

2013 South Carolina Residence Data



Infant Mortality Highlights

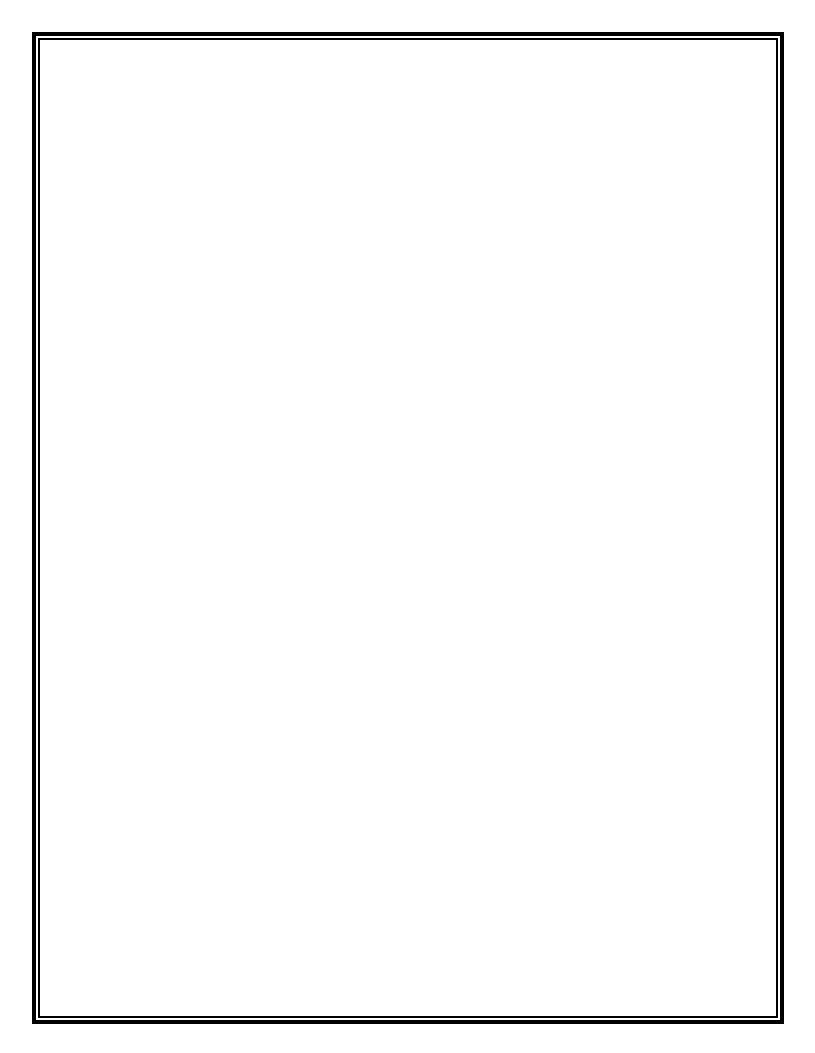
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South Carolina Department of Health and Environmental Control



Highlights of 2013 Infant Mortality Report

Summary:

The South Carolina infant mortality rate decreased substantially from 7.6 infant deaths per 1,000 live births in 2012 to 6.9 infant deaths per 1,000 live births in 2013. This decrease in infant mortality is due to a large decrease in infant deaths among racial minorities in South Carolina (black and other races), while there was a slight increase in infant mortality among whites. There were also large decreases in infant mortality in some counties in the Pee Dee and Low Country that traditionally have some of the highest infant mortality rates in the state (see section 5 below).

This substantial decrease in infant mortality is due in large part to a reduction in the number of deaths due to accidental suffocation and strangulation in bed, dropping from 39 deaths in 2012 to 21 deaths in 2013. Additionally, there was a significant decrease in the number of teen births, our best up-to-date indicator of unplanned births, especially among racial minority residents of South Carolina. There was not an increase in abortions corresponding to the decrease in teen births, meaning that teen pregnancies overall declined from 2012 to 2013. In fact, South Carolina saw a drop in abortions among state residents (both overall and to teens) across all races in South Carolina (10.5 abortions per 1,000 reproductive age females in 2012 to 9.6 per 1,000 reproductive age females in 2013). Fewer teen births and fewer abortions indicate a decrease in unintended pregnancies, which is a preventable risk factor for poor birth outcomes including infant mortality.

