

The purpose of the North Carolina Child Health Report Card is to heighten awareness—among policy makers, 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 publication. This is the eleventh annual Report Card, and we hope it once again will encourage everyone concerned about young North Carolinians to see the big picture, and then rededicate themselves to improving the health and safety of the children whose lives they affect.

Statewide data are presented for the most current year available (usually 2004) with a comparative year (usually 1999) 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 accurate data that would allow the "picture" of child health and safety to expand as well. For several indicators, county data can be accessed through the web site of the NC Child Advocacy Institute (www.ncchild.org).

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

The underlying messages are the same as those noted in prior Report Cards. North Carolina's child health outcomes are not a matter of happenstance, nor are they inevitable. Our results—good, bad, or indifferent—invariably mirror investments made by the NC General Assembly, and the hard work and perseverance of coalitions that include state and local agencies, providers, and child/family advocates. Regrettably, the state budget crisis over the past few years has seriously limited the growth in these investments, and progress on many indicators is showing signs of slowing or reversing.

A recent landmark decision by the NC Supreme Court has confirmed children's constitutional right to the opportunity for a sound, basic education. It must be recognized that failure to deal with health issues robs children of this opportunity. Children cannot maximize their educational 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 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, and are based on a general consensus among 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".

Trends are represented by arrows: ↑ indicates the data are improving; ↓ indicates the data are becoming worse; → indicates little or no change from the reference year. Regardless of the grade, the trend reminds us if progress is being made, and progress should be our goal in every case.

Tom Vitaglione (NCCAI), Kristen L. Dubay (NC IOM), and Kristie Weisner Thompson (NC IOM) led the development of this publication, with valuable contributions from many staff members of the North Carolina Department of Health and Human Services (DHHS).

North Carolina Child Advocacy Institute

311 East Edenton Street
Raleigh, NC 27601
Phone: (919) 834-6623 ext. 229
Fax: (919) 829-7299
E-mail: nccai@ncchild.org
Internet: <http://www.ncchild.org>

North Carolina Institute of Medicine

5501 Fortunes Ridge Drive, Suite E
Durham, NC 27713
Phone: (919) 401-6599 ext. 21
Fax: (919) 401-6899
Internet: <http://www.nciom.org>

Health Indicator	Current Year	Benchmark Year	Δ	Grade & Trend
Insurance coverage¹	2004	1999		
Health Choice enrollment in December (age 0-18)	131,497	53,934	+ 144%	A ↑
Medicaid enrollment in December (age 0-18)	674,885	456,032	+ 48%	A ↑
% of children (age 0-18) below 200% of poverty with public insurance (Medicaid or Health Choice)	87.7	65.8	+ 33%	A ↑
% of all children (age 0-17) uninsured	11.1	13.9	- 20%	B ↑
Medicaid Preventive Care²	FY 03-04	FY 98-99		
% of Medicaid-enrolled children (age 0-18) receiving preventive care	69.7	68.1	+ 2%	B →
Infant Mortality³	2004	1999		
# of infant deaths per 1000 live births:				
All	8.8	9.1	- 3%	B →
White	6.2	6.8	- 9%	B ↑
Other races	15.6	14.8	+ 5%	D ↓
Low Birth-Weight Infants⁴	2004	1999		
% of infants born weighing 5 lbs., 8 ozs. or less:				
All	9.1	8.9	+ 2%	D →
White	7.4	7.2	+ 3%	D →
Other races	13.4	13.1	+ 2%	F →
Immunization Rates⁵	2004	1999		
% of children with appropriate immunizations:				
At age 2	82.9	81.8	+ 1%	A →
At school entry	99.1	99.4	0%	A →
Communicable Diseases⁶	2004	1999		
# of newly reported cases:				
Congenital Syphilis	13	21	- 38%	B ↑
Perinatal HIV/AIDS	0	4	- 100%	A ↑
Tuberculosis (age 0-19)	42	33	+ 27%	C ↓
Vaccine-Preventable Communicable Diseases⁷	2004	1999		
# of reported cases (age 0-19):				
Measles	2	0	+200%	A →
Mumps	1	3	- 67%	A →
Rubella	0	8	- 100%	A ↑
Diphtheria	0	0	0%	A →
Pertussis	70	84	-17%	B ↑
Tetanus	0	0	0%	A →
Polio	0	0	0%	A →

