2017 | Maternal and Child Health Data Brief





Highlights

- After a plateau period between 2002 to 2007, teen pregnancy rates have continued to decline in Guilford County among all races, though a racial disparity persists.
- The percentage of women entering late into prenatal care or not receiving care increased across all race and ethnic groups in 2013 and in 2014, with a small overall improvement in 2015.
- The rate of preterm births increased to 10.7% in 2015, with a significant racial disparity.
- Percentages of low and very low birth weight for the years 2011 to 2015 were significantly higher for Black births as for White births.
- After increasing to 8.6 infant deaths per 1,000 live births in 2013, the infant mortality rate declined in 2014 to 7.9 and to 7.5 in 2015.
- The Guilford County infant mortality rate is higher than that of the state of North Carolina overall as well as the US rate.

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Birth Outcome Objectives from the 2014 Guilford County Community Health Action Plan

• Objective:

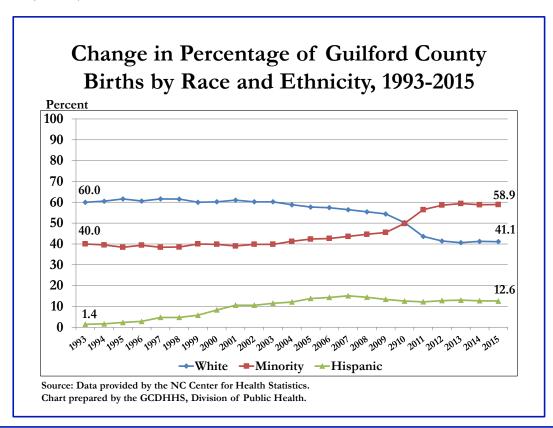
- Reduce rates of preterm births by 5% to below 10% by December 31, 2016.
- Reduce preterm birth racial disparity between whites and African Americans to a ratio of 1.2 by December 31, 2016.
- Reduce the infant mortality rate (per 1,000 live births) to 7.1 per 1,000 live births by December 31, 2016.
- Reduce the 5-year infant mortality rate racial disparity between Whites and African Americans to a ratio of 2.2 by December 31, 2016.

• 2012 Baseline:

- Preterm birth percentage: 10.5% (2012)
- Preterm birth racial disparity, ratio between African American and White preterm rate: 1.4
- Infant mortality rate: 7.9 per 1000 live births (2012)
- Infant mortality racial disparity, ratio between African-Americans and White infant mortality rates: 2.47 (2008-2012)

• 2015 Progress toward Objectives

- Preterm birth percentage: 10.7% (*negative change*)
- Preterm birth racial disparity; ratio between African American and White preterm rate = 1.54 (*no change*)
- Infant mortality rate: 7.5 per 1,000 live births (*improvement*)
- Infant mortality racial disparity, ratio between African American and White infant mortality rates = 2.2
 (reached objective)



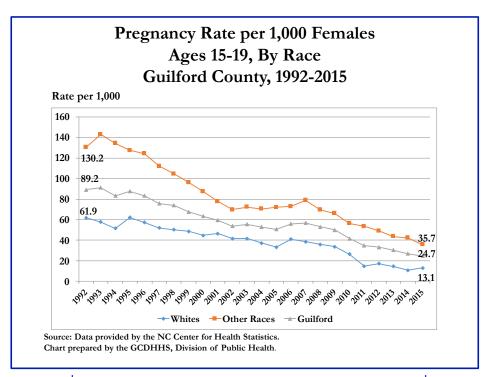
- As a percentage of total live births. White births are declining, while African American births are increasing, making up the majority of births since 2011;
- Hispanic births made up 12.6% of all births in 2015.

Teen Pregnancy in Guilford County

Teen Pregnancies, Abortions, Live Births and Rates per 1,000 Females by Age and by Race, 2015

