

# **Statistical Brief**

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## Decline in Teen Births in North Carolina, 1996–2015

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According to the National Campaign to Prevent Teen and Unplanned Pregnancy, teen childbearing costs taxpayers in North Carolina over \$325 million, and nationally the annual cost is over \$9.4 billion.1 Additionally, pregnancy and birth are significant contributors to high school dropout rates among girls, with only about 50 percent of teen mothers receiving a high school diploma by age 22, compared to 90 percent of women who do not give birth as a teen.<sup>2</sup> Teen mothers are also more likely to rely on public assistance, be poor as adults, and more likely to have children with poorer health outcomes over the course of their lives than children born to older mothers 3

In North Carolina, the birth rate for teenagers aged 15–19 (defined as births per 1,000 women ages 15–19) has fallen 62 percent since 1996, reaching an all-time low of 23.5 in 2015. This mirrors national trends.

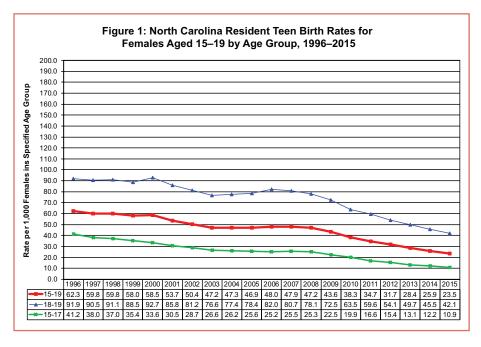
The United States teen birth rate declined 58 percent during the same time period. Despite substantial declines, North Carolina still ranks in the upper half (22nd) compared to other states.<sup>4,5</sup> Furthermore, while all racial and ethnic groups experienced reductions in teen birth rates, significant racial and ethnic disparities in rates remain in North Carolina.



This report presents more detailed information on teen births by maternal demographics and geography, using information collected on live birth certificates for North Carolina residents from 1996–2015.

#### Results

In 1996, there were 15,290 North Carolina resident teen (15–19) births, resulting in a rate of 62.3 teen births per 1,000 teenage women. By 2015, the number of teen births declined to 7,635. In 2015, the teen birth rate hit a record low of 23.5, continuing a trend of decreasing rates for the 9th consecutive year. The steepest decline can be seen over the last five years, where rates

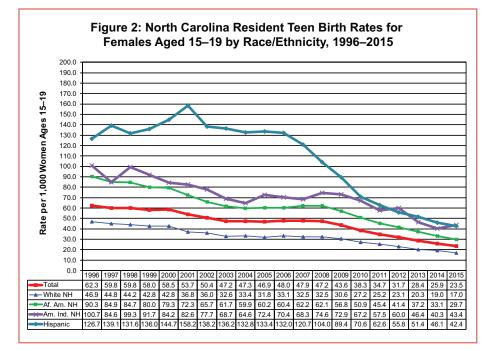


fell from 38.3 in 2010 to 23.5 in 2015 — a 38.6 percent decrease (**Figure 1**).

The birth rate for North Carolina teenagers aged 15–17 declined 11 percent from 2014 to 2015 to a historic low of 10.9 births per 1,000 females aged 15–17. The rate for this younger teen age group has dropped 74 percent since 1996.

The rate for teenagers aged 18–19 decreased 7 percent from 2014 to 2015, to 42.1 births per 1,000 females aged 18–19. The rate for the older teenagers was also at an all-time low in 2015; down 54 percent since 1996.

As shown in **Figure 2**, teen birth rates declined for all race/ ethnicity groups from 1996–2015. All groups experienced reductions of over 50 percent in their birth rates, with Hispanic teens having the largest decline (-66.5 percent) and Non-Hispanic American Indian teens having the lowest decrease (-56.9 percent). Despite substantial decreases among all races and ethnicities, disparities in teen birth rates persist, with Non-Hispanic African American women having teen birth rates 1.7 times higher than Non-Hispanic white teens in 2015 (**Table 1**).



In 2015, just over one in six teen births (15.7 percent) happened to a girl who already had given birth before, known as a "Repeat Teen Birth" (**Figure 3**). Repeat teen births declined nearly 15 percent from 2010 to 2015 and are down 30 percent from 1996 to 2015. Hispanics had the highest repeat birth percentage, with over one in five Hispanic teen births occurring to a mother who had a prior birth (20.3 percent). There was little variation among the other racial/ethnicity groups, with repeat birth percentages between 13 and 16 percent.

