

NORTH CAROLINA  
**CHILD  
HEALTH**  
Report Card

**A LOOK AT  
THE NEW  
REPORT CARD**

The North Carolina Child Health Report Card tracks key indicators on Access to Care, Healthy Births, Safe Homes and Neighborhoods, and Health Risk Factors over time and by race and ethnicity.

20  
17

**FOCUS ON INSURANCE COVERAGE**

Join the Conversation

 #ChildHealthNC

**NC  
Child**

[WWW.NCCHILD.ORG](http://WWW.NCCHILD.ORG)

 **NCIOM**

[WWW.NCIOM.ORG](http://WWW.NCIOM.ORG)

# TABLE OF CONTENTS

03	Improvements in Health Insurance Coverage for Children
04	Access to Care
06	Healthy Births
08	Safe Homes and Neighborhoods
10	Health Risk Factors
12	Data Notes and Sources

# WHY FOCUS ON RACE AND EQUITY?

For 26 years, the *Child Health Report Card* has tracked leading indicators of child health in order to highlight opportunities to strengthen the well-being of North Carolina children and examine the impact of public policies on child outcomes. Throughout the report's history, we have occasionally broken down select indicators by factors such as income and age to better identify which children have the best outcomes, understand why, and explore how North Carolina can ensure every child has the best chance to live a healthy and safe life. We have observed measurable differences by household income or age, factors research has shown can shape child health and well-being.

This year's report also shows children's chances of having these and other fundamental building blocks of good health often differ dramatically by race and ethnicity. The race and ethnicity data presented do not control for education, income, or other social or economic factors that may contribute to differences in health outcomes across race/ethnicity.

Many child and family serving agencies are not required to report data by race and ethnicity. Among those that do, some collect data using the Office of Management and Budget race and ethnicity categories while others do not. **For this reason, race and ethnicity categories presented in this document may differ across indicators.** For consistency, we have provided a key below the data tables throughout the document.

# DEMOGRAPHICS



THERE WERE **120,826 live births** & **2,228,050 children under age 18** **IN 2015**

	Current 2015	Base 2015	African American or Black	American Indian	Asian	Hispanic or Latinx <sup>11</sup>	Other	White
Percent of live births by race and ethnicity	100%	100%	23.8%	1.4%	NA	15.0%	4.4%	55.5%
Percent of children under age 18 by race and ethnicity	100%	100%	22.9%	1.1% <sup>†</sup>	2.8%	15.4%	4.4% <sup>§</sup>	53.0%
Percent of children under age 5	2015 26.3%	2011 27.4%	25.7%	24.5% <sup>†</sup>	26.4%	29.3%	31.7% <sup>§</sup>	25.3%
Percent of children in excellent or good health	2011/12 96.7%	NA	96.4%	NA	NA	93.0%	97.1%	97.9%

NOTE: May not add to 100% due to rounding

<b>KEY</b>	NA   Data are not available	‡   Asian includes Hawaiian/Pacific Islander	*   Race categories include Hispanic
	--   Data suppressed	§   Other includes Multi-Racial and Two or More Races	†   American Indian includes Native Alaskan

# IMPROVEMENTS IN HEALTH INSURANCE COVERAGE FOR CHILDREN

The foundation for lifelong health is built during childhood. Health insurance coverage is an essential support to promote child health. Children with health insurance are more likely to access preventive care and receive needed services than uninsured children. They are also less likely to miss school due to preventable illness.<sup>1</sup>

North Carolina has made significant progress towards ensuring that all children have access to affordable health care. Since 2009, the uninsured rate for children has declined by nearly half (from 8.1% in 2009 to 4.4% percent in 2015), the 14<sup>th</sup> largest drop in the rate of uninsured children nationally.<sup>2,3</sup> Ninety-six percent of children in North Carolina have health insurance coverage, a record high for the state.<sup>3</sup>

Gains in children's health insurance coverage are linked to the success of three complementary policies and programs. Medicaid and NC Health Choice (North Carolina's Children's Health Insurance Program) are federal and state programs that target children in families with incomes below 211 percent of the federal poverty level (FPL). Together Medicaid and NC Health Choice provide health insurance coverage for more than 1.2 million children in North Carolina, almost half of all children in the state. Ninety-three percent of North Carolina children enrolled in public health insurance programs are covered by Medicaid. Medicaid provides a comprehensive set of benefits including dental, vision, regular checkups, and preventive and developmental screening.<sup>4</sup> The Patient Protection and Affordable Care Act (ACA), has strengthened children's private insurance coverage rates by providing subsidies to households with incomes between 100-400% FPL to purchase health insurance.<sup>5,6</sup>

The ACA has also bolstered children's coverage rates through streamlined enrollment processes, greater outreach efforts, and increased coverage for parents.<sup>7</sup> More than 55,000 children in North Carolina have health insurance through the ACA marketplace (also known as the health care exchanges), and children make up nine percent of all North Carolina marketplace enrollees.<sup>8</sup> Research shows as parents pursue coverage for themselves or other family members in the marketplace, children who qualify for public health insurance coverage are often identified. As a result, increased coverage for parents since full implementation of ACA in 2013 has opened the door for eligible but unenrolled children to gain coverage through public programs.<sup>7,9</sup>

Despite an overall reduction in uninsured children, some children continue to experience coverage barriers that weaken their immediate and long-term opportunities for health. One in 16 children in poor or near poor homes (6.1 percent) remains uninsured despite meeting the income eligibility for public health insurance programs.<sup>3,10</sup> Hispanic and Latinx<sup>11</sup> children are 2.8 times more likely to be uninsured than their non-Hispanic white peers.<sup>3</sup> Furthermore, improvements in children's health insurance are closely tied to Medicaid, Health Choice, and the ACA, so policy or administrative changes to these programs at the state or federal level could diminish or eliminate recent gains in coverage. Congress is currently debating several proposals that would significantly alter these programs, including a full or partial repeal of ACA and converting federal financing for Medicaid from an entitlement to a per-capita allotment or block grant. Early analyses of Medicaid reform proposals estimate they could cause as many as 160,000 North Carolina children to lose health insurance coverage.<sup>12</sup> In addition to potential changes to Medicaid, a proposed repeal of tax credits for coverage purchased through the health insurance exchanges is estimated to result in a \$24 billion loss in subsidies to households with income below 400% of FPL by 2023.<sup>13</sup>

As we applaud recent increases in children's health insurance coverage in North Carolina, it is important to remember these improvements are the result of partnerships between policymakers, communities, and practitioners. Health insurance alone does not automatically equate to quality medical care for children, since additional barriers such as cost, a shortage of rural providers, and logistical challenges such as transportation remain, but coverage is a necessary step towards accessing services. More work is required to address coverage and access barriers and assure every child in North Carolina has health insurance to support their best growth and development. North Carolina has come a long way towards ensuring all children have access to affordable health care, and it is imperative that the state remain committed to preserving and building upon that progress.

