

North Carolina

2013



2013

Child Health Report Card

WITH FINANCIAL SUPPORT FROM:

Access to Care and Preventive Health

Access to care and receipt of high quality preventive, acute, and chronic disease services is one of the pillars of good health. Children in North Carolina continue to make gains in rates of insurance. The percentage of uninsured children declined from 12.0% in 2007 to 8.4% in 2012, with dramatic declines among children living at less than 200% of the Federal Poverty Level (20.6% to 11.4%, respectively).

The Affordable Care Act, despite its rocky start, may increase the rates of insurance for children in North Carolina. The North Carolina Division of Medical Assistance estimated that 70,000 additional people, mostly children, will enroll in Medicaid in 2014. In addition, uninsurance rates among children living in families with incomes between 200 and 400% of the Federal Poverty Level may improve as families learn about subsidies available in the Health Insurance Marketplace and the penalties which they will incur if they chose to go without health insurance.

Under the Affordable Care Act, most children with private insurance are eligible for recommended preventive services at no additional cost to their families. With this is the opportunity to improve the receipt of preventive services for many children. In addition, a majority of children enrolled in Medicaid received preventive services in 2012 (59.2%). Recommended preventive services are detailed by the American Academy of Pediatrics in *Bright Futures*.

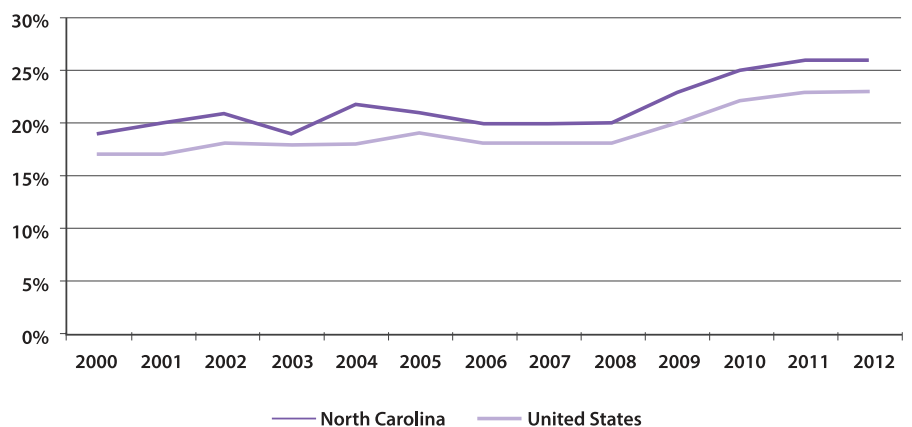
Families can more easily obtain dental coverage for their children in plans offered in the Health Insurance Marketplace. In addition, the North Carolina Medicaid program and North Carolina Health Choice covers dental services for children. The changes in Medicaid enrollment and dental care available in the Health Insurance Marketplace may lead to more children getting preventive oral health services.

Grade	Health Indicator	Current Year	Benchmark Year	Percent Change	Trend
	Insurance Coverage	2012	2007		
B	Percent of all children (ages 0-17) uninsured ⁺	8.4%	12.0%	-30.0%	Better
	Percent of children below 200% of poverty uninsured ⁺	11.4%	20.6%	-44.7%	Better
	Number of children covered by public health insurance (Medicaid or Health Choice) (in December)	1,135,016	896,792	26.6%	Better
	Percent of Medicaid-enrolled children receiving preventive care ⁺	59.2%	–	–	–
	School Health	2011-2012	2006-2007		
D	School nurse ratio	1:1,179	1:1,340	–	–
	Breastfeeding	2010	2005		
B	Percent of infants ever breastfed	74.9%	69.2%	8.2%	Better
	Percent of infants breastfed at least six months	48.5%	39.4%	23.1%	Better
	Immunization Rates	2012	2007		
C	Percent of children with appropriate immunizations:				
	Ages 19-35 months ¹	76.2%	77.3%	-1.4%	No Change
	At school entry ⁺	97.1%	97.3%	-0.2%	No Change
	Early Intervention	2012	2007		
A	Number of children (ages 0-3) enrolled in early intervention services to reduce effects of developmental delay, emotional disturbance, and/or chronic illness ⁺	19,664	15,048	30.7%	Better
	Environmental Health	2011	2006		
A	Lead: Percent of children (ages 1-2): ²				
	Screened for elevated blood levels	52.0%	42.8%	21.5%	Better
	Found to have elevated blood lead levels	0.4%	0.8%	-50.0%	Better
	Asthma:	2012	2007		
	Percent of children ever diagnosed	17.5%	17.1%	2.3%	No Change
	Hospital discharges per 100,000 children (ages 0-14)	163.7	166.2	-1.5%	No Change
	Dental Health	2010	2005		
B	Percent of children: [*]				
	With untreated tooth decay (kindergarten)	15.0%	22.0%	-31.8%	Better
	With one or more sealants (grade 5)	44.0%	43.0%	2.3%	No Change
	Percent of Medicaid-eligible children enrolled for at least 6 months who use dental services:	2012	2007		
	Ages 1-5	61.0%	47.0%	29.8%	Better
	Ages 6-14	67.0%	57.0%	17.5%	Better
	Ages 15-20	51.0%	45.0%	13.3%	Better

