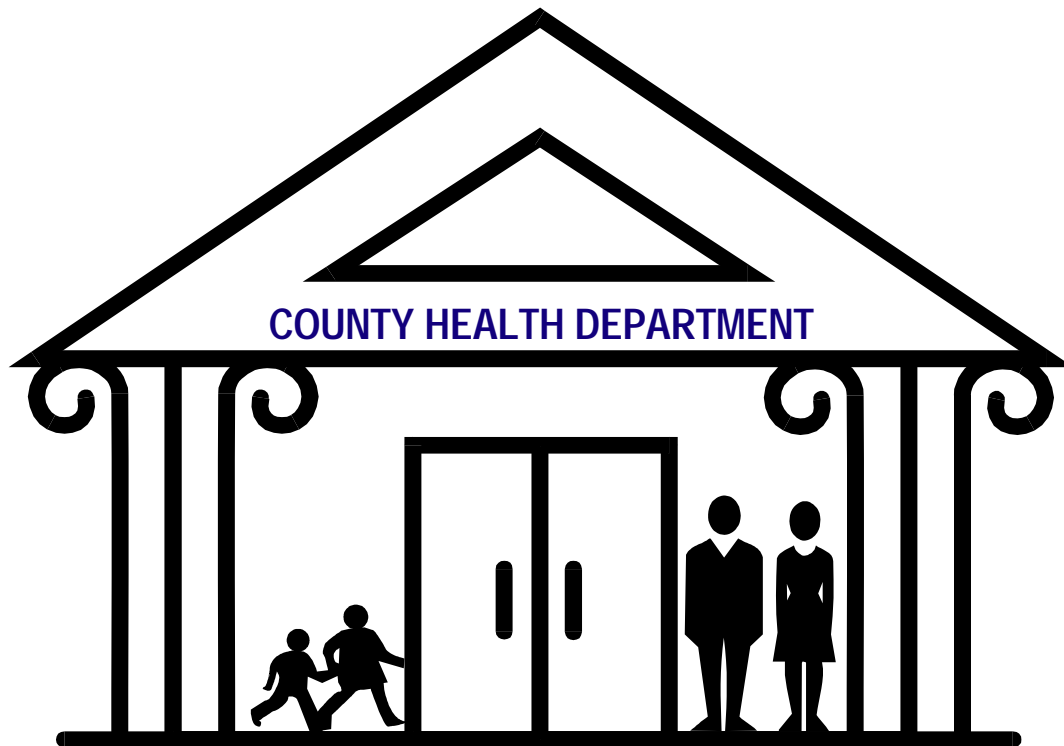


Local Health Department Facilities, Staffing, and Services Summary Fiscal Year 1999



North Carolina
Department of Health and Human Services
Division of Public Health
State Center for Health Statistics
Raleigh, North Carolina
August 2000



Local Health Department Facilities, Staffing, and Services Summary for Fiscal Year 1999

August 2000



**N.C. Department of Health and Human Services
Division of Public Health
State Health Director**

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State Center for Health Statistics

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Local Health Department Facilities, Staffing, and Services Summary For Fiscal Year 1999

Introduction

The Survey of Local Health Department Facilities, Staffing, and Services was begun in FY 1984 and administered annually through FY 1990. There were no surveys done in 1991 and 1992. Resuming in FY 1993, the survey has been completed biennially. The information reported here is as of July 1, 1999.

Ninety-four of the one hundred North Carolina counties responded to the survey. The counties that did not respond were: Avery, Cabarrus, Gates, Hertford, Hyde, and Lincoln. Some counties combined their responses into one survey covering their district. Alleghany, Ashe and Watauga counties (Appalachian district) reported on one form. Martin, Tyrrell, and Washington counties reported together. Also, Pasquotank, Perquimans, Camden, Chowan, and Currituck counties combined their responses on one survey. Thus, there were 86 separate surveys returned.

Previously the data was stored in Lotus or Excel spreadsheets. County level data was available in electronic format from the State Center for Health Statistics (SCHS), and published. An Access database has been created to facilitate better electronic dissemination of the FY 1999 data. Only summary information will be published in this report. The entire database with county specific information can be accessed through the SCHS web site (www.schs.state.nc.us/SCHS/) or by contacting Information Services (919-733-4728).

Changes to the Survey Instrument

Major changes were made to the survey instrument for FY 1999. In the **facilities** section, additional questions were asked for information on facility ownership, asbestos content, adequacy for current and projected client load, and plans for renovation, expansion, or new construction. For counties that were planning new construction or modernization projects, data was obtained on the possible shortfall of capital funds and the key issues affecting the design and cost of the project. Questions were added about confidential exam rooms, telephoning space, chart review areas, and specific services and functions that needed better accommodations.

In the **staffing** section, the employee occupational categories of "LAN/PC Support" and "Epidemiologist/Statistician" were added. In the **services** section, questions have been added under "Bilingual Health Initiatives" concerning cultural diversity training for staff, and outreach efforts aimed at non-English speaking clients.

The two new sections are "**Changes in Service Delivery**" and "**Technology Use**". Changes in Service Delivery asks questions to ascertain the effects of managed care and privatization on public health services, as well as the most pressing staffing and service needs of the health department. Technology Use data assesses the health departments' capacity with respect to information technology. This includes items such as: number of computers, local networks, e-mail accounts, internet access, web sites, video-conferencing and mapping capabilities, and access to the Public Health Training and Information Network.

Building Specifications (Section A)

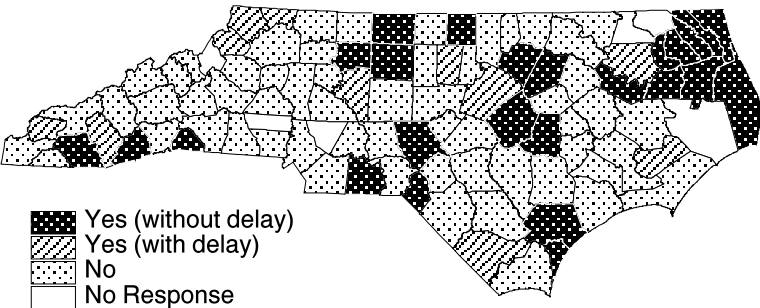
The ninety-four respondent counties reported data on a total of 221 distinct facilities in use. Of these, 167 were owned by the county, with 16 listed as rented short term, and 15 as leased long term. In addition to public health services provided at the main building, many counties had separate facilities for services such as environmental health, administration, and animal control. The average reported building size was 10,252 square feet, with the largest being 83,088 square feet (the Buncombe County Health Center in Asheville). Seven buildings were reported to contain unabated asbestos.