1. Szilagyi, P. G., Schuster, M. A. & Cheng, T. L. The scientific evidence for child health insurance. *Acad. Pediatr.* 9(1): 4-6 (2009).
2. U.S. Census Bureau. *American Community Survey, 1-Year Estimates*, Table S2701: Selected Characteristics of Health Insurance Coverage Status in the United States (2009).
3. U.S. Census Bureau. *American Community Survey, 1-Year Estimates* Table B27001A-I: Selected Characteristics of Health Insurance Coverage Status in the United States (2015).
4. Referred to as Early and Periodic Screening, Diagnosis, and Treatment (EPSDT).
5. *Explaining Health Care Reform: Questions About Health Insurance Subsidies*. The Henry J. Kaiser Family Foundation website (2016). <http://kff.org/health-reform/issue-brief/explaining-health-care-reform-questions-about-health/>. Accessed February 15, 2017.
6. Four hundred percent of the federal poverty level is \$81,680 for a family of three.
7. Gates, J. A., Karpman, M., Kenney, G. M. & Mcmorrow, S. *Uninsurance among Children, 1997-2015: Long-Term Trends and Recent Patterns*. Urban Institute (2016).
8. Assistant Secretary for Planning and Evaluation Office of Health Policy, U. S. Department of Health and Human Services. *Addendum to the Health Insurance Marketplaces 2016 Open Enrollment Period: Final Enrollment Report* (2016).
9. Alker, J. *New Study Confirms that ACA Welcome Mat for Kids was Indeed Welcoming*. Georgetown University Health Policy Institute, Center for Children and Families website (2016). <http://ccf.georgetown.edu/2016/05/11/new-study-confirms-aca-welcome-mat-kids-indeed-welcoming/>. Accessed February 15, 2017.
10. Poor or near poor refers to children who live in families that earn less than twice the federal poverty line--less than \$40,840 per year for a family of three.
11. Latinx is defined as, "a person of Latin American origin or descent, used as a gender-neutral or non-binary alternative to Latino or Latina" (English Oxford Living Dictionaries, <https://en.oxforddictionaries.com/>).
12. Blumberg, L. J., Buettgens, M., Holahan, J., Kenney, G. M., & Pan, C. *Partial Repeal of the ACA through Reconciliation: Coverage Implications for North Carolina Residents*. Urban Institute (2017).
13. Ku, L., Steinmetz, E., Brantley, E. & Bruen, B. *The Economic and Employment Consequences of Repealing Federal Health Reform: A 50 State Analysis*. Milken Institute School of Public Health (2017).

# ACCESS TO CARE

## WHAT WE ARE DOING WELL?

---

- The percent of **uninsured low-income children** declined by almost half since 2010. Children in low-income families who have health insurance coverage experience better health outcomes and higher levels of education than their uninsured peers.<sup>14</sup>
- The percent of **uninsured parents** (15.3%) continued to decline. For parents, having health insurance can lead to greater economic security: uninsured adults are more than three times as likely to have difficulty paying for basic living costs such as food, rent, heating, or electric bills.<sup>15</sup>
- Eight in 10 children age 19-35 months receive **recommended immunizations**, and nearly all school age children have received recommended immunizations. High vaccine coverage results in low levels of vaccine-preventable illnesses among children including hepatitis, rotavirus, diphtheria, measles, mumps, and rubella.

## WHAT CAN WE IMPROVE?

---

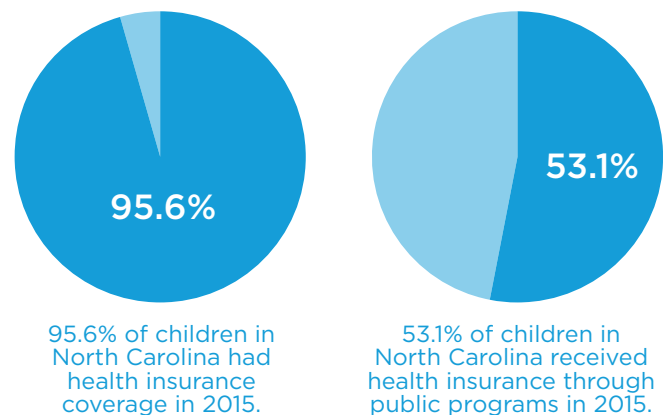
- Fewer than two-thirds of children covered by Medicaid received a **well-child visit** in the past year. For infants and toddlers, the American Academy of Pediatrics recommends multiple well-child visits per year, and for older children, an annual well-child visit is recommended.

## WHAT CAN WE DO?

---

- North Carolina faces a maldistribution of physicians, nurses, and other health care providers, which leads to shortages of health care providers in many rural communities. Addressing this maldistribution, along with factors such as transportation problems and economic insecurity, could reduce barriers to **preventive care visits** that children and families may face.<sup>16</sup>
- There is **one school nurse for every 1,112 children** in North Carolina public schools. The Centers for Disease Control and Prevention recommends a ratio of one nurse for every 750 “well” students in order to adequately meet the health and safety needs of children and school communities.<sup>17</sup>

## CHILDREN'S HEALTH INSURANCE COVERAGE



---

14. Paradise, J. *The Impact of the Children's Health Insurance Program (CHIP): What Does the Research Tell Us?* The Henry J. Kaiser Family Foundation website (2014). <http://kff.org/medicaid/issue-brief/the-impact-of-the-childrens-health-insurance-program-chip-what-does-the-research-tell-us/>. Accessed February 15, 2017.

15. *Loss Of Health Insurance Jeopardizes Health And Economic Security Of One In Four Working-Age Americans*. The Commonwealth Fund website (2001). <http://www.commonwealthfund.org/publications/press-releases/2001/dec/loss-of-health-insurance-jeopardizes-health-and-economic-security-of-one-in-four-working-age-america>. Accessed February 15, 2017.

