

# | 2018 | Maternal and Child Health Data Brief



## Key Findings

- In 2016, teen pregnancy rates increased slightly after six years of declining rates but remain lower than the overall state rate.
- The percentage of women entering late into prenatal care or not receiving care declined to 37.6% in 2016.
- The rate of preterm births remained at 10.7% in 2016, with a significant racial disparity.
- Percentages of low and very low birth weight for the years 2012 to 2016 were significantly higher for Black births than for White or Hispanic births.
- After two years of declining rates, the infant mortality rate increased to 8.3 per 1,000 live births in 2016.
- The Guilford County infant mortality rate is higher than that of the state of North Carolina as well as the US rate.
- 55.1% of new mothers were overweight or obese when their pregnancy began.
- 28.9% of births were through Cesarean section in 2016.

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## Pregnancies, Abortions, Fetal Deaths and Live Births in Guilford County

### Pregnancies, Abortions, Fetal Deaths, Live Births and Rates per 1,000 Females by Age and by Race, 2016

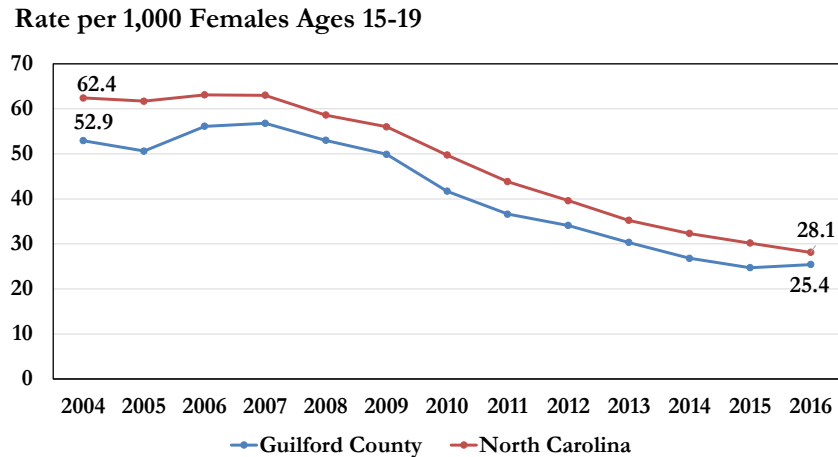
	All Races		White/ Caucasian		African- American		Asian/ Pacific Islander		Native American		Hispanic	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
<b>Pregnancies Ages 10-14</b>	9	0.5	2	0.2	3	0.5	2	2.0	0	0.0	6	2.6
<b>Pregnancies Ages 15-19</b>	505	25.4	120	12.0	299	34.8	71	65.0	5	24.4	76	39.9
<b>Pregnancies Ages 20-50</b>	7,610	40.4	2,892	48.4	3,370	72.6	1,149	167.2	32	33.9	901	100.3
<b>Total Pregnancies</b>	8,124	54.0	3,014	38.4	3,672	59.6	1,222	136.3	37	27.4	983	75.2
<b>Abortions Ages 10-14</b>	4	0.2	1	0.1	1	0.2	0	0.0	0	0.0	3	1.3
<b>Abortions Ages 15-19</b>	159	8.0	47	4.7	92	10.7	8	8.0	2	9.8	10	5.5
<b>Abortions Ages 20-50</b>	1,656	14.5	408	6.8	999	21.5	71	10.3	11	11.7	134	14.9
<b>Total Abortions</b>	1,819	12.1	456	5.8	1,092	17.7	79	8.8	13	9.6	147	11.2
<b>Fetal Deaths Ages 10-14</b>	0	0	0	0	0	0	0	0	0	0.0	0	0
<b>Fetal Deaths Ages 15-19</b>	2	0.1	1	0.1	1	1.1	0	0	0	0.0	1	0.5
<b>Fetal Death Ages 20-50</b>	45	0.4	15	0.3	25	0.5	5	0.7	0	0.0	1	0.1
<b>Total Fetal Deaths</b>	47	0.3	16	0.2	26	0.4	5	0.6	0	0.0	2	0.2
<b>Live Births Ages 10-14</b>	5	0.3	1	0.1	2	0.3	2	2.0	0	0.0	3	1.3
<b>Live Births Ages 15-19</b>	344	17.3	72	7.2	206	24.0	63	57.6	3	14.6	65	35.5
<b>Live Births Ages 20-50</b>	5,909	51.8	2,469	41.3	2,346	50.5	1,073	156.2	21	22.2	766	85.3
<b>Total Live Births</b>	6,258	41.6	2,542	32.4	2,554	41.5	1,138	127.0	24	17.8	834	63.8
<b>Females Ages 10-14</b>	16,551		8,777		6,577		998		199		2,262	
<b>Females Ages 15-19</b>	19,874		9,993		8,583		1,093		205		1,829	
<b>Females Ages 20-50</b>	114,024		59,790		46,420		6,870		944		8,981	
<b>Female Ages 10-50</b>	150,449		78,560		61,580		8,961		1,348		13,072	

