NC Child
The Voice for North Carolina's Children

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Strengthening Women's Health: A Key to Reducing Infant Mortality and Eliminating Racial and Ethnic Disparities

Laila A. Bell | laila@ncchild.org

BACKGROUND

Every child deserves a strong start in life and a chance to become a healthy and productive adult. Unfortunately, data show too many babies in North Carolina are born too small or too soon, placing them at risk for long-term health challenges or death within the first year of life.

Over the past two decades, the infant mortality rate in North Carolina has dropped by more than 40 percent. This progress was made possible by advances in clinical care and interventions that improved the odds of survival for babies born at risk, as well as intentional public policy decisions that increased investments in maternal and infant health.[1] But North Carolina's progress has plateaued and lags behind the rest of the nation, ranking 42nd for infant mortality in 2014.[2] Moreover, stark racial and ethnic disparities mean African American and American Indian babies in North Carolina are more likely to die before reaching their first birthday than White babies.[3] Although infant mortality rates have declined, the infant death gap between African American and White babies in North Carolina is wider today than in 1988.

North Carolina is at a crossroads. Reductions in infant mortality have stalled and new data show rates are on the rise for the state's most vulnerable babies.[4] Motivated by the challenges of high infant mortality and growing race and ethnic disparities--health experts, practitioners, and advocates embarked on a year-long project to identify research and evidence-based strategies to prevent infant deaths. Together they produced a statewide Perinatal Health Strategic Plan that looks beyond clinical interventions to address the root causes of infant mortality in North Carolina: health care barriers and social, economic, and environmental inequities that limit women's opportunities to lead healthy lives and enjoy healthy pregnancies and deliveries. Where gaps in state resources, policies, or practice were found, the Strategic Plan recommends enhancements to strengthen North Carolina's infrastructure to support healthy residents, families, communities, and babies.