16. North Carolina Institute of Medicine. *North Carolina Rural Health Action Plan: A Report of the NCIOM Task Force on Rural Health*. Morrisville, NC (2014).

17. *School Nurse Workload: Staffing for Safe Care*. National Association of School Nurses website (2015). <https://www.nasn.org/PolicyAdvocacy/PositionPapersandReports/NASNPositionStatementsFullView/tabid/462/ArticleId/803/School-Nurse-Workload-Staffing-for-Safe-Care-Adopted-January-2015>. Accessed February 15, 2017.

ACCESS TO CARE

	Current	Base	Better, Worse, No Change (NC)	African American or Black	American Indian	Asian	Hispanic or Latinx <sup>11</sup>	Other	White	
<b>A</b>	<b>Insurance Coverage</b>	2015	2011							
	% of children with health insurance coverage	95.6%	92.4%	NC	96.3%*	91.4% <sup>†</sup> *	94.4% <sup>‡</sup> *	90.8%	93.9% <sup>§</sup> *	96.7%
	% of low-income children without health insurance coverage (<200 % FPL)	6.1%	10.6%	Better	4.0%	9.4%	4.7%	10.9%	8.0%	5.1%
	% of children covered by public health insurance	53.1%	47.9%		--	--	--	--	--	--
	Children covered by Medicaid	1,124,962	942,056		381,278	14,405	17,959	225,023	NA	415,896
	Children covered by NC Health Choice	89,135	153,455		29,202	1,207	2,359	22,818	NA	49,910
% of parents without health insurance coverage*	15.3%	20.6%	Better	13.7%	21.1% <sup>†</sup>	10.1% <sup>‡</sup>	53.7%	15.5% <sup>§</sup>	8.7%	
<b>C</b>	<b>Health Services Utilization</b>									
	% of children with Medicaid who received a well-child checkup in the past year	58.7%	59.7%	NC	NA	NA	NA	NA	NA	NA
<b>C</b>	<b>Oral Health</b>	2016	2010							
	% of kindergarten students with untreated tooth decay	15.0%	15.0%	NC	NA	NA	NA	NA	NA	NA
	% of children with Medicaid who use dental services	2015	2011							
	Ages 1-5	58.0%	56.0%	NC	NA	NA	NA	NA	NA	NA
	Ages 6-14	61.0%	60.0%	NC	NA	NA	NA	NA	NA	NA
Ages 15-20	44.0%	44.0%	NC	NA	NA	NA	NA	NA	NA	
<b>D</b>	<b>School Health</b>	SY 2014-15	SY 2010-11							
	School nurse ratio	1 : 1,112	1 : 1,201	Better	NA	NA	NA	NA	NA	NA
		SY 2013-14								
School counselor ratio	1:379	NA	NA	NA	NA	NA	NA	NA	NA	
<b>B</b>	<b>Immunization</b>	2015	2013							
	% of children ages 19-35 months with appropriate immunizations	80.0%	76.6%	NC	69.5%	NA	NA	79.6%	NA	84.6%
		SY 2015-16	SY 2011-12							
% of children with appropriate immunizations at school entry	96.3%	96.4%	NC	NA	NA	NA	NA	NA	NA	

KEY

NA | Data are not available  
-- | Data suppressed

‡ | Asian includes Hawaiian/Pacific Islander  
§ | Other includes Multi-Racial and Two or More Races

\* | Race categories include Hispanic  
† | American Indian includes Native Alaskan

# HEALTHY BIRTHS

## WHAT WE ARE DOING WELL?

---

- The percent of **babies born to women who smoke** during pregnancy (9.3%) declined by 15 percent between 2011 and 2015. Smoking is associated with poor birth outcomes including prematurity and low birthweight that can contribute to health problems later in life.
- More mothers are meeting the recommended guideline of **exclusively breastfeeding** for six months (20.8% in 2013—up 50% since 2009). Breastfeeding is associated with fewer infectious and chronic illnesses among children, reductions in child mortality, and health benefits into adulthood.<sup>18</sup>
- Almost nine in 10 women (87.2%) report receiving a **postpartum checkup** within four to six weeks of delivery. Postpartum visits support the health of mothers and their babies by providing the opportunity for screening for postpartum depression, contraception counseling, and management of pregnancy-induced health conditions like diabetes and high blood pressure.

## WHAT CAN WE IMPROVE?

---

- Just two-thirds of women receive the **early prenatal care** that promotes healthy pregnancies and deliveries (67.8%). Prenatal care can be particularly important for low-income women who may lack access to ongoing preventive health care before pregnancy.
- For the second consecutive year, the **infant mortality** rate (7.3 per 1,000 live births) is above the state's previously recorded low (7.0 per 1,000 live births). Infant mortality rates were lowest among Hispanic infants (5.4 per 1,000 live births) and highest among African American infants (12.5 per 1,000 live births).

## WHAT CAN WE DO?

---

- Insurance coverage is associated with early initiation of prenatal care and uninsured women may be up to five times as likely to delay **prenatal care** until late in pregnancy.<sup>19</sup> Ensuring women have access to affordable health care before and during pregnancy can improve health outcomes for mothers and babies.
- Racial disparities in infant deaths are driven by inequities in women's health status before pregnancy, as well as the social and economic environments in which they live. Addressing the social determinants that impact maternal and child health could improve birth outcomes and reduce **infant mortality**.<sup>20</sup>



---

18. *Maternal, newborn, child and adolescent health: Breastfeeding*. World Health Organization website (2017). [http://www.who.int/maternal\\_child\\_adolescent/topics/child/nutrition/breastfeeding/en/](http://www.who.int/maternal_child_adolescent/topics/child/nutrition/breastfeeding/en/). Accessed February 15, 2017.

19. Epstein, A. M. & Newhouse, J. P. Impact of Medicaid Expansion on Early Prenatal Care and Health Outcomes. *Health Care Financ. Rev.* 19 (4): 85–99 (1998).

20. Kim, D. & Saada, A. The social determinants of infant mortality and birth outcomes in Western developed nations: a cross-country systematic review. *Int. J. Environ. Res. Public Health.* 10(6): 2296–335 (2013).