Health Indicator	Current Year	Benchmark Year	Δ	Grade & Trend
Environmental Health⁸	2004	1999		
Lead: % of children (age 12-36 months):				
Screened for elevated blood lead levels	39.1	30.4	+ 29%	C ↑
Found to have elevated blood lead levels	1.3	2.3	- 43%	B ↑
Asthma: % of children (Grade 7-8) who have:	2004	2000		
Reported asthma symptoms	na	28		
Diagnosed asthma	na	11		
Asthma: Hospital discharges per 100,000 children (age 0-14):	2004	1999		
	180.1	262.2	- 31%	B ↑
Dental Health⁹	FY 04-05	FY 99-00		
% of children with untreated tooth decay (kindergarten)	22	23	-4%	D →
% of children with one or more sealants (Grade 5)	42	34	+ 24%	B ↑
% of Medicaid-eligible children:	2004	1999		
Ages 1-5 who received dental services	26	16	63%	D ↑
Ages 6-14 who received dental services	43	31	39%	D ↑
Ages 15-20 who received dental services	29.5	18	64%	D ↑
Early Intervention¹⁰	2004	1999		
# of children (ages 0-3) enrolled in early intervention services to reduce effects of developmental delay, emotional disturbance, and/or chronic illness	11,270	6,873	+ 64%	B ↑
Child Abuse & Neglect¹¹	FY 03-04	FY 98-99		
# of children:				
Receiving assessments for abuse & neglect	113,557	104,329	+ 9%	Not Graded
Substantiated as victims of abuse & neglect	27,310	32,115	-15%	
Confirmed deaths due to abuse	2004	1999		
	31	21	+ 48%	F ↓
Child Fatality¹²	2004	1999		
# of deaths per 100,000 children (age 0-17)	77.7	86.7	- 10%	B ↑

Health Indicator	Current Year	Benchmark Year	Δ	Grade	Trend
Deaths Due to Injury¹³	2004	1999			
# of deaths (age 0-17):					
Motor Vehicle-related	192	154	+ 25%	C	↓
Drowning	13	33	- 61%	B	↑
Fire/Burn	19	13	+ 46%	C	↓
Bicycle	6	12	- 50%	B	↑
Suicide	23	33	- 30%	C	↑
Homicide	51	54	- 6%	D	↑
Firearm	39	50	- 22%	D	↑
Alcohol, Tobacco & Substance Abuse¹⁴	2003	1997			
% of students in Grades 9-12 who reported using the following in the past 30 days:					
Cigarettes	24.8	35.8	- 31%	D	↑
Marijuana	24.3	24.9	- 2%	F	→
Alcohol (incl. beer)	39.4	42.7	- 8%	F	↑
Cocaine	2.7	3.0	- 10%	C	↑
Physical Activity¹⁴	2003	1997			
% of students in Grades 9-12 who exercised at least 20 minutes a day, at least 3 days in the past week	61.2	55.3	+ 11%	C	↑
Overweight¹⁵	2004	1999			
% of low-income children who are overweight:					
Age 2-4	14.9	12.3	+ 21%	D	↓
Age 5-11	23.8	17.8	+ 34%	F	↓
Age 12-18	27.2	22.5	+ 21%	D	↓
Teen Pregnancy¹⁶	2003	1998			
# of pregnancies per 1,000 girls (age 15-17):					
All	36.0	54.1	-33%	C	↑
White	28.2	41.8	-33%	C	↑
Other races	52.5	81.1	-35%	C	↑

Notes:

1. Insurance Coverage. NC's Medicaid Program and Health Choice Program have both been recognized for their innovative coverage of children. *Covering Kids*, a community-based outreach initiative sponsored by the NC Pediatric Society Foundation has led to large increases in enrollment in both programs. These enrollment increases are reflected in the most recent census figures, which indicate significant declines in the percentage of uninsured children in the past five years. While the economic downturn and continued loss of employer-based insurance has kept the state's overall uninsured rate above 16%, NC's investments in public insurance have reduced the children's uninsured rate to the national average, 11.1%. Access to care through insurance is a critical underpinning of children's health status. To affect a balance between coverage and costs, the General Assembly has recently enacted changes in both Medicaid and Health Choice and their results must be monitored closely.