Twenty-six buildings were described as “inadequate” for the current client load. By far the most common reason cited was a lack of sufficient space. The poor condition of the building was another main cause of inadequacy. A greater number, 71 facilities in all, were considered only fair. Once again, space was the chief problem, with 58 reporting staff overcrowding, and 34 with client overcrowding. These problems may be due to the lack of adequate room and the absence of an efficient layout. Thirty-seven facilities reported poor confidentiality control and 36 reported poor flow of clients, staff, and charts. Twenty-six facilities reported uncomfortable climate control.

Another issue of concern is the number of facilities deemed inadequate for the projected services and client population growth. There were 77 buildings in this category. Once again, the predominant cause was insufficient room, with building condition also cited.

With so many buildings unable to meet the need for future growth, renovation and new construction have become critical. The planning process for renovation, expansion, or replacement was currently underway for 43 distinct sites. There were 18 local health departments with new facility plans underway, and five with planning complete but not yet implemented. Twenty-eight counties expected to begin construction of a new facility or modernization of an existing facility within the next two years. Of these, 12 anticipated that their construction projects would be delayed because of insufficient funds. The shortfalls ranged from \$50,000 to \$2 million.

Begin Construction on New Facility or Modernization of an Existing Facility within Two Years and Anticipate Delay due to Insufficient Funds



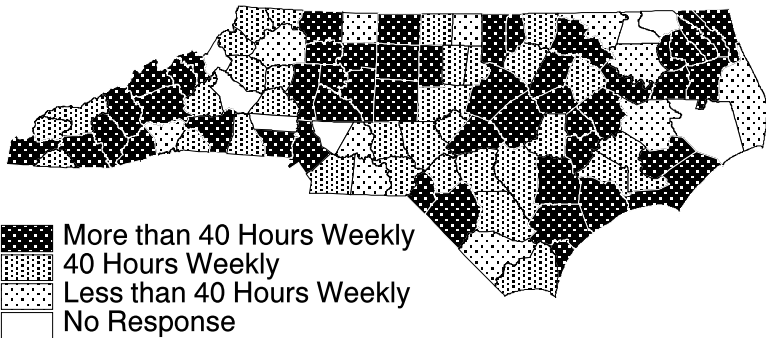
County Facilities (Section B)

Fifty-one percent of the counties reported being open more than 40 hours per week, with seven counties offering services during weekends. Only 13 percent are open less than 40 hours per week. All counties but one, Durham County, require appointments for some or all services.

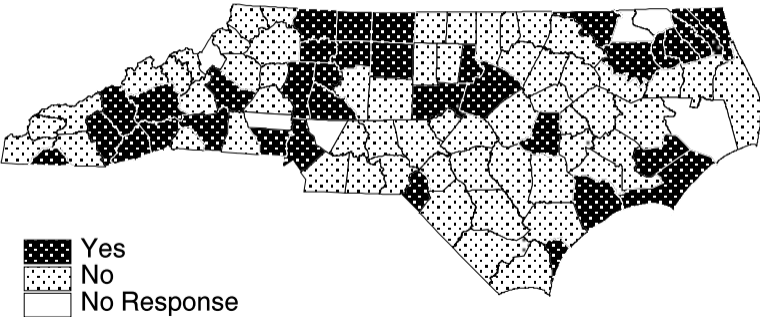
There was an average of 11 exam rooms per health department, with two being the fewest. Cumberland County had the most exam rooms with 36. A reported 95 extra exam rooms were needed across the state to meet the need for the projected client volume. Almost 90 percent of health departments reported having confidential exam rooms. Eighty-one percent reported having areas suitable for vision screening, and 77 percent suitable for hearing screening. Eighty percent had confidential interview rooms, but only 37 percent had confidential front desk intake areas.

Another finding that accentuates the need for more space at many health departments was a 40 percent reporting of patient waiting that obstructed hallways. The large volume of clients for the waiting area was usually cited, while building design was faulted in two instances. Ninety-seven percent had exclusive laboratory areas, while 45 percent reported having classrooms used exclusively for patient education. Fifty-six percent reported having sufficient parking, while 95 percent had parking for the handicapped. Ninety-two percent had public rest rooms, and 91 percent are wheelchair accessible.

Health Department Hours



Open after 5 p.m.



Staffing (Section C)

The occupational group that grew the fastest from FY97 to FY99 was “Interpreter, Spoken Language”. This group rose from 20.8 full-time equivalent employees to 68, an increase of 227%.

There was a 49 percent increase in the number of hours worked by contract staff from FY97 to FY99. This was led by a large rise in the contract staff hours of clinical RNs and LPNs, which increased by over 40 times. There was also large growth in the contract hours of Nutritionists (almost nine-fold increase) and Health Educators (over six-fold). There were over three times more staff hours worked by Dental Assistants/Hygienists, Social Workers, and X-ray Technicians.