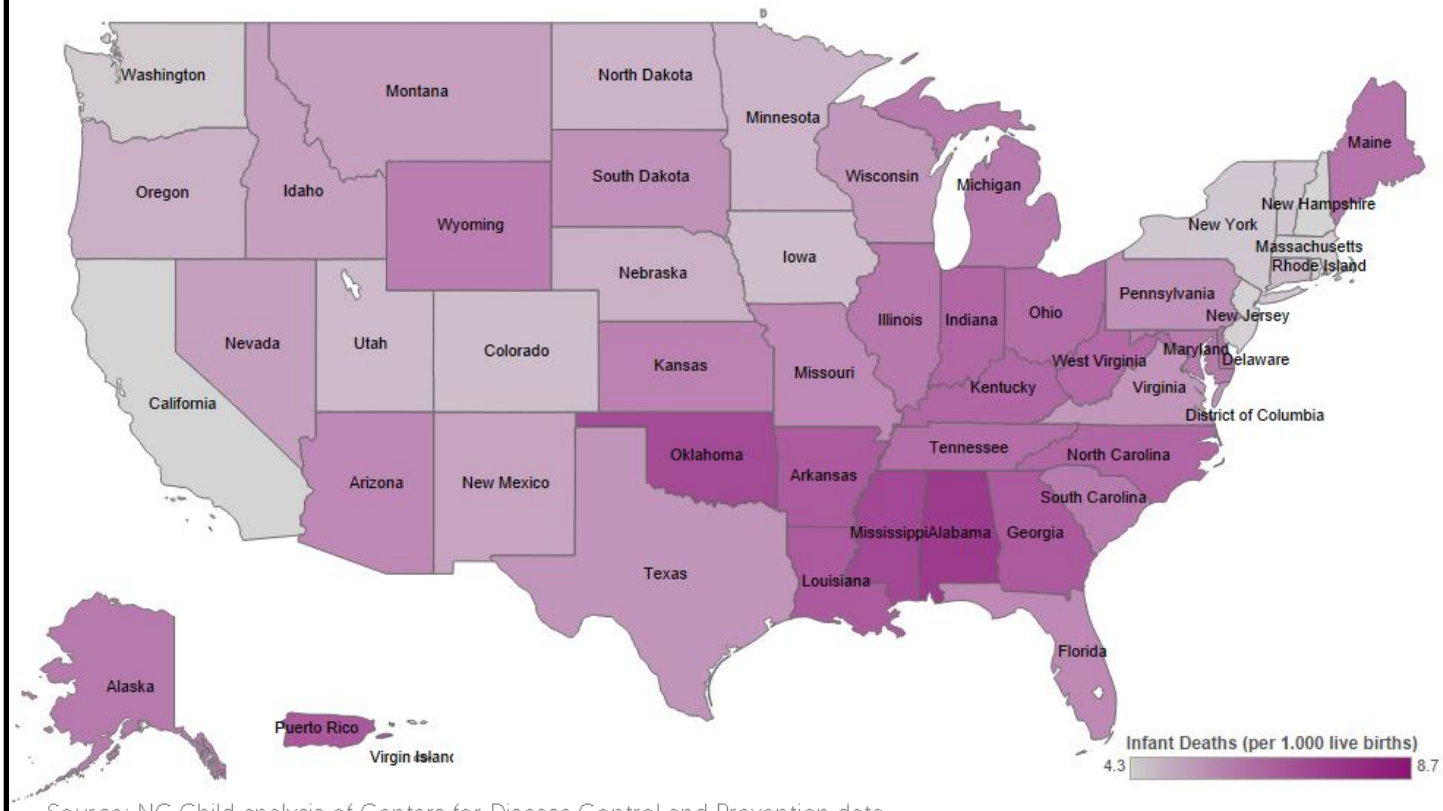
AT A GLANCE

- After declining for more than two decades, North Carolina's infant mortality rate has plateaued and racial and ethnic disparities are growing.
- Infant mortality is the product of many complex factors, but women's health and access to health care ***before*** pregnancy is linked to future birth outcomes.
- One in five women of reproductive age in North Carolina is uninsured, and more than half of them lack access to affordable health care options.
- North Carolina can join 31 states in expanding access to Medicaid for low-income adults. Closing the coverage gap would allow women who are not yet pregnant but are of reproductive age to get critical early help with chronic conditions that affect their likelihood of poor birth outcomes.

> "Every child deserves a strong start in life."

NORTH CAROLINA AMONG STATES WITH HIGHEST INFANT MORTALITY RATES

Infant mortality, 2014



Source: NC Child analysis of Centers for Disease Control and Prevention data.

Click to view this interactive map.; or visit: http://tabsoft.co/299gn9P

North Carolina has a current opportunity to address a significant gap identified in the Perinatal Strategic Plan by implementing its recommendation to increase access to quality health care, particularly for women who are at greatest risk for poor birth outcomes. One in every five adult women in North Carolina is uninsured, the majority of whom are women of reproductive age between 19 and 44. The Affordable Care Act allows states to extend Medicaid eligibility to low-income adults who are in the coverage gap--those who earn too much to qualify for public health insurance, but too little to afford coverage in the Marketplace. Thirty-one states and the District of Columbia have already chosen to close the health insurance coverage gap for low wage adults, but North Carolina has yet to take action on this issue. The following brief explores the potential impact of increasing women's access to health insurance on infant mortality and racial disparities in birth outcomes in North Carolina.

INTRODUCTION

The first year of life is filled with constant growth, excitement, and change--for babies and their families. Parents celebrate as they witness their newborn's precious first smile, laugh, word, and steps. Regrettably, far too many newborns never reach these important milestones. For every 1,000 babies born alive in North Carolina, seven will die in their first year of life at a rate equivalent to three infant deaths per day. Although North Carolina has made strides in reducing infant mortality, the state has the eighth highest infant death rate in the country--higher than the national average of six deaths per 1,000 live births.[5] A baby born in North Carolina is less likely to live to celebrate her first birthday than one born in the neighboring states of South Carolina, Virginia, or Tennessee.[6] In fact, if North Carolina were a country, its infant mortality rate would rank among the poorest in the world, worse than Croatia and falling between Russia and Kuwait.[7]

"Women's health is shaped by their environment and their access to health care."

Every newborn deserves a strong, healthy, and supported start in life, regardless of where they are born. Many factors contribute to infant mortality; the social, economic, and environmental conditions of the communities where a baby's parents live before and during pregnancy can play a big role. But research shows inadequate access to health care also causes preventable and unnecessary barriers to healthy pregnancies and deliveries for women. Uninsured women are more likely to have unaddressed health needs, to suffer from chronic conditions, and to lack access to affordable mental health care services, reproductive planning, tobacco and substance use counseling, or prenatal care, all of which increase their risk of future labor complications, premature, or low birthweight births.

HEALTH CARE GAPS CONTRIBUTE TO DISPARITIES IN BIRTH OUTCOMES

North Carolina's infant mortality rate is highest among African American and Native American babies, who are 2.5 and 1.8 times more likely to die before their first birthday than White babies. Between 2010 and 2014 the infant mortality rate for African American babies stayed the same, while rates among Native American and Hispanic children increased by 25 and 24 percent. Infant mortality for White and other non-Hispanic babies declined slightly during the same period.

