



# Local Health Department Staffing and Services Summary Fiscal Year 2011



North Carolina  
Department of Health and Human Services  
Division of Public Health  
State Center for Health Statistics  
January 2012

Cover photo — pharmacist, [www.morguefile.com](http://www.morguefile.com)

Cover photo — man having his blood pressure taken, James Gathany photographer, <http://phil.cdc.gov/phil/home.asp>

Cover photo — microbiologist, Mary B. Thorman, photographer, [www.morguefile.com](http://www.morguefile.com)

Cover photo — infant being immunized; James Gathany photographer, <http://phil.cdc.gov/phil/home.asp>

Cover photo — brickwall, [www.morguefile.com](http://www.morguefile.com)

# Local Health Department Staffing and Services Summary Fiscal Year 2010–2011



**N.C. Department of Health and Human Services  
Division of Public Health  
State Center for Health Statistics**

1908 Mail Service Center  
Raleigh, North Carolina 27699-1908  
(919) 733-4728  
[www.schs.state.nc.us/SCHS](http://www.schs.state.nc.us/SCHS)

**State of North Carolina**  
Beverly Eaves Perdue, Governor

**Department of Health and Human Services**  
Lanier Cansler, Secretary  
[www.ncdhhs.gov](http://www.ncdhhs.gov)



**Division of Public Health**  
Jeffrey P. Engel, M.D., Health Director  
[www.publichealth.nc.gov](http://www.publichealth.nc.gov)



**Chronic Disease and Injury Section**  
Ruth Petersen, M.D., M.P.H., Chief  
[www.publichealth.nc.gov/chronicdiseaseandinjury](http://www.publichealth.nc.gov/chronicdiseaseandinjury)

**State Center for Health Statistics**  
Karen L. Knight, M.S., Director  
[www.schs.state.nc.us/SCHS](http://www.schs.state.nc.us/SCHS)

The Department of Health and Human Services does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provision of services. 1/12

**January 2012**

# Table of Contents

<b>Introduction</b> .....	1
Changes to the Survey Instrument .....	1
<b>Staffing (Section A)</b> .....	2
Local Health Department Occupations and FTEs .....	2
Total FTEs .....	2
Occupational Composition of LHDs .....	5
Change in 2009 and 2011 FTEs, by County .....	5
<b>Public Health Services (Section B)</b> .....	7
Health Support Services .....	7
Environmental Health .....	7
Personal Health .....	7
<b>Bilingual Health Initiatives (Section C)</b> .....	15
Non-English Information and Education Material in LHDs .....	15
Bilingual Staff .....	15
Bilingual Training .....	15
<b>Information Technology (Section D)</b> .....	17



## Introduction

This survey is the latest in a series of surveys of North Carolina health departments which, since 1984, have provided a count of health department employees by occupational groups, a summary of essential public health services, and assessments of other topics, such as bilingual health initiatives and the use of information technology in health departments. All surveys have been oriented to the state's fiscal year: beginning July 1 and ending June 30 of the subsequent year. The current survey was administered in the summer of 2011 and covers the 2010–2011 fiscal year (FY2011).

All of North Carolina's 100 counties are represented in this survey. A total of 85 surveys were returned, consisting of 79 single-county health department respondents and six multi-county district health department respondents. The district health departments included are: (1) Alleghany, Ashe and Watauga counties (Appalachian District); (2) Granville and Vance counties; (3) Martin, Tyrrell and Washington counties; (4) Rutherford, Polk and McDowell counties; (5) Avery, Mitchell and Yancey counties (Toe River Health District); and (6) Albemarle Regional Health District (consisting of Bertie, Camden, Chowan, Currituck, Gates, Pasquotank and Perquimans counties).

In this report, we summarize the data from the FY2011 survey, and we present comparisons with the FY2009 survey data where possible. For the section of the survey on staffing, we use the same definitions that have been used in the past to calculate the number of full time equivalent (FTE) employees in order to ensure consistency across reports. Throughout this report, health department respondents are referred to as health departments, health departments/health districts or LHDs (Local Health Departments).

### ***Changes to the Survey Instrument***

There were a number of changes to the survey instrument implemented in FY2011. Several additional service categories were added to the Personal Health Services section of the survey. Additionally, the Communicable Disease section was expanded to collect more surveillance and control information. Lastly, the Information Technology (IT) section of the survey was updated to better reflect current technology and IT standards.

