

North Carolina Annual School Health Services Report For Public Schools

Summary Report of School Nursing Services
School Year 2005-06



North Carolina
Department of Health and Human Services
Division of Public Health
Women's and Children's Health Section
School Health Unit



State of North Carolina
Department of Health and Human Services
Division of Public Health • Children and Youth Branch
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NORTH CAROLINA ANNUAL SCHOOL HEALTH SERVICES REPORT FOR PUBLIC SCHOOLS

SCHOOL YEAR: **2005-2006**

This report includes data submitted by school nurses, based on their knowledge of health services provided by school nurses and other health professionals in their schools from North Carolina Public Schools. However, it does not include data from state residential, private, charter, federal schools or pre-kindergarten programs.

SURVEY POPULATION

Number of Local Education Agencies in North Carolina	115
Number of Local Education Agencies responding to survey	115
Number of public school students in North Carolina	1,363,695
Number of School Nurse Positions	946
Number of School Nurses employed both full-time and part-time	932
Number of Full Time Equivalencies (37.5 or more hours per week)	867.86

Student Population, School Nurse Staffing, and Nurse to Student Ratios

Number of:	School Year 2001-02	School Year 2002-03	School Year 2003-04	School Year 2004-05	School Year 2005-06
Local Education Agencies	117	117	117	115	115
Schools	2,139	2,171	2,186	2,182	2,227
Students	1,271,995	1,279,468	1,311,163	1,332,009	1,363,695
School Nurses	716	737	768	903	932
School Nurse Full Time Equivalents	621.42	667.24	691.11	836.06	867.86
Average NC School Nurse/Student Ratio	1:2047	1:1918	1:1897	1: 1593	1:1571

School nurse/student ratios

School nurses are registered nurses. The national standard for the school nurse to student ratio is 1-to-750 for the general student population, 1-to-250 for students with special health needs, and 1-to-125 for students with severe and profound disabilities. Although there were nine hundred thirty-two school nurses during the 2005-2006 school-year, some were employed only part-time. For this report, school nurse to student ratios were based on full-time equivalencies of school nurses working in Local Education Agencies. There were nine hundred forty-six school nurse positions during the 2005-2006 school-year, fourteen of which remained vacant during the year. For a breakdown of nurse to student ratio by Local Education Agency, see Appendix C, page thirteen. The school nurse to student ratio varies widely across the state. The ratios during the 2005-2006 school-year ranged from 1-to-486 in Dare and Graham Counties to 0.5-to-4486 in Watauga County. The one school nurse position in Watauga County is part-time.

In recognition of the enormous health needs of school age children and the linkages between health and academic success, the North Carolina General Assembly included funds for a School Nurse Funding Initiative in its 2004 ratified budget. The funds provided sixty-five time-limited school nurse positions over a two-year period and eighty permanent school nurse positions. The 2006 budget made the sixty-five time-limited positions permanent. The budget stated that the Department of Health and Human Services / Division of Public Health and the Department of Public Instruction “shall provide funds to communities to hire school nurses” and that criteria for the awarding of funds should include determining areas of greatest need and greatest inability to pay for school nurses. The authorizing legislation specified that the following would be part of the criteria:

- current nurse-to-student ratio
- economic status of the community
- health needs of area children

Due to the additional one hundred forty five school nurse positions, the number of Local Education Agencies meeting the recommended ratio of 1-to-750 more than doubled between the 2003-2004 and 2004-2005 school-years, increasing from ten to twenty-one. This year the number has decreased to eighteen due to increasing enrollment and the loss of one locally funded position. Though all Local Education Agencies were able to provide school nursing services during the 2005-2006 school-year, a few school systems provided services for only a portion of their students (e.g., elementary/middle and/or students in exceptional children’s programs). Twenty-three full time equivalents of the nine hundred thirty two school nurses serve only students in the exceptional children’s program, and two school nurses serve Pre-Kindergarten exceptional children only. Overall, ninety-eight percent of students in North Carolina Public Schools had nursing services in their schools.

Employers of School Nurses

School nurses in North Carolina are employed by a variety of agencies. The major employers are Local Education Agencies, county and district health departments, and hospital-affiliated health care systems.

