Action for Children North Carolina

health policy
North Carolina Institute of Medicine

North Carolina 2007 Child Health Report Card

kids count

WITH FINANCIAL SUPPORT FROM:

Annie E. Casey Foundation

BlueCross BlueShield of North Carolina Foundation

North Carolina Department of Health and Human Services

BB&T

novo nordisk®

FOOD LION CHARITABLE FOUNDATION

PBGL ARCHITECTURE

Access to Care and Preventive Health

Access to continuous preventive and primary care is critical to assuring the health of our children. The data indicate that enrollment in public insurance programs has grown dramatically, and these children, in turn, receive preventive care. However, it is alarming to note that the uninsured rate for children has increased by 20%, largely because North Carolina is among the national leaders in the loss of employer-based coverage. The General Assembly recently approved an expansion of children's health insurance, called "N.C. Kids' Care," to take effect in July 2008. This help comes as needs among North Carolina's working families continue to increase.

North Carolina's investments in prevention and early intervention have been exemplary. Immunization rates are among the best in the nation, the early intervention system for young children with special needs has received national acclaim, exposure to lead continues to diminish and serious chronic illnesses, such as asthma, are being identified earlier and managed more successfully. Access to dental care continues to be a major problem that warrants serious attention.

Health Indicator	Current Year	Benchmark Year	% Change	Grade	Trend
Insurance Coverage	**2006**	**2001**			
% of all children (age 0-17) uninsured	13.2%	11.0%	20.0%	**D**	Worse
Number of children (age 0-18) covered by public health insurance (Medicaid or Health Choice)	864,541	634,135	36.3%	**A**	Better
% of Medicaid-enrolled children (age 0-18) receiving preventive care	**2006** 73.5%	**2000** 66.8%	10.0%	**B**	Better
Breastfeeding[1]	**2004**	**2000**			
% ever breastfed	72.0%	66.5%	8.3%	**B**	Better
% breastfed at six months	34.2%	29.3%	16.7%	**C**	Better
Immunization Rates[2]	**2006**	**2001**			
% of children with appropriate immunizations:					
At age 2	82.3%	80.4%	2.4%	**A**	No Change
At school entry	97.3%	98.9%	-1.6%	**A**	No Change
Early Intervention	**2005-2006**	**2001**			
Number of children (age 0-3) enrolled in early intervention services to reduce effects of developmental delay, emotional disturbance and/or chronic illness	14,521	9,845	47.5%	**B**	Better
Environmental Health	**2006**	**2001**			
Lead:[3] % of children (age 12-36 months):					
Screened for elevated blood lead levels	42.8%	35.1%	21.9%	**C**	Better
Found to have elevated blood lead levels	0.8%	1.8%	-55.6%	**B**	Better
Asthma:[4]					
% of children diagnosed	17.1%	-	n/a	**D**	n/a
Hospital discharges per 100,000 children (age 0-14)	**2005** 164.6	**2000** 201.3	-18.2%	**B**	Better
Dental Health	**2007**	**2002**			
% of children:					
With untreated tooth decay (kindergarten)	19.0%	24.0%	-20.8%	**D**	Better
With one or more sealants (grade 5)	42.0%	37.0%	13.5%	**C**	Better
% of Medicaid-eligible children:	**2006**	**2001**			
Age 1-5 who use dental services	23.8%	20.3%	17.2%	**D**	Better
Age 6-14 who use dental services	47.7%	35.2%	35.5%	**D**	Better
Age 15-20 who use dental services	32.6%	22.3%	46.2%	**D**	Better

Health Risk Behaviors

While government can play an important supportive role, children's health behaviors and risk-taking (pregnancy, overweight, physical activity, alcohol, tobacco and substance use, violence, driving habits, etc.) are largely determined by the actions of adults. Whether as role models (children see everything adults do) or as accomplices (a teen would not get access to alcohol without the involvement of an adult at some point), parents or other adults are often the key factors in determining children's health outcomes.

There are some successes of note. The national decline in teen pregnancy rates continues to be experienced in North Carolina, though the wide racial disparity in rates is of particular concern. The continued drop in congenital syphilis and the near elimination of perinatal transmission of HIV/AIDS are true public health success stories. The North Carolina Department of Health and Human Services and the North Carolina Health and Wellness Trust Fund are collaborating on a Healthy Weight Initiative. Regrettably, there has been no real progress yet in improving the relevant indicators. These indicators are a function of cultural complexities that will be very difficult to overcome. These agencies have invested in initiatives that have helped lead to declines in teen smoking. However, teen use of alcohol and illicit substances continue at unacceptably high levels.

