



North Carolina Institute of Medicine
shaping policy for a healthier state

North Carolina

2011



2011

Child Health Report Card

WITH FINANCIAL SUPPORT FROM:

Annie E. Casey Foundation



Access to Care and Preventive Health

Access to preventive and primary care is critical to assuring the health and well-being of our children. Insured children are less likely to use the emergency room as their primary source of care, more likely to seek preventive care (in a primary care setting), and are better equipped for academic success. Despite a continuing decline in employer-sponsored health insurance in North Carolina, overall coverage rates among children have been sustained by expansions in Medicaid and Health Choice, the State Children's Health Insurance Program. Now, as one in four children in North Carolina lives in poverty and high rates of unemployment persist, public health insurance programs play an even more important role in protecting children's access to the care they need to achieve good health and remain healthy.

New legislation extends Community Care of North Carolina (CCNC), the state's nationally-recognized system of managed care, to children enrolled in Health Choice. This expansion will create cost savings for the state and improve health outcomes for children by connecting them with a medical home and improving the quality of care. Other investments in prevention and early intervention have strengthened child health. For example, preventive actions have led to sustained reductions in lead exposure, and serious chronic illnesses such as asthma are being identified earlier and managed more successfully due to CCNC. Recent cuts to the Early Intervention Branch of the Division of Public Health will negatively impact service delivery to children in the state's nationally acclaimed early intervention system in the coming data years.

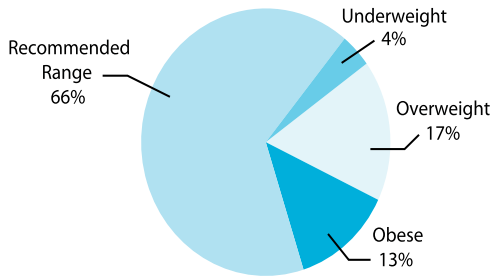
The data indicate areas that merit increased attention: North Carolina continues to lag behind the rest of the country in the initiation and duration of breastfeeding, a practice which can reduce both mortality and morbidity among infants. Although more than half of all Medicaid-enrolled children in North Carolina receive dental care, cuts to the state's oral health program and low reimbursement rates threaten children's access to treatment.

Grade	Health Indicator	Current Year	Benchmark Year	Percent Change	Trend
Insurance Coverage		2010	2005		
B	Percent of all children (ages 0-18) uninsured ⁺	11.8%	12.4%	-4.8%	No Change
	Percent of children below 200% of poverty uninsured ⁺	18.4%	21.1%	-12.8%	Better
	Number of children covered by public health insurance (Medicaid or Health Choice) (in December)	1,046,396	841,985	24.3%	Better
	Percent of Medicaid-enrolled children receiving preventive care ⁺	55.9%	—	—	—
Breastfeeding		2008	2003		
C	Percent of infants ever breastfed	67.3%	71.7%	-6.1%	Worse
	Percent of infants breastfed at least six months	37.0%	32.1%	15.3%	Better
Immunization Rates		2010	2005		
B	Percent of children with appropriate immunizations:				
	Ages 19-35 months ¹	81.6%	81.6%	0.0%	No Change
	At school entry ⁺	97.0%	98.0%	-1.0%	No Change
Early Intervention		2010	2005		
A	Number of children (ages 0-3) enrolled in early intervention services to reduce effects of developmental delay, emotional disturbance, and/or chronic illness ⁺	18,271	12,436	46.9%	Better
Environmental Health		2010	2005		
A	Lead: Percent of children (ages 1-2): ²				
	Screened for elevated blood levels	51.3%	40.6%	26.4%	Better
	Found to have elevated blood lead levels	0.4%	0.9%	-55.6%	Better
	Asthma:				
	Percent of children ever diagnosed	16.8%	17.8%	-5.6%	Better
	Hospital discharges per 100,000 children (ages 0-14) (2009, 2004)	175.0	180.2	-2.9%	No Change
Dental Health		2009	2004		
C	Percent of children: ⁺				
	With untreated tooth decay (kindergarten)	17.0%	23.0%	-26.1%	Better
	With one or more sealants (grade 5)	44.0%	41.0%	7.3%	Better
	Percent of Medicaid-eligible children enrolled for at least 6 months who use dental services:	2010	2005		
	Ages 1-5	59.0%	42.0%	40.5%	Better
	Ages 6-14	64.0%	52.0%	23.1%	Better
	Ages 15-20	48.0%	39.0%	23.1%	Better

Health Risk Behaviors

Although children in North Carolina are generally healthy, these data show our youth are developing habits that can lead to chronic diseases and other health problems in adulthood. Overweight and obesity, lack of physical activity, and tobacco use all contribute to adult cardiovascular disease as well as many other chronic diseases. Substance use can negatively affect school performance, lead to increased violence and injury, and cause physical and emotional health problems. Unprotected sexual activity increases the risk of unintended pregnancy and sexually transmitted diseases. These health problems are entirely preventable. If we provide youth with the information and skills they need to protect themselves, they, along with their families and the state, will benefit.