Number and Percent of Nurses Employed by Type of Agency

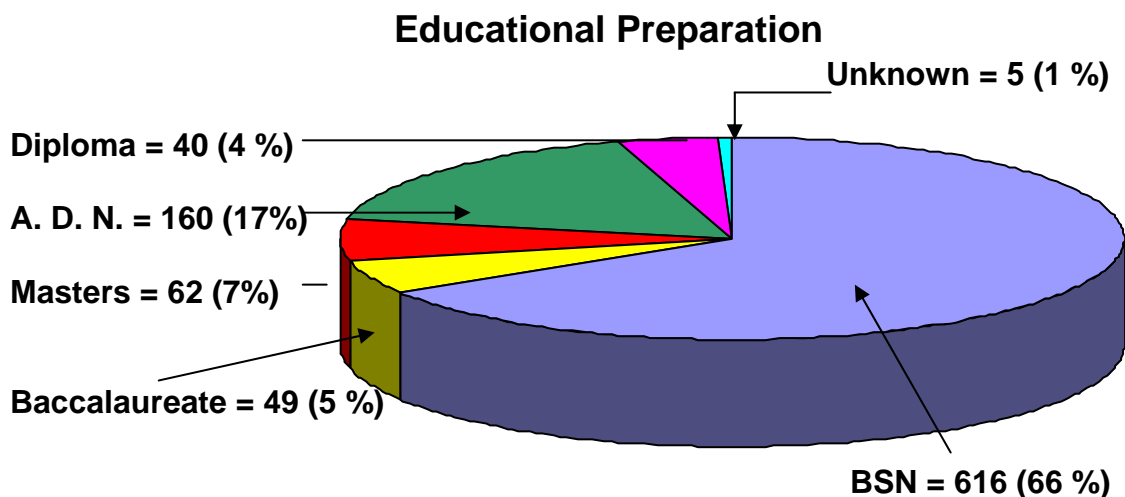
Local Education Agency	490	(52%)
Health Department	303	(33%)
Hospital Health Care System	98	(11%)
Alliances or combinations of above	41	(4%)

Funding for School Nurses

Funding for school nurse positions comes from a variety of sources including local tax revenues, state and federal funding through Local Education Agencies and local health departments, federal block grant and categorical funds, and public and private foundations.

Educational Preparation of School Nurses

The demand for school nursing services has grown rapidly in recent years. Nursing personnel who work on a day-to-day basis with school children must have the expertise required to meet increasingly complex health needs. The American Academy of Pediatrics supports the goal of professional preparation for school nurses. According to the American Academy of Pediatrics, qualifications for the professional school nurse include licensure as a registered nurse and a baccalaureate degree. Seventy-eight percent of the school nurses in North Carolina have a baccalaureate or higher degree.



B.S.N. – Bachelor of Science in Nursing
 Diploma – Hospital Based Nursing
 A.D.N. – Associate Degree in Nursing

National School Nurse Certification

The Department of Public Instruction requires that all school nurses hired by Local Education Agencies after July 1, 1998, hold national school nurse certification from either the American Nurses Credentialing Center or the National Association of School Nurses. Non-certified school nurses hired after this date have three years from the date of employment to become certified. Currently, three-hundred ninety-seven (forty-three percent) of the nine-hundred thirty-two nurses hold national school nurse certification. Of these, three-hundred forty-eight are certified by the National Association of School Nurses; forty-nine by the American Nurses Association. During the 2005-2006 school-year, three hundred eighty (forty-one percent) of the school nurses were certified within their first three years of being hired.

Certified:

1996-97: 17%	1999-00: 29%	2002-03: 39%	2005-06: 43%
1997-98: 20%	2000-01: 34%	2003-04: 40%	
1998-99: 25%	2001-02: 38%	2004-05: 38%	

Pre-kindergarten Programs

Increasing numbers of Pre-Kindergarten students are enrolling in North Carolina's public schools. Pre-Kindergarten students include 3,659 five year olds, 14,332 four year olds, 2,218 three year olds and 56 two year olds. Most students in these programs are developmentally delayed, have disabilities, and/or have special health care needs.

School nurses serve these students in addition to those in grades Kindergarten through twelfth grades.

NOTE: Not all respondents completed all portions of the remainder of the survey. Some Local Education Agencies do not provide these services or collect data regarding services in a portion of these areas.

SCHOOL HEALTH SERVICES

Chronic Health Conditions

An increasing number of students with chronic health conditions attend school. Since these conditions can affect attendance, school performance, and the student's level of well being, school nurses work closely with students, their families, health providers, and school staff to reduce the negative impact of illness on learning. Nurses serve as case managers, evaluate activities of daily living, and develop appropriate modifications for the learning environment. The number and percent of students with reported chronic health conditions are illustrated in the table below.

Number and Percent of Students with Chronic Health Conditions

School Year	Number and Percent
96-97	62,220 (5%)
97-98	78,387 (6%)
98-99	95,035 (8%)
99-00	114,765 (9%)
00-01	131,589 (11%)
01-02	129,329 (10%)
02-03	121,877 (10%)
03-04	161,559 (12%)
04-05	197,052 (15%)
05-06	209,718 (15%)

Asthma, a major chronic illness among school age children, is the leading cause of school absenteeism. Nurses from 115 Local Education Agencies reported:

- 80,886 students have asthma.
- 54 Local Education Agencies have asthma education programs.
- 2,283 students were taught the "Open Airways" curriculum.
- 3,714 students use peak flow monitoring while at school.

Diabetes legislation, requiring diabetic care managers in the schools effective July 1, 2003, reflects concern for the four thousand four hundred thirty-seven students with diabetes as reported by nurses in 115 Local Education Agencies.