Source: NC State Center for Health Statistics.

Note: Use caution when interpreting rates based on small number, i.e., less than 10.

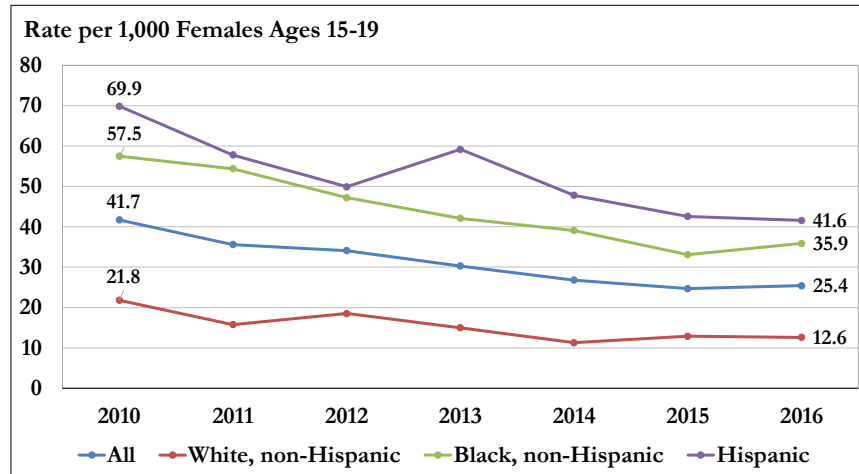
## Trends in Teen Pregnancy Rates in Guilford County

### Pregnancy Rates among Females Ages 15-19, Guilford County and North Carolina, 2004-2016



Source: NC State Center for Health Statistics.  
Chart prepared by the GCDHHS, Division of Public Health.

### Pregnancy Rates among Females Ages 15-19 by Race and Ethnicity, Guilford County, 2010-2016



Source: NC State Center for Health Statistics.  
Chart prepared by the GCDHHS, Division of Public Health.

## Prenatal Care

Prenatal visits are important for the health of both infant and mother. Health care providers can educate mothers on important health issues, such as their diet and nutrition, exercise, immunizations, weight gain and abstaining from tobacco, alcohol and other drugs. Late entry into prenatal care is defined as beginning prenatal care after the first three months of pregnancy. Mothers who receive no prenatal care are more likely to give birth to low birthweight and preterm babies.

