

## 2007 South Carolina Residence Data



# Infant Mortality Highlights

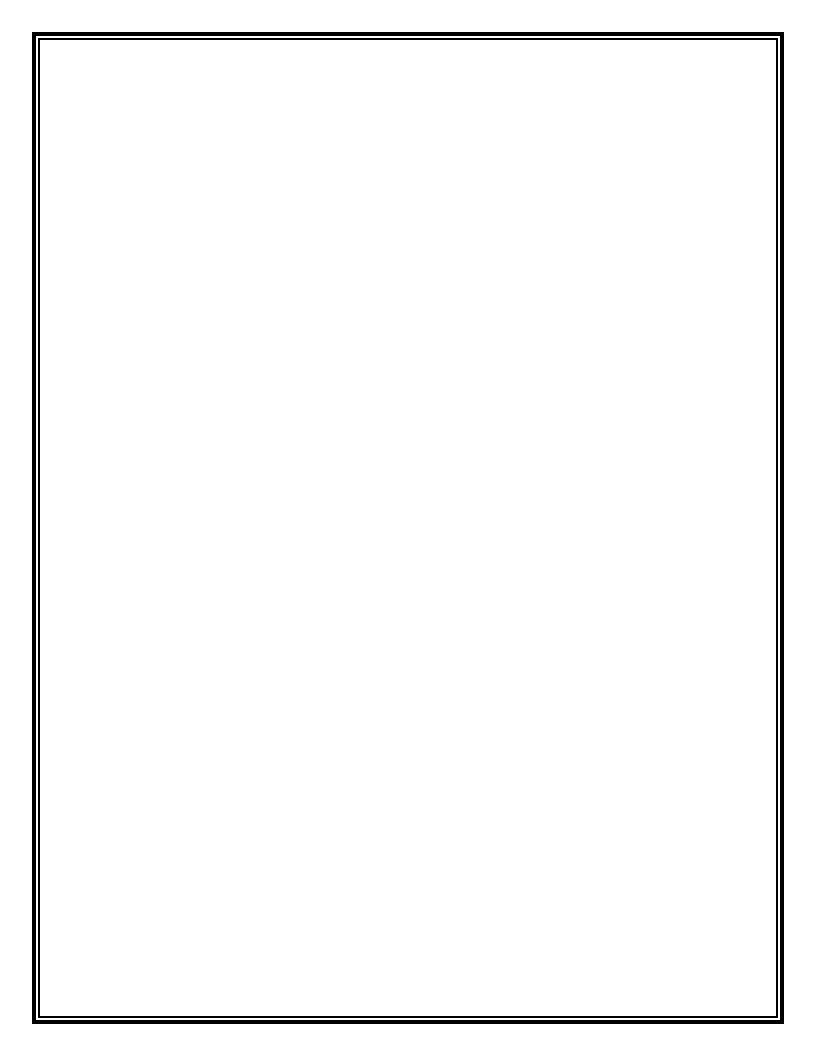
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### **Highlights of 2007 Infant Mortality**

#### 1. Changes from 2006 to 2007 in SC:

The 2007 South Carolina infant mortality rate is 8.5 infant deaths per 1,000 live births, an 1.2% increase from previous year's rate of 8.4. This overall rate is due to an 8.8% increase of infant death in White race group from 5.7 per 1,000 live births in 2006 to 6.2 in 2007 and a 2.3% decrease in Black and Other group from a rate of 13.2 per 1,000 live births in 2006 to 12.9 per 1,000 live births in 2007.

The neonatal mortality rate for White infants increased by 17.1% from the last year. The neonatal mortality rate for Black & Other decreased by 6.5%. Thus, the neonatal mortality for all races increased by 3.6% from 5.5 in 2006 to 5.7 in 2007.

The postneonatal mortality rate for White infants decreased by 4.5% and the postneonatal mortality for Black and Other increased by 7.5% from 2006. The overall postneonatal mortality for all races did not change and stayed at 2.9 deaths per 1,000 live births in 2007.