- 3,419 monitor blood glucose at school
- 1,918 receive insulin injections at school
- 1,414 have insulin pumps

Private Duty Nurses/One-on-One Health Care Attendants

Some medically fragile students require one-on-one nursing care during the school day. Some Local Education Agencies contract with private duty nurses for specific health conditions and procedures. Thirty-seven Local Education Agencies reported contracting "private duty nurses/health care attendants." These attendants consisted of 69 Registered Nurses, 22 Licensed Practical Nurses and 3 Health Aides.

Because school nurses are not present full-time in the majority of North Carolina's schools, the number of students with chronic conditions is likely to be under reported. *For a more extensive list of the types of chronic health conditions that were managed at school, see Appendix A, page 11.*

Of particular importance were reports from school nurses regarding pregnancies, suicide attempts and deaths, and homicides.

Pregnancy

School nurses reported an increase in the number of known pregnancies from three thousand four hundred and six in 2004-2005 to four thousand seventy-two in 2005-2006. Known pregnancies included six elementary school students, three hundred sixty-three middle school students, and three thousand seven hundred and three high school students. Seventy percent stayed in school during the pregnancy. The table below shows the exceptions.

Status of School Enrollment for Students Known to be Pregnant: School Year 2005-06

	Elementary	Middle School	High School	Total
Students receiving homebound instruction	4	109	1115	1228
Students dropping out permanently	0	30	441	471

Suicide and Homicide

There was a decrease in number of deaths by suicide and suicide attempts from 2004-2005 to 2005-2006. In 2005-2006 there were ten deaths from suicide as compared to twenty-three in 2004-2005. Likewise, the number of known suicide attempts decreased from four hundred and one in 2004-2005 to three hundred eighty-nine in 2005-2006.

Death by Suicide/Homicide: School Year 2005-06

	Elementary	Middle School	High School	Total
Deaths from suicide	0	2	8	10
Suicides occurring at school	0	0	2	2
Death from homicide	3	4	11	18
Homicides occurring at school	0	0	0	0

Known Suicide Attempts: School Year 2005-06

	Elementary	Middle School	High School	Total
Known Suicide Attempts	79	113	197	389

Do Not Resuscitate Orders

Some students who attend school have terminal health conditions. There are times when parents and medical providers have determined that no life-saving measures are to be initiated at school. In these situations, a Do Not Resuscitate Order is prepared for the school. In 2005-2006, there were at least seventeen such students.

Student Tobacco Use

Schools communicate tobacco-free messages to young people through school policies, health education programs, and the day-to-day interactions between staff and students. As of July 2006, seventy eight percent of Local Education Agencies have adopted a one-hundred percent tobacco free policy. School policy totally prohibits tobacco use for all students, staff and visitors in the school buildings and extends to the entire campus, vehicles and all school events including outdoor events. The policy extends to hours after regular classroom schedules, twenty four hours a day, seven days a week and includes off-campus school-sponsored student events. This is an increase of seventeen percent over the 2004-2005 NC Annual School Health Services Report. School nurses reporting from 115 Local Education Agencies stated:

- **56** (49%) offered alternatives to suspension programs.
- **61** (53%) offered smoking cessation classes.

Health Counseling

Students contact the school nurse for answers to questions ranging from normal growth and development to serious emotional and mental health concerns requiring referrals to mental health professionals. As the table below illustrates, school nurses provided more than 58,000 individual health-counseling sessions.

Individual Health Counseling Sessions

Health Counseling Issues	Elem	MI	HS	Total
Child Abuse & Neglect	2008	679	580	3267
Grief & Loss	813	717	1334	2864
Pregnancy Related	37	1080	5864	6981
Puberty/Hygiene/"growing up"	9018	6095	15836	30949
Substance Abuse	59	422	2324	2805
Suicide/Depression	551	974	2883	4408
Tobacco Use	117	532	2881	3530
Violence & Bullying	1134	1273	1010	3417
Total	13737	11772	32712	58221

Health Teaching

School nurses were involved in a variety of health teaching and instructional sessions including one-on-one, small groups, and classroom presentations. Classroom instruction included such topics as hygiene, first aid, wellness and fitness promotion, Open Airways and other asthma management programs, Acquired Immune Deficiency Syndrome peer education, smoking prevention and cessation, violence prevention, puberty, prenatal and parenting programs. Faculty and staff training included medication administration, infection control, Occupational Safety and Health Administration Bloodborne pathogen regulations, Cardiopulmonary Resuscitation, first aid, chronic disease management, general and intensive training for the care of students with diabetes. The school nurses also conducted health fairs and made presentations to Parent Teacher Organizations and other community groups. All in all,

the school nurses reported providing 30,400 programs and presentations during the 2005-2006 school-year.

Parents also depend on school nurses for health guidance. During the 2005-2006 school-year, school nurses evaluated at school 135,550 student injuries and acute illnesses that had originated at home. School nurses assist families by locating medical and dental resources and referring students to these providers for the diagnosis and treatment of a wide variety of health problems.