| NORTH CAROLINA SURVEY OF LOCAL HEALTH DEPARTMENT FACILITIES, STAFFING, AND SERVICES, FISCAL YEAR 1999 | | | | | |
|--|---|--|---|---|---------------------------------------|
| Section C – Staff | Total Funded Full-time Positions | Total Hours Worked by Part-time Staff | Annual Contract Staff Hours Worked | Total FTE (Not Including Contract) | Total FTE (Including Contract) |
| Health Director | 81 | 64 | 0 | 83 | 83 |
| Administration/Management Support Staff | 2,002 | 1,692 | 9136 | 2,044 | 2,048 |
| LAN/PC Support | 43 | 115 | 665 | 46 | 46 |
| Physician | 40 | 141 | 69,652 | 44 | 78 |
| Physician Assistant | 58 | 65 | 26,035 | 59 | 72 |
| Dentist | 29 | 110 | 23,403 | 32 | 43 |
| Dental Assistant/Hygienist | 89 | 260 | 43,076 | 96 | 117 |
| Registered Nurse (Clinical) | 1,624 | 3,238 | 177,961 | 1,705 | 1,794 |
| Registered Nurse (Home Health) | 405 | 347 | 76,734 | 414 | 452 |
| LPN (Clinical) | 136 | 346 | 27,040 | 145 | 158 |
| LPN (Home Health) | 14 | 61 | 5,850 | 16 | 18 |
| Occupational Health Nurse | 96 | 100 | 0 | 99 | 99 |
| Nurse Practitioner | 127 | 469 | 15,040 | 139 | 146 |
| Certified Nurse Midwife | 7 | 30 | 8,889 | 8 | 12 |
| Pharmacist | 20 | 170 | 13,726 | 24 | 31 |
| Nutritionist | 331 | 760 | 41,618 | 350 | 371 |
| Therapist | 24 | 65 | 81,375 | 26 | 66 |
| Social Worker | 479 | 389 | 59,826 | 489 | 519 |
| Environmental Health Specialist/Technician | 757 | 197 | 2,850 | 762 | 763 |
| Public Health Investigator | 20 | 0 | 0 | 20 | 20 |
| Laboratory Technician | 196 | 410 | 24,265 | 207 | 219 |
| X-Ray Technician | 11 | 40 | 7,447 | 12 | 15 |
| Health Educator | 289 | 319 | 35,360 | 297 | 315 |
| Interpreter, Spoken Language | 65 | 121 | 26,383 | 68 | 81 |
| Aides (All Types) | 714 | 3,087 | 76,857 | 791 | 830 |
| Landfill Operators/Workers | 51 | 1,719 | 1,200 | 94 | 95 |
| Animal Control Officers | 131 | 50 | 2,080 | 132 | 133 |
| Epidemiologist/Statistician | 7 | 0 | 0 | 7 | 7 |
| Other | 382 | 399 | 28,537 | 392 | 406 |
| TOTAL* | 8,226 | 14,760 | 885,004 | 8,595 | 9,038 |

*Due to rounding, numbers may not add to total.

**Local Health Department Staffing, Fiscal Year 1999
Full-Time Equivalent Staff (Not Including Contract Staff)
and Rate Per 1,000 Population**

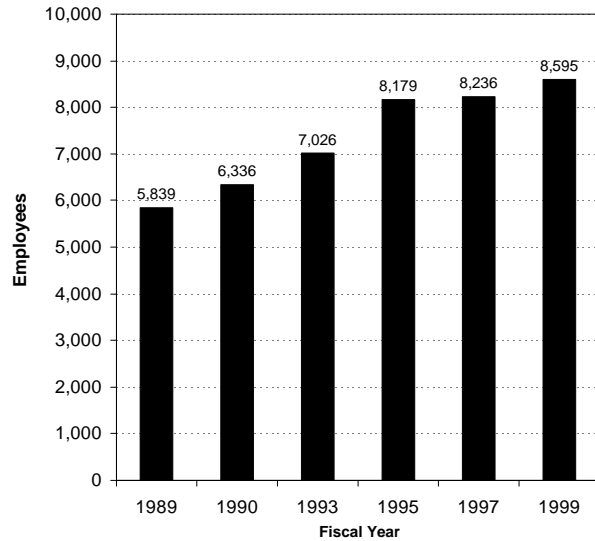
| | FTE STAFF | RATE/1,000 | | FTE STAFF | RATE/1,000 |
|-------------------------|------------------|-------------------|---------------------|------------------|-------------------|
| Alamance | 95 | 0.77 | Johnston | 91 | 0.81 |
| Alexander | 34 | 1.05 | Jones | 12 | 1.33 |
| Alleg/Ashe/Watauga | 88 | 1.18 | Lee | 46 | 0.94 |
| Anson | 36 | 1.52 | Lenoir | 67 | 1.15 |
| Avery | NA | NA | Lincoln | NA | NA |
| Beaufort | 36 | 0.81 | McDowell | 36 | 0.89 |
| Bertie | 44 | 2.22 | Macon | 47 | 1.65 |
| Bladen | 69 | 2.23 | Madison | 31 | 1.62 |
| Brunswick | 92 | 1.32 | Martin/Tyrrell/Wash | 130 | 3.05 |
| Buncombe | 241 | 1.24 | Mecklenburg | 385 | 0.60 |
| Burke | 68 | 0.81 | Mitchell | 33 | 2.23 |
| Cabarrus | NA | NA | Montgomery | 26 | 1.04 |
| Caldwell | 117 | 1.54 | Moore | 64 | 0.88 |
| Cam/Chow/Curr/Pasq/Perq | 346 | 4.14 | Nash | 180 | 2.02 |
| Carteret | 54 | 0.91 | New Hanover | 173 | 1.16 |
| Caswell | 60 | 2.69 | Northampton | 59 | 2.81 |
| Catawba | 136 | 1.01 | Onslow | 174 | 1.17 |
| Chatham | 64 | 1.35 | Orange | 88 | 0.80 |
| Cherokee | 30 | 1.30 | Pamlico | 16 | 1.30 |
| Clay | 32 | 3.86 | Pender | 57 | 1.46 |
| Cleveland | 175 | 1.89 | Person | 58 | 1.71 |
| Columbus | 101 | 1.92 | Pitt | 115 | 0.90 |
| Craven | 133 | 1.48 | Polk | 14 | 0.83 |
| Cumberland | 322 | 1.10 | Randolph | 88 | 0.70 |
| Dare | 56 | 1.94 | Richmond | 60 | 1.33 |
| Davidson | 110 | 0.77 | Robeson | 212 | 1.84 |
| Davie | 66 | 1.99 | Rockingham | 84 | 0.93 |
| Duplin | 50 | 1.12 | Rowan | 77 | 0.61 |
| Durham | 230 | 1.13 | Rutherford | 47 | 0.77 |
| Edgecombe | 198 | 3.66 | Sampson | 42 | 0.78 |
| Forsyth | 210 | 0.72 | Scotland | 74 | 2.12 |
| Franklin | 83 | 1.84 | Stanly | 51 | 0.91 |
| Gaston | 211 | 1.16 | Stokes | 56 | 1.27 |
| Gates | NA | NA | Surry | 162 | 2.35 |
| Graham | 80 | 10.66 | Swain | 83 | 6.75 |
| Granville | 54 | 1.19 | Transylvania | 28 | 1.00 |
| Greene | 27 | 1.48 | Union | 91 | 0.79 |
| Guilford | 456 | 1.16 | Vance | 36 | 0.85 |
| Halifax | 126 | 2.30 | Wake | 231 | 0.39 |
| Harnett | 77 | 0.90 | Warren | 63 | 3.32 |
| Haywood | 64 | 1.22 | Wayne | 117 | 1.04 |
| Henderson | 69 | 0.83 | Wilkes | 64 | 1.00 |
| Hertford | NA | NA | Wilson | 155 | 2.21 |
| Hoke | 35 | 1.13 | Yadkin | 31 | 0.87 |
| Hyde | NA | NA | Yancey | 107 | 6.37 |
| Iredell | 94 | 0.80 | | | |
| Jackson | 55 | 1.85 | NORTH CAROLINA* | 8,595 | 1.12 |