Weight Status of North Carolina Children Ages 10-17



Child and youth health behaviors and risk-taking are heavily influenced by the communities in which they live. State policies shape our schools, parks, neighborhoods, and other physical environments, afterschool options, access to healthy foods, supports for working families and other key factors. Communities, parents, state and local governments, foundations, and our schools can all provide strong positive influences to help youth make better decisions about their health behaviors.

Due to sustained investments in multi-faceted campaigns over the last decade, significant progress has been made in reducing youth cigarette use and teen pregnancy. A broad coalition of state agencies, foundations, and other organizations are supporting a similar multi-faceted effort to increase children's physical activity and improve nutrition. Today this progress is threatened by state budget cuts that have drastically reduced or eliminated many of the programs and services that facilitate positive changes in health behaviors.

Grade	Health Indicator	Current Year	Benchmark Year	Percent Change	Trend
	Teen Pregnancy	2010	2005		
C	Number of pregnancies per 1,000 girls (ages 15-17)	26.4	35.6	-25.8%	Better
	Communicable Diseases	2010	2005		
A	Number of newly reported cases:				
	Congenital syphilis at birth	10	13	-	-
	Perinatal HIV/AIDS at birth	0	1	-	-
	Tuberculosis (ages 0-14)	24	21	-	-
	Weight-Related	2010	2005		
C	Percent of children ages 10-17:				
	Meeting the recommended guidelines of 60 minutes or more of exercise daily	31.2%	-	-	-
	Meeting the recommended guidelines of no more than 2 hours of screen time daily ³	45.8%	-	-	-
	Overweight or obese ⁴	30.1%	32.0%	-5.9%	Better
	Alcohol, Tobacco & Substance Abuse	2009	2005		
D	Percent of students (grades 9-12) who used the following in the past 30 days:				
	Cigarettes	16.7%	20.3%	-17.7%	Better
	Smokeless tobacco	8.5%	9.2%	-7.6%	Better
	Marijuana	19.8%	21.4%	-7.5%	Better
	Alcohol (beer)	35.0%	42.3%	-17.3%	Better
	Cocaine (lifetime)	5.5%	7.9%	-30.4%	Better
	Methamphetamines (lifetime)	3.4%	6.5%	-47.7%	Better
	Percent of students (grades 9-12) who have taken a prescription drug without a doctor's prescription one or more times in their life	20.5%	17.1%	19.9%	Worse

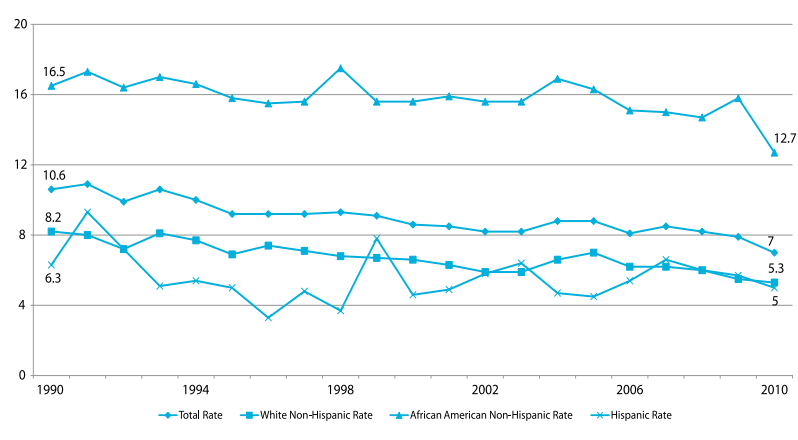
Death and Injury

The sustained efforts over the past twenty years of the North Carolina Department of Health and Human Services, the North Carolina Child Fatality Task Force, the March of Dimes, and others to reduce infant mortality have helped North Carolina improve from having one of the highest infant mortality rates in the country in 1988, to approaching the national average in 2010. This gain reflects improvements in a number of factors such as maternal smoking, substance abuse, nutrition, access to prenatal care, medical problems, and chronic illness.