Health Care Procedures at School

Some students with chronic illness and/or physical disabilities require invasive health care procedures to be performed during the school day. The school nurses reported that at least 20,673 students needed one or more of the following invasive procedures: urinary catheterizations, suctioning, tracheostomy care, nasogastric or gastrostomy tube feedings, stoma care, blood glucose monitoring, oxygen therapy, and nebulizer treatments. The following list illustrates the diversity of some of the more commonly performed procedures at school.

Number of Students Requiring Health Care Procedures

Central Venous Line	81	Suctioning	122
Glucagon Injection	1,863	Tracheostomy Care	79
Nebulizer Treatments	1,840	Tube Feeding	482
Shunt Care	204	Use of Epi-pens	6,739
Stoma Care	179	Urinary Catheterizations	287

Medications at School

During the 2005-2006 school-year, school nurses reported that 87,708 students received medication while at school. On a long term daily basis, 19,772 students received medication. On a short term daily basis, 11,300 students received medication. And 56,636 students had emergency medication available at school. Medications received most frequently on a daily basis include: Ritalin, Dexedrine, Lithium, and other psychotropic, controlled substances. Emergency drugs include rescue asthma inhalers, Glucagon, Diastat, and epinephrine injections. The table below provides a ten-year overview of the numbers and percent of students receiving medications as reported by school nurses.

Administration of Medications

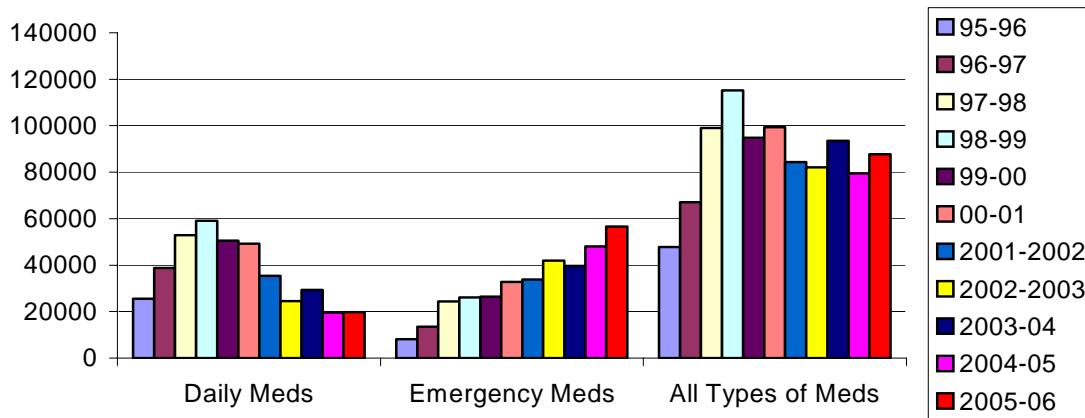
Secretaries, classroom teachers, and teacher assistants are the primary persons who administer medications on a daily basis in the majority of school systems. Administration of medications to students by school staff is a serious responsibility. To ensure that school staff members perform this task with safety and accuracy, it is essential that a school nurse be available to review and participate in the development of school policy and procedures; train and supervise teachers and other staff about all aspects of giving medications correctly; and serve as coordinator among parents, medical providers, and the school.

School nurses in ninety-nine percent of the Local Education Agencies provided formal training programs for school employees who were designated to administer medications and conducted audits of medication records.

Number and Percent of Students Receiving Medications Administered at School

School Year	# Students	Daily Medications	All Types of Medications
96-97	1,183,335	38,780 (3%)	67,073 (6%)
97-98	1,215,556	52,887 (4%)	98,961 (8%)
98-99	1,226,748	59,048 (5%)	115,200 (9%)
99-00	1,237,794	50,554 (4%)	94,812 (8%)
00-01	1,243,442	49,303 (4%)	99,411 (8%)
01-02	1,271,995	35,319 (3%)	84,396 (7%)
02-03	1,279,468	24,477 (2%)	82,147 (6%)
03-04	1,311,163	29,321 (2%)	93,561 (7%)
04-05	1,332,009	19,541 (2%)	79,482 (6%)
05-06	1,363,695	19,772 (1%)	87,708 (6%)

Number of Students Receiving Daily/Emergency/All types of Medications at School



Health Care Coordination

The school nurses' role often extends beyond the school setting. They serve as liaisons with physicians, dentists, community agencies, and families while supporting and caring for the health needs of students. More than 7,975 home visits were conducted during the 2005-2006 school-year to assist families with student health issues.

Emergency Care

Injuries and illnesses are common occurrences in the school-aged population. Many minor incidents occur to students and staff during the course of the school day. School nurses reported approximately 611,339 minor injuries occurring at school during 2005-2006. More importantly, 13,629 serious injuries were reported. Serious injuries are defined as medical emergencies requiring an Emergency Medical Service call or immediate medical care plus the loss of one-half day or more of school. Of the serious injuries reported, thirty four percent occurred on the playground. Another twenty eight percent occurred in Physical Education classes and twenty four percent occurred in the classroom. For a complete breakdown of type and place of injury, refer to Appendix B page 12. There were adverse outcomes for some of the students with serious injuries that occurred at school. For instance, 1,694 of the injuries involved law enforcement

intervention; thirteen students were permanently disabled, while two died. Only forty percent of the Local Education Agencies have school nurses available on campus most of the time when student and staff injuries occur. Therefore, school nurses must assure that school personnel are trained to provide first aid in emergencies. Sixty-six percent of the Local Education Agencies reported having trained school personnel as First Responders in every school building on campus.