### Month Entering Prenatal Care by Race and Ethnicity, 2016

Month Entering Prenatal Care	Total		White or Caucasian		Black or African-American		Native American		Asian		Hispanic	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	101	1.6%	46	1.8%	40	1.6%	0	0.0%	15	1.3%	8	1.0%
2	1,260	20.1%	693	27.3%	427	16.7%	6	25.0%	134	11.8%	103	12.4%
3	2,511	40.1%	1,188	46.7%	907	35.5%	9	37.5%	407	35.8%	291	34.9%
4	973	15.5%	269	10.6%	462	18.1%	5	20.8%	237	20.8%	186	22.3%
5	600	9.6%	128	5.0%	313	12.3%	2	8.3%	157	13.8%	116	13.9%
6	313	5.0%	76	3.0%	154	6.0%	1	4.2%	82	7.2%	55	6.6%
7	191	3.1%	52	2.0%	88	3.4%	1	4.2%	50	4.4%	34	4.1%
8	140	2.2%	44	1.7%	68	2.7%	0	0.0%	28	2.5%	25	3.0%
9	81	1.3%	19	0.7%	42	1.6%	0	0.0%	20	1.8%	81	1.3%
No Prenatal Care	54	0.9%	16	0.6%	35	1.4%	0	0.0%	3	0.3%	54	0.9%
Unknown	34	0.5%	11	0.4%	18	0.7%	0	0.0%	5	0.4%	34	0.5%
<b>Total</b>	<b>6,258</b>	<b>100%</b>	<b>2,542</b>	<b>100%</b>	<b>2,554</b>	<b>100%</b>	<b>24</b>	<b>100%</b>	<b>1,138</b>	<b>100%</b>	<b>834</b>	<b>100%</b>

Source: NC State Center for Health Statistics.

### Percentage of Births to Mothers Receiving Late or No Prenatal Care, 2011-2016\*

	2011	2012	2013	2014	2015	2016
<b>Overall</b>	24.2%	23.7%	34.8%	40.3%	38.5%	37.6%
<b>White</b>	12.6%	12.7%	19.3%	24.2%	26.0%	23.8%
<b>African-American</b>	30.0%	30.2%	42.6%	49.9%	45.9%	45.5%
<b>Hispanic</b>	43.6%	38.7%	55.4%	57.5%	54.4%	51.7%

\*Late prenatal care is defined as prenatal care that begins after the first three months of pregnancy.

Source: NC State Center for Health Statistics.

## Preterm Births

### Completed Weeks of Gestation, All Births, Guilford County, 2012-2016

	2012		2013		2014		2015		2016	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<28 weeks (Extremely preterm)	55	0.9%	70	1.1%	61	1.0%	59	1.0%	57	0.9%
28 to 31 weeks (Very preterm)	54	0.9%	60	1.0%	83	1.4%	70	1.1%	58	0.9%
32 to 36 weeks (Late preterm)	538	8.7%	576	9.3%	494	8.1%	521	8.5%	553	8.8%
37 weeks plus (Normal term)	5,506	89.3%	5,451	88.4%	5,442	89.5%	5,435	89.2%	5,585	89.2%
Unknown	11	0.2%	12	0.2%	5	.08%	10	0.2%	5	0.1%
Premature Births Less than 37 Weeks Gestation	647	10.5	706	10.0	638	10.5	650	10.7	668	10.7
Total	6,164		6,169		6,085		6,095		6,258	

Source: NC Center for Health Statistics; North Carolina Birth Certificate File.

Note: Percentages represent the obstetric estimate of gestational age.

### Completed Weeks of Gestation, By Race and Ethnicity, 2016

	White		Black		Native American		Asian		Hispanic	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<28 weeks (Extremely preterm)	12	0.5%	36	1.4%	0	0.0%	9	0.8%	8	1.0%
28 to 31 weeks (Very preterm)	10	0.4%	41	1.6%	1	4.2%	6	0.5%	8	1.0%
32 to 36 weeks (Late preterm)	197	7.7%	263	10.3%	4	16.7%	89	7.8%	62	7.4%
37 weeks plus (Normal term)	2,322	91.3%	2,211	86.6%	19	79.2%	1,033	90.8%	755	90.5%
Unknown	1	0.0%	3	0.1%	0	0.0%	1	0.1%	1	0.1%
Premature Births Less than 37 Weeks Gestation	219	8.6%	340	13.3%	5	20.8%	104	9.1%	78	9.4%
Total Number	2,542		2,554		24		1,138		834	

Source: NC Center for Health Statistics; North Carolina Birth Certificate File.

Note: Percentages represent the obstetric estimate of gestational age.