*Due to rounding, numbers may not add to total.

Local Health Department Staffing

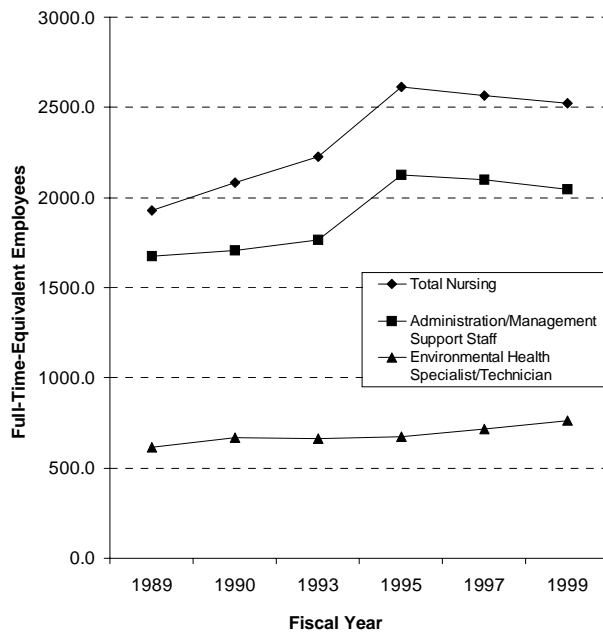
In July of 1999, there were 8,595 full-time-equivalent (FTE) employees in county health departments. This compared with 5,839 FTE employees in FY89, a 47 percent increase over ten years. Full-time-equivalent employees and contract staff combined for a total of 9,038 FTE employees in FY99.

**Full-Time Equivalent Employees, FY89-FY99
(Not Including Contract Personnel)**



Note: Excludes the following counties not reporting:
 1995: Graham, Swain, Wilkes
 1997: Wake
 1999: Avery, Cabarrus, Gates, Hertford, Hyde, Lincoln

**Staffing Growth by Occupational Category,
FY89- FY99
(Not Including Contract Personnel)**



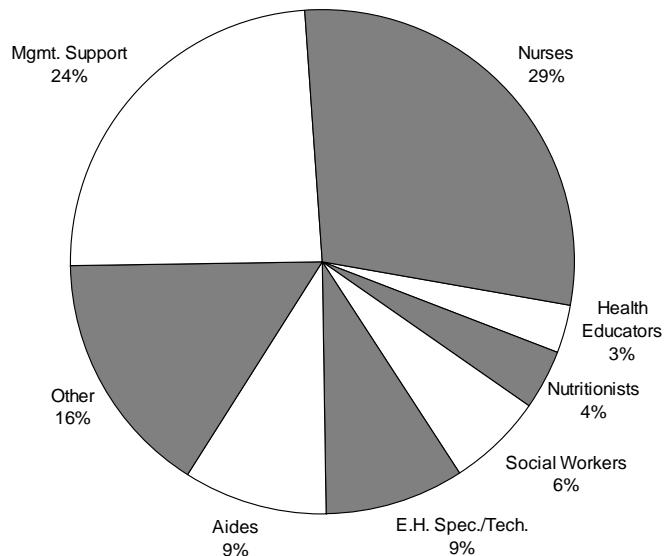
Note: Excludes the following counties not reporting:
 1995: Graham, Swain, Wilkes
 1997: Wake
 1999: Avery, Cabarrus, Gates, Hertford, Hyde, Lincoln

While the overall staff of local health departments has grown by 47 percent, certain occupational groups have grown at differing rates. Management support and administrative staff increased 22 percent from FY89 to FY99, and sanitarians and sanitarian techs (environmental health specialists/technicians) increased by 24 percent. Nursing staff increased 31 percent over the period.

Nurses made up the largest percentage of the personnel in local health departments at 2,524 FTE (29.4%), followed closely by management support and administrative personnel at 2,044 FTE (23.8%). These two occupational categories made up over 53 percent of the personnel in county health departments. The nurse/management support staff ratios increased slightly from 1.22 in FY97 to 1.23 in FY99.

Aides of all types were the next largest group at 9.2 percent of the FTE positions in county health departments, followed by environmental health specialists/technicians at 8.9 percent. The ratios of nurses to these two categories were 3.19 and 3.31 respectively.

**FTE Employees by Occupation, FY 99
(Not Including Contract Employees)**



Another measure of local health department staff is staff per 1,000 population (see table on page 5). While this measure does not take into consideration factors such as poverty level, percent of persons living in rural areas, or provision of services in the private sector, it does allow for comparisons among counties and for comparison of the state and county. Total full-time-equivalent employees (not including contract personnel) were used to compute rates per 1,000 population for the state and each county. The state rate was 1.12 FTE employees per 1,000 population.

The county FTE rates showed great fluctuation. County and state rates may have differed for various reasons. Thus, county officials should determine what factors influence the rate in their county. For example, an examination of other data may reveal that staffing levels are adversely affected by health department facilities that are too small to accommodate needed functions and related staff. In some counties more services to low income populations may be provided in the private sector.

Public Health Services (Section D)

The Public Health Laws of North Carolina establish categories of essential public health services that are to be made available and accessible to all citizens of the State [G.S. 130A-1.1(b)]. The Commission for Health Services has determined specific services to be provided under each of the essential public health services categories. The survey incorporated those into a broader taxonomy of services. Counties were asked to indicate which services were provided at their Health Department.