Health Screening, Referral, Follow-up, and Secured Care

Mass screenings or grade-wide screenings are often conducted with the assistance of trained volunteers or other health professionals such as audiologists, dental hygienists, and speech/language pathologists. Dental screenings, referrals, and follow-up are provided by Division of Public Health dental hygienists in conjunction with school nurses. The dental screening data provided in this report may be incomplete since dental screening numbers from all providers were unavailable. Additional data is available however through the Division of Public Health Oral Health Branch. The following table shows the results of mass screening projects that were conducted during the 2005-2006 school-year. With the exception of pediculosis, significant numbers of students did not complete care by seeking or receiving medical or dental diagnosis and/or treatment. This reflects the need for additional staff to provide appropriate follow-up and care management services for students.

SCREENING	TOTAL	REFERRED	SECURED CARE	% SECURED CARE
Blood Pressure	53,691	2,785 (5%)	2,099	75%
Dental	149,142	20,607 (14%)	10,435	51%
Hearing	158,934	6,870 (4%)	4,225	61%
Pediculosis	346,046	13,746 (4%)	13,211	96%
Spinal	4,377	82 (2%)	41	50%
Vision	465,353	37,561 (8%)	26,847	71%
Other*	75,246	5,419 (7%)	2,756	51%

*(Communicable & Infectious Diseases, BMI, ADHD, Depression & Staff Health Screenings)

HEALTH POLICIES

Policies are essential to guide the development and implementation of coordinated school health programs. School nurses cited the presence of written, school board approved policies in the following key areas:

Medication Administration	98%
Prevention/Control of Communicable Disease	94%
Special Health Care Services	86%
Provision of Emergency Care	73%
Maintenance of School Health Records	61%
Transportation (Non-School Bus)	61%
Injury Reporting	60%
Health Care Referral and Follow-up	50%
Health Screenings	49%
Health Problem Identification	42%

COMMUNITY INVOLVEMENT IN SCHOOL HEALTH SERVICES

Community involvement contributes to the quality and effectiveness of school health programs and services. School nurses encourage and promote community involvement through:

- promotion and support of School Health Advisory Councils
- development of inter-agency planning and written agreements
- recruitment of local physician advisors
- development of Parent Teacher Organization health subcommittees

All of the Local Education Agencies reported having School Health Advisory Councils. Seventy-six have physician advisors for their school health programs. Of those, thirty-six are family practice physicians and thirty-two are pediatricians.

DATA SOURCE:

NC Annual School Health Nursing Survey: Summary Report of School Nursing Services 2005-06
NC Division of Public Health • Department of Health and Human Services
Public Schools of North Carolina • Department of Public Instruction

**APPENDIX A: CHRONIC HEALTH CONDITIONS
SCHOOL YEAR 05-06**

Health Conditions (EL = elementary; MI = Middle School; HI = High School) Some nurses reported only totals with grade level not specified.					
Condition	EL	MI	HS	Grade Level Not Specified	Grand Total of Condition
ADD/ADHD	24046	12172	6911	446	43575
Addison's Disease	36	14	27	68	145
Allergies (Severe)	10447	4195	3724	20	18386
Anorexia/Bulimia	49	141	209	4	403
Asperger's Disease	529	232	159	3	923
Asthma	44531	18865	15874	1616	80886
Autism	2600	714	594	103	4011
Cerebral Palsy	1215	450	472	23	2160
Congenital/Other Cardiac	2459	1039	1309	22	4829
Cystic Fibrosis	145	84	71	3	303
Cytomegalovirus	22	10	6	1	39
Diabetes	1316	1276	1797	48	4437
Down's Syndrome	643	230	277	17	1167
Gastrointestinal Disorders	1776	875	974	49	3674
Genetic Diseases, Other	770	266	251	4	1291
Hemophilia/Bleeding Disorder	351	171	268	12	802
Hepatitis B	20	4	13	3	40
Hepatitis C	6	6	9	3	24
HIV/AIDS	33	18	15	1	67
Hypertension	218	284	547	87	1136
Hyperthyroidism	76	63	110	2	251
Leukemia	144	64	57	2	267
Malignant Disease	211	116	122	5	454
Migraine Headache	2180	2491	3152	72	7895
Multiple Sclerosis	18	22	14	5	59
Muscular Dystrophy	102	67	65	5	239
Neuromuscular Disease	287	128	145	1	561
Orthopedic Disability (Permanent)	962	544	722	22	2250
Psychiatric Disorder	2614	1996	2315	458	7383
Renal Disease	622	295	325	12	1254
Rheumatoid Arthritis	224	150	142	8	524
Severe Hearing &/or Vision Impaired	2119	836	864	61	3880
Seizure Disorder	3824	1502	1703	59	7088
Sickle Cell Disease	717	307	356	9	1389
Spina Bifida	244	103	133	5	485
Substance Abuse (known)	20	307	1030	2	1359
Traumatic Brain Injury	220	85	119	8	432
Ulcers	73	65	104	21	263
Other	2913	1175	1160	139	5387
Total	108782	51362	46145	3429	209718