Neonatal Mortality									
Year	Total	White	Black & Other						
2006	5.5	3.5	9.2						
2007	5.7	4.1	8.6						
Percent Change	3.6%	17.1%	-6.5%						
Pos	stneonatal M	<i>l</i> ortality							
Year	Total	White	Black & Other						
2006	2.9	2.2	4.0						
2007	2.9	2.1	4.3						
Percent Change         0.0%         -4.5%         7.5%									

#### Table 1. Neonatal and Postneonatal mortality

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

		2004			2005			2006			2007	
	Total	White	Black									
United States	6.8	5.7	13.8	6.9	5.7	13.7	6.7	5.6	13.3			
South Carolina	9.3	6.7	14.1**	9.5	7.0	14.3**	8.4	5.7	13.2**	8.5	6.2	12.9**
Alabama	8.7	6.7	13.3	9.3	7.2	14.4	9.0	6.7	14.3	10.0	8.0	14.6
Georgia	8.5	6.1	12.9	8.0	5.7	12.4	8.1	6.0	12.8	7.9	5.8	12.8
Mississippi	9.7	6.1	14.2	11.4	6.6	17.0**	10.5	6.9	14.4**	10.1	6.6	14.1**
North Carolina	8.8	6.2	15.6*	8.8	6.4	14.9**	8.1	6.0	13.6**	8.5	6.3	13.9**
Tennessee	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 2007:

The top two leading causes of infant death remain the same as in 2006, but their order is changed. In descending order for 2007, 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 14.3% in 2007 from 98 in 2006 to 85 in 2007, which moved from the leading first place in the previous year to the second cause of infant death in 2007. The cause "Disorders related to short gestation and low birthweight (ICD-10 code P07)" increased by 10% from 80 in 2006 to 88 in 2007, and thus moved to the leading first place in 2007.

The third leading cause in 2007 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 2.3% from 44 in 2006 to 46 in 2007.

Cause of Infant Death Ranked by 2007 Data (ICD-10 Codes)	2006	2007	% Change
Total Infant Death	520	538	3.5%
Disorders related to short gestation and low birthweight, NEC (P07)	80	88	10.0%
Congenital malformations, deformations, etc. (Q00-Q99)	98	85	-13.3%
Sudden infant death syndrome (R95)	44	46	4.5%
Accidents (V01-X59, Y85-Y86)	33	43	30.3%
Fetus and newborn affected by maternal complications of pregnancy (P01)	42	38	-9.5%
Newborn affected by complication of placenta, ect. (P02)	25	17	-32.0%
Bacterial sepsis of newborn (P36)	16	15	-6.3%
Respiratory distress of newborn (P22)	15	11	-26.7%
Intrauterine hypoxia and birth asphyxia (P20-P21)	10	11	10.0%
All other causes	157	184	17.2%

Table 3. Leading causes of death comparison
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#### 4. Infant Mortality Rate to Hispanic Mother

Infant mortality rate to Hispanic mother in 2007 is 5.3 per 1,000 live births, a 16% decrease from the previous year.

Table 4.	Infant mortality	/ rate to His	panio	c mother	
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Year	Births	Deaths	Rate
2006	5,863	37	6.3
2007	6,237	33	5.3
Percent Change	6.4%	-10.8%	-16.2%

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

	2001	2002	2003	2004	2005	2006	2007	Total (2001-2007)
Accidental suffocation and strangulation in bed		8	10	10	14	22	34	105
Other accidental threats to breathing	15	6	2	6	4	5	2	40
Transportation	3	3	0	1	3	1	3	14
Drowning	0	0	0	0	4	2	0	6
Poison	1	0	1	0	2	1	1	6
Other accidents	2	1	0	4	1	2	3	13

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

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

#### Table 6. Multiple birth trends in SC, 2003–2007, 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*
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
2007	60,783	473	7.8	2,059	63	30.6	91	1	11.0	62,933	538	8.5
Total	284,830	2,221	7.8	9,429	329	34.9	393	19	48.3	294,666	2594	8.8

\* 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 2006 to 2007:

Table 7.

Table 7.			-		-							
	20	06	20	07								
	Percent	Number	Percent	Number	Z-TEST	p-Value						
	<5 PRENATAL CARE VISITS											
TOTAL <sup>2</sup>	7.36	4,576	6.42	4,038	-6.5776	0.0000						
White	6.40	2,558	5.41	2,198	-5.9911	0.0000						
Black & Other	9.06	2,004	8.25	1,837	-3.0122	0.0026						
	PRENAT	AL CARE E	BEGAN FIR	ST TRIME	STER							
TOTAL <sup>2</sup>	67.20	41,792	68.31	42,990	4.2051	0.0000						
White	70.57	28,193	71.82	29,187	3.9052	0.0001						
Black & Other	61.23	13,548	61.93	13,786	1.5293	0.1262						
		MOTHE	R < 18 YE	ARS								
TOTAL <sup>2</sup>	4.54	2,825	4.23	2,664	-2.6718	0.0075						
White	3.40	1,357	3.16	1,285	-1.8725	0.0611						
Black & Other	6.60	1,461	6.19	1,378	-1.7739	0.0761						
2		ARITAL ST		1								
TOTAL <sup>2</sup>	45.34	28,195	46.38	29,187	3.6976	0.0002						
White	30.61	12,227	31.81	12,927	3.6821	0.0002						
Black & Other	72.01	15,933	72.99	16,247	2.3206	0.0203						
		VERY LOV	W BIRTHW	EIGHT								
TOTAL <sup>2</sup>	1.86	1,156	2.06	1,294	2.5193	0.0118						
White	1.15	458	1.31	532	2.0951	0.0362						
Black & Other	3.15	697	3.41	758	1.5107	0.1309						
КО	TELCHUC	K INDEX: /	ADEQUATI	E, ADEQU/	ATE PLUS							
TOTAL <sup>2</sup>	69.36	43,135	70.98	44,671	6.2741	0.0000						
White	71.28	28,477	73.07	29,698	5.6776	0.0000						
Black & Other	65.96	14,595	67.19	14,956	2.7482	0.0060						