**Table 1. Health Department Staffing for FY2011:  
Full-Time Positions, Part-Time Hours, Annual Contract Hours and FTEs by Occupation**

<b>Occupational Groups</b>	<b>Total Funded Full-time Positions</b>	<b>Total Vacant Positions During Year</b>	<b>Total Hours Worked by Part-time Staff</b>	<b>Annual Contract Staff Hours Worked</b>	<b>Total FTE (Not Including Contract)</b>	<b>Total FTE (Including Contract)</b>
Health Director	85	15	85	4,160	87	89
Administrative/Management Support Staff	2,066	182	1,346	257,351	2,100	2,228
LAN/PC Support	49	4	20	16,064	50	58
Physician	36	3	601	30,522	51	67
Physician Assistant	38	7	251	23,872	44	56
Dentist	46	8	187	39,074	51	70
Dental Assistant	104	25	286	20,263	112	122
Dental Hygienist	51	6	251	12,847	57	64
RN (Clinical)	1,270	169	2,295	82,033	1,328	1,369
RN (Enhanced Role)	319	10	522	21,143	332	343
RN (Home Health)	417	83	422	230,042	428	543
LPN (Clinical)	102	12	232	9,984	108	113
LPN (Home Health)	10	4	42	1,224	11	12
Occupational Health Nurse	9	2	20	3,120	10	11
Nurse Practitioner	122	23	1,097	41,682	149	170
Certified Nurse Midwife	11	2	111	10,489	14	19
Pharmacist	22	3	3,232	18,192	103	112
Nutritionist	400	64	679	41,466	417	438
Therapist	36	28	20	95,263	37	84
Social Worker	410	53	399	67,411	420	454
Environmental Health Specialist	730	34	358	95,281	739	787
Environmental Health Technician	14	5	0	0	14	14
Public Health Investigator	10	1	0	4,163	10	12
Lab Technician	210	28	234	32,295	216	232
X-Ray Technician	3	1	20	255	4	4
Health Educator	298	45	213	46,458	303	326
Interpreter, Spoken Language	198	11	397	72,478	207	244
Aides (all types)	405	49	972	48,553	429	453
Landfill Operators/Workers	92	1	20	9964	93	97
Animal Control Officers	130	21	32	25,716	131	144
Epidemiologist/Statistician	10	1	0	4,070	10	12
Other	609	87	3,925	75,309	707	745
<b>TOTAL</b>	<b>8,313</b>	<b>986</b>	<b>18,269</b>	<b>1,440,741</b>	<b>8,769</b>	<b>9,490</b>

Note: Part-time hours per week were converted to FTEs by dividing by 40; annual contract staff hours were converted to FTEs by dividing by 2000.



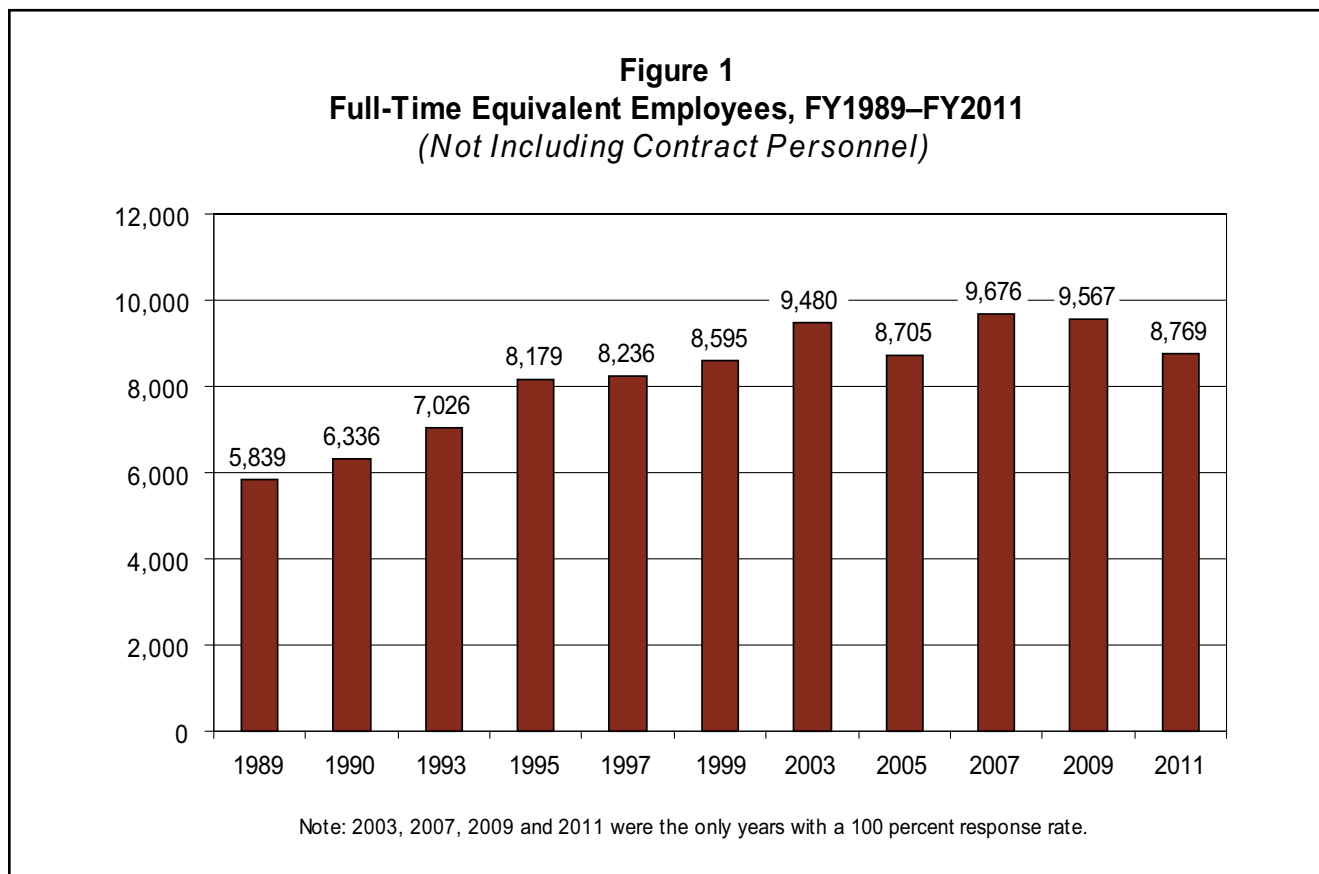
## Staffing (Section A)