In what may be an indicator of an increased emphasis in health assurance, a major change was noted in the proportion of Health Departments offering primary care for adults. In the FY97 survey, 31 percent indicated that they offered adult primary care, while for FY99, this number jumped to 94 percent. With that exception, most services remained at or near their previous levels.

In the area of health support, over 95 percent of responding health departments perform registration of vital events, maintain vital records and statistics, and offer communicable disease surveillance and laboratory services. Under environmental health, nearly all (at least 95%) provided sanitation inspections, on-site sewage and wastewater disposal, and public swimming pool water sanitation. For personal health, at least 98 percent offered maternity care coordination and contraceptive care. All health departments reported that they provide child immunizations, and all but one offered child service coordination. A vast majority of health departments offered early detection and patient education for several chronic diseases including: hypertension, cancer, diabetes, and high cholesterol. However, less than half provide services for kidney disease, arthritis, glaucoma, and epilepsy. All respondents provided tuberculosis control, and all but one offered AIDS/HIV screening. In the area of dental health, 65 of 86 respondents, or three-fourths, offered dental health education, while over seventy percent provided dental screening and referral. However, only 45 percent provided sealant applications, and 38 percent provided dental treatment. As noted in Section F, dental health was the most frequently mentioned pressing service needed in local health departments.

PUBLIC HEALTH SERVICES
(As of 7/1/99 with 86 counties reporting)

| SERVICE | NUMBER OF HEALTH DEPARTMENTS OFFERING SERVICE |
|---|---|
| HEALTH SUPPORT | |
| Registration of Vital Events | 82 |
| Assessment of Health Status, Health Needs and Environmental Risks to Health | |
| Epidemic Investigations | |
| Risk Assessment | 73 |
| Pesticide Poisoning | 23 |
| Health Assessment | |
| Behavioral Risk Assessment | 60 |
| Morbidity Data | 68 |
| Reportable Disease | 81 |
| Vital Records and Statistics | 84 |
| Chronic Disease Surveillance | 64 |
| Communicable Disease Surveillance | 83 |
| Policy Development Functions and Services | |
| Health Code Development and Enforcement | 58 |
| Health Planning | 63 |
| Health Assurance | |
| Health Education | 80 |
| Child Health | 83 |
| Prenatal Care | 78 |
| Primary Care | |
| Adult | 81 |
| Pediatric | 45 |
| Community Health Education | 78 |
| Interpretation, Spoken Language | 72 |
| Laboratory Services | 82 |
| Pharmacy Services | 55 |
| ENVIRONMENTAL HEALTH | |
| Restaurant/Lodging/Institutions Sanitation and Inspections | 84 |
| On-Site Sewage and Wastewater Disposal | 83 |
| Water Sanitation and Safety | |
| Public Water Supply | 42 |
| Private Water Supply | 77 |
| Milk Sanitation | 16 |
| Shellfish Sanitation | 9 |
| Public Swimming Pool | 83 |
| Bedding Control | 14 |
| Pest Management | |
| Mosquito | 28 |
| Rodent | 35 |
| Lead Abatement | 78 |
| PERSONAL HEALTH | |
| Maternal Health | |
| Prenatal and Postpartum Care | 78 |
| Maternity Care Coordination | 85 |
| SIDS Counseling | 80 |
| WIC Services — Mother | 81 |

PUBLIC HEALTH SERVICES *(continued)*

(As of 7/1/99 with 86 counties reporting)

| SERVICE | NUMBER OF HEALTH DEPARTMENTS OFFERING SERVICE |
|---|---|
| PERSONAL HEALTH (continuedj) | |
| Family Planning | |
| Preconceptional Counseling | 77 |
| Contraceptive Care | 84 |
| Fertility Services | 35 |
| Pregnancy Prevention— Adolescent | 80 |
| Child Health | |
| Well-Child Services | 83 |
| Genetic Services | 34 |
| Services to Developmentally Disabled Children | 60 |
| Child Service Coordination | 85 |
| Adolescent Health Services | 67 |
| School Health Services | 67 |
| Lead Poisoning Prevention | 83 |
| WIC Services — Children | 82 |
| Immunizations | 86 |
| Chronic Disease Control | |
| Early Detection and Referral | |
| Kidney Disease | 21 |
| Hypertension | 76 |
| Cancer | 75 |
| Diabetes | 77 |
| Cholesterol | 70 |
| Arthritis | 20 |
| Glaucoma | 24 |
| Epilepsy | 13 |
| Patient Education | |
| Kidney Disease | 30 |
| Hypertension | 79 |
| Cancer | 78 |
| Diabetes | 81 |
| Cholesterol | 74 |
| Arthritis | 32 |
| Glaucoma | 36 |
| Epilepsy | 21 |
| Asthma | 36 |
| Chronic Disease Monitoring and Treatment | 40 |
| Home Health Services | 35 |
| Health Promotion and Risk Reduction | |
| Nutrition Counseling | 81 |
| Injury Control | 54 |
| Communicable Disease Control | |
| Tuberculosis Contro | 86 |
| Acute Communicable Disease Control | 83 |
| STD Control | |
| Case Management | 72 |
| Drugs | 82 |
| Training/Education | 81 |
| Technical Assistance | 61 |

PUBLIC HEALTH SERVICES (continued)
(As of 7/1/99 with 86 counties reporting)

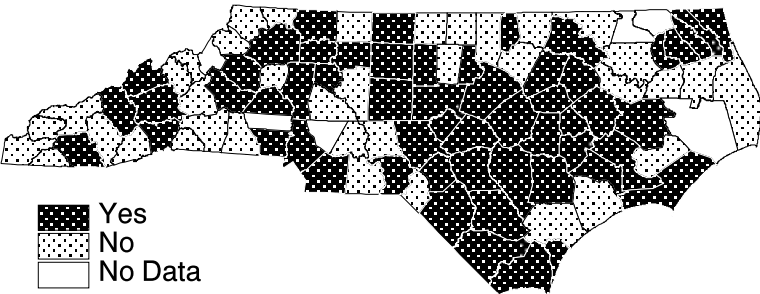
| SERVICE | NUMBER OF HEALTH DEPARTMENTS OFFERING SERVICE |
|-------------------------------------|---|
| PERSONAL HEALTH (continuedj) | |
| AIDS/HIV Screening | 85 |
| Rabies Control | 78 |
| Dental Health | |
| Dental Health Education | 65 |
| Fluoride Prophylaxis | 45 |
| Sealant Application | 39 |
| Dental Screening and Referral | 61 |
| Dental Treatment | 33 |
| Community Fluoridation | 24 |
| Other Personal Health | |
| Migrant Health | 39 |
| Refugee Health | 25 |