**APPENDIX B:
REPORTED INJURIES
in
North Carolina Public Schools
requiring EMS response or immediate care by physician/dentist AND loss of 1/2 day or more of school
School Year 05-06**

Type of Injury	Bus	Hallway	Classrm	Playground	PE Class	Shop	Restrm.	Lunchrm.	Other	Total # & %	
Abdominal/Internal	5	15	30	72	35	0	4	5	0	166	1%
Anaphylaxis	5	12	72	33	21	0	0	19	2	164	1%
Back Injury	6	12	33	86	94	1	5	6	6	249	2%
Dental Injury	11	38	85	226	149	1	12	10	2	534	4%
Drug Overdose	15	27	76	21	3	0	15	2	0	159	1%
Eye Injury	10	23	199	148	130	31	10	14	4	569	4%
Fracture	21	87	108	1090	618	5	13	18	34	1994	15%
Head Injury	31	108	179	416	315	10	32	33	22	1146	8%
Heat Related Emergency	6	2	61	92	68	4	0	3	1	237	2%
Laceration	42	141	363	702	380	86	50	29	22	1815	13%
Neck Injuries	4	4	9	36	38	0	1	1	1	94	1%
Psychiatric Emergency	6	25	302	21	13	0	10	6	2	385	3%
Respiratory Emergency	7	33	635	158	231	1	8	8	4	1085	8%
Seizures	22	100	642	100	82	1	2	30	1	980	7%
Sprain or Strain	38	297	235	1154	1593	12	19	17	45	3410	25%
Other	67	40	265	119	95	9	12	29	6	642	5%
Total #	296	964	3294	4474	3865	161	193	230	152	13629	100%
%	2%	7%	24%	34%	28%	1%	1%	2%	1%	100%	

Appendix C
NORTH CAROLINA
School Nurse to Student Ratio
 By Local Education Agency (LEA)
School Year 2005-06

County public school districts are listed alphabetically: City school districts are listed alphabetically under the counties in which they are located. (This report does not include private, charter, federal, or state residential schools.) Ratios are based on FTEs working in local education agencies (LEAs) grades K – 12. Vacant positions are not included in calculating the school nurse to student ratio. Also note, Pre-K membership numbers are not included in the school nurse to student ratio nor contained within the reported average daily membership of the LEAs.)

County/LEA (SY 2004-05)	# of SN positions	RN (FTE only)	# STUDENTS	RATIO	COMMENTS
Alamance-Burlington	13	12.38	21,799	1:1761	
Alexander	4	4	5,682	1:1421	
Allegany	2	2	1,520	1:760	
Anson	4	4	4,167	1:1042	
Ashe	3	3	3,235	1:1078	
Avery	2	2	2,287	1:1144	
Beaufort	3	3	7,111	1:2370	
Bertie	5	3	3,211	1:1070	2 positions vacant SY 05-06
Bladen	4	3.24	5,470	1:1688	
Brunswick	10	10	11,133	1:1113	
Buncombe: Buncombe County Schools	9	8.6	25,236	1:2934	
Asheville City Schools	4	3.4	3,753	1:1104	
Burke	13	13	14,263	1:1097	
Cabarrus: Cabarrus County Schools	27	22.51	23,799	1:1057	
Kannapolis City Schools +	8	6.64	4,704	1:708	
Caldwell	6	5.53	12,922	1:2337	
Camden +	3	3	1,808	1:603	
Carteret	6	6	8,209	1:1368	
Caswell	2	2	3,253	1:1627	
Catawba: Catawba County Schools	9	9	17,004	1:1889	
Hickory City Schools	4	4	4,487	1:1122	
Newton Conover Schools	3	3	2,910	-----	1 FTE serves 133 EC students only; 2 FTE serve all others (1:1389)
Chatham	4	4	7,471	1:1868	
Cherokee	6	4.7	3,629	1:772	
Edenton-Chowan +	4	3.8	2,444	1:643	
Clay	1	1	1,314	1:1314	
Cleveland	12	11.71	16,878	-----	1 FTE serves 148 EC students only; 10.71 serve all others (1:1562)

