North Carolina Institute of Medicine

Citizens dedicated to improving the health of North Carolinians

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 indicators. This year, instead of presenting data comparing two consecutive years, data are presented for the most current years available and a comparative benchmark year. This fourth Report Card is produced annually by the North Carolina Institute of Medicine (NC-IOM) to assist health administrators, legislators and family advocates improve the health and safety of children statewide.

The 1998 North Carolina Child Health Report Card was developed by the North Carolina Institute of Medicine (NC-IOM) under the direction of Heather McCary Edin, research associate with the Cecil G. Sheps Center for Health Services Research at the University of North Carolina at Chapel Hill. Data were compiled by Tom Vitaglione, MPH, chief of the Children and Youth Branch, Women's and Children's Health Section, 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 at the Sheps Center.

Grades

Grades are based either on the percentage change in the indicator's current data in relation to the same indicator in a prior year, or on a general consensus among the sponsoring organizations regarding the acceptability of the current status. 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 bad". In general, pluses (+) and minuses (-) indicate where a grade falls at the threshold between two letter grades.

North Carolina Child Population Data, 1997

Age		Gender		Race	
	Total	Male	Female	White	Other
0-4 years	509,909	260,305	249,604	352,832	157,077
5-9 years	525,722	268,096	257,626	359,450	166,272
10-14 years	487,750	249,466	238,284	340,118	147,632
15-19 years	488,708	247,731	240,977	344,200	144,508
Total	2,012,089	1,025,598	986,491	1,396,600	615,489
		51%	49%	69%	31%

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Health Indicator	Current Year	Benchmark Year	Δ	Grade
Insurance Coverage[1]	**1997**	**not available**		
# of uninsured children:				
All	222,913			
Under Age 1	7,321			
Age 1-5	57,595			
Age 6-18	157,997			
Access to Preventive Care[2]	**1997**	**1993**		
% of Medicaid-enrolled children (age 0-18) receiving preventive care:	50.3	30.7	+67%	
Infant Mortality[3]	**1997**	**1994**		
# of infant deaths per 1000 live births:				
All	9.2	10.0	-8%	
White	6.9	7.5	-8%	
Non-white	14.8	15.6	-5%	
Low Birth-Weight Infants[4]	**1997**	**1994**		
% of infants born weighing 5.5 lbs or less:				
All	8.8	8.7	+1%	
White	7.1	6.8	+4%	
Non-white	13.0	13.2	-2%	
Prenatal Care[5]	**1997**	**1994**		
% of mothers receiving prenatal care during first trimester:				
All	83.4	81.6	+2%	
White	87.7	87.0	+1%	
Non-white	73.0	69.0	+6%	
Immunization Rates[6]	**1997**	**1991**		
% of children with appropriate immunizations:				
At age 2	81	64.9	+25%	
At school entry	98	98	none	
Communicable Diseases[7]	**1997**	**1994**		
# of newly reported cases (age 0-19):				
Syphilis, Gonorrhea, Chlamydia	13,519	13,464	+0.4%	
AIDS	11	8	+38%	
Tuberculosis	33	34	-3%	

Health Indicator	Current Year	Benchmark Year	Δ	Grade
Vaccine-Preventable Communicable Disease[8]	**1997**	**1994**		
# of cases (age 0-18):				
Measles	2	3	-33%	
Mumps	6	73	-92%	
Rubella	18	0	+1800%	
Diptheria	0	0	none	
Pertussis	54	140	-61%	
Tetanus	0	0	none	
Polio	0	0	none	
Environmental Health[9]	**1997**	**1994**		
% of children (age 12-24 months):				
Screened for elevated blood lead levels	36.9	25.5	+45%	
Found to have elevated blood lead levels	3.8	6.7	-43%	
Dental Health[10]	**1997**	**1994**		
% of children:				
With one or more sealants (Grades 5 and 6)	30	23	+30%	
With fluoridated water systems	89	78	+14%	
Developmental Health[11]	**1997**	**1994**		
# of children (age 0-3) enrolled in early intervention services to reduce effects of developmental delay, emotional disturbance and/or chronic illness	7,931	6,104	+30%	
Child Abuse & Neglect[12]	**FY 96-97**	**FY 93-94**		
# of:				
Reports	60,687	59,907	+1%	
Substantiated reports	19,512	18,397	+6%	
Reported victims of child abuse & neglect	102,168	95,811	+7%	
Substantiated victims of child abuse & neglect	33,133	not available		
	CY 1997	**CY 1995**		
Confirmed child deaths due to abuse	36	42	-14%	
Child Fatality[13]	**1997**	**1993**		
# of deaths (age 0-18) per 100,000 children	89.6	100.4	-11%	