2. Medicaid Preventive Care. Over the past decade, enormous progress has been made in assuring that Medicaid-enrolled

children receive preventive care on a continuous basis. Though the current rate of almost 70% is good, there has been very little progress in the past five years. Community Care of North Carolina, which links children with primary care providers, is an excellent program that continues to expand. Hopefully, this expansion will soon lead to improved rates of preventive care.

3. Infant Mortality. The infant mortality rates of 8.2 in both 2002 and 2003 were the lowest ever recorded in NC. Following a national trend, the rate increased by 7% to 8.8 in 2004. Though this still represents a remarkable 12% reduction in the infant mortality rate in the past decade, the beginning of an upward trend is cause for concern. (And NC continues to rank in the mid-forties among the states.) NC DHHS already has in place a State Infant Mortality Collaborative, which is focusing on the problem. Attention is being given to the overall health of women as a determining factor. In addition, significant attention is being focused on the wide disparity in the rates for whites and other races. There is also concern that the trend for Hispanics is increasing.

4. Low Birth-Weight Infants. Low birth-weight is a serious component of infant mortality, and is also associated with childhood developmental delays. Regrettably, this indicator has remained intractable over the years. Efforts to reduce this problem are shifting to the preconception period. It has been noted that women with a history of positive health behaviors prior to pregnancy have better birth outcomes. School health curricula and awareness campaigns can play a big role in this regard. The wide disparity between whites and other races remains a cause for great concern.

5. Immunization Rates. Federal reports indicate that North Carolina's immunization rate at age two has been among the best in the nation for the past several years. This true success story is directly attributable to a decision by the NC General Assembly to make vaccines available at low or no cost, and to a statewide initiative, which benefits from the participation of public and private primary care providers.

6. Communicable Diseases. A decade-long NC DHHS initiative has dramatically reduced the number of newly-reported congenital syphilis cases and it is hoped this progress will continue. Though more infants are being born to women who are HIV+, it is truly remarkable that the transmission of HIV/AIDS from mother to child during birth has become a relatively rare event (0 transmissions in 2004). This is due to a statewide system of voluntary testing, counseling, and drug intervention for which public and private providers should be proud. Regrettably, tuberculosis has rebounded in children and youth in NC, likely due to the entry of migrants and immigrants with the disease.

7. Vaccine-Preventable Communicable Diseases. Due to the development of vaccines and a statewide surveillance system guided by NC DHHS, these diseases are no longer the childhood afflictions they used to be. Tetanus, diphtheria and polio have been virtually eliminated. Cases of measles and mumps are rare and contained. The persistence of pertussis warrants careful monitoring. A fourth consecutive year with no cases of rubella reported is testimony to the work of local health departments providing immunization education and services, particularly focused on new immigrant populations.

8. Environmental Health. The percent of children ages 12-36 months screened for blood lead levels has increased significantly in the past five years due to a statewide awareness initiative and the participation of private physicians and local health departments' WIC Programs. However, only 39% of the target children were screened in 2004, a disappointingly low percentage given the adverse effects of elevated blood lead levels (defined as 10 micrograms per deciliter or greater) on child development. Conversely, the percent of screened children found to have elevated levels has declined dramatically to its lowest point ever in NC, largely due to awareness campaigns and the continued reduction in exposure to products containing lead. The NC Department of Environment and Natural Resources' plan to eliminate childhood lead poisoning by 2010 deserves both public and private support. The NC School Asthma Survey was conducted in 1999-2000 on most seventh- and eighth-graders and produced for the first time relatively accurate estimates of asthma prevalence. The data confirm that asthma is the leading chronic illness among our school-age children, with few urban-rural and racial differences in prevalence. Recent comparable survey data are not available, but a new health survey (CHAMPS) sponsored by NC DHHS should provide such data next year. The decline in the hospital discharge rate reflects the efforts of the NC Medical Society Foundation and Community Care of North Carolina to educate primary care providers in the management of asthma.

