



North Carolina

2010



2010

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 of our children. Regrettably, the data indicate that the percentage of uninsured children (including those in low-income families) continues to increase, largely because North Carolina has experienced dramatic losses in employer-based coverage. The picture would be even worse were it not for a dramatic increase in children's coverage through public health insurance programs over the past decade. This increase is thanks to investments made by the General Assembly and the hard work of state and local agencies and others who enroll children and ensure that they receive preventive care.

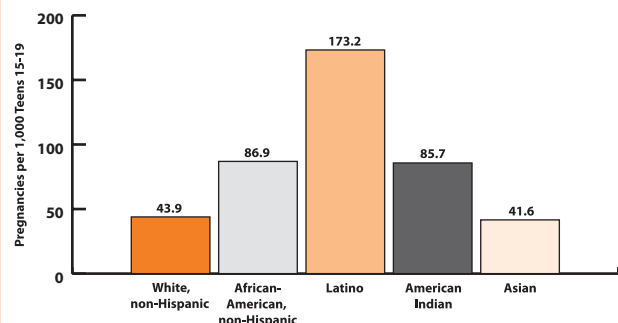
Other investments in prevention and early intervention have been exemplary. The early intervention system for children with special needs has received national acclaim, exposure to lead continues to decline, and serious illnesses such as asthma are being identified earlier and managed more successfully, largely due to the innovative system of care developed through Community Care of North Carolina. Additional improvement is needed in the initiation and duration rates for breastfeeding, which has the potential to reduce both mortality and morbidity in infants. North Carolina's immunization rate among children 19-35 months of age ranks ninth in the nation. However, recent reductions in state funding may make this ranking difficult to attain in the future. Access to dental care, though showing much improvement, is a problem that deserves continued attention.

| Grade | Health Indicator | Current Year | Benchmark Year | Percent Change | Trend |
|---|--|--------------|----------------|----------------|-----------|
| Insurance Coverage | | 2009 | 2004 | | |
| B | Percent of all children (ages 0-18) uninsured ⁺ | 11.5% | 11.4% | 0.7% | No Change |
| | Percent of children below 200% of poverty uninsured ⁺ | 20.0% | 19.3% | 3.6% | No Change |
| | Number of children covered by public health insurance (Medicaid or Health Choice) (in December) | 1,020,317 | 806,044 | 26.6% | Better |
| | Percent of Medicaid-enrolled children receiving preventative care ⁺ | 81.3% | 69.7% | 16.6% | Better |
| Breastfeeding | | 2007 | 2002 | | |
| C | Percent of infants ever breastfed | 73.5% | 63.2% | 16.3% | Better |
| | Percent of infants breastfed at least six months | 35.9% | 33.7% | 6.5% | Better |
| Immunization Rates | | 2009 | 2004 | | |
| B | Percent of children with appropriate immunizations: | | | | |
| | Ages 19-35 months ¹ | 78.3% | 77.8% | 0.6% | No Change |
| | At school entry ⁺ | 96.5% | 99.6% | -3.1% | No Change |
| Early Intervention | | 2009 | 2004 | | |
| A | Number of children (ages 0-3) enrolled in early intervention services to reduce effects of developmental delay, emotional disturbance, and/or chronic illness ⁺ | 17,606 | 10,826 | 62.2% | Better |
| Environmental Health | | 2009 | 2004 | | |
| A | Lead: Percent of children (ages 1-2): ² | | | | |
| | Screened for elevated blood levels | 49.5% | 39.1% | 26.6% | Better |
| | Found to have elevated blood lead levels | 0.5% | 1.3% | -61.5% | Better |
| | Asthma: | | | | |
| | Percent of children ever diagnosed (2009, 2005) | 15.5% | 17.8% | -12.9% | Better |
| Hospital discharges per 100,000 children (ages 0-14) (2008, 2004) | 151.9 | 180.2 | -15.7% | Better | |
| 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: | | | | |
| | Ages 1-5 | 58.0% | 42.0% | 38.1% | Better |
| | Ages 6-14 | 64.0% | 51.0% | 25.5% | Better |
| Ages 15-20 | 48.0% | 38.0% | 26.3% | Better | |

Health Risk Behaviors

Children's health behaviors and risk-taking (sexual activity, poor nutrition, physical inactivity, substance abuse, violence, driving habits, etc.) are largely determined by the adults in their lives. Governments, foundations, communities, and schools can provide strong influences as well through the implementation of evidence-based programs and policies that facilitate positive health behaviors.

