Action for Children North Carolina

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# North Carolina

2009

2009

# Child Health Report Card

**WITH FINANCIAL SUPPORT FROM:**

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# Access to Care and Preventive Health

Access to preventive and primary care is critical to assuring the health of our children. Given that there has been no improvement in child poverty in the period 2000-2008, and the fact that North Carolina has experienced one of the largest decreases in employer-based coverage in the nation, it is quite remarkable that the uninsured rate for children has essentially returned to the 2000 level. This is largely due to the dramatic increase in children's enrollment in public health insurance programs. This would not have happened without increased investments made by the North Carolina General Assembly and the hard work of state and local agencies and others who enroll eligible children and assure that they receive preventive care.

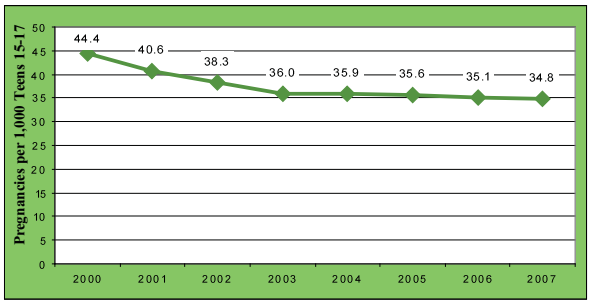
Other investments in prevention and early intervention have been exemplary. The early intervention system for young children with special needs has received national acclaim, exposure to lead continues to decline, and serious chronic illnesses such as asthma are being identified earlier and managed more successfully. However, the initiation and duration rates for breastfeeding, which has the potential to prevent both mortality and morbidity in infants, need improvement; the immunization rate at age 2 has declined a bit, possibly due to some parental concerns about the immunization schedule; and access to dental care, though showing much improvement, is a problem that warrants serious attention.

| Grade | Health Indicator | Current Year | Benchmark Year | Percent Change | Trend |
|---|---|---|---|---|---|
| | **Insurance Coverage** | **2008** | **2000** | | |
| B | Percent of uninsured children (age 0-17) below 200% of poverty level | 15.6% | 17.4% | -10.3% | Better |
| | Percent of all children (0-17) uninsured | 9.3% | 9.9% | -6.1% | Better |
| | Number of children (0-18) covered by public health insurance (Medicaid or NC Health Choice) (in December) | 947,036 | 578,486 | 63.7% | Better |
| | Percent of Medicaid-enrolled children (0-18) receiving preventive care | 79.4% | 66.8% | 18.9% | Better |
| | **Breastfeeding** | **2006** | **2000** | | |
| C | Percent ever breastfed | 66.9% | 66.5% | 0.6% | No change |
| | Percent breastfed at least six months | 36.7% | 29.3% | 25.3% | Better |
| | **Immunization Rates** | **2008** | **2000** | | |
| B | Percent of children with appropriate immunizations: | | | | |
| | At age 2[1] | 71.2% | 80.6% | -11.7% | Worse |
| | At school entry | 96.5% | 97.5% | -1.0% | No change |
| | **Early Intervention** | **2008** | **2000** | | |
| A | Number of children (age 0-3) enrolled in early intervention services to reduce effects of developmental delay, emotional disturbance, and/or chronic illness | 15,869 | 7,046 | 125.2% | Better |
| | **Environmental Health** | **2008** | **2000** | | |
| A | Lead: Percent of children (1 and 2 year olds)[2] | | | | |
| | Screened for elevated blood lead levels | 46.2% | 33.7% | 37.1% | Better |
| | Found to have elevated blood lead levels | 0.5% | 2.4% | -79.2% | Better |
| | Asthma: | | | | |
| | Percent of children diagnosed | 14.2% | 11.0% | 29.1% | Worse |
| | Hospital discharges per 100,000 children (age 0-14) (2007) | 166.2 | 201.3 | -17.4% | Better |
| | **Dental Health** | **2008** | **2000** | | |
| 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% | 37.0% | 18.9% | Better |
| | Percent of Medicaid-eligible children: | | | | |
| | Age 1-5 who use dental services | 40.6% | 16.0% | 153.8% | Better |
| | Age 6-14 who use dental services | 52.3% | 31.0% | 68.7% | Better |
| | Age 15-20 who use dental services | 36.1% | 18.0% | 100.6% | Better |

# Health Risk Behaviors

Children's health behaviors and risk-taking (sexual activity, poor nutrition, physical inactivity, substance abuse, violence, driving habits; etc.) are determined by a variety of factors. Governments, foundations, communities, and schools establish a strong, supportive foundation through the implementation of evidence-based programs and policies that facilitate positive health behaviors.