## HEALTHY BIRTHS

	Current	Base	Better, Worse, No Change (NC)	African American or Black	American Indian	Asian	Hispanic or Latinx <sup>11</sup>	Other	White	
<b>C</b>	<b>Preconception Health</b> % of women aged 18-44 with health insurance coverage	2015 <b>80.6%</b>	2011 73.6%	Better	88.6%	--	NA	31.4%	90.4%	89.2%
	% of women who describe their overall health as excellent, very good, or good	<b>79.9%</b>	79.7%	NC	75.6%	NA	NA	75.7%	80.8%	
<b>D</b>	<b>Birth Outcomes</b> Infant mortality: infant deaths per 1,000 live births	<b>7.3</b>	7.2	NC	12.5	--	NA	5.4	6.2	5.7
	% of babies who are born before 37 weeks of pregnancy	<b>10.2%</b>	10.2%	NC	14.0%	11.4%	NA	8.7%	8.5%	9.1%
	% of babies who are born at a low birthweight (<2500 g)	<b>9.2%</b>	9.0%	NC	14.5%	11.2%	NA	7.0%	8.6%	7.5%
<b>C</b>	<b>Maternal Health &amp; Support</b> % of pregnancies that are intended	2014 <b>55.8%</b>	NA	NA	32.6%	NA	NA	57.2%	58.9%	65.8%
	% of babies born to women who smoke	2015 <b>9.3%</b>	2011 10.9%	Better	9.2%	21.8%	NA	1.8%	1.6%	11.8%
	% of women who receive early prenatal care	<b>67.8%</b>	71.2%	NC	59.0%	61.8%	NA	57.4%	66.0%	74.6%
	% of women who report adequate or excellent prenatal social support	2014 <b>94.5%</b>	NA	NA	93.0%	NA	NA	92.7%	94.3%	95.7%
	Pregnancy-related deaths per 100,000 live births (during pregnancy or shortly after child birth)	2013 <b>21.0</b>	2009 24.5	Better	24.3	--	--	--	NA	24.2
	% of women who receive a postpartum checkup	2014 <b>87.2%</b>	NA	NA	79.9%	--	--	85.0%	--	92.3%
	% of women who experience postpartum depressive symptoms	2014 <b>12.3%</b>	2012 15.6%	Better	19.5%	NA	NA	--	--	11.0%
<b>B</b>	<b>Breastfeeding</b> % of babies who were ever breastfed	2013 <b>75.3%</b>	2009 69.1%	Better	62.7%	--	--	80.9%	NA	72.5%
	% of newborns who are breastfed exclusively for at least 6 months	<b>20.8%</b>	13.9%	Better	14.6%	--	--	12.9%	NA	17.6%
	% of babies born at a hospital with Baby Friendly Hospital Designation	<b>28.7%</b>	9.9%	Better	NA	NA	NA	NA	NA	NA

### KEY

NA | Data are not available

-- | Data suppressed

‡

| Asian includes Hawaiian/Pacific Islander

§

| Other includes Multi-Racial and Two or More Races

\* | Race categories include Hispanic

† | American Indian includes Native Alaskan



# SAFE HOMES AND NEIGHBORHOODS

## WHAT WE ARE DOING WELL?

---

- Nearly four out of five families in North Carolina **eat dinner together** 4 or more days per week. Children who regularly eat dinner with their families are more likely to eat more nutritious foods and are less likely to be overweight or obese.<sup>21</sup>

## WHAT CAN WE IMPROVE?

---

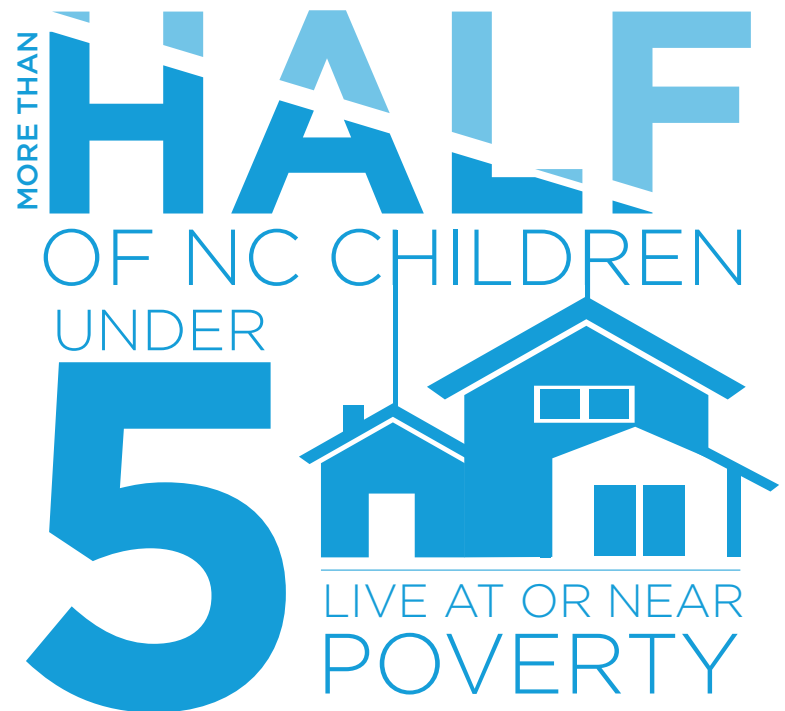
- **Child fatality** rates were lowest among Latinx children (12.6 per 100,000) and highest among African American children (25.7 per 100,000). Disparities in child fatalities are influenced by social factors such as poverty, education, and teen pregnancy.<sup>22</sup>
- One in three children **live in homes with a high housing cost burden**, defined as more than 30% of monthly income spent on housing expenses. Higher housing costs can cause families to spend less on health care and increase rates of food insecurity.<sup>23</sup>
- One in seven **children live in high poverty neighborhoods** (14%). African American, American Indian, and Latinx children are more likely to live in concentrated poverty than their non-Hispanic White peers. Children who live in high poverty neighborhoods are more likely to suffer poor physical and mental health outcomes and to be exposed to violence and crime.