		White/	African-	Asian/ Pacific	
	All Races	Caucasian	American	Islander	Hispanic
Pregnancies Ages 10-14	8	3	5	0	1
Pregnancies Ages 15-19	477	129	270	64	73
Total Pregnancies 10-19	485	132	275	64	74
Pregnancy Rate per 1,000 Females Ages 10-14	0.5	0.3	0.8	0.0	0.5
Pregnancy Rate per 1,000 Females Ages 15-19	24.7	13.1	32.6	65.0	42.5
Total Pregnancy Rate per 1,000 Females Ages 10-19	13.5	7.1	18.5	32.7	19.4
A1 A 40.44	2	1	2	0	4
Abortions Ages 10-14	3	1	2	0	1
Abortions Ages 15-19	142	38	82	9	16
Total Abortions 10-19	145	39	84	9	17
Abortion Rate per 1,000 Females Ages 10-14	0.2	0.1	0.3	0.0	0.5
Abortion Rate per 1,000 Females Ages 15-19	7.4	3.9	9.9	9.1	9.3
Abortion Rate per 1,000 Females Ages 10-19	4.1	2.1	5.7	4.6	4.5
Live Births Ages 10-14	5	2	3	0	0
Live Births Ages 15-19	334	90	188	55	57
Total Live Births Ages 10-19	339	92	191	55	57
Birth Rate per 1,000 Females Ages 10-14	0.3	0.2	0.5	0.0	0.0
Birth Rate per 1,000 Females Ages 15-19	17.3	9.1	22.7	55.9	33.2
Birth Rate per 1,000 Females Ages 10-19	9.5	4.9	12.9	28.1	14.9
Female Population 10-14	16,494	8,747	6,557	975	2,097
Female Population 15-19	19,302	9,842	8,287	984	1,717
Total Female Population 10-19	35,796	18,589	14,844	1,959	3,814

Source: NC State Center for Health Statistics.



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 1	Entering in	to Prenatal	Care, by Ra	ce and His	panic Status	s, 2015	
Month Entering Prenatal Care	W/hite Atrican		American Indian	Asian	Other Non- White	Hispanic	
1	44	36	2	9	7	8	
	1.8%	1.5%	6.3%	2.0%	1.1%	1.0%	
2	647	424	7	75	68	95	
	25.8%	17.1%	21.9%	16.4%	11.0%	12.4%	
3	1,142	860	11	178	184	238	
	45.55	34.7%	34.4%	39.0%	29.7%	31.1%	
4	263	429	7	63	134	162	
	10.5%	17.3%	21.9%	13.8%	21.6%	21.1%	
5	152	259	3	56	90	101	
	6.1%	10.4%	9.4%	12.3%	14.5%	13.2%	
6	89	161	1	32	49	60	
	3.5%	6.5%	3.1%	7.0%	7.9%	7.8%	
7	58	102	0	18	30	36	
	2.3%	4.1%	0.0%	3.9%	4.8%	4.7%	
8	35	71	1	13	22	24	
	1.4%	2.9%	3.1%	2.9%	3.5%	3.1%	
9	28	53	0	3	18	20	
	1.1%	2.1%	0.0%	0.7%	2.9%	2.6%	
No prenatal	27	62	0	4	11	14	
Care	1.1%	2.5%	0.0%	0.9%	1.8%	1.8%	
Unknown	23	22	0	5	7	8	
	0.9%	0.9%	0.0%	1.1%	1.1%	1.0%	
Total	2,508	2,479	32	456	620	766	
Total Percent	100%	100%	100%	100%	100%	100%	

Source: NC State Center for Health Statistics.

Percentage of Births to Mothers Receiving Late or No Prenatal Care, 2011-2015*										
	2011	2012	2013	2014	2015					
Overall	24.2	23.7	34.8	40.3	38.5					
White	12.6	12.7	19.3	24.2	26.0					
African-American	30.0	30.2	42.6	49.9	45.9					
Hispanic	43.6	38.7	55.4	57.5	54.4					

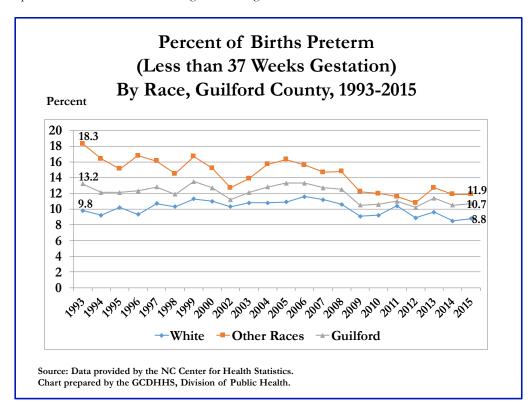
^{*}Late prenatal care is defined as prenatal care that begins after the first three months of pregnancy. Source: NC State Center for Health Statistics.