### Local Health Department Occupations and FTEs

**Table 1** presents data regarding health department staffing for FY2011. Data are presented for each occupational group, and include the total number of full-time positions, the total hours worked by part-time staff per average week, the annual number of contract staff hours worked, as well as the total FTEs—both including and excluding contract staff. FTEs were calculated as the number of full-time funded positions, plus the number of part-time hours divided by 40 (one work week).

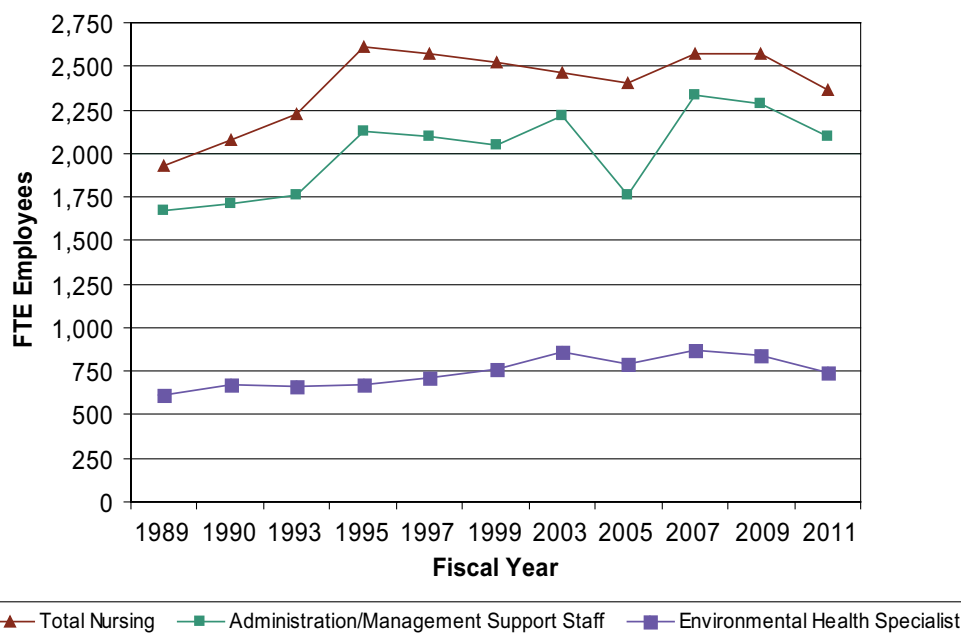
### Total FTEs

As of July 1, 2011, there were 8,769 full-time equivalent employees in county health departments (not including contract personnel), which is below the 2009 FTE total by 798 employees (**Figure 1**). Based on the FTE total for FY1989, the number of additional FTE health department employees in FY2011 constituted an increase of 50 percent over the past 22 years.



In **Figure 2**, trends from FY1989-FY2011 are shown for three of the largest professional groups working in North Carolina health departments: nurses (LPNs and RNs), management support staff and environmental health specialists. Within the nursing profession, the total number of FTE nurses increased by 23 percent from FY1989 to FY2011. Environmental health specialist positions also increased by 21 percent (126 FTEs) since 1989. In addition, the number of administration/management support staff positions has increased since 1989, with an increase of 426 positions (25 percent) during this time period.