Health Indicator	Current Year	Benchmark Year	% Change	Grade	Trend
Teen Pregnancy	**2005**	**2000**			
Number of pregnancies per 1,000 girls (age 15-17):					
All	35.6	44.4	-19.8%	**C**	Better
White	27.5	35.5	-22.5%	**C**	Better
All Other Races	50.9	62.8	-18.9%	**D**	Better
Communicable Diseases	**2006**	**2001**			
Number of newly-reported cases:					
Congenital Syphilis at birth	6	19	-	**B**	-
Perinatal HIV/AIDS at birth	2	6	-	**A**	-
Tuberculosis (age 0-19)	29	22	-	**C**	-
Overweight[5]	**2006**	**2001**			
% of low-income children who are overweight:					
Age 2-4	15.2%	12.0%	26.7%	**D**	Worse
Age 5-11	25.2%	20.3%	24.1%	**F**	Worse
Age 12-18	29.5%	26.0%	13.5%	**F**	Worse
Physical Activity[6]	**2005**	**2001**			
% of students (grades 9-12) who were physically active for a total of 60 minutes or more per day on five or more of the past seven days	45.9%	-	n/a	**D**	n/a
Alcohol, Tobacco & Substance Abuse	**2005**	**2001**			
% of students (grades 9-12) who used the following in the past 30 days:					
Cigarettes	20.3%	27.8%	-27.0%	**D**	Better
Smokeless Tobacco	9.2%	8.9%	3.4%	**C**	No Change
Marijuana	21.4%	20.8%	2.9%	**F**	No Change
Alcohol (including beer)	42.3%	38.2%	10.7%	**F**	No Change
Cocaine (lifetime)	7.9%	6.7%	17.9%	**D**	No Change
Methamphetamines (lifetime)	6.5%	7.8%	-16.7%	**D**	No Change

Death and Injury

After two years of slight increases, in 2006 the infant death rate dropped to the lowest ever recorded in North Carolina. The rate has dropped by a remarkable 12% in the past decade. Hopefully, this trend will continue, for North Carolina still ranks poorly among the states. The State Infant Mortality Collaborative is giving increased attention to low birthweight and prematurity, which have been serious, relatively intractable components of infant mortality. The persistently wide racial disparity is cause for grave concern, warranting increased attention.

The overall child death rate also dropped to the lowest level ever recorded, largely due to passage of several child safety laws in recent years. Injuries are the leading cause of death in children ages 1-17. The North Carolina Child Fatality Task Force, as well as state and local review teams, continues to explore ways to prevent child deaths. Increases in homicides and firearm-related deaths in recent years command increased attention.

In an attempt to deal with child abuse and neglect more effectively, all 100 counties now participate in the Multiple Response System. Since this has changed many data definitions, trend data on assessments and substantiations are not available. However, the recurrence of maltreatment has begun to decline, which is encouraging. Regrettably, the increasing trend in child abuse homicides is perhaps the most tragic of all the indicators.

Health Indicator	Current Year	Benchmark Year	% Change	Grade	Trend
Infant Mortality	**2006**	**2001**			
Number of infant deaths per 1,000 live births:					
All	8.1	8.5	-4.7%	**B**	No Change
White	6.0	6.1	-1.6%	**B**	No Change
All Other Races	13.6	14.8	-8.1%	**D**	Better
Low Birthweight Infants	**2006**	**2001**			
% of infants born weighing 5 lbs., 8 ozs. (2,500 grams) or less:					
All	9.0%	8.9%	1.1%	**D**	No Change
White	7.4%	7.3%	1.4%	**D**	No Change
All Other Races	13.4%	13.2%	1.5%	**F**	No Change
Child Fatality	**2006**	**2001**			
Number of deaths (age 0-17) per 100,000	73.2	76.2	-3.9%	**B**	No Change
Deaths Due to Injury	**2006**	**2001**			
Number of deaths (age 0-17):					
Motor vehicle-related	163	171	-	**C**	-
Drowning	23	25	-	**C**	-
Fire/Burn	15	7	-	**B**	-
Bicycle	6	8	-	**B**	-
Suicide	21	29	-	**C**	-
Homicide	65	43	-	**F**	-
Firearm	45	36	-	**F**	-
Child Abuse and Neglect (Including Deaths)	**2006**	**2001**			
Number of children:					
Receiving assessments for abuse and neglect	118,294	-	n/a	-	n/a
Substantiated as victims of abuse and neglect	17,246	-	n/a	-	n/a
Found in need of services	11,129	-	n/a	-	n/a
% of children experiencing recurrence of maltreatment within six months	5.5%	7.5%	-27%	**B**	Better
Confirmed child deaths due to abuse	34	22	-	**F**	-

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 one easy-to-read document. This is the 13th annual *Report Card*, and we hope it will once again encourage everyone concerned about young North Carolinians to see the big picture and then rededicate their efforts to improving the health and safety of the children whose lives they affect.