<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 2007 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 2007 vs. 2006 is either increase or decrease. If Z-test value is positive, then there was an increase in 2007 vs. 2006; 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 "<5 PRENATAL CARE VISITS" category, there was a statistically significant decrease in percent of mothers with less than 5 prenatal care visits in 2007 vs. 2006 for All Races with *P* values of 0.0000.

#### 8. Infant death leading causes of death, 2005 to 2007:

	South Garolina Infant Death, Resident Data, 2003-2007, All faces						
Rank	Cause of death	Number	Mortality rate*				
	Total Infant Deaths	1607	8.8				
1	Congenital Malformations, Etc. (Q00-Q99)	262	1.4				
2	Disorders Related To Short Gestation, Etc. (P07)	249	1.4				
3	Sudden Infant Death Syndrome (R95)	138	0.8				
4	Newborn Affected By Maternal Comp Of Pregnancy (P01)	108	0.6				
5	Accidents (V01-X59,Y85-Y86)	104	0.6				
6	Newborn Affected By Comp Of Placenta, Etc. (P02)	67	0.4				
7	Respiratory Distress Of Newborn (P22)	51	0.3				
8	Bacterial Sepsis Of Newborn (P36)	49	0.3				
9	Necrotizing Enterocolitis of Newborn (P77)	41	0.2				
10	Disease Of Circulatory System (100-199)	37	0.2				
	All Other Causes	501	2.8				

#### Table 8.1 South Carolina Infant Death, Resident Data, 2005-2007, All races

Table 8.2	South Carolina Infant dea	th, Resident Data	a, 2005-2007,White
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Rank	Cause of death	Number	Mortality rate*
	All White Infant Deaths	735	6.2
1	Congenital Malformations, Etc. (Q00-Q99)	172	1.5
2	Disorders Related To Short Gestation, Etc. (P07)	84	0.7
3	Sudden Infant Death Syndrome (R95)	73	0.6
4	Accidents (V01-X59,Y85-Y86)	54	0.5
5	Newborn Affected By Maternal Comp Of Pregnancy (P01)	35	0.3
6	Newborn Affected By Comp Of Placenta, Etc. (P02)	29	0.2
7	Intrauterine Hypoxia And Birth Asphyxia (P20-P21)	20	0.2
8	Disease Of Circulatory System (I00-I99)	20	0.2
9	Respiratory Distress Of Newborn (P22)	18	0.2
10	Bacterial Sepsis Of Newborn (P36)	18	0.2
	All Other Causes	212	1.8

#### Table 8.3 South Carolina Infant death, Resident Data, 2005-2007, Black and Others

Rank	Cause of death	Number	Mortality rate*
	All Black And Other Infant Deaths	869	13.5
1	Disorders Related To Short Gestation, Etc. (P07)	165	2.6
2	Congenital Malformations, Etc. (Q00-Q99)	90	1.4
3	Newborn Affected By Maternal Comp Of Pregnancy (P01)	73	1.1
4	Sudden Infant Death Syndrome (R95)	65	1.0
5	Accidents (V01-X59,Y85-Y86)	50	0.8
6	Newborn Affected By Comp Of Placenta, Etc. (P02)	38	0.6
7	Respiratory Distress Of Newborn (P22)	31	0.5
8	Bacterial Sepsis Of Newborn (P36)	31	0.5
9	Necrotizing Enterocolitis of Newborn (P77)	29	0.5
10	Disease Of Circulatory System (I00-I99)	19	0.3
	All Other Causes	278	4.3

\* Rates are per 1,000 live births.

(End Of This Highlight Package)