## WHAT CAN WE DO?

---

- Two-thirds of child deaths occur within the first year of life. Efforts to improve North Carolina's **infant mortality rate** would reduce the overall child death rate.
- Nearly one in 5 parents report their **child had been diagnosed with asthma**. The prevalence for African American children is nearly double that for white children (28.1% vs. 14.4%). Asthma is a leading cause of children missing school for health-related reasons, and minority children with asthma are more likely to miss school days due to their illness.<sup>24</sup> To reduce asthma hospitalizations for children, the Centers for Disease Control and Prevention recommends: improving clinical and personal asthma management and providing home visits that offer education and identify indoor asthma triggers.<sup>25</sup>

MORE THAN  
**HALF**  
OF NC CHILDREN  
UNDER  
**5**  
LIVE AT OR NEAR  
POVERTY



---

21. Cook, E. & Dunifon, R. *Do Family Meals Really Make a Difference?* Cornell University College of Human Ecology (2012).

22. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. *National Action Plan for Child Injury Prevention*. Atlanta, GA (2012).

23. Maqbool, N., Viveiros, J. & Ault, M. *The Impacts of Affordable Housing on Health: A Research Summary*. Center for Housing Policy (2015).

24. Hsu, J., Qin, X., Beavers, S. F. & Mirabelli, M. C. Asthma-Related School Absenteeism, Morbidity, and Modifiable Factors. *Am. J. Prev. Med.* 51(1): 23-32 (2016).

25. *Controlling Asthma*. Office of the Associate Director for Policy, Centers for Disease Control and Prevention website (2015). <https://www.cdc.gov/policy/hst/statestrategies/asthma/>. Accessed February 16, 2017.



## SAFE HOMES AND NEIGHBORHOODS

	Current	Base	Better, Worse, No Change (NC)	African American or Black	American Indian	Asian	Hispanic or Latinx <sup>11</sup>	Other	White	
<b>B</b>	<b>Family Involvement</b>	2011/12	2007							
	% of families eat meals together four or more times per week	79.6%	78.4%	NC	72.7%	NA	NA	77.4%	81.0%	82.3%
<b>C</b>	% of families who read to children (ages 0-5) everyday	44.3%	54.6%	Worse	30.2%	NA	NA	23.9%	64.0%	53.0%
	<b>Housing and Neighborhood Stability</b>	2015	2010							
% of children living in households spending over 30% of income on housing costs	32.0%	38.0%	Better	47.0%	31.0%	24.0%	44.0%	35.0%	22.0%	
% of children who live in high-poverty neighborhoods	14.0%	9.0%	Worse	28.0%	39.0%	9.0%	22.0%	14.0%	5.0%	
<b>C</b>	<b>Environmental Health</b>	2012	2007							
	% of children who have an asthma diagnosis*	17.5%	15.7%		28.1%	NA	NA	NA	11.8%	14.4%
Hospital discharges with primary diagnosis of asthma per 100,000 children, age 0-14	144.6	166.0	Better	314.3	245	NA	93.1	297.5	71.8	
<b>C</b>	<b>Child Abuse and Neglect</b>	2015	2011							
	Children who are investigated for child abuse or neglect	130,216	131,658		44,278	2,680	NA	15,256	8,980	59,022
	Children who are substantiated as victims of abuse or neglect	10,055	11,333		2,885	227	NA	1,170	784	4,989
	Children who are recommended or received supportive family services	37,973	33,673		14,238	400	NA	4,608	2,944	15,783
Child abuse homicides	32	24		NA	NA	NA	NA	NA	NA	
<b>D</b>	<b>Children In Out-of-Home Care</b>	2015	2011							
	Children in foster care	15,417	14,337		4,948	401	NA	1,289	1,273	7,506
	% of children who reenter foster care in 12 months	4.3%	3.6%	Worse	4.0%	9.6%	NA	3.0%	4.5%	4.4%
% of children who exit to permanency within 24 months	62.6%	63.7%	NC	57.8%	82.1%	NA	63.0%	59.4%	64.6%	
<b>C</b>	<b>Child Fatality</b>	20.8	20.6	NC	25.7	--	NA	12.6	--	20.6
	Child deaths per 100,000 (ages 1-17)	31.6	24.1	Worse	40.5	--	NA	17.6	--	31.2
	Ages 1 to 4	11.8	13.2	Better	11.9	--	NA	--	--	13.0
	Ages 5 to 9	14.4	14.8	NC	20.2	--	NA	--	--	13.3
	Ages 10 to 14	32.6	38.3	Better	39.0	--	NA	--	--	32.1
	Ages 15 to 17									
Child deaths (ages 0-17) caused by:										
Motor vehicle injuries	83	98		NA	NA	NA	NA	NA	NA	
All other unintentional injuries	80	104		NA	NA	NA	NA	NA	NA	
Homicide	51	43		NA	NA	NA	NA	NA	NA	
Suicide	35	23		NA	NA	NA	NA	NA	NA	
Child deaths involving firearms (homicides and suicides)	35	NA		NA	NA	NA	NA	NA	NA	

### KEY

NA | Data are not available  
-- | Data suppressed

‡ | Asian includes Hawaiian/Pacific Islander  
§ | Other includes Multi-Racial and Two or More Races

\* | Race categories include Hispanic  
† | American Indian includes Native Alaskan

# HEALTH RISK FACTORS

## WHAT WE ARE DOING WELL?

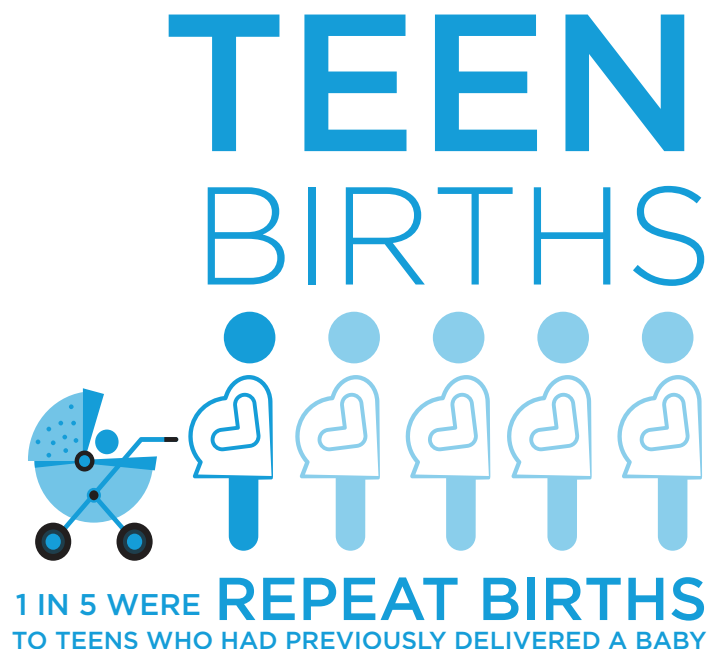
- North Carolina's graduation rate continues to increase, with six in seven students now **completing high school on time**. Students who graduate on time are more likely to continue their education, earn higher incomes as adults, and have better health outcomes.<sup>26</sup>
- **Births to teen girls age 15-19** (23.6 births per 1,000 girls) decreased by one-third between 2011 and 2015. Teen girls who have babies have lower incomes as adults, are less likely to finish high school, and have children with poorer health and behavioral outcomes than peers who delay childbearing.<sup>27</sup>