Bilingual Health Initiatives (Section E)

All health departments indicated that they provide educational and informational material in Spanish. Only ten, or less than 12 percent, provided materials in languages other than English or Spanish. Those languages were Vietnamese, French, Russian, Laotian, Hmong, Cambodian, Chinese, Korean, Japanese, Haitian, Hindi, and Arabic. The service areas that used the most non-English informational materials were maternal health, family planning, and child health.

Sixty percent of the respondents reported having staff positions designated as interpreters. One hundred seventy-four Local Health Department staff members were reported to be bilingual. Thirty-six percent indicated they have no bilingual staff, while 44 percent said they have two or more. Almost 40 percent of respondents reported having special training for health care providers who work with non-English speaking clients. Two-thirds of the health departments have staff that has undergone cultural diversity training. Among the counties that do not have staff trained in another language, three-fourths of them perceived this as needed training for their staff. Forty-seven percent reported that they have specific outreach efforts targeting the non-English speaking populations in their area. Eighty-four percent indicated that their service population was becoming more non-English speaking.

Staff Positions Designated as Interpreters



Changes in Service Delivery (Section F)

Changes in the financing and organization of health services have affected some local health departments. One section of the survey addressed those changes.

Of 86 respondents, 75 (87%) indicated that there was a managed care organization (MCO) providing primary care services in their service area. Seventy health departments said that the MCO served Medicaid clients. Thirty-three reported an existing contractual service relationship between the MCO and the health department. Some of the services listed were: primary care, child health, adult health, family planning, home health, maternal health, women's preventive health services, smoking cessation, communicable disease, nutrition education, and x-rays.

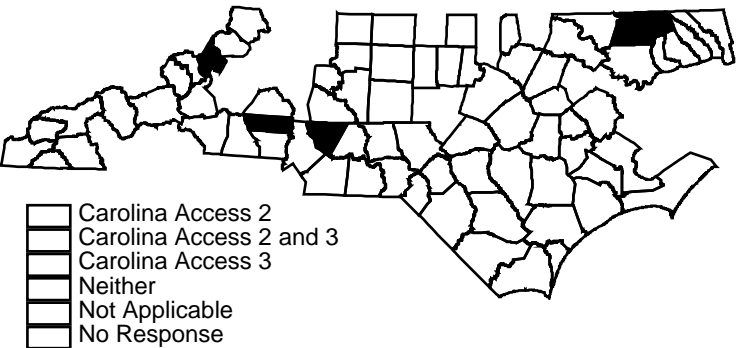
Thirty-three health departments (38%) are primary care providers under the Carolina Access Program. Sixteen of those indicated that this has resulted in increased patient load, while four said the patient load has decreased. Nine reported no change. For those health departments using other Carolina Access providers, service has also been affected. Thirty-two health departments reported a reduction in total patients, nine reported a reduction in insured (paying) patients, 23 reported a reduction in volume of services, and two indicated a reduction in the range of services. Seven stated no change. There are 42 health department populations in Carolina Access II, and three in Carolina Access III.

Privatization of health services has occurred in some counties. Eleven respondents have indicated that their health department has privatized some essential public health services. Some services that are contracted with private providers include: school health nurses, mammograms, home health, prenatal care, laboratory services, and primary care for children. There were not any negative comments regarding the quality of the services contracted.

The health departments were asked to identify their three most pressing **staffing** resource needs. Nursing positions were listed on 27 surveys, followed by bilingual staff or interpreters on 26. Health education was a concern for 24. Physician and physician assistant was noted by 16 counties, while dental positions and environmental health staff were listed 15 times each. Other categories that received multiple mentions include: administrative support, nutritionist, clerical staff, social and outreach workers, and computer support. Several counties took this opportunity to express that competitive salaries are an important staffing need.

The question regarding the most pressing **service** needs garnered a wide variety of responses. Dental health was listed the most times (39). Other services mentioned at least ten times were: care for the indigent, transportation, school care, bilingual/cultural services, primary care, and chronic disease treatment. The range of responses also included adult health, care for the elderly, pediatric care, health education, environmental health, teen pregnancy prevention, maternal health, and outreach to the Hispanic population.

Carolina Access 2 and 3 Population



Technology Use (Section G)

Local health programs have become more dependent on technology, but their capacity varies. The survey asked the health departments to indicate their current use of technology.

The 86 respondent health departments reported a total of 3,599 personal computers (PCs) in use. There was an average of 37 PCs per health department that had Pentium processors, and an average of 40 PCs with either Windows 95 or 98. Fifty-nine (68.6%) reported having a Local Area Network (LAN). Of those health departments with a LAN, there was an average of 32 staff members having e-mail access. Overall, 28 (32.6%) stated they had a LAN Administrator on staff. Twenty-four health departments have connectivity to the State's Wide Area Network, with 22 of them having a T1 connection.

Ninety-four percent of respondents stated they had access to the internet. Those health departments had an average of 17 computers connected to the internet. Thirty-one counties had their own internet homepage. Eleven were on the Public Health Training and Information Network (PHTIN). Eight health departments had desktop videoconferencing capability, while 22 had access to GIS (Geographic Information Services) functionality in-house.

Tier One Counties

The following counties were designated as “Tier One” counties by the North Carolina Department of Commerce in 1999: Bertie, Edgecombe, Graham, Halifax, Hertford, Hyde, Martin, Northampton, Richmond, Swain, Tyrrell, Warren, and Washington. This status was based on their need for economic development. There were five tier groups. Tier group designations were based on several criteria to include the average rate of unemployment, per capita income, and population growth. Obviously, the counties in “Tier One” are ranked the lowest in economic development. Any county classified as “Tier One” retains that designation for at least two consecutive years, which means that some counties may move up and some may be added to the list as their situation changes.