**North Carolina Teen Pregnancy Rate**




Source: North Carolina State Center for Health Statistics. North Carolina Reported Pregnancies 2000-2007. http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm. Accessed October 2, 2009.

There have been some improvements worth noting in the period 2000-2008. The national decline in teen pregnancy rates has also been experienced in North Carolina. The continued drop in congenital syphilis and the near elimination of perinatal transmission of HIV/AIDS are true public health success stories. The collaborative efforts of the North Carolina Department of Health and Human Services and the North Carolina Health and Wellness Trust Fund have helped realize a significant decline in youth tobacco use.

While these same agencies have been collaborating on a Healthy Weight Initiative for some time, there has been no progress as yet in the relevant indicators. A broad approach to weight management and physical activity that takes into account environmental, economic, and social factors is needed to overcome this negative trend and set more children on the path to healthy adulthood.

| Grade | Health Indicator | Current Year | Benchmark Year | Percent Change | Trend |
|---|---|---|---|---|---|
| | **Teen Pregnancy** | **2007** | **2000** | | |
| C | Number of pregnancies per 1,000 girls (age 15-17) | 34.8 | 44.4 | -21.6% | Better |
| | **Communicable Diseases** | **2008** | **2000** | | |
| A | Number of newly-reported cases: | | | | |
| | Congenital syphilis at birth | 10 | 20 | - | - |
| | Perinatal HIV/AIDS at birth | 1 | 4 | - | - |
| | Tuberculosis (age 0-18) | 31 | 27 | - | - |
| | **Obesity** | **2008** | **2002** | | |
| F | Percent of low-income children who are obese[3]: | | | | |
| | Age 2-4 | 15.4% | 13.5% | 14.1% | Worse |
| | Age 5-11 | 25.7% | 21.1% | 21.8% | Worse |
| | Age 12-18 | 28.5% | 26.3% | 8.4% | Worse |
| | **Physical Activity** | **2007** | **2005** | | |
| C | Percent 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 | 44.3% | 45.9% | -3.5% | No change |
| | **Alcohol, Tobacco, and Substance Abuse** | **2007** | **2001** | | |
| D | Percent of students (grades 9-12) who used the following in the past 30 days: | | | | |
| | Cigarettes | 19.0% | 27.8% | -31.7% | Better |
| | Smokeless tobacco | 8.6% | 8.9% | -3.4% | No change |
| | Marijuana | 19.1% | 20.8% | -8.2% | Better |
| | Alcohol (including beer) | 37.7% | 38.2% | -1.3% | No change |
| | Cocaine (lifetime) | 7.0% | 6.7% | -4.5% | No change |
| | Methamphetamines (lifetime) | 4.7% | 7.8% | -39.7% | Better |

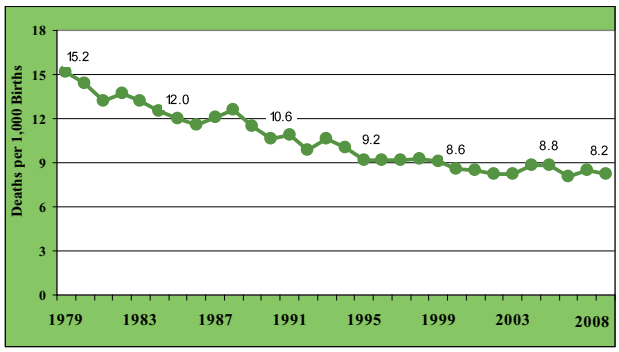
# Death and Injury

After a significant decline during the 1990s, the infant death rate has been relatively stagnant in the period 2000-2008. Though the rate is near the lowest ever recorded, North Carolina still ranks very poorly among the states. The North Carolina Department of Health and Human Services, the North Carolina Child Fatality Task Force, the March of Dimes, and other agencies are jointly providing increased attention to the interconceptional period in hopes of reducing prematurity and low birthweight, which have been serious, relatively intractable components of infant mortality.

The overall child death rate has continued to drop and was at its lowest level in 2008. Injuries remain the leading cause of death in children, but these have been ameliorated and reduced in the period 2000-2008, largely due to the passage of numerous child safety laws, including requirements for booster seats, bicycle helmets, ATV safety, and enhancements to the graduated drivers license system. The Child Fatality Task Force continues to explore ways to prevent child deaths. Homicides, suicides, and firearm-related deaths command increased attention.