## Birthweight

### Number and Percentage of Births by Birth Weight Category Guilford County, 2007-2016

Birth Weight	2007		2008		2009		2010		2011		2012		2013		2014		2015		2016	
	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.
Less than 1,500 grams	144	2.3	122	1.9	146	2.4	111	1.8	143	2.4	107	1.7	118	1.9	131	2.2	134	2.2	105	1.7
1,500-2,499 grams	476	7.6	473	7.4	446	7.3	453	7.5	451	7.5	466	7.6	461	7.5	462	7.6	482	7.9	466	7.4
2,500+ grams	5,676	90.2	5,786	90.7	5,558	90.4	5,439	90.6	5,455	90.2	5,588	90.7	5,590	90.6	5,489	90.2	5,479	89.9	5,686	90.9
Under 2,500 Grams	620	9.8	595	9.3	592	9.6	564	9.4	594	9.8	573	9.3	579	9.4	593	9.9	616	10.1	571	9.1
Total Births	6,296		6,381		6,150		6,003		6,049		6,164		6,169		6,085		6,095		6,258	

Source: NC Center for Health Statistics; North Carolina Birth Certificate File.

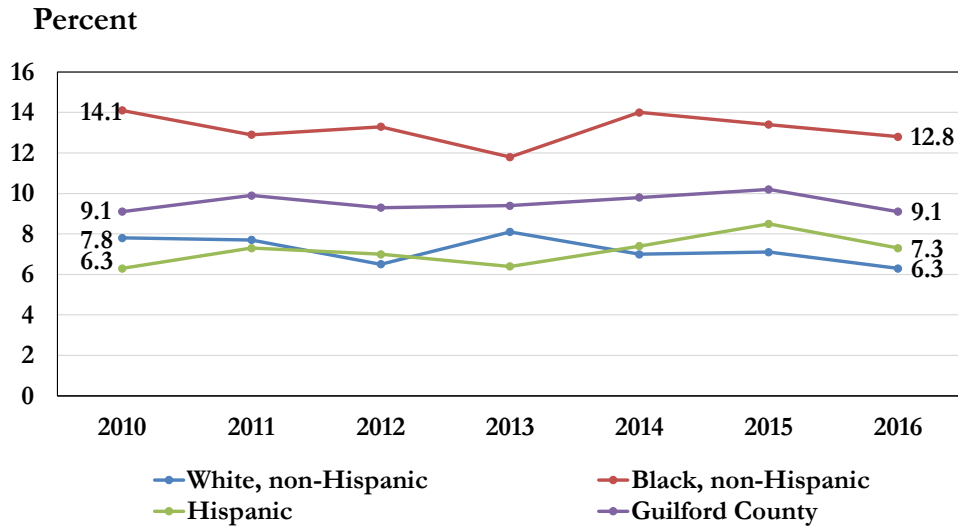
Note: Birth weights under 2,500 grams are classified as low birth weight; birth weights under 1,500 grams are classified as very low birth weight.

### Low and Very Low Birthweight, by Race and Ethnicity Guilford County and North Carolina, 2012-2016

Birth Weight		Total		White, Non-Hispanic		Black, Non-Hispanic		Hispanic	
		Births	Percent	Births	Percent	Births	Percent	Births	Percent
North Carolina	Low	54,208	9.0%	24,969	7.5%	19,889	13.9%	6,186	6.9%
	Very Low	10,356	1.7%	4,161	1.2%	4,612	3.2%	1,116	1.2%
Guilford County	Low	2,944	9.6%	840	7.0%	1,608	13.1%	289	7.3%
	Very Low	597	1.9%	153	1.3%	362	2.9%	57	1.4

Source: NC Center for Health Statistics, County Health Databook.