## WHAT CAN WE IMPROVE?

- More than half of all North Carolina children under age 5 **live in poor or near-poor homes**. Children in low-income homes face greater risk of poor health outcomes, lower educational attainment, and reduced economic opportunity.
- Just one-third of North Carolina children **meet recommended guidelines for physical activity** (32.5%). Getting enough physical activity is important for kids' physical and mental health, and can improve their performance in school.<sup>28</sup>
- One in 10 **high school students attempted suicide** in the past year. Suicide is the 2nd leading cause of death for adolescents age 15-19 in North Carolina.<sup>29</sup>

## WHAT CAN WE DO?

- Among teen births, more than 1 in 5 were **repeat births to teens** who had previously delivered a baby. Accessible, affordable, and confidential family planning services can help to reduce one-time and **repeat births to teens**.
- **Healthy weight** is determined by more than children's nutrition or physical activity. Research shows improvements to the socioeconomic conditions in which families live (poverty, neighborhood safety, access to healthy foods) help children develop healthy eating habits in their homes and support obesity prevention and control.<sup>30,31</sup>



26. *High School Students Not Graduating on Time*. KIDS COUNT Data Center website (2016). <http://datacenter.kidscount.org/data/tables/7245-high-school-students-not-graduating-on-time#detailed/1/any/false/1124,1024,937,809,712/any/14289,14290>. Accessed February 16, 2017.

27. *Reproductive Health: Overview*. The Office of Adolescent Health, U.S. Department of Health and Human Services website (2017). <https://www.hhs.gov/ash/oah/adolescent-health-topics/reproductive-health/teen-pregnancy/>. Accessed February 16, 2017.

28. Centers for Disease Control and Prevention. *The Association Between School-Based Physical Activity, Including Physical Education, and Academic Performance*. Atlanta, GA (2010).

29. *Leading Causes of Death in North Carolina*. State Center for Health Statistics Health Data Query System (2015). <http://www.schs.state.nc.us/interactive/query/lcd/lcd.cfm>. Accessed February 16, 2017.

30. Frieden, T. R., Dietz, W. & Collins, J. Reducing childhood obesity through policy change: acting now to prevent obesity. *Health Aff. (Millwood)*. 29(3) 357-63 (2010).

31. Center for the Study of Social Policy. *Results-based Public Policy Strategies for Preventing Childhood Obesity* (2011).

**HEALTH RISK FACTORS**

	Current	Base	Better, Worse, No Change (NC)	African American or Black	American Indian	Asian	Hispanic or Latinx <sup>11</sup>	Other	White	
<b>F</b>	<b>Economic Security</b> % of children who live in poor or low-income homes (<200% FPL)	2015 <b>48.0%</b>	2011 50.0%	NC	67.0%	--	34.0% <sup>‡</sup>	52.0% <sup>§</sup>	33.0%	
	% of children ages 0-5 who live in poor or low-income homes	2015 <b>52.6%</b>	2012 55.2%	NC	71.1%	51.0%	30.7%	77.5%	NA	37.1%
<b>C</b>	<b>Education</b> % of high school students who graduate on time	SY 2016 <b>85.9%</b>	2012 80.4%	Better	82.9%	82.0%	93.4%	80.1%	83.0% <sup>§</sup>	88.6%
	% of fourth grade students reading at grade-level	2015 <b>38.0%</b>	2011 34.9%	Better	23.0%	19.0% <sup>†</sup>	59.0%	23.0%	47.0% <sup>§</sup>	51.0%
<b>B</b>	<b>Teen Pregnancy</b> Birth to teen girls ages 15-19 per 1,000	<b>23.5</b>	34.8	Better	29.7	43.4	NA	42.4	12.0	17.0
	% of births to girls ages 15-19 that are repeat	<b>22.9%</b>	24.6%	Better	23.8%	20.7%	NA	26.1%	20.2%	20.7%
<b>D</b>	<b>Healthy Eating &amp; Active Living</b> % of children who live in food insecure households	2014 <b>22.0%</b>	2010 25.0%	Better	NA	NA	NA	NA	NA	NA
	% of children who meet recommended guidelines for physical activity*	<b>32.5%</b>	2012 45.8%	Worse	28.0%	NA	NA	NA	--	32.7%
	% of children ages 10-17 who are overweight or obese*	<b>36.4%</b>	2012 33.7%	Worse	NA	NA	NA	NA	--	32.4%
<b>D</b>	<b>Tobacco, Alcohol, and Substance Use</b> % of high school students who currently use: Cigarettes	2015 <b>13.1%</b>	2011 17.7%	Better	10.8%	--	3.8%	14.9%	9.2% <sup>§</sup>	14.6%
	Smokeless tobacco	<b>8.6%</b>	11.0%	Better	4.9%	--	3.0%	7.4%	5.9% <sup>§</sup>	10.5%
	Electronic vapor products	<b>29.6%</b>	NA	NA	27.9%	--	7.7%	29.8%	22.9% <sup>§</sup>	31.3%
	Marijuana	<b>22.3%</b>	24.2%	Better	27.9%	--	4.4%	22.4%	24.7% <sup>§</sup>	19.9%
	Alcohol (including beer)	<b>29.2%</b>	34.3%	Better	25.2%	--	10.4%	24.2%	25.3% <sup>§</sup>	32.9%
	% of high school students who have ever used: Cocaine	<b>4.5%</b>	7.1%	Better	5.7%	--	2.5%	7.0%	3.7% <sup>§</sup>	2.9%
	Prescription drugs without a doctor's prescription	<b>17.9%</b>	20.4%	Better	15.8%	--	8.4%	14.1%	21.9% <sup>§</sup>	19.5%
<b>D</b>	<b>Mental Health</b> % of high school students who attempted suicide in the past year	2015 <b>9.3%</b>	2011 5.0%	Worse	13.6%	NA	3.4%	14.0%	21.6%	5.5%
	% of past-year major depressive episode among adolescents aged 12-17	2013-14 <b>11.4%</b>	2009-10 7.4%	Worse	NA	NA	NA	NA	NA	NA
	% of adolescents (age 12-17) with major depressive episode who received treatment	2010-14 <b>40.7%</b>	2008-12 36.0%	Better	NA	NA	NA	NA	NA	NA