**Figure 4** displays North Carolina resident teen birth rates by county of residence for 2011–2015. Rates are highest in the southern and western counties, with Swain (64.7) having the highest five-year rate and Orange and Watauga Counties the lowest (6.2). **Table 2** shows the percentage of repeat births for the time periods 1996–2000 and 2011–2015, by county of residence. Overall, North Carolina saw a 27.7 percent decrease in the percentage of repeat teen births, with approximately half (n=48) of the counties showing a higher percent decrease than the state average. With the exception of three counties, all counties showed a decrease in the percentage of repeat teen births.

determinant of declining pregnancy rates. 7.8 In October 2014, the American Academy of Pediatrics recommended long-acting reversible contraceptives (LARCs), such as implants and IUDs, as first-line contraceptive methods for preventing teen-pregnancy. 9 Fewer teen girls may also be engaging in sexual activity. Data from the North Carolina Youth Risk Behavior Surveillance System (YRBSS) shows that 9th–12th grade females are reporting ever having sexual intercourse at significantly lower percentages (41.4 percent in 2015, compared to 57.6 percent in 1995). 10

North Carolina's non-profits and state programs have also likely contributed to reductions in teen birth rates during this time period.

SHIFT NC (formerly The Adolescent Pregnancy Prevention Campaign of North Carolina), is a non-profit organization focused on teen pregnancy prevention.<sup>11</sup>

SHIFT NC is dedicated to preventing adolescent pregnancy by working with communities through advocacy, collaboration, and education. SHIFT NC initiatives, such as 10 County Campaign, BrdsNBz North Carolina Text Line, and North Carolina Youth Connected aim to continue state and local level improvements in teen pregnancy prevention.

The North Carolina Division of Public Health oversees several teen pregnancy prevention initiatives focused on reducing teen birth rates. The Teen Pregnancy Prevention Initiatives (TPPI) program supports communities across North Carolina with programs that prevent teen pregnancy and support teen parents. The Adolescent Parenting Program (APP) helps teen parents prevent a repeat pregnancy, graduate from high school, keep themselves and their babies healthy, and build skills that will help them support themselves and their babies. In FY16, only 0.5 percent of APP participants reported having a repeat pregnancy, and nearly half of participants reported using a LARC. 12

TPPI also supports three separate primary prevention programs: Adolescent Pregnancy Prevention Program (APPP),

#### **Discussion**

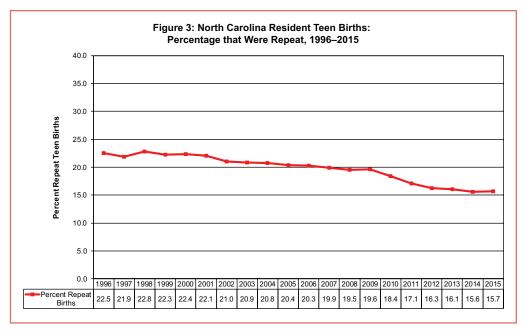
Explaining the reasons for the significant decrease in teen birth rates from vital statistics alone is insufficient. Some research has shown a correlation between the birth rate decline and the economic recession.<sup>6</sup> However, the overall decline in births from 2010 to 2015 in North Carolina was not nearly as steep as the decline in teen births (1.2 percent decrease among all ages, compared to a 38.6 percent decrease in teen births). Other research has shown that increasing rates of contraceptive use appear to be the primary

Table 1: North Carolina Resident Teen Birth Rates for Females Aged 15-19 by Race/Ethnicity, 1996 and 2015

		1996					
	1	5-19 Females		1	Percent		
Racial/Ethnic Group:	Births	Population	Rate	Births	Population	Rate	Decline
White non-Hispanic	7,570	161,313	46.9	3,181	186,635	17.0	-63.8
African American non-Hispanic	6,276	69,466	90.3	2,524	85,081	29.7	-61.7
American Indian non-Hispanic	390	3,874	100.7	198	4,566	43.4	-56.9
Hispanic	915	7,223	126.7	1,613	38,065	42.4	-66.5
Total*	15,290	245,385	62.3	7,635	324,276	23.5	-62.3