Birthweight and length of gestation are the two most important predictors of a baby's subsequent health and survival. Differences in babies' length of gestation and birthweight create long-standing health disparities that continue into adulthood. In 2014, one in seven African American babies (13.7 percent), and one in eight Native American babies (12.3 percent) in North Carolina were born at a low birthweight, compared to 7.4 percent of White babies. These gaps persist for premature births, which account for 15.8 percent of African American births and 14.1 percent of Native American births, compared to 9.9 percent of White births .

KEY TERMS

Infant mortality: Deaths that occur within the first year of a child's life.

Preterm birth: Babies born prior to 37 weeks of gestation.

Low birthweight birth: Babies born weighing less than 2500 grams or 5.5 pounds.

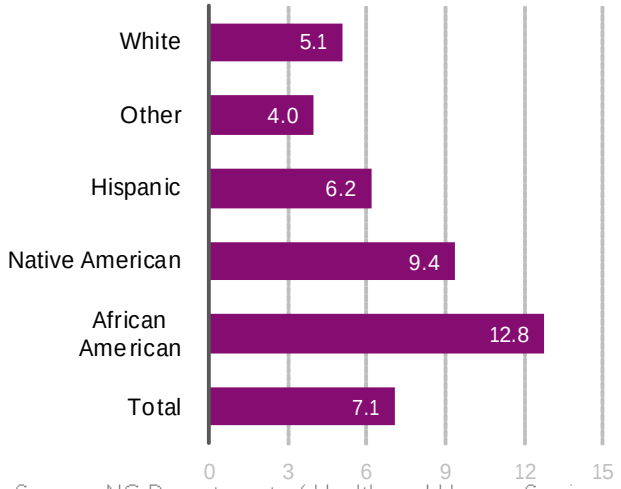
Health disparity: Preventable differences in health risks or outcomes between populations.

Low birthweight and premature birth are closely linked with maternal health and access to health care. Research shows the disproportionate number of preterm and low birthweight births among African American and Native American women are influenced by high poverty rates, gaps in insurance coverage, and limited access to quality prenatal care as well as the physical and psychological strain caused by exposure to racism.[8] Among women who had recently given birth in North Carolina, one in five African Americans (18.9 percent) and Latinas (21.8 percent) reported feeling emotionally upset by an encounter with racial bias at some time during the 12 months before pregnancy.[9] As experiences of racism are internalized, they impact women's stress levels which can increase the likelihood of poor birth outcomes.[10] A statewide survey of new mothers shows women who reported an encounter with racial bias were 1.5 times more likely to have had a low birthweight birth than a baby born at a healthy weight.[11]

Racism, economic insecurity, and other exposure to trauma place many women of color at particularly high risk for depression, anxiety, and other physical health conditions, all of which have an adverse effect on birth outcomes.[12] Despite greater health risks, financial barriers leave Native American and African Americans less likely to access physical and mental health care due to financial barriers. Across genders, one in four Native

WOMEN OF COLOR MOST VULNERABLE TO INFANT MORTALITY

Infant deaths per 1,000 live births by race and ethnicity, 2014



Source: NC Department of Health and Human Services, State Center for Health Statistics. 2014 Infant Mortality Report Table 3.

Americans (25.8 percent), 18.9 percent of African Americans, and 28.3 percent of Latinos reported being unable to seek medical care when they needed it due to cost, compared to 13.8 percent of Whites.[14]

WOMEN'S HEALTH AND WELLNESS SUPPORT HEALTHIER BABIES

Of the four leading causes of infant mortality in North Carolina--1) prematurity and low birthweight; 2) maternal factors/complications of pregnancy, labor, and delivery; 3) congenital malformations; and 4) other conditions originating in the perinatal period--almost half are linked to risk factors in maternal health that occur prior to pregnancy.[15,16]

Insurance coverage plays a critical role in women's ability to access affordable medical care that allows them to achieve and maintain good health. Uninsured adults are twice as likely to forgo seeing a doctor when they are sick, and are less likely to receive preventive care and services to help them manage major health conditions or chronic diseases.[17] Women who suffer from chronic diseases like obesity, diabetes, or hypertension are more likely to give birth to a baby who is preterm, low birthweight, or dies within the first year of life. One in every five women of reproductive age in North Carolina (20 percent) is currently uninsured.[18]