## Percent of Births Low Birthweight by Race and Ethnicity, Guilford County, 2010-2016

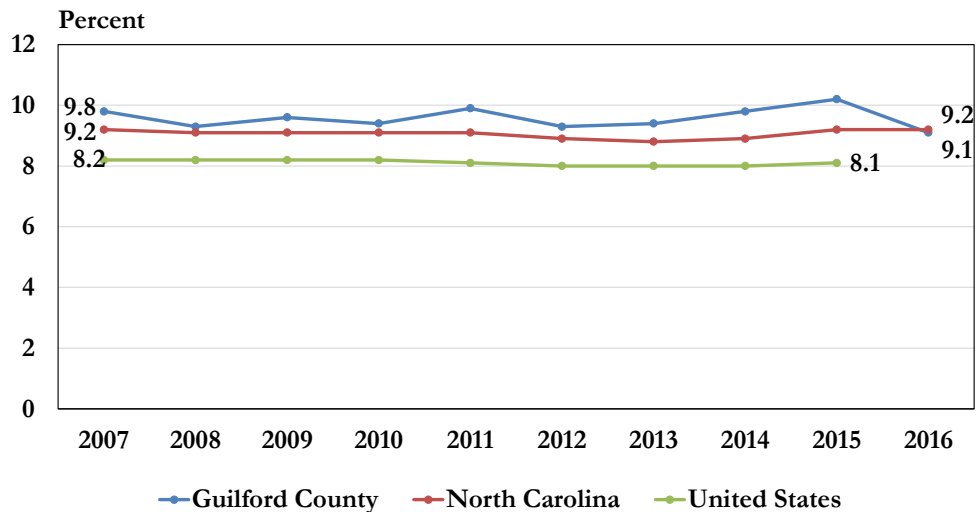


Note: \*Less than 2,500 grams (about 5 ½ pounds).

Source: Data provided by the NC Center for Health Statistics.

Chart prepared by the GCDHHS, Division of Public Health.

## Percent of Births Low Birthweight, Guilford County, NC and US, 2007-2016



Note: \*Less than 2,500 grams (about 5 ½ pounds).

Source: Data provided by the NC Center for Health Statistics.

Chart prepared by the GCDHHS, Division of Public Health.

## Characteristics of Guilford County Births, by Race and Ethnicity 2016

### Mother's Pre-Pregnancy BMI

Category	Guilford		White		Black		Asian		Hispanic	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Underweight (<18.5)	189	3.0%	74	2.9%	73	2.9%	40	3.5%	17	2.0%
Normal Weight (18.5-14.9)	2,407	38.5%	1,159	45.6%	759	39.7%	479	42.1%	268	32.1%
Overweight (25.9-29.9)	1,570	25.1%	633	24.9%	623	24.4%	310	27.2%	249	29.9%
Obese (30.0+)	1,875	30.0%	614	24.2%	987	38.6%	267	23.5%	269	32.3%
Unknown	217	3.5%	62	2.4%	112	4.4%	42	3.7%	31	3.7%
Total	6,258	100%	2,542	100%	2,554	100%	1,138	100%	834	100%

### Kotelchuck Prenatal Care Adequacy Index

Category	Guilford		White		Black		Asian		Hispanic	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Inadequate	1,411	22.5%	342	13.5%	718	28.1%	347	30.5%	255	30.6%
Intermediate	121	1.9%	35	1.4%	61	2.4%	25	2.2%	21	2.5%
Adequate	661	10.6%	242	9.5%	268	10.5%	149	13.1%	135	16.2%
Adequate Plus	3,996	63.9%	1,904	74.9%	1,465	57.4%	609	53.5%	418	50.1%
Missing Information	69	1.1%	19	0.7%	42	1.6%	8	0.7%	5	0.6%
Total	6,258	100%	2,542	100%	2,554	100%	1,138	100%	834	100%

Note: the Kotelchuck Index of Adequacy of Prenatal Care Utilization combines information on time of prenatal care initiation with the number of prenatal care visits, resulting in four categories: 1. Inadequate (received less than 50% of expected visits), 2. Intermediate (50%-79% of expected visits), 3. Adequate (80%-109% of expected visits), and 4. Adequate Plus (110% or more of expected visits).