<sup>\*</sup>Total includes Other non-Hispanic Racial/Ethnic group

Personal Responsibility Education Program (PREP) and Redefining & Empowering Adolescents and Community Health (REACH). These programs prevent teen pregnancy and sexually transmitted infections by providing young people with essential education, supporting academic achievement, encouraging parent/teen communication, promoting responsible citizenship and building self-confidence. All TPPIfunded sites engage in community mobilization efforts by convening a community stakeholder group that provides guidance and support to the programs.12



### **Summary**

Similar to trends found across the country, teen birth rates in North

Carolina have shown a steady decline over the last 20 years — with the greatest declines taking place over the last five years. Repeat teen birth rates have also declined substantially from 1996 to 2015. Despite this decrease, racial disparities in teen births and repeat teen births persist. Teen birth rates also show regional variations across North Carolina. State, federal and local agencies will need to continue to collaborate to reduce geographic and racial/ethnic disparities in teen births, and ensure

that reductions in North Carolina's teen birth rates carry on into the future.

Note: Rates presented here may differ from previous published rates. The most recent population estimates provided by the Population Estimates Program of the U.S. Census Bureau in collaboration with the National Center for Health Statistics were used for the population denominators in this report. 13

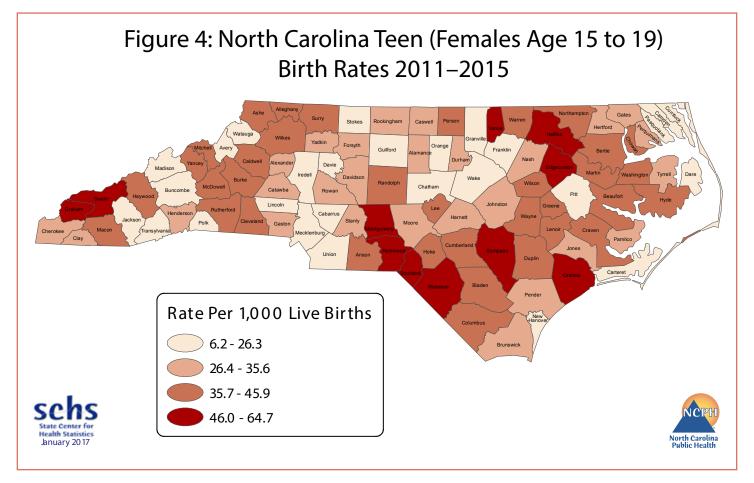


Table 2: North Carolina Resident Teen Births: Percentage that Were Repeat, 1996–2000 and 2011–2015 by County of Residence

	1996–2000			2011–2015			
	Repeat Births		Repeat Births				
	Total Teen Births	Number	Percent	Total Teen Births	Number	Percent	Percent Change
NORTH CAROLINA	76,018	17,023	22.4	46,057	7,474	16.2	-27.7
Alamance	1,193	237	19.9	784	116	14.8	-25.6
Alexander	311	66	21.2	176	23	13.1	-38.2
Alleghany	76	22	28.9	56	13	23.2	-19.7
Anson	366	113	30.9	176	38	21.6	-30.1
Ashe	217	35	16.1	133	29	21.8	35.4
Avery	111	19	17.1	61	4	6.6	-61.4
Beaufort	517	121	23.4	249	39	15.7	-32.9
Bertie	306	83	27.1	115	20	17.4	-35.8
Bladen	400	84	21	195	29	14.9	-29.0
Brunswick	684	124	18.1	410	64	15.6	-13.8
Buncombe	1,620	328	20.2	815	102	12.5	-38.1
Burke	1,038	268	25.8	481	80	16.6	-35.7
Cabarrus	1,161	248	21.4	795	109	13.7	-36.0
Caldwell	910	217	23.8	524	88	16.8	-29.4
Camden	39	3	7.7	21	1	4.8	-37.7
Carteret	411	61	14.8	213	27	12.7	-14.2
Caswell	184	34	18.5	93	9	9.7	-47.6
Catawba	1,376	346	25.1	839	138	16.4	-34.7
Chatham	340	53	15.6	195	24	12.3	-21.2
Cherokee	246	44	17.9	120	19	15.8	-11.7
Chowan	207	44	21.3	82	17	20.7	-2.8
Clay	43	7	16.3	36	3	8.3	-49.1
Cleveland	1,212	308	25.4	639	104	16.3	-35.8
Columbus	783	177	22.6	414	75	18.1	-19.9
Craven	1,209	266	22	629	85	13.5	-38.6
Cumberland	3,796	854	22.5	1,992	324	16.3	-27.6
Currituck	120	23	19.2	95	11	11.6	-39.6
Dare	160	24	15	91	12	13.2	-12.0
Davidson	1,404	309	22	835	150	18	-18.2
Davie	252	39	15.5	168	23	13.7	-11.6
Duplin	629	146	23.2	398	62	15.6	-32.8
Durham	1,811	396	21.9	1,241	210	16.9	-22.8
Edgeccombe	910	247	27.1	456	76	16.7	-38.4
Forsyth	2,585	582	22.5	1,799	295	16.4	-27.1
Franklin	394	81	20.6	250	36	14.4	-30.1
Gaston	2,187	503	23	1,095	173	15.8	-31.3
Gates	76	17	22.4	53	9	17	-24.1
Graham	92	9	9.8	55	5	9.1	-7.1
Granville	412	85	20.6	222	20	9	-56.3
Greene	229	61	26.6	126	19	15.1	-43.2
Guilford	3,049	653	21.4	2,063	345	16.7	-22.0
Halifax	843	189	22.4	382	62	16.2	-27.7
Harnett	1,058	258	24.4	649	120	18.5	-24.2
Haywood	382	67	17.5	279	43	15.4	-12.0
Henderson	613	120	19.6	440	70	15.9	-18.9
Hertford	323	79	24.5	136	23	16.9	-31.0
Hoke	548	127	23.2	306	60	19.6	-15.5
Hyde	27	3	11.1	25	2	8	-27.9
Iredell	1,105	243	22	712	120	16.9	-23.2