Completed Weeks of Gestation, All Births Guilford County, 2011-2015

Number of Births by Completed Weeks of Gestation										
	2011	2012	2013	2014	2015					
<28 weeks (Extremely preterm)	68	55	70	61	59					
28 to 31 weeks (Very preterm)	80	54	60	83	70					
32 to 36 weeks (Moderate to late preterm)	521	538	576	494	521					
37 weeks plus (Normal term)	5,373	5,506	5,451	5,442	5,435					
Unknown	7	11	12	5	10					
Total Number	6,049	6,164	6,169	6,085	6,095					
Percent of Births	by Complet	ed Weeks o	f Gestation							
<28 weeks (Extremely preterm)	1.1	0.9	1.1	1.0	1.0					
28 to 31 weeks (Very preterm)	1.3	0.9	1.0	1.4	1.1					
32 to 36 weeks (Moderate to late preterm)	8.6	8.7	9.3	8.1	8.5					
37 weeks plus (Normal term)	88.8	89.3	88.4	89.5	89.2					
Unknown	0.1	0.2	0.2	.08	0.2					
Premature Births—Less than 37 Weeks Gestation										
Number	669	647	706	638	650					
Percent	11.1	10.5	10.0	10.5	10.7					

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

Note: Percentages represent the obstetric estimate of gestational age.



Low and Very Low Birthweight

Birth Weights in Guilford County, 2005-2015

Number of Births by Birth Weight Category											
Birth Weights	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Very Low Birth Weight Less than 1,500 grams	121	123	144	122	146	111	143	107	118	131	134
1,500-2,499 grams	441	450	476	473	446	453	451	466	461	462	482
Normal Weight 2,500+ grams	5,435	5,546	5,676	5,786	5,558	5,439	5,455	5,588	5,590	5,489	5,479
Total Births	6,000	6,119	6,296	6,381	6,150	6,003	6,049	6,164	6,169	6,085	6,095
		Pei	cent of	Births b	y Birth V	Weight (Category	τ			
Very Low Birth Weight Less than 1,500 grams	2.0	2.0	2.3	1.9	2.4	1.8	2.4	1.7	1.9	2.2	2.2
1500-2,499 grams	7.4	7.4	7.6	7.4	7.3	7.5	7.5	7.6	7.5	7.6	7.9
Normal Weight 2500+ grams	90.6	90.6	90.2	90.7	90.4	90.6	90.2	90.7	90.6	90.2	89.9
Low Birth Weight Births—Under 2,500 Grams											
Number Low Birth Weight Less than 2,500 grams	562	573	620	595	592	564	594	573	579	593	616
Percent Low Birth Weight	9.4	9.4	9.8	9.3	9.6	9.4	9.8	9.3	9.4	9.8	10.1

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

Note: Birth weights under 2,500 grams (five pounds eight ounces) are classified as low birth weight; birth weights under 1,500 grams (three pounds five ounces) are classified as very low birth weight.

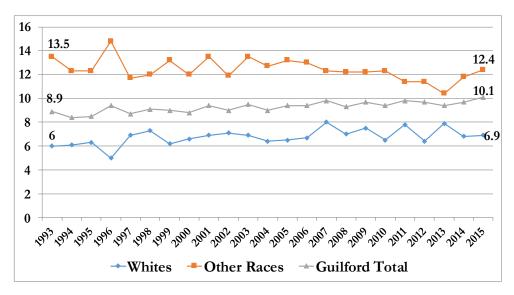
Low and Very Low Birthweight, by Race and Ethnicity, Guilford County and North Carolina, 2011-2015

	Birth	Total		White, No.	n-Hispanic	Black, Nor	n-Hispanic	Hispanic		
	Weight	Births	Percent	Births	Percent	Births	Percent	Births	Percent	
North	Low	53,957	9.0	24,935	7.4	19,908	13.9	6,091	6.8	
Carolina	Very Low	10,489	1.7	4,214	1.3	4,683	3.3	1,122	1.3	
Guilford	Low	2,966	9.7	883	7.3	1,590	13.1	282	7.3	
County	Very Low	635	2.1	173	1.4	379	3.1	57	1.5	

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

Percent of Births Low Birthweight* by Race Guilford County, 1993-2015

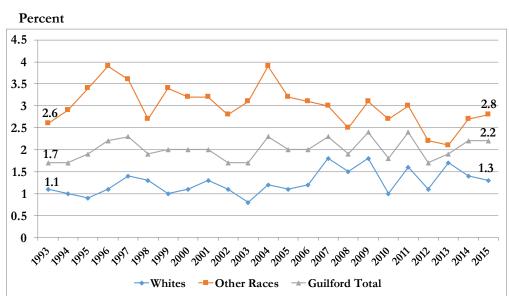
Percent



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 Very Low Birth Weight* by Race, Guilford County, 1993-2015



Note: *Less than 1500 grams (about 3 ½ pounds).

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

Chart prepared by the GCDHHS, Division of Public Health.

