NORTH CAROLINA
child ADVOCACY Institute

health policy
North Carolina Institute of Medicine

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IN COLLABORATION WITH:

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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 tenth 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 2003) with a comparative year (usually 1998) 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.

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Health Indicator	Current Year	Benchmark Year	Δ	Grade & Trend
Insurance coverage[1]	**2003**	**1999**		
Health Choice enrollment in December (age 0-18)	104,923	53,934	+ 95%	**A** ↑
Medicaid enrollment in December (age 0-18)	653,461	456,032	+ 43%	**A** ↑
	2000-2003 avg.	**1996-1998 avg.**		
% of all children (age 0-18) at or below 200% poverty without health insurance	8.2	11.2	- 27%	**B** ↑
	2003	**1998**		
% of all children (age 0-17) uninsured	11.9	13.2	- 10%	**B** ↑
Medicaid Preventive Care[2]	**2003**	**1998**		
% of Medicaid-enrolled children (age 0-18) receiving preventive care	69.8	56.1	+ 24%	**B** ↑
Infant Mortality[3]	**2003**	**1998**		
# of infant deaths per 1000 live births:				
All	8.2	9.3	- 12%	**B** ↑
White	5.9	6.4	- 8%	**B** ↑
Other races	14.0	16.3	- 14%	**D** ↑
Low Birth-Weight Infants[4]	**2003**	**1998**		
% of infants born weighing 5 lbs., 8 ozs. or less:				
All	9.0	8.8	+ 2%	**D** →
White	7.4	7.0	+ 6%	**D** ↓
Other races	13.4	13.2	+ 2%	**F** →
Immunization Rates[5]	**2003**	**1998**		
% of children with appropriate immunizations:				
At age 2	85.3	82.8	+ 3%	**A** →
At school entry	99.6	98.3	+ 1%	**A** →
Communicable Diseases[6]	**2003**	**1998**		
# of newly reported cases:				
Congenital Syphilis	19	22	- 14%	**B** ↑
Perinatal HIV/AIDS	(2002) 2	6	- 67%	**A** ↑
Tuberculosis (age 0-19)	22	24	- 8%	**C** ↑
Vaccine-Preventable Communicable Diseases[7]	**2003**	**1998**		
# of reported cases (age 0-19):				
Measles	1	1	0%	**A** →
Mumps	0	5	- 100%	**A** ↑
Rubella	0	2	- 100%	**A** ↑
Diptheria	0	0	0%	**A** →
Pertussis	106	86	+ 23%	**C** ↓
Tetanus	0	0	0%	**A** →
Polio	0	0	0%	**A** →

Health Indicator	Current Year	Benchmark Year	Δ	Grade & Trend
Environmental Health[8]	**2003**	**1998**		
Lead: **%** of children (age 12-36 months):				
Screened for elevated blood levels	37.4	25.3	+ 48%	**C** ↑
Found to have elevated blood lead levels	2.0	3.6	- 47%	**B** ↑
Asthma: **%** of children (grade 7-8) who have:	**2003**	**2000**		
Reported asthma symptoms	na	28		
Diagnosed asthma	na	11		
Asthma: Hospital discharges per 100,000 children (age 0-14):	**2003** 211.5	**1998** 219.0	- 3%	**C** ↑
Dental Health[9]	**FY 03-04**	**FY 98-99**		
% of children with one or more sealants (Grade 5)	41	31	+ 32%	**B** ↑
% of children with untreated tooth decay (kindergarten)	23	23	0%	**D** →
	2003	**1998**		
% of Medicaid-eligible children:				
Ages 1-5 who received dental services	23	12	+ 92%	**D** ↑
Ages 6-14 who received dental services	39	27	+ 44%	**D** ↑
Ages 15-20 who received dental services	26	19	+ 37%	**D** ↑
Early Intervention[10]	**2003**	**1998**		
# of children (age 0-3) enrolled in early intervention services to reduce effects of developmental delay, emotional disturbance, and/or chronic illness	10,504	8,187	+ 28%	**B** ↑
Child Abuse & Neglect[11]	**FY 02-03**	**FY 97-98**		
# of children:				
Receiving assessments for abuse & neglect	107,157	98,696	+ 9%	**Not Graded**
Substantiated as victims of abuse & neglect	30,016	31,163	- 4%	
	2003	**1998**		
Confirmed deaths due to abuse	27	26	+ 4%	**F** →
Child Fatality[12]	**2003**	**1998**		
# of deaths per 100,000 children (age 0-17)	73.3	86.4	- 15%	**B** ↑