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	Total Teen Births	Number	Percent	Total Teen Births	Number	Percent	Percent Change		
Jackson	250	52	20.8	194	42	21.6	3.8		
Johnston	1,106	266	24.1	909	155	17.1	-29.0		
Jones	99	18	18.2	38	7	18.4	1.1		
Lee	661	138	20.9	388	74	19.1	-8.6		
Lenoir	833	198	23.8	375	68	18.1	-23.9		
Lincoln	589	118	20	307	49	16	-20.0		
McDowell	431	75	17.4	266	39	14.7	-15.5		
Macon	239	45	18.8	164	27	16.5	-12.2		
Madison	158	26	16.5	94	15	16	-3.0		
Martin	309	63	20.4	126	17	13.5	-33.8		
Mecklenburg	5,131	1,255	24.5	3,685	608	16.5	-32.7		
Mitchell	103	22	21.4	66	13	19.7	-7.9		
Montgomery	379	96	25.3	253	46	18.2	-28.1		
Moore	641	141	22	345	55	15.9	-27.7		
Nash	905	205	22.7	551	77	14	-38.3		
New Hanover	1,120	230	20.5	637	98	15.4	-24.9		
Northampton	267	65	24.3	111	21	18.9	-22.2		
Onslow	2,219	459	20.7	1,353	195	14.4	-30.4		
Orange	425	84	19.8	224	25	11.2	-43.4		
Pamlico	100	19	19	49	7	14.3	-24.7		
Pasquotank	384	98	25.5	174	25	14.4	-43.5		
Pender	326	65	19.9	240	33	13.8	-30.7		
Perquimans	115	22	19.1	51	5	9.8	-48.7		
Person	312	54	17.3	234	35	15	-13.3		
Pitt	1,325	302	22.8	859	152	17.7	-22.4		
Polk	110	21	19.1	66	6	9.1	-52.4		
Randolph	1,351	284	21	843	139	16.5	-21.4		
Richmond	754	222	29.4	374	64	17.1	-41.8		
Robeson	2,276	603	26.5	1,273	236	18.5	-30.2		
Rockingham	914	180	19.7	473	76	16.1	-18.3		
Rowan	1,308	287	21.9	765	130	17	-22.4		
Rutherford	676	134	19.8	421	58	13.8	-30.3		
Sampson	782	186	23.8	502	98	19.5	-18.1		
Scotland	643	164	25.5	347	60	17.3	-32.2		
Stanly	575	126	21.9	314	50	15.9	-27.4		
Stokes	314	53	16.9	169	21	12.4	-26.6		
Surry	677	123	18.2	408	65	15.9	-12.6		
Swain	184	45	24.5	147	21	14.3	-41.6		
Transylvania	220	45	20.5	114	10	8.8	-57.1		
Tyrrell	32	2	6.3	15	1	6.7	6.3		
Union	1,022	225	22	731	107	14.6	-33.6		
Vance	687	170	24.7	391	65	16.6	-32.8		
Wake	3,027	644	21.3	2,561	431	16.8	-21.1		
Warren	214	49	22.9	108	18	16.7	-27.1		
Washington	177	42	23.7	69	5	7.2	-69.6		
Watauga	157	25	15.9	97	15	15.5	-2.5		
Wayne	1,383	325	23.5	793	150	18.9	-19.6		
Wilkes	699	165	23.6	441	75	17	-28.0		
Wilson	987	267	27.1	538	118	21.9	-19.2		
Yadkin	325	75	23.1	176	26	14.8	-35.9		
Yancey	132	22	16.7	109	15	13.8	-17.4		

