,682	430	7.1
2010	56,393	382	6.8	1,867	43	23.0	65	5	76.9	58,325	430	7.4
Total	296,755	2,106	7.1	10,087	282	28.0	365	27	74.0	307,208	2,422	7.9

\* 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 Race<sup>1</sup> in SC from 2009 to 2010:**

**Table 7.**

	2009		2010		Z-TEST	p-Value
	Percent	Number	Percent	Number		
<b>PRENATAL CARE BEGAN FIRST TRIMESTER</b>						
TOTAL <sup>2</sup>	70.33	42,675	72.08	42,039	6.6693	0.0000
White	74.03	29,129	75.82	28,757	5.7467	0.0000
Black & Other	63.52	13,520	65.15	13,266	3.4754	0.0005
<b>KOTELCHUCK INDEX: INADEQUATE</b>						
TOTAL <sup>2</sup>	18.86	11,447	18.45	10,760	-1.8395	0.0658
White	16.19	6,372	15.63	5,928	-2.1422	0.0322
Black & Other	23.81	5,067	23.68	4,822	-0.2975	0.7661
<b>PREMATURE BIRTHS (&lt; 37 WEEKS)</b>						
TOTAL <sup>2</sup>	11.71	7,103	11.50	6,705	-1.1273	0.2596
White	10.33	4,066	9.90	3,753	-2.0189	0.0435
Black & Other	14.24	3,031	14.48	2,948	0.6921	0.4889
<b>HISPANIC MOTHER</b>						
TOTAL <sup>2</sup>	9.16	5,557	8.63	5,034	-3.1896	0.0014
White	13.55	5,331	12.63	4,791	-3.7737	0.0002
Black & Other	1.06	226	1.19	243	1.2725	0.2032

<sup>1</sup> Race of Mother

<sup>2</sup> Includes unknown races

Table 7 on previous page is about maternal characteristics selected from table 9 in “South Carolina 2010 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 2010 vs. 2009 is either increase or decrease. If Z-test value is positive, then there was an increase in 2010 vs. 2009; 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 “PRENATAL CARE BEGAN FIRST TRIMESTER” category, there was a statistically significant increase in the percent of mothers entering prenatal care in the first trimester in 2010 vs. 2009 for All Races with *P* values of 0.0000.

## **8. Infant death leading causes of death, 2008 to 2010:**

**Table 8.1 South Carolina Infant Death, Resident Data, 2008-2010, All races**

<b>Rank</b>	<b>Cause of death</b>	<b>Number</b>	<b>Mortality rate*</b>
	.....Total Infant Deaths.....	1364	7.5
1	Congenital Malformations, etc. (Q00-Q99).....	230	1.3
2	Disorders Related to Short Gestation, etc. (P07).....	199	1.1
3	Sudden Infant Death Syndrome (R95).....	150	0.8
4	Accidents (V01-X59,Y85-Y86).....	106	0.6
5	Newborn Affected by Maternal Comp of Pregnancy (P01).....	100	0.5
6	Bacterial Sepsis of Newborn (P36).....	42	0.2
7	Disease of Circulatory System (I00-I99).....	40	0.2
8	Newborn Affected by Comp of Placenta, etc. (P02).....	39	0.2
9	Neonatal hemorrhage (P50-P52, P54).....	31	0.2
10	Respiratory Distress of Newborn (P22).....	23	0.1
	.....All Other Causes.....	404	2.2

**Table 8.2 South Carolina Infant death, Resident Data, 2008-2010, White**

<b>Rank</b>	<b>Cause of death</b>	<b>Number</b>	<b>Mortality rate*</b>
	.....All White Infant Deaths.....	640	5.4
1	Congenital Malformations, Etc. (Q00-Q99).....	123	1.0
2	Sudden Infant Death Syndrome (R95).....	78	0.7
3	Disorders Related To Short Gestation, Etc. (P07).....	69	0.6
4	Accidents (V01-X59,Y85-Y86).....	64	0.5
5	Newborn Affected By Maternal Comp Of Pregnancy (P01).....	38	0.3
6	Bacterial Sepsis of Newborn (P36).....	21	0.2
7	Disease of Circulatory System (I00-I99).....	20	0.2
8	Neonatal hemorrhage (P50-P52, P54)	15	0.1
9	Intrauterine Hypoxia And Birth Asphyxia (P20-P21).....	14	0.1
10	Assault (Homicide) (X85-Y09,Y87.1).....	12	0.1
	.....All Other Causes.....	186	1.6

**Table 8.3 South Carolina Infant death, Resident Data, 2008-2010, Black and Others**

<b>Rank</b>	<b>Cause of death</b>	<b>Number</b>	<b>Mortality rate*</b>
	.....All Black And Other Infant Deaths.....	723	11.3
1	Disorders Related To Short Gestation, Etc. (P07).....	130	2.0
2	Congenital Malformations, Etc. (Q00-Q99).....	106	1.7
3	Sudden Infant Death Syndrome (R95).....	72	1.1
4	Newborn Affected By Maternal Comp Of Pregnancy (P01).....	62	1.0
5	Accidents (V01-X59,Y85-Y86).....	42	0.7
6	Newborn Affected By Comp Of Placenta, Etc. (P02).....	29	0.5
7	Bacterial Sepsis Of Newborn (P36).....	21	0.3
8	Disease Of Circulatory System (I00-I99).....	20	0.3
9	Neonatal hemorrhage (P50-P52, P54).....	16	0.3
10	Necrotizing Enterocolitis of Newborn (P77).....	13	0.2
	.....All Other Causes.....	212	3.3

\* Rates are per 1,000 live births.

(End Of This Highlight Package)