North Carolina Teen Pregnancy Rates by Race/Ethnicity, 2004-2008



Source: State Center for Health Statistics and Office of Minority Health and Health Disparities, North Carolina Department of Health and Human Services, Racial and Ethnic Health Disparities in North Carolina, 2010. Available online at http://www.schs.state.nc.us/SCHS/pdf/MinRptCard_WEB_062210.pdf.

There have been some successes of note. 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. In fact, for the first time, there have been declines in each of the substances reported below.

While these same agencies—and many others, including the General Assembly—have been collaborating on a Healthy Weight Initiative and other efforts to reduce obesity rates among children for some time, there has been no improvement 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 a healthy adulthood.

| Grade | Health Indicator | Current Year | Benchmark Year | Percent Change | Trend |
|--|---|--------------|----------------|----------------|-----------|
| Teen Pregnancy | | 2009 | 2004 | | |
| C | Number of pregnancies per 1,000 girls (ages 15-17) | 30.1 | 35.9 | -16.2% | Better |
| Communicable Diseases | | 2009 | 2004 | | |
| A | Number of newly-reported cases: | | | | |
| | Congenital syphilis at birth | 9 | 11 | - | - |
| | Perinatal HIV/AIDS at birth | 2 | 4 | - | - |
| | Tuberculosis (ages 0-19) | 24 | 42 | - | - |
| Obesity | | 2009 | 2005 | | |
| F | Percent of low-income children who are obese: ³ | | | | |
| | Ages 2-4 | 15.4% | 14.9% | 3.4% | No Change |
| | Ages 5-11 | 25.8% | 23.8% | 8.4% | Worse |
| | Ages 12-18 | 28.0% | 27.2% | 2.9% | No Change |
| Physical Activity | | 2009 | 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 | 46.0% | 45.9% | 0.2% | No change |
| | Percentage of children (ages 14-17) who watched TV on a typical day for more than 2 hours | 25.6% | 31.5% | -18.7 | Better |
| Alcohol, Tobacco, and 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 |

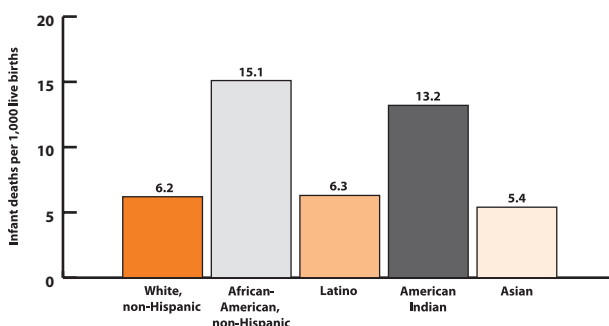
Death and Injury

After a few years of stagnation, in 2009 the infant death rate dropped to the lowest level ever recorded in North Carolina. While the rate has declined by more than 25 percent in the past two decades, 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 providing increased attention to the interconceptional period in hopes of reducing prematurity and low birthweight, which continue to be serious, relatively intractable components of infant mortality. The persistently wide racial disparity in both infant mortality (See Figure) and low birthweight is cause for grave concern, warranting increased attention.