County/LEA (SY 2004-05)	# of SN positions	RN (FTE only)	# STUDENTS	RATIO	COMMENTS
Columbus: Columbus County Schools	5	5	6,929	1:1386	
Whiteville City Schools	3	3	2,585	1:862	
Craven	22	18.98	14,544	1:766	
Cumberland	30	23.62	51,886	-----	5.32 FTE serve 50 EC students only; 18.3 serve all others (1:2833); 1 position vacant SY 05-06
Currituck +	6	6	4,025	1:671	
Dare +	10	10	4,858	1:486	
Davidson: Davidson County Schools	6	4.93	19,917	1:4040	
Lexington City Schools	3	3	3,019	-----	1 FTE serves 41 EC students only; 2 FTE serve all others (1:1489)
Thomasville City Schools +	4	4	2,580	1:645	
Davie	9	8.4	6,350	1:756	
Duplin	8	8	8,896	1:1112	
Durham	19	11.65	30,883	-----	1 FTE serves 50 EC only; 10.65 serves all others (1:2895); 3 positions vacant SY 05-06
Edgecombe	5	5	7,469	1:1494	
Winston-Salem-Forsyth	32	14	49,237	-----	3 FTE serves 362 EC students only; 11 FTE serve all others (1:4443)
Franklin	7	7	7,938	1:1134	
Gaston	20	19.53	31,793	-----	1 FTE serves 144 EC students; 18.53 serve all others (1:1708)
Gates	2	2	2,003	1:1002	
Graham +	3	2.5	1,216	1:486	
Granville	4	4	8,662	1:2166	
Greene	4	3.85	3,195	1:830	
Guilford	32	30.48	68,118	-----	3 FTE serves 264 EC students only; 27.48 serve all others (1:2469)
Halifax: Halifax County Schools	4	4	4,949	1:1237	
Roanoke Rapids City Schools	3	3	2,950	1:983	
Weldon City Schools +	2	2	1,014	1:507	
Harnett	9	8.64	17,310	1:2003	
Haywood	9	9	7,799	1:867	
Henderson	5	5	12,578	1:2516	
Hertford +	5	5	3,469	1:694	
Hoke	5	3.64	6,964	1:1913	.36 FTE vacant during SY 05-06
Hyde +	1	1	627	1:627	
Iredell: Iredell-Statesville Schools	14	14	20,201	-----	2 FTE serves 34 EC students only; 12 FTE serve all others (1:1681)
Mooresville City Schools	3	3	4,808	1:1603	

County/LEA (SY 2004-05)	# of SN positions	RN (FTE only)	# STUDENTS	RATIO	COMMENTS
Jackson	2	2	3,633	1:1817	
Johnston	12	12	27,433	1:2286	
Jones	2	1	1,317	1:1317	1 position vacant as of 1-06
Lee	8	7.47	9,133	1:1223	
Lenoir	5	5	9,806	1:1961	
Lincoln	6	5	11,810	1:2362	1 position vacant SY 05-06
Macon	4	2.64	4,183	1:1584	1 position vacant as of 2/1/06
Madison	2	2	2,601	1:1301	
Martin	2	2	4,255	1:2128	
McDowell	5	5	6,397	1:1279	
Charlotte-Mecklenburg	69	67.24	122,261	-----	1 FTE serves 265 EC students only; 66.24 serve all others (1:1842)
Mitchell	2	2	2,252	1:1126	
Montgomery	4	4	4,477	1:1119	
Moore	6	6	12,004	1:2001	
Nash-Rocky Mount	13	12.17	17,927	1:1473	
New Hanover +	35	34.18	23,848	1:698	
Northampton	3	2	3,053	1:1527	1 position vacant SY 05-06
Onslow	17	17	22,593	1:1329	
Orange:	11	9.28	6,668	1:719	1 position vacant 1-06
Orange County + Chapel Hill-Carrboro +	17	16.82	10,973	1:652	1 position ended 6/06
Pamlico	2	2	1,574	1:787	
Elizabeth City-Pasquotank	5	5	6,029	1:1206	
Pender	6	6	7,352	1:1225	
Perquimans +	3	3	1,770	1:590	
Person	3	3	5,759	1:1920	
Pitt	15	15	21,925	1:1462	
Polk	1	1	2,451	1:2451	
Randolph: Randolph County Schools	7	7	18,350	1:2621	
Asheboro City Schools	3	3	4,510	1:1503	
Richmond	6	6	8,164	-----	1 FTE serves 90 EC students only; 5 FTE serve all others (1:1615)
Robeson	21	21	23,913	1:1139	
Rockingham	7	7	14,326	1:2047	
Rowan-Salisbury	11	10.48	20,717	1:1977	
Rutherford	5	5	9,898	1:1980	
Sampson: Sampson County Schools	6	6	8,119	1:1353	
Clinton City Schools	3	3	3,012	1:1004	
Scotland	6	5.92	6,765	1:1143	