#### References

- 1. National Campaign to Prevent Teen and Unplanned Pregnancy, Accessed May 10, 2017, from: <a href="https://toenationalcampaign.org/sites/default/files/resource-primary-download/fact-sheet-north-carolina.pdf">https://toenationalcampaign.org/sites/default/files/resource-primary-download/fact-sheet-north-carolina.pdf</a>.
- 2. Perper K, Peterson K, Manlove J. Diploma Attainment Among Teen Mothers. Child Trends, Fact Sheet Publication #2010-01: Washington, DC: Child Trends; 2010.
- 3. Hoffman, SD and Maynard, RA (Eds.). (2008). *Kids having kids: economic costs and social consequences of teen pregnancy* (2nd ed.). Washington, DC: Urban Institute Press.
- Ventura SJ, Hamilton BE, Matthews TJ. National and state patterns of teen births in the United States, 1940–2013. National vital statistics reports; vol 63, no 4. Hyattsville, MD: National Center for Health Statistics. 2014. Available from: www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63 04.pdf.
- Martin JA, Hamilton BE, Osterman MJK, et al. Births: Final data for 2015. *National vital statistics report;* vol 66, no 1. Hyattsville, MD: National Center for Health Statistics. 2017.
- Cohn D, Livingston G. U.S. birth rate decline linked to recession. Social & Demographic Trends Report. Pew Research Center. 2010. Available from: <a href="http://pewsocialtrends.org/files/2010/10/753-birth-rates-recession.pdf">http://pewsocialtrends.org/files/2010/10/753-birth-rates-recession.pdf</a>.

- 7. Santelli JS et al. Explaining recent declines in adolescent pregnancy in the United States: the contribution of abstinence and improved contraceptive use, *American Journal of Public Health*. 2007;97(1):150–6.
- 8. Martinez G et al. Teenagers in the United States: sexual activity, contraceptive use, and childbearing, 2006–2010 National Survey of Family Growth, Vital and Health Statistics. 2011, Series 23, No. 31.
- 9. *Pediatrics* Vol. 134, No. 4, October 1, 2014, pp. e1244–e1256. Available from: <a href="http://pediatrics.aappublications.org/content/134/4/e1244.full.pdf+html">http://pediatrics.aappublications.org/content/134/4/e1244.full.pdf+html</a>.
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Division of Adolescent and School Health. Retrieved March 8, 2017, from: <a href="www.cdc.gov/healthyyouth/">www.cdc.gov/healthyyouth/</a>.
- 11. Sexual Health Initiatives for Teens (SHIFTNC). Retrieved March 8, 2017, from: <a href="https://www.shiftnc.org/">www.shiftnc.org/</a>.
- 12. North Carolina Department of Health and Human Services, Division of Public Health, Women's and Children's Health Branch, Teen Pregnancy Prevention Initiatives. Retrieved March 8, 2017, from: <a href="https://www.teenpregnancy.ncdhhs.gov/">www.teenpregnancy.ncdhhs.gov/</a>.
- 13. United States Census Bureau. 2016. Bridged Race-Population Estimates. *Vintage 2015 Bridged-race Postcensal Estimates* (data file). Available at <a href="www.cdc.gov/nchs/nvss/bridged\_race/data\_documentation.">www.cdc.gov/nchs/nvss/bridged\_race/data\_documentation.</a> htm#vintage2015. Retrieved July 25, 2016.