In an attempt to deal with child abuse and neglect and to provide family support more effectively, all 100 counties now participate in the Multiple Response System, which evaluates and responds to alleged child abuse and, or neglect. Since this has changed many data definitions, trend data on assessments and substantiations are not available. However, though the recurrence of maltreatment had been in decline, in 2008 it increased to former levels, providing cause for concern. Though child abuse homicides have moderated in the period 2000-2008, this is perhaps the most tragic of all the indicators.

**North Carolina Infant Mortality Rate**




Source: State Center for Health Statistics, North Carolina Department of Health and Human Services. Infant deaths and rates by race, North Carolina 1979-2008. http://www.schs.state.nc.us/SCHS/deaths/ims/2008/table3.html. Accessed October 2, 2009.

| Grade | Health Indicator | Current Year | Benchmark Year | Percent Change | Trend |
|---|---|---|---|---|---|
| | **Birth Outcomes** | **2008** | **2000** | | |
| C | Number of infant deaths per 1,000 live births | 8.2 | 8.6 | -4.7% | No change |
| | Percent of infants born weighing 5 lbs., 8 ozs. (2,500 grams) or less | 9.1 | 8.8 | 3.4% | No change |
| | **Child Fatality** | **2008** | **2000** | | |
| B | Number of deaths (age 0-17) per 100,000 | 71 | 81 | -12.3% | Better |
| | Number of deaths (age 0-17): | | | | |
| | Motor vehicle related | 123 | 172 | - | - |
| | Drowning | 30 | 37 | - | - |
| | Fire/Burn | 17 | 18 | - | - |
| | Bicycle | 3 | 6 | - | - |
| | Suicide | 22 | 32 | - | - |
| | Homicide | 58 | 54 | - | - |
| | Firearm | 45 | 47 | - | - |
| | **Child Abuse and Neglect** | **2008** | **2003** | | |
| D | Number of children: | | | | |
| | Receiving assessments for abuse and neglect | 127,192 | n/a | - | - |
| | Substantiated as victims of abuse and neglect[4] | 12,396 | n/a | - | - |
| | Found in need of services[4] | 13,951 | n/a | - | - |
| | Percent of children experiencing recurrence of maltreatment within six months | 7.3% | 7.6% | -4.0% | No change |
| | Confirmed child deaths due to abuse | 33 | 30 | - | - |

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 15th 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 the children whose lives they affect.

Statewide data are presented for the most current year available (usually 2008), with a comparison year (usually 2000) as a benchmark. This time period was chosen because it reflects the administrations of President Bush and Governor Easley and the concurrent congressional and legislative sessions. Though government is not the sole determinant of child heath, it does indeed set the tone. To the extent that a public "vision" of healthy, nurtured children is maintained, responses in terms of fiscal investments, child safety laws, state and local agency efforts, and parental involvement are enhanced. Thus, it is instructive to be aware of the changes in child health and safety during this period.

The specific indicators were chosen not only because they are important, but also because data are 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. *Ethnic/racial disparity data for many of the indicators are now available, and will soon be presented in a companion document by Action for Children North Carolina.*

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## "We can chart our future clearly and wisely only when we know the path which has led to the present." - Adlai E. Stevenson

The period 2000-2008 began and ended in recessions, with several years of growth in between. The number of children (age 0-17) grew each year to a total of more than 2.2 million, more than ever before. However approximately 20% of them continued to live in poverty, meaning that more children than ever before were living in significant financial stress. Under such conditions, a general decline in children's health and safety would be expected.

Fortunately this was not the case. A review of the indicators in this Report Card shows that, though the picture is not always rosy, the health and safety of our children generally improved, and analysis makes it clear that these generally favorable outcomes are not happenstance. They are a reflection of increased government investments, both fiscal and enhanced child safety laws; the hard work and perseverance of child advocates and state and local agencies in developing and implementing child health and safety initiatives; and the attentiveness of parents and other caregivers.