Statewide data are presented for the most current year available (usually 2006) with a comparative year (usually 2001) as a benchmark. Unless otherwise noted, data are presented for calendar years. The specific indicators were chosen not only because they are important, but also because there are data available. In time, we hope expanded data systems will begin to produce more comprehensive data that will allow the "picture" of child health and safety to expand. To facilitate review, the indicators have been grouped into three broad categories—Access to Health and Preventive Care, Health Risk Behaviors and Death and Injury. However, it should be recognized that virtually all of the indicators are interrelated.

"Children are the living message that we send to a time we will not see."
— John W. Whitehead

There are 2.1 million children (age 0-18) in North Carolina, more than ever before. Approximately 20% continue to live in poverty. This represents a growing challenge to adults—in the home, in the community and collectively through government—who are responsible for protecting children from harm and providing opportunities for healthy growth. The data in this *Report Card* serve as indicators of how adults are discharging these responsibilities.

The data provide reason for both celebration and concern. There is plenty to celebrate. For the majority of indicators, the trend is toward improvement, and for several—infant and child death rates; the immunization rate; the lead poisoning rate; the teen pregnancy rates—the data are truly encouraging. However, there is also cause for heightened concern and strong action. For several indicators—the rate of uninsured children; child abuse homicide; asthma; access to dental care; overweight in low-income children; the use of alcohol, tobacco and illegal substances—the data reflect unnecessary and unacceptable risks to children and youth. When data are available, they indicate that racial disparities remain disturbingly wide.

The underlying message is 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 General Assembly.

Our greatest 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 have been poisoned by lead, are dealing with the pain of tooth decay, are living with untreated developmental delays or chronic illnesses or do not feel safe at home.

Our children are 20% of our population, but they are 100% of our future. They will soon be our leaders, our producers and our consumers. Now is the time for adults—both collectively and individually—to make the investments that will assure a bright future for our state.

Grades and Trends

Grades are assigned to bring attention to the current status of each indicator of child health and safety. Grades are assigned by a group of health experts from the sponsoring organizations. "**A**" indicates that the current status is "very good"; "**B**" is "satisfactory"; "**C**" is "mediocre"; "**D**" is "unsatisfactory"; "**F**" is "very poor."

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% between the given data points. A percentage change of 5% or less between the two years of data is described as "No Change." Percent change and trends have not been given for population count data with relatively small numerators. 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.

Tom Vitaglione, Berkeley Yorkery and Rebecca Clendenin from Action for Children North Carolina and Mark Holmes, Kiernan McGorty and Daniel Shive from the North Carolina Institute of Medicine led the development of this publication, with valuable contributions from many staff members of the North Carolina Department of Health and Human Services.

This project was funded by the Annie E. Casey Foundation's KIDS COUNT project, the North Carolina Department of Health and Human Services, Blue Cross and Blue Shield of North Carolina Foundation, BB&T, Novo Nordisk, Pearce Brinkley Cease + Lee Architecture and Food Lion Charitable Foundation. Action for Children and the North Carolina Institute of Medicine thank them for their support but acknowledge that the findings and conclusions presented in this report are those of the authors alone and do not necessarily reflect the opinions of financial supporters.

Data Sources

Access to Care and Preventive Health
Uninsured: 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, August 2007; Medicaid-Enrolled Preventive Care: Calculated using data from the Division of Medical Assistance, N.C. DHHS, "Health Check Participation Data." Available online at: http://www.dhhs.state.nc.us/dma/healthcheck.htm; 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/data_2004.htm; Immunization Rates and Early Intervention: Special data request to the Women and Children's Health Section, Division of Public Health, N.C. DHHS, August 2007; Lead: Special data request to the Childhood Lead Poinsoning Prevention Program, N.C. Department of Environment and Natural Resources, August 2007; Asthma Diagnosed: State Center for Health Statistics, N.C. DHHS Child Health Assessment and Monitoring Program. Available online at: http://www.schs.state.nc.us/SCHS/champ/; Asthma Hospitalizations: State Center for Health Statistics, N.C. DHHS. County Health Data Book. Available online at: http://www.schs.state.nc.us/SCHS/data/databook/; Dental Health: Special data request to the Oral Health Section, Division of Public Health and Division of Medical Assistance, N.C. DHHS, August 2007.