A recent study in Oregon demonstrates the value of expanding access to health care for uninsured low-income adults.[19] Using a randomized control trial--the gold standard for medical evidence--researchers found that Medicaid expansion lowered rates of depression and significantly increased the diagnosis of diabetes and use of diabetes medication. Medicaid expansion also improved self-reported health, increased the probability of having a usual place of care by 50 percent, and increased the use of preventive services and screening for low-income adults.[20]

Improving women's access to routine and affordable health care would bolster birth outcomes through:

⇒ *Health and Wellness*: Thirty-seven percent of North Carolina women between the age of 18 and 44 (suffer from one or more chronic health conditions placing their babies at higher risk for pregnancy complications, preterm births and low birthweight.[21]

⇒ *Tobacco Cessation and Substance Abuse Services*: In 2014, one in every 10 births in North Carolina (9.8 percent) was to a mother who smoked.[22] Babies born to mothers who smoke during pregnancy are at greater risk of preterm birth, low birthweight, birth defects such as cleft lip or cleft palate, and Sudden Infant Death Syndrome (SIDS).

⇒ *Reproductive Planning, Including Pregnancy Intendedness and Healthy Birth Spacing*: In 2010, the latest data year available, more than half of all pregnancies in North Carolina were unintended.[23] Research shows unintended pregnancies and pregnancies that occur less than 18 months apart place women at risk for premature births.

⇒ *Healthy Weight* : The risk of infant mortality is higher for obese women, and the odds of infant mortality increase as BMI increases. However studies also show women who gain too little weight during pregnancy are also at risk for infant mortality.[24] In 2014, half of all births in North Carolina were to overweight or obese women and 4 percent were to women who were underweight.

⇒ *Mental Health*: Maternal depression during pregnancy is a risk factor for low birthweight births and prematurity and emerging research links other mental health conditions such as anxiety disorders, eating disorders, and psychotic illness to adverse birth outcomes.

⇒ *Lactation Support*: Breastfed infants have a 20 percent lower risk of dying between 28 days and one year after their birth than infants who were not breastfed. North Carolina ranks 25th in the nation for the percent of babies who were exclusively breastfed for the first six months of life, the length of time research shows supports better infant and maternal health outcomes.[25]

⇒ *Prenatal Care*: In 2014, 31 percent of all births in North Carolina were to mothers who did not receive prenatal care within her first trimester of pregnancy.

In addition to strengthening health outcomes, insurance coverage helps bolster economic security contributing to overall wellness. For example, the Oregon Health Insurance Experiment found expanded access to insurance through Medicaid reduced other measures of financial strain for low-income adults who gained coverage. The probability of having to borrow money or forgo paying other bills declined by more than 50 percent, and Medicaid virtually eliminated out-of-pocket catastrophic medical expenses (medical costs that exceeded 30 percent of income).

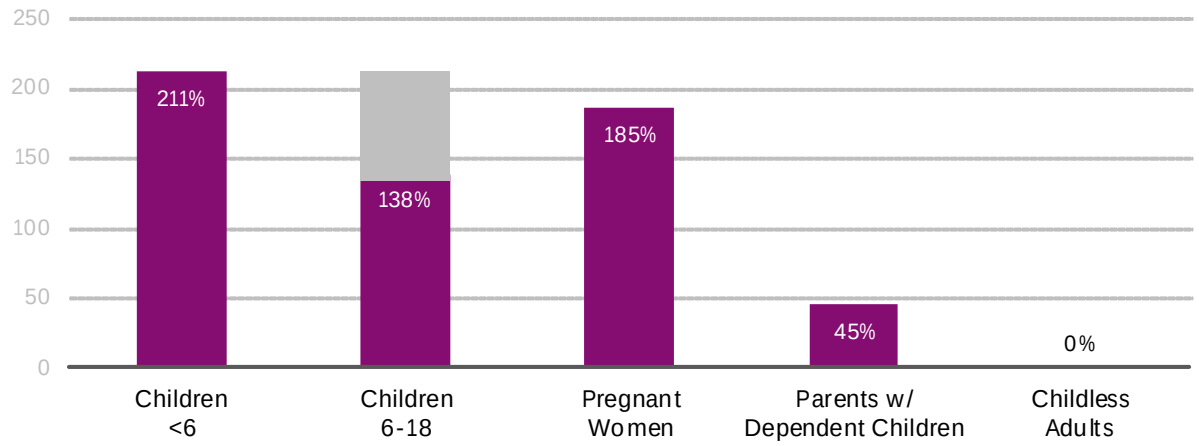
NORTH CAROLINA CAN CLOSE THE COVERAGE GAP FOR WOMEN

More than half of all uninsured women of reproductive age (53 percent) in North Carolina earn too little to afford coverage in the Marketplace. Among all adult women in North Carolina, four in every ten uninsured women (39 percent) fall within the coverage gap and have no affordable options for health insurance.[26]