Health Risk Behaviors

The link between poverty and health outcomes is well documented. Poor children fare worse in almost every indicator of health, including birth outcomes, access to care, health-risk behaviors, and mortality. More than 160,000 children in North Carolina slipped into poverty during the recent recession, as the percentage of poor children increased from 19.5% of the child population in 2007 to 26%—more than one in every four children—in 2012. Studies show poverty and financial stress can impede children's cognitive development; impair their ability to learn; and contribute to behavioral, social, emotional and health problems later in life. The risks posed by poverty are greatest among children who experience poverty during their earliest developmental years (before age five), as well as those who experience persistent and deep poverty.

Percent of Children Living in Poverty 2000-2012, North Carolina and United States



Grade	Health Indicator	Current Year	Benchmark Year	Percent Change	Trend
High School Graduation		2011-2012	2006-2007		
B	Percent of high school students graduating on time with their peers ⁺	80.2%	69.5%	17.4%	Better
Child Poverty		2012	2007		
D	The percent of children in poverty				
	Ages 0-5	30.2%	22.6%	33.6%	Worse
	Ages 0-18	26.0%	19.5%	33.3%	Worse
Teen Pregnancy		2011	2006		
C	Number of pregnancies per 1,000 girls (ages 15-17):	19.7	34.8	-43.4%	Better
Weight Related*		2011	2006		
D	Percent of Children:				
	Meeting the recommended guidelines of 60 minutes or more of exercise 6 or 7 days a week				
	Ages 2-9	30.8%	—	—	—
	Ages 10-17	27.5%	—	—	—
	Meeting the recommended guidelines of two or fewer hours of screen time every day ³				
	Ages 2-9	81.4%	—	—	—
	Ages 10-17	60.6%	—	—	—
	Ages 10-17 who are overweight or obese ⁴	30.6%	30.9%	-1.0%	No Change
Tobacco Use		2011	2007		
C	Percent of students (grades 9-12) who used the following in the past 30 days:				
	Cigarettes	15.5%	19.0%	-18.4%	Better
	Smokeless tobacco	6.6%	8.6%	-23.3%	Better
Alcohol & Substance Abuse		2011	2007		
D	Percent of students (grades 9-12) who used the following:				
	Marijuana (past 30 days)	24.2%	19.1%	26.7%	Worse
	Alcohol (including beer) (past 30 days)	34.3%	37.7%	-9.0%	Better
	Cocaine (lifetime)	7.1%	7.0%	1.4%	No Change
	Methamphetamines (lifetime)	4.1%	4.0%	2.5%	No Change
	Prescription drugs without a doctor's prescription (lifetime)	20.4%	17.0%	20.0%	Worse