Infant Mortality in Guilford County

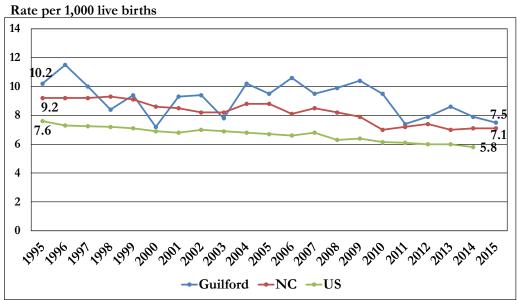
Infant Deaths per 1,000 Live Births, by Race/Ethnicity Guilford County, 2005-2015

Number of Infant Deaths											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Guilford County All Races	57	65	60	63	64	57	45	49	53	48	46
White	20	31	21	26	17	25	10	16	20	9	16
African Americans					45	31	30	26	32	33	23
Hispanic						9	5	5	3	4	5
		Infant	Mortali	ty Rate I	er 1,000	Live Bi	rths				
Guilford County All Races	9.5	10.6	9.5	9.9	10.4	9.5	7.4	7.9	8.6	7.9	7.5
White	5.8	8.8	5.9	7.4	5.1	6.4	3.9	6.5	8.0	3.8	6.4
African American					18.6	13.2	12.7	10.7	12.7	13.6	9.3
Hispanic						11.8	6.7	6.3	3.7	5.2	6.5
			Nun	nber of I	ive Birt	hs					
Guilford County All Races	6,000	6,119	6,296	6,381	6,150	6,003	6,049	6,164	6,169	6,085	6,095
White	3,462	3,513	3.548	3,563	3,349	3,013	2,549	2,460	2,503	2,370	2,508
African American					2,418	2,341	2,367	2,429	2,519	2,434	2,479
Hispanic						759	741	790	804	774	766

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

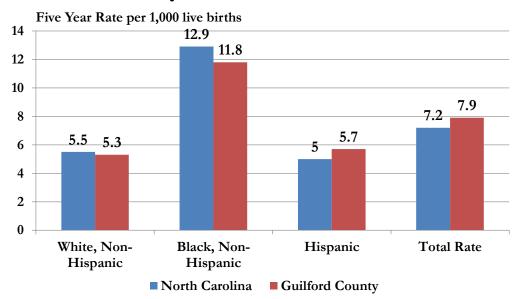
- After increasing to 8.6 infant deaths per 1,000 live births in 2013, the infant mortality rate declined in 2014 to 7.9 and to 7.5 in 2015.
- The leading causes of infant death in 2014 were maternal complications of pregnancy, disorders related to short gestation and low birth weight, congenital malformations, deformations and chromosomal abnormalities, and respiratory and cardiovascular disorders originating in the perinatal period.

Infant Mortality Rate, 1995-2015 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, 2011-2015



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

Detailed Infant Causes of Death, 2015

ICD-10 Codes	Cause of Death	Number of Deaths
A090	Other and unspecified gastroenteritis and colitis of infectious origin	1
N19	Unspecified kidney failure	1
P01.0 P01.1	Maternal complications of pregnancy Newborn (suspected to be) affected by incompetent cervix Newborn (suspected to be) affected by premature rupture of membranes	3 1
P02.1	Newborn (suspected to be) affected by other forms of placental separation and hemorrhage Newborn (suspected to be) affected by chorioamnionitis	1
P07.2 P07.3	Disorders related to short gestation and low birth weight Extreme immaturity of newborn Preterm (premature) newborn (other)	9 2
Q03.0 Q03.9 Q20.3 Q21.2 Q23.4 Q24.9 Q33.6 Q60.6 Q64.2 Q74.9 Q79.0 Q90.9 Q91.3	Congenital malformations, deformations and chromosomal abnormalities Congenital Hydocephalus, Unspecified Discordant ventriculoarterial connection Atrioventricular septal defect Hypoplastic left heart syndrome Congenital malformation of heart, unspecified Congenital hypoplasia and dysplasia of lung Potter's Syndome Congenital posterior urethral valves Unspecified congenital malformation of limb(s) Congenital diaphragmatic hernia Down syndrome, unspecified Trisomy 18, unspecified	1 1 1 1 1 1 1 1 1 1 1 1
P22.0 P25.3 P52.5 P29.3 R99	Respiratory and cardiovascular disorders originating in the perinatal period Respiratory distress of the newborn Pneumopericardium originating in the perinatal period Subarachnoid (nontraumatic) hemorrhage of newborn Persistent fetal circulation Ill-defined and unknown cause of mortality Accidental suffocation and strangulation in bed	5 1 1 2 5
	Total Infant Deaths	46

Source: NC Mortality File, Center for Health Statistics.

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For more information about Guilford County health statistics, visit www.myguilford.com/humanservices/health/health-statistics