Child abuse is preventable, as are most child injuries and fatalities. Reviewing child injuries and fatalities can improve the health and safety of children and prevent other children from being injured or dying. Our state and local communities have many of the necessary tools to change the circumstances that led to the injuries, deaths, abuse, and neglect highlighted below.

North Carolina has aggressively worked to improve motor vehicle safety through the passage of booster seat laws, seat belt laws, and the implementation of the graduated driver's licensing system. As a result of these efforts, North Carolina is a national leader in motor vehicle safety and has seen a dramatic decline in child motor vehicle fatalities. North Carolina's Multiple Response System allows the Division of Social Services to respond more quickly and effectively to child abuse and neglect allegations. The increase in the number of families receiving services, and the reduction in deaths due to child abuse, point to improved outcomes for North Carolina's children and families. The North Carolina Child Fatality Task Force continues to explore ways to prevent child deaths and make recommendations to the state to improve child safety.

North Carolina Infant Mortality Rates by Race/Ethnicity, 1990-2010



Grade	Health Indicator	Current Year	Benchmark Year	Percent Change	Trend
Birth Outcomes		2010	2005		
B	Number of infant deaths per 1,000 live births	7.0	8.8	-20.5%	Better
	Percent of infants born weighing less than 5 lbs., 8 ozs (2,500 grams)	9.1	9.2	-1.1%	No Change
Child Fatality		2010	2005		
B	Number of deaths (ages 0-17) per 100,000	57.5	76.9	-25.2%	Better
	Number of deaths:				
	Motor Vehicle-related	100	155	-	-
	Drowning	37	21	-	-
	Fire/Burn	6	13	-	-
	Bicycle	2	7	-	-
	Suicide	23	29	-	-
	Homicide	42	78	-	-
	Firearm	39	61	-	-
Child Abuse and Neglect		2010	2005		
C	Number of children ⁴				
	Receiving assessments for abuse and neglect	126,612	120,410	-	-
	Substantiated as victims of abuse or neglect ⁵	11,229	N/A	-	-
	Recommended services ⁵	28,815	N/A	-	-
	Recurrence of Maltreatment	6.8%	6.9%	-1.4%	No Change
	Confirmed child deaths due to abuse	19	35	-	-

The purpose of the *North Carolina Child Health Report Card* is to heighten awareness – among policymakers, practitioners, the media, and the general public – of the health of children and youth across our state. All of the leading child health indicators are summarized in this easy-to-read document. This is the 17th annual Report Card, and we hope it will once again encourage everyone concerned about young North Carolinians to see the big picture and rededicate their efforts to improving the health and safety of children.

Statewide data are presented for the most current year available (usually 2010), with a comparison year (usually 2005) as a benchmark. The specific indicators were chosen not only because they are important, but also because data are available. As data systems expand and become more comprehensive, indicators are added to the Report Card so that over time the “picture” of child health and safety also expands.

The indicators have been grouped into three broad categories: Access to Care and Preventive Health, Health Risk Behaviors, and Death and Injury. However, it should be recognized that virtually all of the indicators are interrelated.

Because of space constraints, racial disparity is presented for only one indicator, infant mortality. Disparities data for other indicators can be found on Action for Children North Carolina’s website at www.ncchild.org.

**“We worry about what a child will become tomorrow,
yet we forget that he is someone today.”—Steve Tauscher**

As noted in the narratives of the three categories, the data for individual indicators provide reason for both encouragement and concern. Taken together, however, there are several important underlying messages:

- It is clear that North Carolina’s child health outcomes are not a matter of happenstance, nor are they inevitable. They mirror investments made by adults: the attentiveness of parents, the hard work and perseverance of community agencies and child advocates, and the fiscal and legislative investments made by the North Carolina General Assembly.
- While government can provide important supports, all adults have a role in affecting children’s health status and risk-taking behaviors as they shape the community and serve as role models.
- All children deserve a healthy start, and data (both in this Report Card and from many other sources) indicate that racial disparities in health outcomes remain disturbingly wide. Targeted health interventions must be made to narrow these gaps.
- While our greatest state-level fiscal investment is in the education of our children, we must recognize that this investment can be maximized only if our children are healthy and safe. Children cannot achieve their potential if they are frequently absent from school due to asthma and other chronic illnesses, are living with untreated developmental delays, are dealing with the pain of tooth decay, or do not feel safe in their homes, schools, or communities.
- The downturn in the economy means that more children than ever before are living in families under significant financial and social stress. This same downturn has led to state budget reductions in health, education and other services for children and families, creating the paradox of increasing needs and decreasing resources. It should be noted that health indicators frequently lag behind changes in the economic and support system. Thus, North Carolinians should brace for declines in the indicators of child health in *Report Cards* over the next few years.