The Affordable Care Act passed in 2010 allows states to expand Medicaid to cover low-income adults up to 138 percent of the federal poverty line, or $16,242 per year for a single adult. In North Carolina, low-income childless adults are ineligible for Medicaid, as are parents earning more than 45 percent of the federal poverty line ($667 per month for a family of three).[27] Because

CHILDLESS ADULTS IN NORTH CAROLINA ARE CURRENTLY INELIGIBLE FOR MEDICAID COVERAGE

Medicaid income eligibility limits, 2016



Source: NC Department of Health and Human Services, Division of Medical Assistance. Note: Children under age 6-18 up to 211 percent of the federal poverty level are eligible for coverage in the Children's Health Insurance Program.

"Insurance coverage plays a critical role in supporting women's ability to achieve and maintain good health."

federal healthcare reform intended low-income adults to receive their health insurance coverage through Medicaid nationwide, it did not provide financial assistance to people below poverty for other coverage options. This leaves parents and childless adults who earn too much to qualify for Medicaid, but too little to afford health insurance in the Marketplace, without options for affordable healthcare.

Thirty-one states and the District of Columbia have chosen to close this health insurance coverage gap for their residents. Twenty-five of these states expanded income eligibility for their existing Medicaid program and an additional six states (Arkansas, Iowa, Michigan, Indiana, New Hampshire, and Montana) have elected to adopt an alternative coverage plan under a federal waiver.

In North Carolina, low-income women only qualify for Medicaid once they are pregnant. Unfortunately, this coverage may come too late to address chronic conditions that can adversely affect pregnancy and birth outcomes.

Closing the health insurance coverage gap would help low-income women achieve and maintain good health before, during, and after pregnancy and allow more women to receive preventive care like regular doctor's visits, birth control, tobacco cessation counseling, and substance abuse services. Additionally, by increasing access to preventive and routine sources of care for women of color, closing the coverage gap has the potential to address health care gaps that contribute to race and ethnic disparities in birth outcomes.

CONCLUSION

Healthy pregnancies and babies require healthy mothers. Access to health care and related services is a crucial component of ensuring healthy birth outcomes for women and infants. In order to build on previous progress, further reduce infant mortality, and close racial and ethnic disparities, North Carolina must first address the lack of affordable health insurance options that leave many women without affordable health care options. Medicaid expansion holds tremendous potential to improve birth outcomes and reduce long-standing racial and ethnic disparities by improving access to care and promoting the health of women.