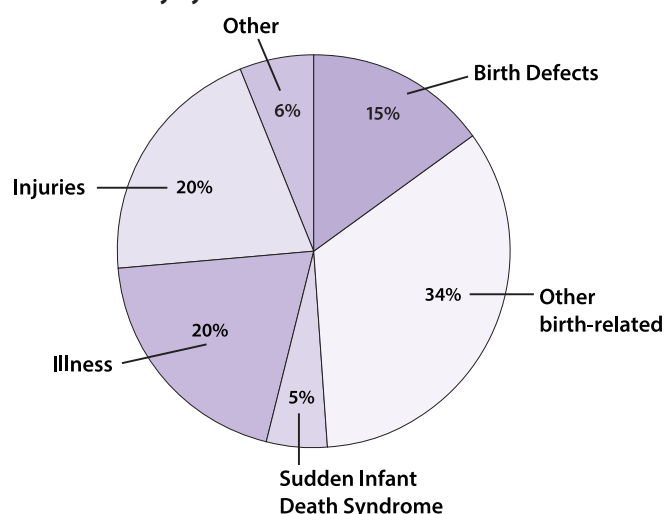
Death and Injury

After a steady decline over twenty years, child mortality has remained stable for the last three years. The child mortality rate improved from 105.2 per 100,000 children in 1990 to 57.5 in 2010, and remains steady at 58.6 in 2012. Declines in infant mortality have been responsible for much of this change, with an infant mortality rate of 10.6/1000 in 1990 and an infant mortality rate of 7.0/1000 in 2010. The infant mortality rate for 2012 was 7.4/1000. Much of this decline can be attributed to improvements in obstetric and neonatal care. Smaller declines in child mortality can be attributed to improved motor vehicle safety, access to trauma services, declines in vaccine preventable deaths, and improvements in access to preventive and chronic care.

The largest contributors to child mortality remain prematurity (the majority of 'Other birth-related' conditions in the figure), birth defects, and sudden infant death syndrome. These conditions account for 50% of child mortality. Infant mortality accounts for 66% of all child mortality. In addition to continued improvements in neonatal care, efforts to reduce prematurity will likely improve child mortality. Community Care of North Carolina's Pregnancy Medical Home initiative, among other things, seeks to improve the delivery of progesterone to women at risk for prematurity, provide assistance with behavioral risk factors, and offer care management services to women with high risk pregnancies. This type of multi-faceted approach to preventing prematurity is likely to be an important part of North Carolina's approach to child mortality reduction in the coming years. The other essential opportunity for decreasing infant mortality is to ensure that women are in optimum health at the time of conception and pregnancies are planned and appropriately spaced.

After birth related conditions, injury and illness are the next most common causes of child death. Of the 298 injuries in 2012, 72% were unintentional, with motor vehicle crashes responsible for 108 child deaths. Homicide and suicide accounted for 82 child deaths in 2012. Improvements in supervision, environmental controls to keep children safe, and mental health services may hold the potential to decrease child mortality from injury.

Child Mortality by Cause 0-17



Grade	Health Indicator	Current Year	Benchmark Year	Percent Change	Trend
Birth Outcomes		2012	2007		
B	Number of infant deaths per 1,000 live births	7.4	8.5	-12.9%	Better
	Percent of infants born weighing less than 5 lbs., 8 ozs (2,500 grams)	8.9	9.2	-3.3%	No Change
Maternal Risk Factors		2012			
C	Percent of babies born to women who smoke	10.6	-	-	-
Child Fatality		2012	2007		
B	Number of deaths (ages 0-17) per 100,000	58.6	75.1	-22.0%	Better
	Number of deaths:				
	Motor Vehicle-related	108	142	-	-
	Drowning	29	26	-	-
	Fire/Burn	8	24	-	-
	Bicycle	2	4	-	-
	Suicide	35	26	-	-
	Homicide	47	61	-	-
	Firearm	36	52	-	-
	Poisoning	13	17	-	-
Child Abuse and Neglect		2012	2007		
C	Number of children: ⁴				
	Children investigated for child abuse or neglect	133,949	122,369	-	-
	Substantiated as victims of abuse or neglect ⁵	11,170	14,522	-	-
	Recommended services ⁵	22,931	19,632	-	-
	Recurrence of Maltreatment	7.1	7.0	1.4%	No Change
	Confirmed child deaths due to abuse	28	25	-	-

For 19 years, the *North Carolina Child Health Report Card* has tracked the wellness of children in our state. The *Report Card* compiles 40 indicators of child health and safety into one easy-to-read document. Indicators are selected by a panel of experts for their timeliness, consistency and ability to convey salient information about the health and safety of children in North Carolina. Our hope is that this document will enrich state and community discussions about strategies to improve child health, illuminate emerging data trends, and support strategic planning for future investments.

Statewide data are presented for the most recent year available (usually 2012) and a benchmark year (usually 2007). Comparing data from before and after the recession reveals positive developments: more children in North Carolina are insured than at any other time in state history and, in general, child health has improved. It is important to note, however, that this timeframe obscures recent data shifts that show our children are now losing ground in important areas.