Our leaders face the continuing challenge of improving the economy while protecting the most vulnerable portions of our population, especially our children. In virtually all surveys of “business friendliness,” North Carolina ranks among the top five states. However, on virtually all measures of child well-being, North Carolina ranks between 35th and 45th in the nation. The two—business climate and child well-being—are not independent. The future prosperity of our state depends on the health and well-being of our next generation. The challenge for all North Carolinians is to make our state the best place to raise a child, just as it is a great state to conduct business. Our children, and our future, deserve no less.

Data Sources 2011 Child Health Report Card

Access to Care and Preventive Health

Uninsured: North Carolina Institute of Medicine. Analysis of the Annual Social and Economic Supplement, Current Population Survey, U.S. Census Bureau and Bureau of Labor Statistics; **Public Health Insurance:** Special data request to the Division of Medical Assistance, N.C. Department of Health and Human Services, September 2011; **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>. For 2010 the 4:3:1:3:3:1-S was used and for 2005 the 4:3:1:3:3:1 was used. See notes for more details; **Kindergarten immunization data and early intervention:** Special data request to the Women and Children's Health Section, Division of Public Health, North Carolina Department of Health and Human Services, July 2011; **Lead:** N.C. Childhood Lead Poisoning Prevention Program, Department of Environment and Natural Resources. 2009 Special data request in July 2010. 2004 data available online at: http://www.deh.enr.state.nc.us/ehs/children_health/NorthCarolinaChildhoodLeadScreeningData2004Final.pdf; **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>; **Dental Health:** Oral Health Section, Division of Public Health, North Carolina Department of Health and Human Services. NC County Level Oral Health Status Data. Available online at: <http://www.ncdhhs.gov/dph/oralhealth/stats/MeasuringOralHealth.htm>. Special data request to the Division of Medical Assistance, NC DHHS, July 2010.

Health Risk Behaviors

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>. **Communicable Diseases:** Special data request to the HIV/STD Section, Division of Public Health, North Carolina Department of Health and Human Services, September 2011 and Special data request to the Division of Public Health/Epidemiology, NC DHHS, September 2011; **Weight Related:** State Center for Health Statistics, North Carolina Department of Health and Human Services. Child Health Assessment and Monitoring Program. Special data request in October 2011. Overweight and Obese 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 and Low Birth-Weight Infants: State Center for Health Statistics, North Carolina Department of Health and Human Services. Infant Mortality Statistics, Tables 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. Child Deaths in North Carolina. Available online at: <http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm>. **Child Abuse and Neglect and Recurrence of Maltreatment:** Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., and Weigensberg, E.C. (2010). NC Child Welfare Program. Retrieved October 26, 2010, from University of North Carolina at Chapel Hill Jordan Institute for Families website. URL: <http://ssw.unc.edu/cw/>; **Firearm Deaths and Child Abuse Homicide:** information was obtained from the North Carolina Child Fatality Prevention Team (Office of the Chief Medical Examiner) for this report. However, the analysis, conclusions, opinions and statements expressed by the author and the agency that funded this report are not necessarily those of the CFPT or OCME.

Data Notes 2011 Child Health Report Card

1. Immunization is measured for children 19-35 months of age using the 4:3:1:3:3:1 measure. For 2010, the 4:3:1:3:3:1-S measure is used because it takes into account the Hib vaccine shortage, the required suspension of the booster dose, and the difference between types of Hib vaccines used by the states. More information is available online at: <http://www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#nis>.
2. Elevated blood lead level is defined as 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 equal to or greater than the 95th percentile.
5. The number substantiated and recommended services findings are not exclusive, i.e., a child may be counted more than once within those categories and may be counted in both of those categories. This is the case because a child may have more than one report investigated in a state fiscal year. The number substantiated includes those substantiated of abuse, neglect, or abuse and neglect.

* 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 group of health experts to bring attention to the current status of each indicator of child health and safety. Grades reflect the state of children in North Carolina and are not meant to judge the state agency or agencies providing the data or the service. Agencies like those responsible for child protection and dental health have made a great deal of progress in recent years that are not reflected in these grades. The grades reflect how well our children are doing, not agency performance. Grades are a subjective measure of how well children in North Carolina are faring in a particular area.

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 Berkeley Yorkery from the North Carolina Institute of Medicine led the development of this publication, with valuable input from the panel of health experts and from many staff members of the North Carolina Department of Health and Human Services.

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