### Mother Smoking Before and During Pregnancy

Category	Guilford		White		Black		Asian		Hispanic	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Smoked before Pregnancy	427	6.8%	220	8.7%	185	7.2%	16	1.4%	20	2.4%
Smoked during Pregnancy	329	5.3%	176	6.9%	138	5.4%	0	0.8%	16	1.9%

### Mother's Educational Attainment

Less than High School		High School/GED		Some College		Bachelor's Degree		Master's or Ph.D.		Unknown	
Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
875	14.0%	1381	22.1%	1900	30.4%	1413	22.6%	685	10.9%	4	0.1%

### Mother's Marital Status

Married		Unmarried		Unknown	
Number	Percent	Number	Percent	Number	Percent
3347	53.5%	2908	46.5%	3	0.0%



## Mother has WIC (Women, Infant and Children Food and Nutrition Services)

Category	Guilford		White		Black		Asian		Hispanic	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Mother has WIC	2,818	45.0%	581	22.9%	1,550	60.7%	673	59.1%	565	67.7%

## Infectious Diseases Present and/or Treated During Pregnancy

Category	Guilford		White		Black		Asian		Hispanic	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Gonorrhea	35	0.6%	3	0.1%	31	1.2%	1	0.1%	1	0.1%
Chlamydia	104	1.7%	10	0.4%	83	3.2%	10	0.9%	10	1.2%
Syphilis	5	0.1%	0	0.0%	5	0.2%	0	0.1%	0	0.0%
Hepatitis C	7	0.1%	7	0.3%	0	0.0%	0	0.0%	0	0.0%
Hepatitis B	16	0.3%	0	0.0%	8	0.3%	8	0.7%	0	0.0%

## Route of Delivery

Category	Guilford		White		Black		Asian		Hispanic	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Forceps	12	0.2%	6	0.2%	2	0.1%	4	0.4%	2	0.2%
Vacuum	232	3.7%	99	3.9%	86	3.4%	47	4.1%	26	3.1%
Cesarean	1,811	28.9%	731	28.8%	810	31.7%	266	23.4%	191	22.9%
Total	6,258	100%	2,542	100%	2,554	100%	1,138	100%	834	100%

## Form of Payment for Delivery Expenses

Category	Guilford		White		Black		Asian		Hispanic	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Medicaid	2,756	44.0%	682	26.8%	1611	63.1%	447	39.3%	299	35.9%
Private Insurance	2,886	46.1%	1,721	67.7%	808	31.6	350	30.8%	184	22.1%
Self-Pay	563	9.0%	114	4.5%	109	4.3%	339	29.8%	350	42.0%
Other	51	0.8%	23	0.9%	26	1.0%	2	0.2%	1	0.1%
Total	6,258	100%	2,542	100%	2,554	100%	1,138	100%	834	100%

## Infant being Breastfed at Discharge

Category	Guilford		White		Black		Asian		Hispanic	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Breastfed at Discharge	5,670	90.6%	2,367	93.1%	2,193	85.9%	1,088	95.7%	796	95.4%

## Other Risk Factors/Complications

	Number	Percent
Gestational Diabetes	306	4.9%
Gestational Hypertension	364	5.8%
Previous Preterm Birth	444	7.1%
NICU Admission	486	7.8%