Since “Tier One” counties were recognized as economically depressed counties, their responses to the Health Facilities, Staffing, and Services Survey will be highlighted in this section. Of the 13 counties listed above, all responded to the survey except Hertford and Hyde counties. Ten of these counties are located in the Northeastern section of North Carolina. The remaining counties (Graham and Swain) are in the extreme western section and Richmond County is the southern middle section. In all areas except facilities, Martin, Tyrrell, and Washington (MTW district) counties reported together.

According to the survey results, facilities, staffing and services varied from county to county. The overall responses regarding the facilities were as follows: too small, leaks, lack of storage, staff overcrowded, poor flow pattern, lack of confidential and interviewing space and lack of space for pharmacy. In regards to staff and services, the health departments reported their most pressing needs were: dentists/dental care, nutritionists, school health, certified nursing assistants, diabetes clinic, transportation, health educators, and technology equipment. Other needs were: health education, environmental education, assistance for indigent patients, care management – asthma, physicians, funding sources for existing programs, dental health services, social workers, service for uninsured and underinsured, interpreters, and training for staff.

Facilities

- Most (81.8%) of these health departments were county owned. A few facilities were rented. Graham County’s health department has a long-term lease.
- There were a total of 26 buildings in those health departments. Asbestos content was not known for most of them. Graham County reported unabated asbestos in its facility.
- More than 40 percent of those health departments had buildings that were either fair or inadequate for the current or projected client load.
- Only 4 counties (Bertie, Edgecombe, Graham, and Martin) were planning or implementing plans for construction of a new facility or modernizing an existing facility. Graham and Bertie health departments were anticipating delays in their projects due to insufficient funds (approximately \$2.6 million).
- There were no plans to date to renovate, expand, or replace 77 percent of the buildings in these counties. Districting and co-location with other county entities such as hospitals, mental health, and social services, competition with managed care, or conversion to a primary care model were projected to affect the design and cost of any future projects.
- All health departments, except for Northampton and Bertie, were open 40 hours per week, and some more than 40 hours per week. None of the health departments were opened on the weekend.
- Appointments were required for some services.
- MTW district, Bertie, Richmond, Graham, and Swain health departments did not have designated play space for young children in the Waiting Room area.
- Only two counties (Richmond and Northampton) had classrooms used exclusively for patient education.

| Building Specifications for Health Departments in Tier One Counties, 1999 | | | | | | | | | | | | | |
|---|--|-----------|--------|---------|--------|-------------|----------|-------|---------|--------|------------|-----------------|----|
| Specifications | Bertie | Edgecombe | Graham | Halifax | Martin | Northampton | Richmond | Swain | Tyrrell | Warren | Washington | Total Buildings | |
| Adequacy for current client load | Number of Buildings | | | | | | | | | | | | |
| | <i>Good</i> | 1 | 2 | | 1 | 1 | 1 | 1 | | 1 | | 8 | |
| | <i>Acceptable</i> | | | | | | | | | | | 0 | |
| | <i>Fair</i> | 2 | 1 | 1 | 2 | | | | | 1 | 2 | 2 | 11 |
| Adequacy for projected service and client growth | <i>Inadequate</i> | | | 1 | 1 | 2 | | | 2 | | | 1 | 7 |
| | <i>Good</i> | 1 | 1 | | 1 | 1 | 1 | | 1 | | | 7 | |
| | <i>Fair</i> | 2 | 2 | 1 | | | | | | 1 | 1 | 7 | |
| Plans for renovation, expansion or replacement with a new facility | <i>Inadequate</i> | | | 1 | 3 | 2 | | | 2 | 1 | 1 | 2 | 12 |
| | <i>Nothing planned to date</i> | 1 | 2 | | 4 | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 20 |
| | <i>Planning process currently underway</i> | 2 | | 2 | | 1 | | | | | | | 5 |
| | <i>Planning complete but not implemented</i> | | | | | | | | | | | | 0 |
| <i>Implementation of plan underway</i> | | 1 | | | | | | | | | | 1 | |

Note: Hertford and Hyde counties did not report.

- There were a total of 52 exam rooms in use for these counties. The survey showed a need for four exam rooms to accommodate the current client volume and six more rooms for projected volume. MTW district, Edgecombe, Halifax, and Richmond counties reported having a sufficient number of exam rooms for current and projected clients. The Graham County health department needed the largest number of additional exam rooms.
- Confidentiality was a concern for 50 percent of the health departments. These counties (MTW district, Graham, and Bertie) did not have suitable space for confidential exam rooms or confidential staff telephoning.

| Number of Examination Rooms Tier One Counties | | | |
|--|-----------------------|---|---|
| County | Number in Use as Such | Additional Number Needed for Current Volume | Additional Number Needed for Projected Volume |
| Bertie | 3 | 1 | 2 |
| Edgecombe | 8 | 0 | 0 |
| Graham | 2 | 2 | 4 |
| Halifax | 12 | 0 | 0 |
| Northampton | 3 | 0 | 1 |
| Richmond | 12 | 0 | 0 |
| Swain | 2 | 1 | 2 |
| Martin-Tyrrell-Washington | 5 | 0 | 0 |
| Warren | 5 | 0 | 1 |
| Total | 52 | 4 | 10 |