Due to space constraints data by race and ethnicity are not presented in this document, though observable disparities exist among several indicators. Visit the North Carolina state profile on the KIDS COUNT Data Center at datacenter.kidscount.org/nc to view disaggregated data, where available, and www.ncchild.org to download corresponding county-level data cards to see how children fare in your community.

**“For these are all our children, we will all profit by or pay
for what they become.”—James Baldwin**

Good health during the earliest years forms a solid foundation for success in school and in life. Children who have insurance are more likely to have a regular care provider, to get the treatment they need when they are sick or injured, and have better health outcomes than uninsured children.

The Patient Protection and Affordable Care Act of 2010 (ACA) was enacted to reduce costs, improve health care quality and expand access to health coverage for uninsured populations. The Affordable Care Act fundamentally changes the health insurance landscape for children and their families:

- Young adults under the age of 26 are able to stay on their parents' health plan.
- The Children's Health Insurance Program has been extended until 2015, with an enhanced federal match until 2019.
- Pediatric care (including dental), maternity and newborn care, and preventive and wellness services are now covered as essential benefits.
- Insurance companies are no longer able to refuse coverage to children with preexisting conditions.
- Lifetime limits have been eliminated for most benefits.
- School-Based Health Centers have been strengthened.

Though findings are mixed, this year's *Report Card* shows progress for children in several areas. These gains reflect sustained investments made by the North Carolina General Assembly, as well as health care improvements implemented under ACA:

- Although child poverty rates remain elevated, the share of uninsured children in North Carolina continues to decline.
- Enrollment in Medicaid and North Carolina Health Choice remains strong. Participation has increased 27% since the start of the economic downturn.
- The school nurse ratio has improved slightly in recent years.

Yet challenges remain. Despite long-term progress in infant mortality there has been a non-significant increase in the rate for two consecutive years as racial disparities have widened. North Carolina continues to compare poorly with other states ranking 46th in the nation for infant deaths. Studies show women's health status before pregnancy is a strong predictor of her newborn's health. Addressing women's health needs and improving the quality and continuity of care they receive throughout their childbearing years would prepare more women to enter pregnancy in good health and improve women's chances for safe deliveries and positive birth outcomes.

The majority of uninsured children in North Carolina are eligible for Medicaid and CHIP, but are currently not enrolled. Research shows that extending health insurance coverage to parents increases the likelihood that their children will gain coverage and remain insured once they do, while improving parents' health and boosting families' economic security. Many families have access to more affordable health insurance coverage through the newly established marketplaces; however, without Medicaid expansion many low-income parents will not be able to purchase affordable coverage.

As the picture of health reform continues to evolve in North Carolina gains in insurance coverage and other important indicators should not be assumed. Instead, advocates, providers, community and business leaders, state and federal governments must collaborate to strengthen investments in prevention programs and ensure that public health insurance programs remain strong.

Data Sources 2013 Child Health Report Card

Access to Care and Preventive Health

Uninsured: U.S. Current Population Survey, Annual Social and Economic Supplement. CPS Table Creator. Available online at: <http://www.census.gov/cps/data/cpstablecreator.html>; *Public Health Insurance:* Division of Medical Assistance, North Carolina Department of Health and Human Services. Special data request in August 2013; *Medicaid-Enrolled Preventive Care:* Calculated using data from the Division of Medical Assistance, North Carolina Department of Health and Human Services. Health Check Participation Data. Available online at: <http://www.dhhs.state.nc.us/dma/healthcheck/>; *Breastfeeding:* Centers for Disease Control and Prevention. Breastfeeding Practices—Results from the National Immunization Survey. Available online at: http://www.cdc.gov/breastfeeding/data/NIS_data/index.htm; *Immunization Rates for 2-year-olds:* Centers for Disease Control and Prevention, National Immunization Survey. Available online at <http://www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#nis>; *Kindergarten Immunization and Early Intervention:* Women and Children's Health Section, Division of Public Health, North Carolina Department of Health and Human Services. Special data request in August 2013; *Lead:* North Carolina Childhood Lead Poisoning Prevention Program, Department of Environment and Natural Resources. 2012 data were not available at time of publication; *Asthma Diagnosed:* State Center for Health Statistics, North Carolina Department of Health and Human Services. Child Health Assessment and Monitoring Program. Available online at: <http://www.schs.state.nc.us/SCHS/champ/>; *Asthma Hospitalizations:* State Center for Health Statistics, North Carolina Department of Health and Human Services. County Health Data Book. Available online at: <http://www.schs.state.nc.us/SCHS/about/chai.html>; *Untreated Tooth Decay and Sealants:* Oral Health Section, Division of Public Health, North Carolina Department of Health and Human Services. 2012 data were not available at time of publication; *Medicaid-Enrolled Children Receiving Dental Services:* Division of Medical Assistance, North Carolina Department of Health and Human Services. Special data request in August 2013.