County/LEA (SY 2004-05)	# of SN positions	RN (FTE only)	# STUDENTS	RATIO	COMMENTS
Stanly	4	4	9,606	1:2402	
Stokes	4	4	7,305	1:1826	Lost one grant position 2-1-06
Surry:	7	7	8,658	1:1237	
Surry County Schools	2	1.43	1,221	1:854	
Elkin City Schools					
Mt. Airy City Schools +	3	3	1,759	1:586	
Swain +	3	3	1,816	1:605	
Transylvania	2	2	3,743	-----	1 FTE serves 297 EC students only; 1 FTE serves all others (1:3446)
Tyrrell +	1	1	616	1:616	
Union	16	15	31,330	1:2089	
Vance	5	5	7,948	1:1590	
Wake	61	52.66	120,367	1:2286	1.07 FTE serves Pre-K only and is not counted in the FTE for K-12; 1 FTE on leave
Warren	4	2	2,883	1:1442	2 positions vacant SY 05-06
Washington +	3	3	2,140	1:713	
Watauga	1	0.5	4,486	0.5:4486	
Wayne	10	8.96	19,027	-----	1 FTE serves 71 EC students only; 7.96 serve all others (1:2381)
Wilkes	9	8.53	9,976	1:1170	
Wilson	5	5	12,414	1:2483	
Yadkin	4	3.85	6,151	1:1598	
Yancey	2	2	2,520	1:1260	

+Meets nationally recommended ratio of 1:750 (endorsed by the American Academy of Pediatrics, National Association of School Nurses, Inc., American Nurses Association, Centers for Disease Control and Prevention, American School Health Association, and other professional associations.)

SCHOOL NURSE

=Registered Nurses (R.N.s) are recognized as school nurses

LEA

=Local Education Agency (school district) There are 115 LEAs in N.C.

FTE

=Full Time Equivalency

Students

=Final Average Daily Membership as reported by Public Schools of North Carolina • Department of Public Instruction (Pre-K enrollments are not included in the student membership)

EC Student

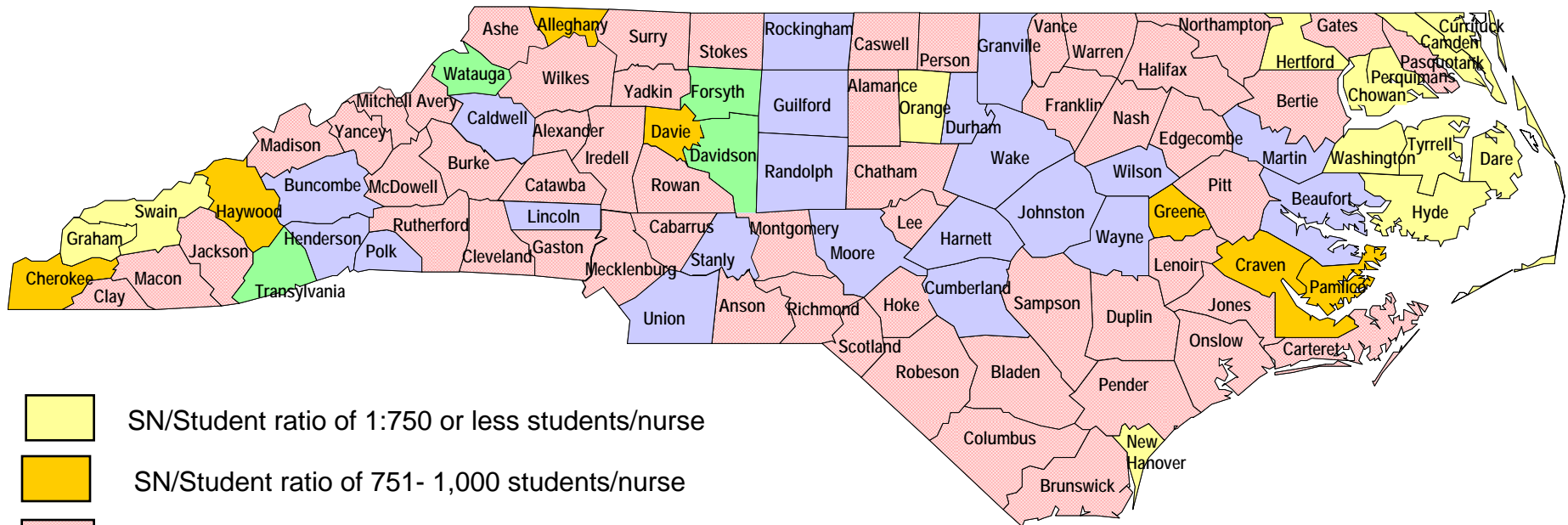
=Exceptional Children: those who receive special education under Federal Law I.D.E.A.






DATA SOURCE:

2005-06 School Nurse Survey compiled by Regional School Nurse Consultants
 N.C. Division of Public Health • Department of Health and Human Services
 and
 Public Schools of North Carolina • Department of Public Instruction

School Nurse/Student Ratio SY 2005-06

(Ratio is based upon full-time equivalencies)



-  SN/Student ratio of 1:750 or less students/nurse
-  SN/Student ratio of 751- 1,000 students/nurse
-  SN/Student ratio 1,001-2,000 students/nurse
-  SN/Student ratio 2,001-3,000 students/nurse
-  SN/Student ratio 3,001-4,999 students/nurse

Note: The National Association of School Nurses recommends a SN/student ratio of 1:750

Source: NC Annual Survey of School Health Services
NC DHHS August 2006