1. Changes from 2012 to 2013 in SC:

The 2013 South Carolina infant mortality rate is 6.9 infant deaths per 1,000 live births, a 9.2% decrease from previous year's rate of 7.6. This is the lowest infant mortality rate on record for South Carolina. There was a large decrease in infant mortality among Black and Other women (20.2% decrease) and a small increase in infant mortality among White women (3.8%). This led to a large drop in the racial disparity in infant mortality from 2012 to 2013, with minority infants dying at 2.25 times the rate of White infants in 2012 and minority infants dying at 1.73 times the rate of White infants in 2013.

For Black and Other women, there was a large drop in deaths in both the neonatal period (first 27 days of life; 15.8% decrease from 2012 to 2013) and in the postneonatal period (28-364 days of life; 27.9% decrease from 2012 to 2013). For White women, there was a 15.6% increase in neonatal deaths and a 14.3% decrease in postneonatal deaths from 2012 to 2013. Overall, there was a 2.1% decrease in neonatal mortality and a 24.1% decrease in postneonatal mortality from 2012 to 2013.

Table 1. Neonatal and Postneonatal Mortality Rates¹ by Race²

Neonatal Mortality Rates							
Year	Total	White Black & Ot					
2012	4.7	3.2	7.6				
2013	4.6	3.7	6.4				
Percent Change	-2.1%	15.6%	-15.8%				
Postneonatal Mortality Rates							
Postne	eonatai Mor	tality Rate	es				
Year	Total	White	Black & Other				
Year	Total	White	Black & Other				

Source: SC DHEC: PHSIS - Division of Biostatistics

Notes: ¹Rates per 1,000 live births

²Race of mother

While the number and rate of deaths to Hispanic infants increased from 2012 to 2013, the Hispanic infant mortality rate in 2013 (5.7) was very close to the white infant mortality rate in 2013 (5.5) and much lower than black (without other races) infant mortality rate in 2013 (10.0).

Table 2. Infant mortality rate to Hispanic mothers

Year	Births	Deaths	Rate
2012	4,649	16	3.4
2013	4,360	25	5.7
Percent Change	-6.2%	56.3%	66.6%

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

Table 3. IMR by race in US and select states

Table 5. INIT by			00.001 01									
		2010 2011			2012			2013				
	Total	White	Black	Total	White	Black	Total	White	Black	Total	White	Black
United States	6.2	5.2	11.6	6.1	5.1	11.4						
South Carolina	7.4	5.5	11.3	7.4	5.0	12.2	7.6	5.3	12.5	6.9	5.5	10.0
Alabama	8.7	6.6	13.7	8.1	6.1	13.0	8.9	6.6	14.4	8.6	6.9	12.6
Georgia	6.3	5.7	10.0	6.8	5.8	11.4	6.8	5.3	10.5			
Mississippi	9.6	6.4	13.8	9.4	6.5	13.2	8.8	5.4	13.1			
North Carolina	7.0	5.3	12.7	7.2	5.5	12.9	7.4	5.5	13.9	7.0	5.5	12.5
Tennessee	7.9	6.3	13.8	7.4	6.0	12.8	7.2	5.9	12.1			

^{*}Total may include unknown race

South Carolina generally has an infant mortality rate that's near the average of other Southeastern states, but usually higher than the rate in both Georgia and North Carolina. The only other Southeastern states that have released their 2013 infant mortality data to date are Alabama, whose rate is substantially higher than the South Carolina rate, and North Carolina, whose rate is slightly higher than the South Carolina rate.

3. Leading Causes of Infant Deaths in 2013:

The four leading causes of death in SC remained the same in 2013 as they were in 2012, but their order has changed. In descending order for 2013, the leading causes of infant death were:

- Disorders related to short gestation and low birthweight (preterm birth and low birthweight)
- Congenital malformation, deformation, etc. (birth defects)
- Sudden Infant Death Syndrome (SIDS)
- Accidents

From 2012 to 2013 there was a 16.9% increase in deaths attributed to preterm birth and low birthweight, moving it ahead of birth defects to become the leading cause of infant death in 2013.

From 2012 to 2013 there was a 43.9% decrease in accidental infant deaths, dropping from 41 accidental deaths in 2012 to 23 accidental deaths in 2013. In 2013 all of the accidental deaths were due to accidental suffocation and strangulation in bed or other accidental threats to breathing (positional asphyxia).