**KEY**

NA | Data are not available  
-- | Data suppressed

‡ | Asian includes Hawaiian/Pacific Islander  
§ | Other includes Multi-Racial and Two or More Races

\* | Race categories include Hispanic  
† | American Indian includes Native Alaskan

# DATA NOTES AND SOURCES

Laila A. Bell from NC Child and Anne Foglia and Michelle Ries from the North Carolina Institute of Medicine led the development of this publication, with valuable input from colleagues, child health experts, and many staff members of the North Carolina Department of Health and Human Services. This project was supported by the Annie E. Casey Foundation, and the Blue Cross and Blue Shield of North Carolina Foundation. NC Child and The North Carolina Institute of Medicine thank our supporters and acknowledge that the findings and conclusions do not necessarily reflect the opinions of financial supporters.

**Grades and Change Over Time:** Grades are assigned by a panel of health experts to bring attention to the current status of North Carolina children in salient measures of health and well-being. Grades are subjective measures of how well children in North Carolina are faring in a particular area, and are not meant to judge the performance of state agency or agencies providing data or services. Please note that several agencies have made a great deal of progress in recent years, which may not be reflected in these grades.

Change over time is described as “Better,” “Worse,” or “No Change.” Indicators with trends described as “Better” or “Worse” experienced a change of more than 5% during the period. A percentage change of 5% or less is described as “No Change.” Percent change and trends have not been given for population count data involving small numbers of cases. Grades and trends are based on North Carolina’s performance year-to-year, disparities by race/ethnicity, and what level of child health and safety North Carolina should aspire to, regardless of how we compare nationally.

## Data Sources

**Demographics:** *Live Births:* North Carolina Department of Health and Human Services, State Center for Health Statistics. North Carolina Infant Mortality Report, Table 10b: North Carolina Resident Live Birth Trends: 2011-2015. Available online at: <http://www.schs.state.nc.us/data/vital.cfm>. *Child Population:* U.S. Census Bureau. American Community Survey Single-Year Estimates 2015 and 2011, Table S0201: Selected Population Profile in the United States. Available online at: <https://factfinder.census.gov>. *Children’s Health Status:* National Survey of Children’s Health, 2011/12. Data query from the Child and Adolescent Health Measurement Initiative, Data Resource Center on Child and Adolescent Health website. Available online at: <http://www.childhealthdata.org>.

**Access to Care:** *Children with Health Insurance Coverage:* U.S. Census Bureau. American Community Survey Single-Year Estimates, 2015 and 2011. Table S2701: Selected Characteristics of Health Insurance Coverage Status in the United States and Table B27001A-I: Health Insurance Coverage Status by Age. Available online at: <https://factfinder.census.gov>. *Low-income Children without Health Insurance Coverage:* U.S. Census Bureau. American Community Survey Single-Year Estimates, 2015 and 2011. Table C27016: Health Insurance Coverage by Ratio of Income to Poverty Level in the Past 12 Months by Age. Available online at: <https://factfinder.census.gov>. *Children Covered by Public Health Insurance, Medicaid, and NC Health Choice:* Special data request to Division of Medical Assistance, North Carolina Department of Health and Human Services, December 2016. *Parents without Health Insurance Coverage:* Population Reference Bureau, analysis of data from the U.S. Census Bureau, American Community Survey, 2011 and 2015. Public Use Microdata Sample. *Children who Received a Well-child Checkup and Children Receiving Dental Services:* U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services. Early and Periodic Screening, Diagnostic and Treatment Participation Report, 2015 and 2011. Form CMS-416. *Untreated Tooth Decay:* Special data request to the Oral Health Section, Division of Public Health, North Carolina Department of Health and Human Services, December 2016. *School Nurse Ratio:* North Carolina Annual School Health Services Report, 2014-2015. Available online at: <https://www2.ncdhhs.gov/dph/wch/stats/>. *School Counselor Ratio:* American School Counselor Association. Student-to-School-Counselor Ratio 2013-2014. Available online at: <https://www.schoolcounselor.org/asca/media/asca/home/Ratios13-14.pdf>. *Children with Appropriate Immunizations:* Centers for Disease Control and Prevention. National Immunization Survey, Combined 6-vaccine Series coverage, 2013 and 2015. Available online at: <https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/data-reports/index.html>. *Children with Appropriate Immunizations at School Entry:* Special data request to the Immunization Branch, Division of Public Health, North Carolina Department of Health and Human Services, December 2016.