Health Indicator	Current Year	Benchmark Year	Δ	Grade
Deaths Due to Injury[14]	**1997**	**1993**		
# of deaths (age 0-18)				
Unintentional				
Motor Vehicle	218	168	+30%	
Drowning	28	27	+4%	
Fire/Burn	17	18	-6%	
Firearm	8	21	-62%	
Bicycle	9	13	-31%	
Intentional				
Suicide	35	35	none	
Homicide	62	81	-23%	
Alcohol, Tobacco & Substance Abuse[15]	**1997**	**1993**		
% (Grades 9-12) who used the following in the past 30 days:				
Cigarettes	35.8	29.3	+22%	
Smokeless Tobacco	7.4	11.1	-33%	
Marijuana	24.9	14.8	+68%	
Alcohol (beer)	42.7	43.7	-2%	
Cocaine	3.0	2.2	+36%	
Physical Fitness[15]	**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%	
Nutrition[16]	**1997**	**1995**		
% of low-income children who are overweight:				
Age 0-4	9.9	10.7	-7%	
Age 5-11	14.5	14.0	+4%	
Age 12-18	22.1	21.7	+2%	
Teen Pregnancy[17]	**1996**	**1994**		
# of pregnancies per 1,000 girls (age 15-17):				
All	61.3	69.1	-11%	
White	45.6	50.7	-10%	
Non-white	94.6	111.7	-15%	

Notes

1. **Insurance Coverage:** The number of uninsured children in NC was derived from an average of 1995 and 1996 Current Population Survey data, which was adjusted to reflect true Medicaid enrollment and extrapolated to 1997 NC population projections. These numbers represent a benchmark before the implementation of *NC Health Choice for Children*, NC's new children's health insurance program, which became available on October 1, 1998 and now offers comprehensive benefits to children in families with incomes below 200% of the federal poverty guidelines ($32,900 or less for a family of 4). Thus, more than 50% of uninsured children in NC now have access to insurance. We anticipate that this enhanced access will have a positive effect on almost all of the health indicators in this Report Card in the years to come. For more information on *NC Health Choice for Children,* call 1-800-367-2229.

2. **Access to Preventive Care:** The percentage of Medicaid-enrolled children receiving preventive care improved by 64% in the four-year period 1993-1997. 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 will be combined with the outreach efforts for NC Health Choice to produce a single, efficient awareness campaign for all public-sponsored health insurance in NC.

3. **Infant Mortality:** The total number of deaths per 1000 live births in NC has declined 8% since 1994 and the 1997 rate of 9.2 matches the lowest ever reported infant mortality rate in NC and is a remarkable 25% lower than a decade ago. However, the large difference between white and non-white rates remains largely the same and is a continuing cause for concern.

4. **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.

5. **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 increasing steadily, but slowly.

6. **Immunization Rates:** The 25% increase in the immunization rate (at age 2) in the 1990s is directly attributable to a decision by the North Carolina General Assembly to make vaccines universally available to children at low or no cost, and to a statewide immunization initiative requiring children to be immunized before starting school.

7. **Communicable Diseases:** The number of newly-reported cases of syphilis, gonorrhea, chlamydia, AIDS and tuberculosis fluctuate when compared year-to-year. However, the average between 1994 and 1997 shows very little change overall.

8. **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 6 to eliminate these preventable diseases. Since 1994, the number of measles, mumps and pertussis cases decreased. However, surveillance and persistence are still required. These proved vital in containing a rubella outbreak in 1997 to 18 cases.

9. **Environmental Health:** The percent of children age 12-24 months screened for blood lead has increased 45% since 1994, largely due to the increased participation of private physicians. Conversely, the percent of children screened who are found to have elevated lead levels (defined as 10 micrograms/deciliter or higher) has decreased by 43%. This is largely due to successful public awareness campaigns and the continued reduction in exposure to products containing lead.

10. **Dental Health:** These indicators show steady gains. Awareness efforts regarding the effectiveness of sealants continue to be enhanced, thus contributing to the 30% increase since 1994.

11. **Developmental Health:** Early intervention caseloads continue to increase (30% since 1994) and NC's collaborative early intervention services system continues to receive national acclaim.

12. **Child Abuse & 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.

13. **Child Fatality:** The rate of child deaths continues to decline: 11% since 1994 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.

14. **Deaths Due to Injury:** This is the primary cause of deaths in children older than one year of age. Overall, unintentional deaths due to fire/burns, firearms and bicycles have declined 6%, 62% and 31%, respectively. However, the number of motor vehicle-related deaths continues to rise. Ironically, more deaths occurred with children as passengers, not drivers, indicating the need for increased compliance with state seatbelt and car safety seat restraint requirements. The number of intentional deaths due to homicide has decreased 23%, but the number of suicides remained the same. Both indicators are of great concern.

15. **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.

16. **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 two times (2x) the expected number of overweight preschoolers, more than three times (3x) the expected number of overweight school-age children, and more than four times (4x) 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 a local health department sponsored clinic and may not be representative of the state as a whole.

17. **Teen Pregnancies:** While there is an overall decline 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.