ACKNOWLEDGEMENTS

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UNINSURED WOMEN AND BIRTH OUTCOMES BY COUNTY

County	PCT Uninsured Women of Reproductive Age[a]	Live Births[b]	PCT Low Birthweight[c]	PCT Premature[d]	Infant Mortality Rate[e]
Alamance	27	1,766	11	15	10.8
Alexander	23	351	8.3	13.4	2.8
Alleghany	39	99	6.1	12.1	0
Anson	30	237	10.5	13.9	8.4
Ashe	29	223	7.2	12.6	4.5
Avery	32	114	9.6	11.4	8.8
Beaufort	23	447	9.2	13.2	17.9
Bertie	27	164	17.1	17.1	12.2
Bladen	32	363	9.6	17.6	5.5
Brunswick	28	1,102	8.2	11.4	3.6
Buncombe	25	2,576	7.8	13.5	6.6
Burke	25	885	9.2	12.4	11.3
Cabarrus	22	2,335	8.4	11.6	6
Caldwell	29	828	11.6	14.3	14.5
Camden	18	98	4.1	5.1	0
Carteret	31	581	6.2	11	5.2
Caswell	23	210	7.6	13.8	14.3
Catawba	24	1,806	8.4	10.6	6.6
Chatham	26	610	9.7	11.3	14.8
Cherokee	47	210	12.4	16.2	14.3
Chowan	24	124	7.3	8.1	8.1
Clay	46	78	11.5	19.2	0
Cleveland	25	1,055	9.6	12.4	6.6
Columbus	32	608	11	15.5	14.8
Craven	26	1,500	7.5	11	4.7
Cumberland	21	5,700	10	12.7	11.2
Currituck	28	260	6.5	11.2	15.4
Dare	33	351	6.3	8.8	5.7
Davidson	25	1,756	9.5	10.6	4
Davie	21	361	8.3	10.2	5.5
Duplin	42	772	7.9	10.6	3.9
Durham	20	4,503	8.9	11.4	8.7
Edgecombe	29	601	13	14	6.7
Forsyth	24	4,548	9.5	10.7	6.4
Franklin	26	664	6.3	10.8	10.5
Gaston	26	2,533	10.1	11.3	6.7
Gates	18	104	15.4	20.2	9.6
Graham	40	90	15.6	14.4	0
Granville	19	550	9.6	13.3	7.3
Greene	30	216	13	11.1	4.6
Guilford	22	6,085	9.8	11.7	7.9
Halifax	23	593	11	15.7	10.1
Harnett	23	1,985	9.6	13.1	11.1
Haywood	30	562	9.6	13.2	5.3
Henderson	28	1,110	6.8	12.8	3.6
Hertford	19	223	10.8	16.1	31.4
Hoke	19	948	7.9	11.4	5.3
Hyde	27	37	5.4	5.4	0
Iredell	23	1,771	8	9.9	7.3
Jackson	24	399	9.8	13.8	0
Johnston	25	2,287	7.4	10.8	4.8
Jones	29	105	12.4	14.3	0
Lee	29	787	11.7	14.6	5.1
Lenoir	28	681	10.1	12.8	10.3
Lincoln	23	817	6.7	10.5	4.9
McDowell	23	447	9.4	14.5	13.4
Macon	39	334	8.4	12.3	9
Madison	20	196	6.6	12.8	25.5
Martin	32	232	11.2	12.9	4.3
Mecklenburg	22	14,409	9.1	10.6	6.3
Mitchell	24	142	8.5	12	7
Montgomery	33	318	11.0	13.8	9.4
Moore	23	1,023	8.3	11.1	3.9
Nash	23	1,036	10.0	13.1	8.7
New Hanover	19	2,283	7.5	10.3	1.3
Northampton	28	165	12.1	17	18.2
Onslow	18	4,367	7.2	8.4	6.9
Orange	13	1,215	6.0	9	4.9
Pamlico	33	91	11.0	14.3	22
Pasquotank	25	536	9.9	12.3	5.6
Pender	28	634	7.1	9.3	6.3
Perquimans	30	124	5.6	8.1	0
Person	21	435	9.0	11.3	6.9
Pitt	19	2,125	9.0	13.3	13.2
Polk	24	156	7.1	11.5	12.8
Randolph	28	1,603	7.5	10.5	4.4
Richmond	31	504	11.3	14.3	6
Robeson	32	1,819	12.1	14.5	14.8
Rockingham	23	963	8.5	10.5	5.2
Rowan	27	1,551	9.5	11	11
Rutherford	28	672	8.6	9.5	6
Sampson	33	840	9.4	14.8	3.6
Scotland	26	440	13.9	14.3	11.4
Stanly	24	718	8.9	12	5.6
Stokes	25	402	5.7	7	5
Surry	30	758	7.5	9.2	5.3
Swain	40	200	10.0	14.5	15
Transylvania	36	289	9.0	12.8	3.5
Tyrrell	43	41	9.8	4.9	24.4
Union	20	2,378	8.3	9.7	5.9
Vance	22	561	12.3	16.4	7.1
Wake	17	12,635	8.1	10.3	4.7
Warren	23	198	14.1	16.7	20.2
Washington	25	116	9.5	12.1	0
Watauga	13	370	6.8	7.3	2.7
Wayne	27	1,717	8.4	10.1	4.1
Wilkes	27	686	8.5	10.6	8.7
Wilson	30	936	11.6	14.4	4.3
Yadkin	29	341	9.7	8.8	8.8
Yancey	31	173	8.1	8.7	0

Sources: [a]:U.S. Census Bureau, 2010-2014 American Community Survey, In this table, reproductive age refers to women age 18 to 44. [b-e] North Carolina Department of Health and Human Services, State Center for Health Statistics, 2014 Birth and infant mortality statistics.. Data current as of July 2016.

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NC Child

The Voice for North Carolina's Children

3109 Poplarwood Court
Suite 300
Raleigh, NC 27604-1044
facebook.com/ncchildorg

@nckidscount

info@ncchild.org
w 919 834 6623
f 919 829 7299

ncchild.org