North Carolina Institute of Medicine

Citizens dedicated to improving the health of North Carolinians

North Carolina • 1999 • Child Health Report Card • 1999 •

IN COLLABORATION WITH:

Women's and Children's Health Section, North Carolina Department of Health and Human Services
North Carolina Area Health Education Centers Program • North Carolina Child Advocacy Institute
Wellness Council of North Carolina

The purpose of the North Carolina Child Health Report Card is to heighten awareness of the health of North Carolina's children by summarizing in one brief document both current and comparative data on important child health indicators. Data are presented for the most current year available and comparative year data for benchmark. Unless otherwise noted, data are presented for calendar years. This fifth Report Card is produced annually by the North Carolina Institute of Medicine (NC-IOM) to assist health administrators, legislators and family advocates in their efforts to improve the health and safety of children statewide.

The 1999 North Carolina Child Health Report Card was developed by the North Carolina Institute of Medicine (NC-IOM) in collaboration with The North Carolina Department of Health and Human Services. Data were compiled by Tom Vitaglione, MPH, Chief of the Children and Youth Branch in the Women's and Children's Health Section of the Division of Public Health at the North Carolina Department of Health and Human Services (NC-DHHS). Data sources include the health divisions of the NC-DHHS and the State Center for Health Statistics. Graphic design was by Carolyn Busse, Communications Coordinator of the Cecil G. Sheps Center for Health Services Research at the University of North Carolina at Chapel Hill.

Grades

Grades are based either on the percentage change in an indicator's current data in relation to the same indicator in a prior year, or on a general consensus among the sponsoring organizations. Generally, the following guidelines were used: A = 25% or greater improvement or current status remains "very good"; B = 11-25% improvement or current status remains "satisfactory"; C = no significant change (between 11% improvement and 11% decline) or current status remains "mediocre"; D = 11-25% decline or current status remains "unsatisfactory"; F = 25% or greater decline or current status remains "very poor". In general, pluses (+) and minuses (-) indicate where a grade falls at the threshold between two letter grades.

Projected NC Child Population Data, 1998

Age		Gender		Race	
	Total	Male	Female	White	Non-white
0-4	495,911	252,890	243,021	333,741	162,170
5 to 9	540,082	276,089	263,993	364,255	175,827
10 to 14	525,232	268,224	257,008	357,706	167,526
15 to 19	532,491	272,085	260,406	363,541	168,950
Total	**2,093,716**	**1,069,288**	**1,024,428**	**1,419,243**	**674,473**
		51%	**49%**	**68%**	**32%**

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Health Indicator	Current Year	Benchmark Year	Δ	Grade
Access to Preventive Care[1]	**1998**	**1993**		
% of Medicaid-enrolled children (age 0-18) receiving preventive care:	56.1	41.7	+ 35%	A
Infant Mortality[2]	**1998**	**1994**		
# of infant deaths per 1000 live births:				
All	9.3	10.0	- 7%	C
White	6.4	7.5	- 15%	B
Non-white	16.3	15.6	+ 5%	C
Low Birth-Weight Infants[3]	**1998**	**1994**		
% of infants born weighing 5.5 lbs or less:				
All	8.8	8.7	n/c	C
White	7.0	6.8	+ 3%	C
Non-white	13.2	13.2	n/c	C
Prenatal Care[4]	**1998**	**1994**		
% of mothers receiving prenatal care during first trimester:				
All	84.1	81.6	+ 3%	B
White	87.7	87.0	+ 1%	B
Non-white	75.1	69.0	+ 9%	C+
Immunization Rates[5]	**1998**	**1991**		
% of children with appropriate immunizations:				
At age 2	83	64.9	+ 28%	A
At school entry	98	98	n/c	A
Communicable Diseases[6]	**1998**	**1994**		
# of newly reported cases (age 0-19):				
Congenital Syphilis	22	57	- 61%	B
AIDS	7	8	- 13%	C
Tuberculosis	23	34	- 32%	B
Vaccine-Preventable Communicable Disease[7]	**1998**	**1994**		
# of cases (age 0-18):				
Measles	1	3	- 67%	A
Mumps	12	73	- 84%	A
Rubella	16	0	+ 100%	C
Diptheria	0	0	n/c	A
Pertussis	112	140	- 20%	B
Tetanus	1	0	+ 100%	A
Polio	0	0	n/c	A