The overall child death rate also dropped to its lowest level in 2009. Injuries remain the leading cause of death in children over age one, but these have been ameliorated and reduced in the past two decades, largely due to the passage of numerous child safety laws, including ATV safety laws and requirements for booster seats and bicycle helmets. The dramatic decline in motor vehicle-related fatalities is attributed in great part to the adoption of the graduated drivers license system for young drivers. The Child Fatality Task Force continues to explore ways to prevent child deaths. The significant decline in homicides as well as the significant rise in suicides will command focused 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/neglect. Since the new system has changed many data definitions, trend data on assessments and substantiations are not available. On a positive note, the recurrence of maltreatment, one of the key objectives of the new system, appears to be trending downward. One can only hope that the remarkable decline in child abuse homicides in 2009 will not be a one-year phenomenon, but the beginning of a sharp decline in this most tragic of indicators.

North Carolina Infant Mortality Rates by Race/Ethnicity, 2004-2008



Source: State Center for Health Statistics and Office of Minority Health and Health Disparities, North Carolina Department of Health and Human Services. Racial and Ethnic Health Disparities in North Carolina, 2010. Available online at http://www.schs.state.nc.us/SCHS/pdf/MinRptCard_WEB_062210.pdf.

| Grade | Health Indicator | Current Year | Benchmark Year | Percent Change | Trend |
|----------|---|--------------|----------------|----------------|-----------|
| | Birth Outcomes | 2009 | 2004 | | |
| C | Number of infant deaths per 1,000 live births | 7.9 | 8.8 | -10.2% | Better |
| | Percent of infants born weighing less than 5 lbs., 8 ozs. (2,500 grams) | 9.1 | 9.1 | 0.0% | No change |
| | Child Fatality | 2009 | 2004 | | |
| B | Number of deaths (ages 0-17) per 100,000 | 67.0 | 77.7 | -13.8% | Better |
| | Number of deaths (ages 0-17): | | | | |
| | Motor vehicle related | 114 | 192 | - | - |
| | Drowning | 28 | 13 | - | - |
| | Fire/Burn | 8 | 19 | - | - |
| | Bicycle | 1 | 6 | - | - |
| | Suicide | 35 | 23 | - | - |
| | Homicide | 36 | 51 | - | - |
| | Child Abuse and Neglect | 2009 | 2004 | | |
| C | Number of children: ⁺ | | | | |
| | Receiving assessments for abuse and neglect | 125,665 | 117,352 | - | - |
| | Substantiated as victims of abuse or neglect ⁴ | 10,961 | N/A | - | - |
| | Recommended services ⁴ | 25,590 | N/A | - | - |
| | Recurrence of Maltreatment | 5.6% | 7.7% | -27.2% | Better |
| | Confirmed child deaths due to abuse | 16 | 31 | - | - |

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 16th 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 2009), with a comparison year (usually 2004) 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 provide more comprehensive data, indicators are added to the *North Carolina Child Health Report Card* so that over time the “picture” of child health and safety expands.

Because of space constraints, racial disparity is presented for just two indicators – infant mortality and teen pregnancy. Both show unacceptably wide disparities. Those interested in the disparities across other indicators are invited to visit the web page of Action for Children North Carolina at www.ncchild.org.

“The test of the morality of a society is what it does for its children.” – Dietrich Bonhoeffer

In retrospect, 2010 and 2011 may be viewed as watershed years in North Carolina’s quest to improve the health and well-being of its children. This is because the data and events of 2009 provide a fulcrum which may tip in the direction of continued improvement or a loss in many of the gains that have been achieved thus far.