Health Indicator	Current Year	Benchmark Year	Δ	Grade & Trend
Deaths Due to Injury[13]	**2003**	**1998**		
# of deaths (age 0-17):				
Motor Vehicle-related	162	186	- 13%	**B** ↑
Drowning	28	25	+ 12%	**C** ↓
Fire/Burn	18	17	+ 6%	**C** ↓
Bicycle	11	14	- 21%	**B** ↑
Suicide	23	30	- 23%	**C** ↑
Homicide	46	48	- 4%	**D** ↑
Firearm	40	49	- 18%	**D** ↑
Alcohol, Tobacco & Substance Abuse[14]	**2003**	**1997**		
% of students in grades 9-12 who reported using the following in the past 30 days:				
Cigarettes	25	35.8	- 30%	**D** ↑
Marijuana	24.3	24.9	- 2%	**F** →
Alcohol (beer)	39.4	42.7	- 8%	**F** ↑
Cocaine	2.9	3.0	- 3%	**C** →
Physical Activity[14]	**2003**	**1998**		
% 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** ↑
Overweight[15]	**2003**	**1998**		
% of low-income children who are overweight:				
Age 2-4	14.4	11.4	+ 26%	**D** ↓
Age 5-11	22.8	16.5	+ 38%	**F** ↓
Age 12-18	26.5	23.5	+ 13%	**F** ↓
Teen Pregnancy[16]	**2002**	**1998**		
# of pregnancies per 1,000 girls (age 15-17):				
All	38.3	54.1	- 29%	**C** ↑
White	30.8	41.8	- 26%	**C** ↑
Other races	54.2	81.1	- 33%	**C** ↑

Notes:

1. For years, NC's Medicaid Program has been recognized as one of the better programs in the nation. Several studies have acclaimed NC Health Choice for Children, the state children's health insurance program implemented in 1998, as one of the best such programs. A community-based outreach initiative (now sponsored by the NC Pediatric Society Foundation and known as *Covering Kids*) 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 over the past five years. It should be noted that the 2003 rates are slightly higher than the 2002 rates, reflecting the effects of the economic downturn and continued loss of employer-based insurance. Access to care through insurance is a critical underpinning of children's health status. While the NC General Assembly has recently provided additional appropriations for Health Choice, enrollment may soon exceed the available funding.

2. Medicaid Preventive Care. Though the percentage of Medicaid-enrolled children receiving preventive care on a continuous basis has stalled recently, there has been a remarkable 24% increase between 1998 and 2003. This significant increase can be attributed to the *Community Care Program*, which links children with primary care providers, and the outreach efforts of the *Covering Kids Project*. Since even more progress is needed in this area, it is critical that the *Community Care Program* and outreach efforts remain in place.

3. Infant Mortality. The 2003 infant mortality rate of 8.2 matches the 2002 rate, which was the lowest ever recorded. This represents a 12% reduction since 1998, and a notable 23% reduction in the past decade. (This comes at a time when the rates in many states are beginning to creep up. Nevertheless, North Carolina still ranks in the mid-forties among the states.) Much progress has been made in reducing infant deaths from birth defects and sudden infant death syndrome, though progress may be beginning to stall. Both areas have received financial investments from the NC General Assembly, and have been the focus of enhanced services and awareness campaigns. It is critical that these investments be maintained. Significant attention has been focused on the differences between the

rates for whites and other races for some time, but the disparity is not narrowing, and this is cause for concern. There is also concern that the rate for Hispanics may be trending upward.

4. Low Birth-Weight Infants. Low birth-weight is a serious component of infant mortality that 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 general awareness campaigns can play a big role in this regard. The wide disparity between whites and other races is 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 last few 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 that enjoys the participation of public and private primary care providers.