Additional clinical causes of infant death that decreased substantially from 2012 to 2013 include newborns affected by complications of placenta, etc., diseases of the circulatory system, and respiratory distress of newborn. Many of these deaths were associated with extreme prematurity or birth defects and were likely not preventable.

Table 4. Leading causes of death comparison

Cause of Infant Death Ranked by 2013 Data (ICD-10 Codes)	2012	2013	% Change
Total Infant Deaths	435	389	-10.6%
Disorders related to short gestation and low birthweight, NEC (P07)	65	76	16.9%
Congenital malformations, deformations, etc. (Q00-Q99)	72	73	1.4%
Sudden infant death syndrome (R95)	33	35	6.1%
Accidents (V01-X59, Y85-Y86)	41	23	-43.9%
Fetus and newborn affected by maternal complications of pregnancy (P01)	22	20	-9.1%
Newborn affected by complication of placenta, etc. (P02)	21	12	-42.9%
Bacterial sepsis of newborn (P36)	12	11	-8.3%
Diseases of circulatory system (I00-I99)	12	9	-25.0%
Respiratory distress of newborn (P22)	18	9	-50.0%
Necrotizing enterocolitis of newborn (P77)	9	9	0.0%
All other causes	130	112	-13.8%

Table 5. Breakdown of infant deaths due to accidents

	2007	2008	2009	2010	2011	2012	2013	Total (2007-2013)
Accidental suffocation and strangulation in bed (W75, W84)	34	37	22	25	21	39	21	199
Other accidental threats to breathing	2	2	3	2	2	0	2	13
Transportation	3	1	5	1	3	1	0	14
Drowning	0	0	0	0	1	0	0	1
Poison	1	0	1	0	1	0	0	3
Other accidents	3	1	2	4	2	1	0	13

4. Risk Factors for Infant Deaths in 2013:

In 2013 there were significantly fewer births to teen mothers than there were in 2012 (2.73% of all births in 2012 compared to 2.31% of all births in 2013), especially among minority women (3.74% of births in 2012 compared to 3.12% of births in 2013). There was also a significant decrease in tobacco use during pregnancy among white women (13.49% of births in 2012 compared to 12.91% of births in 2013).

Table 6. Prevalence of selected risk factors for infant death in 2012 and 2013

	20	12	2013					
	Percent Number Percent		Percent	Number				
Mother <18 Years of Age								
Total	2.73%	1,160	2.31%	1,313				
White	2.19%	811	1.89%	704				
Black and Other	3.74%	747	3.12%	608				
Tobacco Use During Pregnancy								
Total	11.26%	6,429	10.91%	6,190				
White	13.49%	5,004	12.91%	4,801				
Black and Other	7.12%	1,422	7.09%	1,384				

Notes: Race of mother

Total may include unknown race

5. Geographic Variation in Infant Deaths in 2013:

Counties with substantial decreases in their infant mortality rates and numbers from 2012 to 2013 include: **Beaufort, Charleston, Colleton, Darlington, Fairfield, Florence, Horry, Lexington, and Marion**. Many of these counties are in the Low Country and Pee Dee regions. In these counties, the overall infant mortality rate decreased from 9.0 deaths per 1,000 live births in 2012 to 5.2 deaths per 1,000 live births in 2013. In these same counties from 2012 to 2013, the white infant mortality rate decreased from 5.4 to 3.5 while the minority (black and other) infant mortality rate decreased from 16.1 to 8.6.

Among the counties with substantial decreases in their infant mortality rates and numbers from 2012 to 2013, the following counties had substantial decreases among the white population: **Beaufort, Charleston, Darlington, and Horry**.

Among the counties with substantial decreases in their infant mortality rates and numbers from 2012 to 2013, the following counties had substantial decreases among the minority population (black and other): **Colleton, Darlington, Fairfield, Florence, Lexington, and Marion**.

Table 7. Counties with substantial decreases in the number and rate of infant deaths from 2012 to 2013

County	Substantial Decrease Overall	Substantial Decrease Among White	Substantial Decrease Among Minority
Low Country			
Beaufort	*	*	
Charleston	*	*	
Colleton	*		*
Pee Dee			
Darlington	*	*	*
Florence	*		*
Horry	*	*	
Marion	*		*
Midlands			
Fairfield	*		*
Lexington	*		*

Source: SC DHEC: PHSIS – Division of Biostatistics