Though results are somewhat mixed, it is remarkable that virtually all the indicators were improved during the 2000-2008 period, and continue to be so. Investments fall into three categories, with state highlights below:

- Additional appropriations have significantly expanded public health insurance for children, have brought the infant mortality rate to historic lows, and have expanded access to dental care for children in low-income families.
- Laws were enacted to enhance children's safety, particularly to prevent motor vehicle-related injuries, and the overall child fatality rate fell to the lowest rate ever recorded in North Carolina.
- State and local agencies, often in partnership with private providers, foundations, and the business community, worked hard to improve service delivery, and in some instances revamped entire service systems. Community Care of North Carolina has enhanced both access and quality of health care for children on Medicaid; the Early Intervention Program was reorganized to expand services for young children with special needs and their families; and the Multiple Response System has been implemented statewide to respond more appropriately to families in stress. During this same period, a Healthy Weight Initiative was developed, a Blueprint to Support Breastfeeding was published, a State Plan to Eliminate Childhood Lead Poisoning was put into effect, and a successful Youth Tobacco Prevention Campaign was launched.

This period has also seen the growing use of evidence-based decision-making in affecting changes in policies and services. The North Carolina Institute of Medicine has supported this movement by sponsoring task force studies on access to care, the prevention of child maltreatment, adolescent health, prevention, and many others.

While all of the above efforts are heartening, it is clear that North Carolina has a long way to go. Most of the indicators show improvement, and for several the progress is truly encouraging. However, even where progress has been made, the data for some indicators – child abuse homicides, access to dental care, overweight children, and the use of tobacco, alcohol, and illegal substances – reflect continued unacceptable risks to children and youth, and should be cause for grave concern.

The data in this Report Card now become the baseline for the new administrations of President Obama, Governor Perdue, and concurrent congressional and legislative sessions. These leaders inherit the progress that has been made in 2000-2008, but face daunting economic challenges. These are the times, however, when it is especially important for our leaders to set and maintain the vision of healthy, safe children within nurturing families.

## Data Sources

### 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, NC Department of Health and Human Services, August 2009; Medicaid-Enrolled Preventive Care: Calculated using data from the Division of Medical Assistance, NC DHHS, "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 and Early Intervention: Data for 2-year-olds from the Centers for Disease Control and Prevention, National Immunization Survey. Available online at: www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#nis. Kindergarten data are from a special data request to the Women and Children's Health Section, Division of Public Health, NC DHHS, August 2009; Lead: Special data request to the Childhood Lead Poisoning Prevention Program, NC Department of Environment and Natural Resources, August 2009; Asthma Diagnosed: State Center for Health Statistics, NC 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, NC 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, NC DHHS, August 2009.

### Health Risk Behaviors

Teen Pregnancy: State Center for Health Statistics, NC 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, Division of Public Health, NC DHHS, August 2009; Obese: 2008 NC-NPass Data "Proportion of Obese (BMI >=95th Percentile) Children by Age, Race, and Gender, NC-NPASS." Available online at: http://www.eatsmartmovemorenc.com/Data/ChildAndYouthData.html; Tobacco Use: NC Tobacco Prevention and Control Branch, NC DHHS, NC Youth Tobacco Survey. Available online at: http://www.tobaccopreventionandcontrol.ncdhhs.gov/data/index.htm; Physical Activity, Alcohol and Substance Abuse: 2007 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, NC DHHS, "Infant Mortality Statistics." Available online at: http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm; Low Birth-Weight Infants: State Center for Health Statistics, NC 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/dealths/ims/2008/; Child Fatality and Deaths Due to Injury: Women's and Children's Health Section, Division of Public Health, NC DHHS, and the State Center for Health Statistics. "Child Deaths in North Carolina." http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm; Child Abuse and Neglect and Recurrence of Maltreatment: Duncan DF, Kum HC, Flair KA, Stewart CJ, Van Busum K, Huang SP. (2009). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina. Retrieved September 25, 2009, from University of North Carolina at Chapel Hill Jordan Institute for Families website. URL: http://ssw.unc.edu/ma/; 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.

## 2009 Report Card Data Notes

1. Immunization is measured for 2 year-olds using the 2000 CDC recommendation (4:3:1:3:3). 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. Obese is defined as a body mass index equal to or greater than the 95th percentile using federal guidelines. This represents a change in terminology by NC-NPASS, which used to definte BMI >=95th percentile as overweight. The children represented in these data are those who receive services in local health departments or school health centers and are primarily low-income. They may not be representative of the state as a whole.
4. The number substantiated and in need of 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.

## 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% 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 invloving 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.

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Tom Vitaglione, Alexandra Forter Sirota, and Angella Bellota from Action for Children North Carolina and Mark Holmes, Berkeley Yorkery, and Christine Nielsen 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.

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