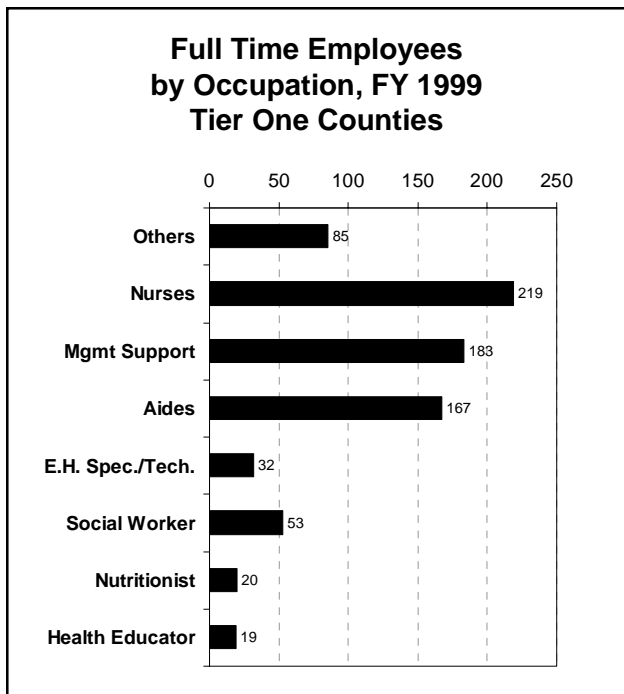
- Bertie and Graham county health departments did not have space to do confidential staff chart review, confidential front desk intake areas, confidential interview rooms, vision screening, or hearing screening.
- Richmond, Warren, Northampton, and Edgecombe health departments did not have patient waiting routinely obstructing the halls.
- All counties, except Bertie County, had a laboratory used exclusively as such.
- Four health departments (Halifax, Bertie, Graham, and Swain) reported not having sufficient parking for customers.
- Each county had designated handicapped parking spaces except for Swain County.
- Bertie, Swain, and Graham health departments do not have handicapped accessible public rest rooms at their facilities. Bertie County did not have accessible wheelchair ramps.
- All health departments in tier one counties reported needing space for storage, nursing and health aid, centralized billing, confidential services, clinical and administration services, and meetings and conferences.

Staffing

- There was a total of 778 full time health department staff in the Tier One counties. Nurses, aides and administrative staff made up approximately 75 percent of all the employees.
- Many employees such as physicians, dentists, therapists, and pharmacists were contracted out.
- MTW district, Halifax and Edgecombe county health departments have the largest number of full time employees. Graham County had the least.

| Health Department Staffing Tier One Counties | | | |
|---|----------------------------------|------------------------------|------------------------------|
| Health Dept. | Number Fulltime Employees | Number Parttime Hours | Number Contract Hours |
| Bertie | 44 | 0 | 690 |
| Edgecombe | 198 | 19 | 2,400 |
| Graham | 25 | 2,205 | 506 |
| Halifax | 125 | 31 | 10,793 |
| Northampton | 57 | 75 | 16,849 |
| Richmond | 57 | 124 | 0 |
| Swain | 83 | 7 | 198 |
| Martin-Tyrrell-Washington | 127 | 123 | 50,000 |
| Warren | 62 | 38 | 12,500 |
| Total* | 778 | 2,620 | 93,936 |

*Due to rounding, numbers may not add to total.



Services

- Each county health department provided services for registering vital events, vital records and statistics, communicable diseases, health education, child health, prenatal care, and risk assessment.
- Laboratory services were provided in each county. Community Health Education is provided in each health department except Swain County.
- At least 50 percent of those county health departments did not provide pharmacist services.

| Suitable Space for Selected Services, Tier One Counties | | | | | | | |
|---|--------------|-------------------|--------------|-----------------|------------------|-----------|---------|
| County | Confidential | | | | | Screening | |
| | Exam Room | Staff Telephoning | Chart Review | Interview Rooms | Desk Intake Area | Visual | Hearing |
| Bertie | | | | | | | |
| Edgecombe | • | • | • | • | | • | • |
| Graham | | | | | | | |
| Halifax | • | • | • | • | | • | • |
| Northampton | • | • | • | • | | • | • |
| Richmond | • | • | • | • | • | • | • |
| Swain | | • | • | | | | |
| Martin-Tyrrell-Washington | | | • | | | • | |
| Warren | • | • | • | • | • | • | • |

Bilingual Health Activities

- Each health department offered or provided educational and information material in languages other than English. Richmond County provided materials in languages other than English and Spanish.
- Halifax, Edgecombe, and Richmond counties had staff designated as interpreters.
- Warren, Halifax, and Edgecombe health departments had staff who are bilingual.
- Training for health care workers who interact with non-English-speaking clients was being provided by approximately half of the health departments in the Tier One counties.
- Three health departments (Swain, Graham, and Halifax) reported that the service population was not becoming more non-English speaking.
- More than half of those health departments had staff that had undergone cultural diversity training.

| Services Least Offered by Tier One Health Departments | |
|--|--|
| <p>Health Support</p> <ul style="list-style-type: none"> Pesticide Poisoning Health Code Development and Enforcement Primary Care for adults and pediatric Pharmacy Services <p>Environmental Health</p> <ul style="list-style-type: none"> Milk Sanitation Shellfish Sanitation Bedding Control Pest Management – Mosquito and Rodent | <p>Personal Health</p> <ul style="list-style-type: none"> Family Planning – Fertility Services Child Health – Genetic Services Chronic Disease Control (Kidney, Arthritis, Glaucoma, Epilepsy) Patient Education (Kidney, Arthritis, Glaucoma, Epilepsy, Asthma) Health Promotion & Risk Reduction Injury Control Sexual Transmitted Disease – Technical Assistance Dental Health (all services) Other – Refugee Health |

Changes in Services Delivery

- Each health department (except Swain) had a Managed Care provider organization (MCO) providing primary care services.
- Halifax and Graham county health departments had a contractual relationship with an MCO.
- Halifax County health department had a Carolina Access Primary Care provider.
- Carolina Access has caused a reduction in the total patients in most (54%) of the health departments. Graham County health department has experienced a reduction in total patients and uninsured patients as well as volume of services.
- Five of these health departments had a population in Carolina Access II and none in Access III. The MTW district reported a reduction in volume and range of services due to Access II and III. None of the counties were experiencing an increase in volume and range of services.
- Warren and Edgecombe health departments have privatized some essential public health services.

Technology Use

- More than half of these health departments (82%) had personal computers with Pentium processors. Halifax County had the most computers.
- Swain County health department did not report having any personal computers.
- All of these health departments (except Richmond, Swain, and Graham) reported being on a Local Area Network (LAN) with or without an administrator. Each county had internet access on some of the computers and Windows 95 or 98.
- Bertie County was the only health department with a Wide Area Network (WAN) and it uses T1 state WAN connection speed. Edgecombe County was the only one of these health department with a web page.
- MTW district and Halifax County were the only health departments with desktop video-conferencing capabilities.
- None of the Tier One health departments had GIS (Geographical Information System, or mapping) capabilities.
- Halifax County health department had the Public Health Training and Information Network (PHTIN).

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