6. Communicable Diseases. While still disappointingly high, the trend in the number of newly-reported congenital syphilis cases has been dropping. Continued progress is hoped for. Though more infants are being born to women who are HIV+, the transmission of HIV/AIDS from mother to child during the birth process has become a relatively rare event in NC. This is due to a statewide system of voluntary counseling and drug intervention, for which public and private providers should be proud. Regrettably, tuberculosis has made a comeback in children and youth in NC, largely due to the entry of migrants and immigrants with the disease.

7. Vaccine-Preventable Communicable Diseases. These diseases are no longer the childhood afflictions they used to be, due to the development and expanded accessibility of vaccines, and a statewide surveillance system guided by NC DHHS. Tetanus, polio, and diphtheria have been virtually eliminated. Cases of measles and mumps are relatively rare. The persistence of pertussis warrants careful monitoring. For the third consecutive year, no cases of rubella were reported, which 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 (and WIC Programs in particular). However, only 37% of the target children were screened in 2003, 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 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 is currently developing a plan to eliminate childhood lead poisoning by 2010. This initiative 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. No recent prevalence data are available. A problem of this magnitude warrants more frequent surveys. The decline in the hospital discharge rate reflects the efforts of the NC Medical Society Foundation and the *Community Care Program* to educate primary care providers in the management of asthma. More progress is expected.

9. Dental Health. Data from surveys conducted by the DHHS Oral Health Section show no improvement in the dental health of children entering kindergarten, with 23% 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 on school entry. Happily, the percent of school-age children with the protection of sealants continues to grow. Access to dental care for Medicaid-enrolled children has grown, but remains disappointingly low. In response to a court-negotiated settlement, the NC General Assembly approved appropriations to substantially increase dental reimbursement rates more than a year ago. Hopefully, this will enhance access quickly and dramatically in the near future.

10. Early Intervention. Program caseloads continue to increase, and NC's collaborative early intervention services system continues to receive national acclaim. Despite these impressive enrollment numbers, program administrators estimate that as little as 50% of the target population is being served. NC DHHS has made expansion and strengthening of this service system a priority, and children less than three years old who are confirmed victims of maltreatment are now part of the system's target. It is critical that federal and state appropriations keep pace with the growing service need.

11. Child Abuse and Neglect. The number of children substantiated as victims of abuse and neglect has hovered near 30,000 annually for almost a decade. In communicable disease terms, child maltreatment is endemic in our society. To deal with reports of maltreatment more efficiently and effectively, NC DHHS is implementing a Multiple Response System, with hopes of reducing repeat occurrences of abuse and neglect. Paradoxically, appropriations for the prevention of child maltreatment have been reduced by the NC General Assembly in recent years. Tragically, deaths due to abuse continue to occur about once every two weeks. Child abuse deaths represent more than half of all child homicides.

12. Child Fatality. The 2003 rate of child deaths is the lowest ever reported in NC—representing a 15% decline since 1998 and a remarkable 26% decline since 1993. Declines occurred in all age categories. 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 Injury. This is the primary cause of death in children older that one year of age. The largest of the injury categories—motor vehicle-related—has experienced the most dramatic decrease in the past decade, primarily due to the new graduated driver's license system and the expansion and enforcement of passenger restraint laws. In general, more awareness campaigns are needed to promote the vigilance needed to prevent unintentional injury deaths due to drowning, fires, etc. Cases of homicide and suicide, though in decline, are a continuing tragedy.

14. Alcohol, Tobacco, Substance Abuse, and Physical Activity. These data, which indicate improvement in all areas 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. It should be noted that when compared to data from the 2001 survey, progress in reducing the use of cigarettes has slowed, and the use of marijuana, alcohol, and cocaine show slight increases. 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 school children. Recent legislative appropriations for school nurses offer great promise in dealing with these issues.

15. Overweight. This is conservatively defined as a body mass index equal to or greater than the 95th percentile using federal guidelines. Despite recent attention to this problem, the data are getting worse. This does not bode well since childhood obesity can lead to adult health problems, such as high blood pressure, heart disease, diabetes, etc. 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 are sending an important signal that must be heeded. Increased public awareness offers some hope in dealing with this problem. In particular, the recommendations of the new NC Healthy Weight Initiative and the efforts of the NC Health and Wellness Foundation deserve consideration and support.

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. Of particular concern is the wide disparity in rates between whites and other races.