**Healthy Births:** *Women with Health Insurance Coverage and Women’s Health Status:* North Carolina Department of Health and Human Services, State Center for Health Statistics. 2015 and 2011 Behavioral Risk Factor Surveillance System, Percentage of women who currently have some type of health care coverage and Percentage of women who report good, very good, or excellent health. Available online at: <http://www.schs.state.nc.us/data/preconception/>. *Infant Mortality:* North Carolina Department of Health and Human Services, State Center for Health Statistics. North Carolina Infant Mortality Report, Table 3: Infant Death Rates (per 1,000) by Race/Ethnicity and Year. Available online at: <http://www.schs.state.nc.us/data/vital.cfm>. *Gestation, Birthweight, Babies Born to Women Who Smoke, and Early Prenatal Care:* North Carolina Department of Health and Human Services, State Center for Health Statistics. North Carolina Infant Mortality Report, Table 10b: North Carolina Resident Live Birth Trends: 2011-2015. Available online at: <http://www.schs.state.nc.us/data/vital.cfm>. *Pregnancy Intendedness, Prenatal Social Support, and Postpartum Checkup:* North Carolina Department of Health and Human Services, State Center for Health Statistics. N.C. Pregnancy Risk Assessment Monitoring System Survey, Was Pregnancy Intended, Postpartum Social Support, Postpartum Check for Mom, and Postpartum Depression, 2014. Special data request, March 2017. *Pregnancy-related Mortality:* North Carolina Department of Health and Human Services, State Center for Health Statistics. Trends in Maternal Mortality Statistics, Table 3: Pregnancy-related mortality by Race and Ethnicity, North Carolina Residents 1999-2013. Available online at: <http://www.schs.state.nc.us/data/maternal/>. *Postpartum Depression:* North Carolina Department of Health and Human Services, State Center for Health Statistics. N.C. Pregnancy Risk Assessment Monitoring System Survey. Special data request, January 2017. *Breastfeeding:* Centers for Disease Control and Prevention. National Immunization Survey, Rates of Any and Exclusive Breastfeeding by State among Children Born in 2013 and 2009, North Carolina – Percent of infants who were ever breastfed by Race/Ethnicity, 2009-2011, and North Carolina – Percent of infants who were exclusively breastfed through 6 months by Race/Ethnicity, 2009-2011. Available online at: [https://www.cdc.gov/breastfeeding/data/nis\\_data/](https://www.cdc.gov/breastfeeding/data/nis_data/) and <http://www.cdc.gov/nccdphp/DNPAO/index.html>. *Baby Friendly Hospitals:* Centers for Disease Control and Prevention. Breastfeeding Report Card, 2016 and 2012. Available online at: <http://www.cdc.gov/breastfeeding/data/reportcard.htm>.

**Safe Homes and Neighborhoods:** *Family Eats Meals Together, Family Reads to Children:* National Survey of Children’s Health, 2011/12 and 2007 Indicator 6.8: Family eats meals together, Indicator 6.7: Family reads to children, age 0-5 years. Available online at: <http://childhealthdata.org>. *High Housing Cost Burden, High-Poverty Neighborhoods:* Population Reference Bureau, analysis of data from the U.S. Census Bureau, American Community Survey, 2005-2015. Children Living in Households With a High Housing Cost Burden by Race and Ethnicity, Children Living in Areas of Concentrated Poverty by Race and Ethnicity. Data provided by National KIDS COUNT. Available online at: <http://datacenter.kidscount.org/>. *Asthma Diagnosis:* North Carolina Department of Health and Human Services, State Center for Health Statistics. N.C. Child Health Assessment and Monitoring Program, 2012 and 2007, Asthma. Available online at: <http://www.schs.state.nc.us/data/champ/survey.htm>. *Asthma Hospitalizations and Child Fatality:* Special data request to the State Center for Health Statistics, North Carolina Department of Health and Human Services, December 2016. *Children Investigated for Abuse and Neglect, Children Substantiated as Victims of Abuse and Neglect, Children Recommended/Received Services, Children in Foster Care, Children who Reenter Foster Care, Children who Exit to Permanency:* Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., Vaughn, J.S., Guest, S., Rose, R.A., Gwaltney, A.Y., and Gogan, H.C. (2015). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina (v3.2). Special data request, December 2016. *Child Abuse Homicides:* Special data request to the North Carolina Office of the Chief Medical Examiner, December 2016. *Child Fatality:* North Carolina Department of Health and Human Services, Division of Public Health. 2015 Child Deaths in North Carolina: Annual Report. Available online at: <http://www.ncleg.net/DocumentSites/Committees/NCCFTF/>; and Special data request to the State Center for Health Statistics, North Carolina Department of Health and Human Services, January 2017.

**Health Risk Factors:** *Children in Low-Income Homes:* Population Reference Bureau, analysis of data from the U.S. Census Bureau, 2005 through 2015 American Community Survey. Children Below 200 Percent Poverty by Race. Data provided by National KIDS COUNT. Available online at: <http://datacenter.kidscount.org/>. *Young Children in Low-Income Homes:* NC Child analysis of Integrated Public Use Microdata Series (IPUMS). IPUMS-USA, University of Minnesota. Available online at: [www.ipums.org](http://www.ipums.org). *High School Graduation:* North Carolina Department of Public Instruction. 2016 North Carolina Cohort Graduation Rate. Available online at: <http://apxcd.schools.nc.gov/pls/apex/f?p=775:1:0>. *Fourth Grade Reading:* National Center for Education Statistics, Summary of National Assessment of Educational Progress Results for North Carolina; and 2015 Reading State Snapshot Report. Available online at: <https://nces.ed.gov/nationsreportcard/states/>. *Births to Teen Girls and Repeat Births to Teen Girls:* North Carolina Department of Health and Human Services, State Center for Health Statistics. NC Resident Fertility Rates: Females Ages 15-19 by Race/Ethnicity, Perinatal Care Regions, and County of Residence, 2011 and 2015. Available online at: <http://www.schs.state.nc.us/data/vital.cfm>; and special data request to the State Center for Health Statistics, North Carolina Department of Health and Human Services, December 2016. *Food Insecurity:* Population Reference Bureau, analysis of data from the U.S. Census Bureau, Current Population Survey, Food Security Supplement. Data provided by National KIDS COUNT. Available online at: <http://datacenter.kidscount.org/>. *Physical Activity and Overweight or Obese:* North Carolina Department of Health and Human Services, State Center for Health Statistics. N.C. Child Health Assessment and Monitoring Program, 2012 and 2007, Physical Activity and BMI for Age-Weight Status Categories. Available online at: <http://www.schs.state.nc.us/data/champ/survey.htm>. *Tobacco, Alcohol, and Substance Use, and Attempted Suicide:* Centers for Disease Control and Prevention. High School Youth Risk Behavior Survey, 2015 and 2011. Available online at: <https://nccd.cdc.gov/Youthonline/App/Default.aspx>. *Major Depressive Episode, Received Treatment for Depression:* Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, and Behavioral Health Barometer, North Carolina, 2014. Available online at: <https://www.samhsa.gov/data/>.

WITH FINANCIAL SUPPORT FROM



BlueCross BlueShield  
of North Carolina

Foundation

An independent licensee of the Blue Cross and Blue Shield Association