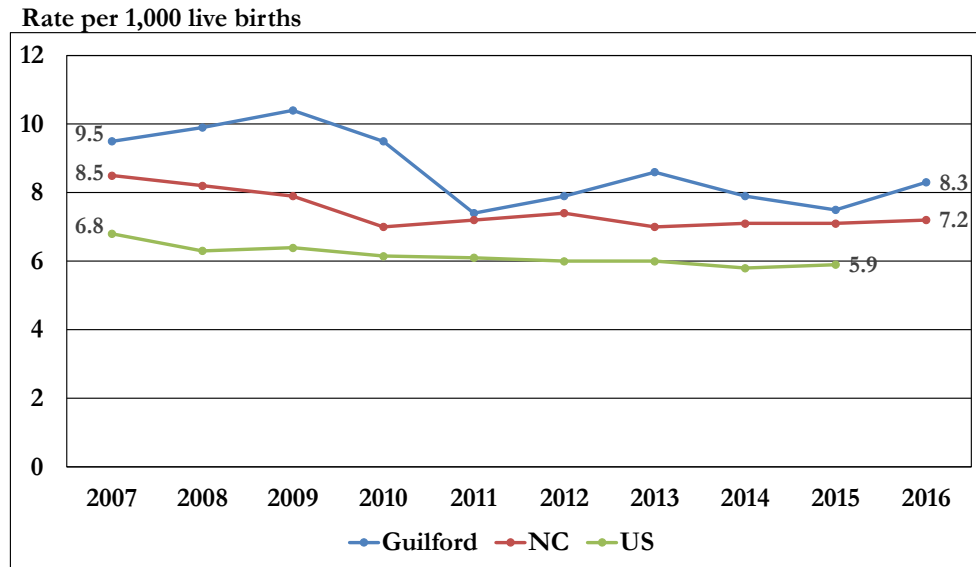
**Infant Mortality in Guilford County**

**Infant Deaths, Rate per 1,000 Live Births, by Race/Ethnicity  
Guilford County, 2008-2016**

	2008		2009		2010		2011		2012		2013		2014		2015		2016	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Guilford County All Races	63	9.9	64	10.4	57	9.5	45	7.4	49	7.9	53	8.6	48	7.9	46	7.5	52	8.3
White	26	7.4	17	5.1	25	6.4	10	3.9	16	6.5	20	8.0	9	3.8	16	6.4	9	3.5
African Americans	--	--	45	18.6	31	13.2	30	12.7	26	10.7	32	12.7	33	13.6	23	9.3	37	14.5
Hispanic	--	--	--	--	9	11.8	5	6.7	5	6.3	3	3.7	4	5.2	5	6.5	5	6.0
<b>Live Births</b>																		
Guilford County All Races	6,381		6,150		6,003		6,049		6,164		6,169		6,085		6,095		6,258	
White	3,563		3,349		3,013		2,549		2,460		2,503		2,370		2,508		2,542	
African American	--		2,418		2,341		2,367		2,429		2,519		2,434		2,479		2,554	
Hispanic	--		--		759		741		790		804		774		766		834	

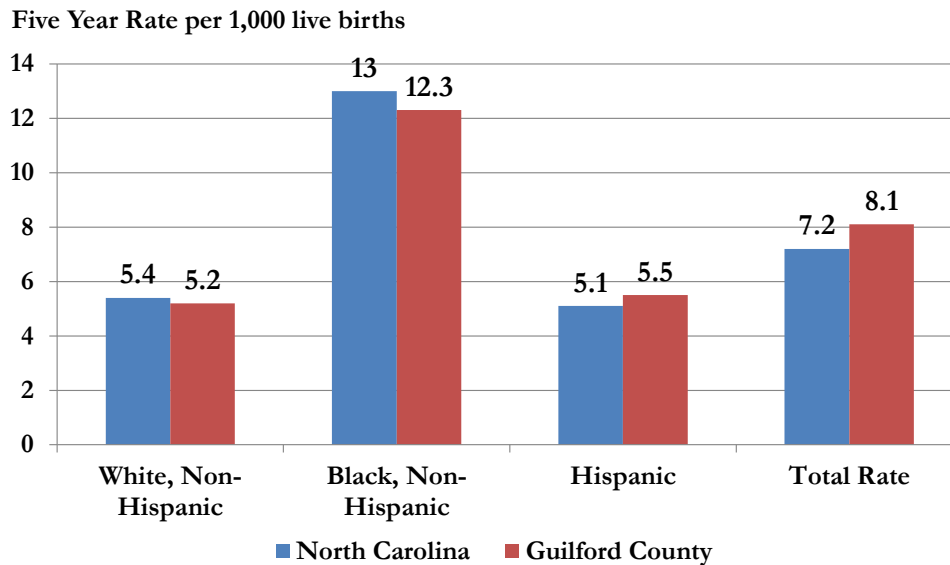
Source: NC Live Birth File: NC Center for Health Statistics.

## Infant Mortality Rate, 2007-2016 Guilford County, North Carolina and United States



Source: Data provided by the NC Center for Health Statistics, National Center for Health Statistics.  
Chart prepared by the GCDHHS, Division of Public Health.

## Infant Mortality Rates, by Race/Ethnicity Guilford County and North Carolina, 2012-2016



Source: Data provided by the NC Center for Health Statistics.  
Chart prepared by the GCDHHS, Division of Public Health.