Health Indicator	Current Year	Benchmark Year	Δ	Grade
Environmental Health[8]	**1998**	**1994**		
% of children (age 12-36 months):				
Screened for elevated blood lead levels	25.3	21.9	+ 16%	C
Found to have elevated blood lead levels	3.6	7.0	- 49%	A
Dental Health[9]	**1998**	**1994**		
% of children:				
With one or more sealants (Grade 5)	31	23	+ 35%	B
With fluoridated water systems	89	78	+ 14%	A
% of Medicaid-eligible children				
Ages 1-5 who used dental services	12	n/a		D
Ages 6-14 who used dental services	27	n/a		D
Ages 15-20 who used dental services	19	n/a		D
Developmental Health[10]	**1998**	**1994**		
# of children (age 0-3) enrolled in early intervention services to reduce effects of developmental delay, emotional disturbance and/or chronic illness	8,187	6,104	+ 34%	A
Child Abuse & Neglect[11]	**FY 97-98**	**FY 93-94**		
# of:				
Reports	61,298	59,907	+ 2%	D
Substantiated reports	19,310	18,397	+ 5%	D
Reported victims of child abuse & neglect	114,152	95,811	+ 19%	D
Substantiated victims of child abuse & neglect	34,759	n/a		D
	1998	**1995**		
Confirmed child deaths due to abuse	26	42	- 38%	F
Child Fatality[12]	**1998**	**1993**		

Health Indicator	Current Year	Benchmark Year	Δ	Grade
# of deaths (age 0-18) per 100,000 children	89.5	100.4	- 11%	B
Deaths Due to Injury[13]	**1998**	**1993**		
# of deaths (age 0-18)				
Unintentional				
Motor Vehicle	186	168	+ 11%	C
Drowning	25	27	- 8%	C
Fire/Burn	17	18	- 6%	C
Firearm	8	21	- 62%	A
Bicycle	14	13	+ 8%	C
Intentional				
Suicide	30	35	- 14%	C
Homicide	48	81	- 41%	B
Alcohol, Tobacco & Substance Abuse[14]	**1997**	**1993**		
% (Grades 9-12) who used the following in the past 30 days:				
Cigarettes	35.8	29.3	+ 22%	D
Smokeless Tobacco	7.4	11.1	- 33%	C
Marijuana	24.9	14.8	+ 68%	F
Alcohol (beer)	42.7	43.7	- 2%	D
Cocaine	3.0	2.2	+ 36%	F
Physical Fitness[14]	**1997**	**1993**		
% (Grades 9-12) who exercised at least 20 minutes a day, at least 3 days in the past week	55.3	59.1	- 6%	C
Nutrition[15]	**1998**	**1995**		
% of low-income children who are overweight:				
Age 2-4	11.4	9.8	n/c	D
Age 5-11	16.5	14.3	+ 13%	D
Age 12-18	23.5	21.5	- 3%	D
Teen Pregnancy[16]	**1998**	**1994**		
# of pregnancies per 1,000 girls (age 15-17):				
All	54.1	69.1	- 22%	C
White	41.8	50.7	- 18%	C
Non-white	81.1	111.7	- 27%	B

Notes

1. Access to Preventive Care: The number of Medicaid-enrolled children receiving preventive care increased 35% between 1993 and 1998. This significant increase can be attributed to the outreach efforts of the Health Check Initiative (EPSDT), an increase even more remarkable because Medicaid enrollment increased significantly during this period both due to outreach efforts and to expanded access created by the NC General Assembly. These outreach efforts are now being combined with the outreach efforts for NC Health Choice to produce a single, efficient awareness campaign for all public-sponsored health insurance in NC.

2. Infant Mortality: North Carolina's infant mortality rate has decreased by 7% since 1994, largely as the result of initiatives funded by the NC General Assembly. However, non-white infant mortality has increased 4.5% and the disparity between white and non-white rates has increased and is a cause for concern.

3. Low Birth-Weight Infants: Low birth-weight is often associated with increased risk of infant mortality or developmental concerns. The percent of infants born weighing 5.5 lbs. or less has changed very little over the past several years and remains an intractable problem of serious concern.