Health Risk Behaviors

Graduation Rate: North Carolina Department of Public Instruction. State Four-Year Cohort Graduation Rate. Available online at <http://www.ncpublicschools.org/graduate/statistics/>; *Poverty:* U.S. Census Bureau, American Fact Finder. Table CP02. Available online at www.americanfactfinder2.census.gov; *Teen Pregnancy:* State Center for Health Statistics, North Carolina Department of Health and Human Services. North Carolina Reported Pregnancies. Available online at <http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm>; *Weight Related:* State Center for Health Statistics, North Carolina Department of Health and Human Services. Child Health Assessment and Monitoring Program. 2012 data were not available at time of publication. Overweight and obese data are available online at: <http://www.schs.state.nc.us/SCHS/champ/>; *Tobacco Use:* Tobacco Prevention Branch, Division of Public Health, North Carolina Department of Health and Human Services. North Carolina Youth Tobacco Survey. Available online at <http://www.tobaccopreventionandcontrol.ncdhhs.gov/data/index.htm>; *Physical Activity, Alcohol and Substance Abuse:* North Carolina Department of Public Instruction. Youth Risk Behavior Survey, North Carolina High School Survey detailed tables. Available online at <http://www.nchealthyschools.org/data/yrebs/>.

Death and Injury

Infant Mortality, Low Birth-Weight Infants, and Babies Born to Women Who Smoke: State Center for Health Statistics, North Carolina Department of Health and Human Services. Table 1 and 10. Available online at: <http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm>; *Child Fatality and Deaths Due to Injury:* State Center for Health Statistics, North Carolina Department of Health and Human Services. Available online at: <http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm>; *Poisoning ages 10-17:* North Carolina Department of Health and Human Services. NC DETECT. Special data request in September 2013; *Child Abuse and Neglect and Recurrence of Maltreatment:* Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., Vaughn, J., Bauer, R, and Reese, J. (2013). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina. Special data request in July 2013. Data available online from the University of North Carolina at Chapel Hill Jordan Institute for Families website. URL:<http://ssw.unc.edu/cw/>; *Firearm Deaths and Child Abuse and Neglect Homicides:* North Carolina Child Fatality Prevention Team, Office of the Chief Medical Examiner, North Carolina Department of Health and Human Services. Special data request in August 2013. Please note the analysis, conclusions, opinions and statements expressed within this report are not necessarily those of the CFPT or OCME.

Data Notes 2013 Child Health Report Card

1. Immunization is measured for children 19-35 months of age using the 4:3:1:3:3:1 measure.
 2. Elevated blood lead level is defined as 5 micrograms per deciliter or greater. This definition has been revised from 10 micrograms per deciliter or greater.
 3. Screen time includes TV, videos, or DVDs OR playing video games, computer games or using the Internet.
 4. Overweight is defined as a body mass index equal to or greater than the 85th percentile using federal guidelines; obese is defined as a body mass index equal to or greater than the 95th percentile.
 5. Findings represent exclusive counts of reports investigated in a state fiscal year. The number substantiated includes those substantiated of abuse, neglect, or abuse and neglect.
- * Updated lead, tooth decay, dental sealant and CHAMP data were not available at the time of publication.
+ Data for indicators followed by a + sign are fiscal or school year data ending in the year given. For example, immunization rates at school entry labeled 2010 are for the 2009-2010 school year.

Grades and Trends

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

Data trends are 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. Due to data limitations, only the indicators for alcohol and drug use have been tested for statistical significance. Grades and trends are based on North Carolina's performance year-to-year and what level of child health and safety North Carolina should aspire to, regardless of how we compare nationally.

Laila A. Bell from Action for Children North Carolina and Kimberly Alexander-Bratcher and Adam Zolotor, MD from the North Carolina Institute of Medicine led the development of this publication, with valuable input from child health experts, and many staff members of the North Carolina Department of Health and Human Services.

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