9. Dental Health. Data from surveys conducted by the DHHS Oral Health Section show little improvement in the dental health of children entering kindergarten, with 22% having untreated tooth decay. Awareness regarding the effectiveness of fluoride varnish for young children is growing, which hopefully will reduce the prevalence of tooth decay at school entry. Happily, the percent of school-age children with the protection of sealants continues to grow. However, although access to dental care for Medicaid-enrolled children has grown, it remains disappointingly low.

10. Early Intervention. Program caseloads continue to increase dramatically, and North Carolina's collaborative early intervention services system continues to receive national acclaim. Despite these impressive enrollment numbers, program administrators estimate that less than 60% of the target population is being served. Under federal requirements, children less than three years of age who are confirmed victims of maltreatment are now part of the system's target, and waiting lists have been growing. Administrators have reorganized the system in hopes of expanding capacity, and the General Assembly has recently increased appropriations by \$5 million. Hopefully, the system will be able to keep pace with the growing service need.

11. Child Abuse and Neglect. To deal with reports of maltreatment more efficiently and effectively, and with hopes of reducing both initial and repeat occurrences of abuse and neglect, NC DHHS is implementing a Multiple Response System (MRS). MRS is an effort to reform the entire continuum of child welfare in North Carolina using family-centered principles of partnership. Thus, an accurate comparison of data over time is not possible. However, it should be noted that the number of children substantiated as victims of abuse and neglect has hovered near 30,000 annually for many years. In communicable disease terms, child maltreatment is endemic in our society. A Child Maltreatment Prevention Task Force sponsored by the NC Institute of Medicine will soon release its recommendations. These should receive considerable attention. Tragically, deaths due to child abuse continue to occur about once every two weeks and increased significantly in the past five years. Child abuse deaths represent more than half of all child abuse homicides.

12. Child Fatality. After declining to the lowest level ever reported in 2003, the rate for 2004 rose slightly. Nevertheless, due to legislative investments and the strengthening of child safety laws, the child fatality rate has declined by 10% in the past five years and 20% in the past decade. The NC Child Fatality Task Force, as well as state and local review teams, continues to explore ways to prevent child deaths.

13. Deaths Due to Injuries. This is the primary cause of death in children older than one year of age. After a decade-long decline, the number of motor vehicle-related deaths jumped in 2004, and this should come under careful scrutiny. Though the numbers are relatively low, more awareness campaigns are needed to promote the vigilance needed to prevent unintentional deaths due to drowning, fires, etc. Cases of suicide and homicide, though in decline, are a continuing tragedy.

14. Alcohol, Tobacco, Substance Abuse and Physical Activity. These data, which indicate improvement over the past six years, are derived from the biennial Youth Risk Behavior Survey conducted by the NC Department of Public Instruction, in cooperation with the federal Centers for Disease Control and Prevention. However, when compared to the 2001 survey, it appears that progress in reducing the use of cigarettes and alcohol has slowed. Though there are some questions regarding the validity of the survey process, these data indicate a need for continued efforts to reduce the risk-taking behaviors of our youth. NC DHHS and the NC Health and Wellness Foundation are investing in initiatives that show great promise. Recent legislative appropriations for school nurses and social workers should lead to further improvements.

15. Overweight. This is conservatively defined as a body mass index equal to or greater than the 95th percentile using federal guidelines. This area is receiving increased attention. The DHHS-sponsored NC Health Weight Initiative, as well as an array of investments made by the NC Health and Wellness Foundation, deserve consideration and support. New laws and policies promoting physical activity and restricting the availability of certain foods/drinks in schools should bring positive results. Hopefully, the data, which continue to worsen, will begin to show improvement. This is critical because childhood obesity can lead to adult health problems, such as high blood pressure, heart disease, and diabetes. While the children represented in these data are those who receive services in local health departments or school health centers and may not be representative of the state as a whole, these data send an important signal that must be heeded.

16. Teen Pregnancies. The national decline in teen pregnancies is being experienced in NC as well. While the data are encouraging, it is clear that more progress must be made in this area. Though improving, the wide disparity in rates between whites and other races is of particular concern.