Health Risk Behaviors
Teen Pregnancy: State Center for Health Statistics, N.C. DHHS, "North Carolina Reported Pregnancies." Available online at: http://www.schs.state.nc.us/SCHS/data/county.cfm; Communicable Diseases: Special data request to the HIV/STD Section and Epidemiology Section, Divison of Public Health, N.C. DHHS, August 2007; Overweight: 2005 NC-NPass Data. "Proportion of Overweight (BMI >=95th Percentile) Children by Age, Race and Gender, NC-NPASS* 2006." Available online at: http://www.eatsmartmovemorenc.com/data/index.html; Tobacco Use: N.C. Tobacco Prevention and Control Branch, N.C. DHHS, N.C. Youth Tobacco Survey. Available online at: http://www.communityhealth.dhhs.state.nc.us/tobacco.htm; Physical Activity, Alcohol and Substance Abuse: 2005 Youth Risk Behavior Survey, North Carolina High School Survey, detailed tables. Available online at: http://www.nchealthyschools.org/data/.

Death and Injury
Infant Mortality: State Center for Health Statistics, N.C. DHHS, "North Carolina Infant Mortality Report." Available online at: http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm; Low Birth-Weight Infants: State Center for Health Statistics, N.C. DHHS, "Infant Mortality Report, Table 10: Risk Factors and Characteristics for North Carolina Resident Live Births." Available online at: http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm; Child Fatality and Deaths Due to Injury: Women's and Children's Health Section, Division of Public Health, N.C. DHHS, and the State Center for Health Statistics. "Child Deaths in North Carolina." Available online at: http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm; Child Abuse and Neglect: Special data request to the Division of Social Services, N.C. DHHS, August 2007; Recurrence of Maltreatment: Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., Weigensberg, E.C. (2007). N.C. Child Welfare Program. Retrieved 9/27/07, from University of North Carolina at Chapel Hill Jordan Institute for Families website. Available online at: http://ssw.unc.edu/cw/; 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.

Changes in Data

1. **Breastfeeding** has been introduced as an indicator because evidence is growing that breastfeeding decreases the incidence and severity of childhood infectious diseases and is also associated with decreases in the occurrence of Sudden Infant Death Syndrome (SIDS). The North Carolina Department of Health and Human Services has adopted a Blueprint for Action to promote breastfeeding. Much of the gain in breastfeeding in North Carolina in recent years is due to the efforts of the Supplemental Nutrition Program for Women, Infants and Children (WIC) in encouraging breastfeeding among low-income women.

2. **Immunization** at age 2 is based on an expanded definition that includes 14 doses as follows: 4 DTaP, 3 polio, 1 MMR, 3 Hib and 3 Hep B. Immunization at school entry (kindergarten) is based on the 5-4-2-4-3 series of immunizations: 5 DTaP, 4 Polio, 2 MMR, 4 Hib and 3 HepB. North Carolina's immunization rate at age 2 ranks among the best in the nation. This success is directly attributable to a decision by the General Assembly to make vaccines available at low or no cost, as well as the development of a statewide public awareness campaign and an immunization registry, which benefits from the participation of public and private providers.

3. **Elevated Blood Lead Level** is defined as 10 micrograms per deciliter or greater. The 2006 percentage of 0.8% is the lowest ever reported in North Carolina, largely due to awareness campaigns and the continued reduction in exposure to products containing lead, and lead paint in particular.

4. **Asthma** remains the leading chronic illness among our children and is also one of the leading health reasons for school absence. The continued, dramatic decline in the hospital discharge rate reflects the success of the Community Care of North Carolina initiative in educating primary care providers in the management of the illness.

5. **Overweight** is conservatively defined as a body mass index equal to or greater than the 95th percentile using federal guidelines.

6. **Physical Activity** is based on an updated definition adopted by the Centers for Disease Control and Prevention. Thus, there are no comparable earlier data. This area needs greater improvement, though it is now receiving increased attention.

Action for Children North Carolina
1300 Saint Mary's St., Suite 500
Raleigh, NC 27605-1276
PHONE 919.834.6623 x 202
FAX 919.829.7299
E-MAIL admin@ncchild.org
WEBSITE www.ncchild.org

North Carolina Institute of Medicine
5501 Fortunes Ridge Dr., Suite E
Durham, NC 27713
PHONE 919.401.6599
FAX 919.401.6899
WEBSITE www.nciom.org