4. Prenatal Care: Infants whose mothers seek prenatal care in the first trimester (first 13 weeks) of pregnancy are less likely to be low birth-weight and are less likely to fall victim to infant mortality. In recent years, this indicator has been improving steadily, with most of the progress among non-white women.

5. Immunization Rates: The 28% increase in the immunization rate (at age 2) in the 1990s is directly attributable to a decision by the NC General Assembly to make vaccines universally available to children at low or no cost, and to a statewide immunization initiative encouraging age-appropriate immunizations. NC is one of the national leaders in regard to this indicator.

6. Communicable Disease: The number of newly-reported cases of congenital syphilis, AIDS and tuberculosis fluctuate year-to-year. Though the reduction in all three between 1994 and 1998 is encouraging, the incidence of these communicable diseases in children remains disappointingly high.

7. Vaccine-Preventable Communicable Disease: These diseases are no longer the childhood afflictions they used to be due to the discovery of vaccines and the vigilant efforts described in Note 5 to eliminate them. Since 1994, the number of measles, mumps and pertussis cases has decreased, and cases of diphtheria and polio have not occurred. However, surveillance and persistence are still required. These efforts proved particularly vital in containing the rubella outbreak of 1998 to 16 cases.

8. Environmental Health: The percentage of children age 12-36 months screened for blood lead levels increased 16% since 1994, largely due to the increased participation of private physicians in the screening process. However, only 25% of children are being screened, which is a disappointingly low percentage. Conversely, the number of children screened who are found to have elevated lead levels (defined as 10 micrograms/deciliter or higher) has decreased by 48.6%. This is largely due to successful public awareness campaigns and the continued reduction in exposure to products containing lead.

9. Dental Health: Indicators for preventive dentistry show steady gains. Awareness efforts regarding the effectiveness of sealants continue to be enhanced, thus contributing to the 35% increase since 1994. Medicaid populations are having great difficulty in gaining access to basic dental care.

10. Developmental Health: Early intervention caseloads continue to increase (34% since 1994) and NC's collaborative early intervention services system continues to receive national acclaim.

11. Child Abuse and Neglect: The number of substantiated reports and the number of affected children continue to rise alarmingly. At these rates, were it a communicable disease, child abuse and neglect in NC might be declared an epidemic. While child deaths due to abuse have decreased, each such death is a needless tragedy.

12. Child Fatality: The rate of child deaths continues to decline: 11% since 1993 and a full 25% in the past decade. The NC Child Fatality Task Force as well as state and local review teams continue to explore ways to prevent child deaths.

13. Deaths Due to Injury: This is the primary cause of death in children older than one year of age. Motor vehicle-related deaths are up 10.7% since 1993. Preliminary data for 1999 indicate that new graduated driver's license requirements in addition to increased enforcement of seat belt laws may reduce this rate in future years. While intentional deaths are always of great concern, the continued decreases in suicides and homicides are encouraging.

14. Alcohol, Tobacco, Substance Abuse and Physical Fitness: These data are derived from the biennial Youth Risk Behavioral Survey conducted by the NC Department of Public Instruction in cooperation with the Centers for Disease Control and Prevention. Though there are some questions regarding the scientific validity of the survey process, these data indicate a need for continued efforts to reduce the risk-taking behaviors of our school children of all ages.

15. Nutrition: Overweight is conservatively defined as weight for height (2-4 years old) or a body mass index (5-18 years old) greater than or equal to the 95th percentile. Concern about overweight prevalence occurs when it exceeds 5%. These data show that NC has more than two times the expected number of overweight preschoolers, more than three times the expected number of overweight school-age children, and more than four times the expected number of overweight teens. This is an issue of great concern as childhood obesity can lead to adult health problems such as high blood pressure, heart disease, etc. Note that the children represented by these data are those who receive services in local health department sponsored clinics and may not be representative of the state as a whole.

16. Teen Pregnancies: While there is an overall decline of 22% in the occurrence of teen pregnancies, the discrepancy between white and non-white pregnancy rates continues to be great. This remains a cause for concern and a reminder that more progress must be made in this area.