The gains have been many. 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 between 2004 and 2009. Analysis makes it clear that these generally favorable outcomes are not happenstance. They are a reflection of continuing government investments, both fiscal and through enhanced child safety laws; the hard work and perseverance of child advocates and state and government agencies in developing and implementing child health and safety initiatives; and the attentiveness of parents and caregivers. Highlights include:

- More children have public health insurance coverage than ever before, yet the percent of uninsured children in low-income families continues to increase, largely because of the recession and significant declines in employer-based coverage.
- Additional appropriations and service system improvements over past years have brought the infant mortality rate to historic lows, and have expanded access to dental care for low-income families.
- Laws have been enacted to enhance children’s safety, particularly to prevent motor vehicle-related injuries, and the overall child fatality rate has fallen to the lowest rate ever recorded in North Carolina.
- While suicides have increased, homicides—particularly child abuse homicides—have declined significantly.
- For the first time, indicators of teens’ use of alcohol, tobacco and other substances have all declined, some dramatically.
- North Carolina ranked ninth in the nation in 2009 for immunization rates among children ages 19-35 months.

These general gains, however, may be in jeopardy. The full force of the recession was felt in 2009, and 22.5 percent of our 2.2 million children (ages 0-17) sank into poverty, meaning that more children than ever before were (and are) living in significant financial stress. In addition, the percentage of uninsured children increased to 11.5 percent (ages 0-18). Under such conditions, a general decline in children’s health and safety would be expected. These declines are not immediately seen for two reasons: first, it generally takes two to three years for an economic downturn to be reflected in indicators of child well-being; second, even though some budget reductions occurred in 2008, major cuts to children’s services were not made until 2009 and 2010. Due to budget shortfalls, appropriations for many services and supports for children and families were reduced dramatically. Examples include: funds for many infant mortality prevention services were eliminated; support for immunizations was dramatically reduced; and severe limitations were placed on the growth in enrollment in public health insurance for children in low-income working families. It is likely that the effects of these service reductions will be reflected partially in the 2010 data on child health and safety and fully in 2011.

North Carolina faces another funding shortfall in 2011. Thus, as the state considers further budget cuts, North Carolina’s leaders need to understand that, although not reflected here, children’s health and well-being are likely already declining due to past years’ reductions in services and supports. Their challenge will be to set a vision of healthy, safe children within nurturing families, and to do everything possible to attain that vision even in times of budget crises. Nothing less than the future of North Carolina is in the balance.

Data Sources 2010 CHRC

Access to Care and Preventive Health

Uninsured: North Carolina Institute of Medicine and Mark Holmes. 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, October 2010; *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 2009 the 4:3:1:3:3:1-S was used and for 2004 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 2010; *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> and 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, July 2010 and Special data request to the Division of Public Health/Epidemiology, NC DHHS, August 2009; *Obesity:* Eat Smart, Move More North Carolina. North Carolina Nutrition and Physical Activity Surveillance System (NC-NPASS) data. Available online at <http://www.eatsmart-movemorenc.com/Data/ChildAndYouthData.html>; *TV Watching:* State Center for Health Statistics, North Carolina Department of Health and Human Services. Special analysis of North Carolina Child Health Assessment and Monitoring Program data; *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/yrbs/>.

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 18, 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 2010 CHRC

1. Immunization is measured for children 19-35 months of age using the 4:3:1:3:3:1 measure. For 2009, 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. Obese is defined as a body mass index equal to or greater than the 95th percentile using federal guidelines. 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 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 2009 are for the 2008-2009 school 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 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.

Tom Vitaglione and Laila Bell from Action for Children North Carolina and Berkeley Yorkery and Lauren Short 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 supported by the Annie E. Casey Foundation's KIDS COUNT project, the Blue Cross and Blue Shield of North Carolina Foundation, and MedImmune. Action for Children North Carolina and the North Carolina Institute of Medicine thank them for their support but acknowledge that the findings and conclusions do not necessarily reflect the opinions of financial supporters.

Action for Children North Carolina

1300 Saint Mary's St., Suite 500
Raleigh, NC 27605-1276
PHONE 919.834.6623 x 229
FAX 919.829.7299
E-MAIL admin@ncchild.org
WEBSITE www.ncchild.org

North Carolina Institute of Medicine

630 Davis Dr., Suite 100
Morrisville, NC 27560
PHONE 919.401.6599
FAX 919.401.6899
WEBSITE www.nciom.org