**Figure 2**  
**Staffing Change by Occupational Category, FY1989–FY2011**  
*(Not Including Contract Personnel)*

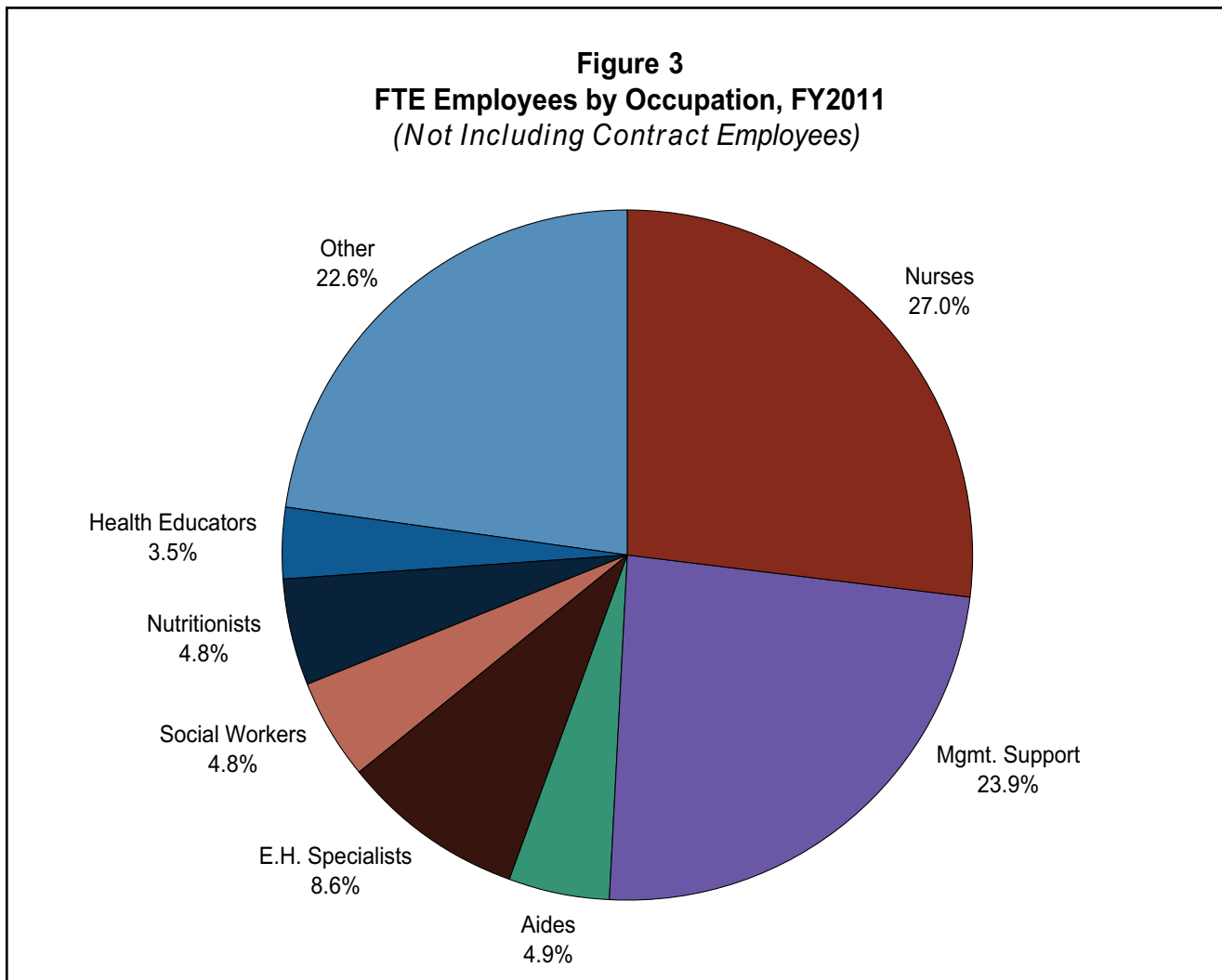


### Occupational Composition of LHDs

Figure 3 shows the distribution of all public health occupations in North Carolina health departments for FY2011. The nursing profession made up the largest percentage of personnel with 27 percent, followed closely by management support staff with 24 percent. The remaining specified occupations — aides, environmental health specialists, social workers, nutritionists and health educators — accounted for approximately 27 percent of all health department personnel. Those who were assigned to the “other” category in the survey comprised an additional 23 percent of the occupations. This occupational distribution, shown in Figure 3, is similar to the results found in the FY2009 health department survey, with nurses representing 28 percent and support staff representing 24 percent of the health department personnel.

### Change in 2009 and 2011 FTEs, by County

Table 2 shows the change in the number of FTEs from 2009 to 2011, along with the percent change. Overall, 54 out of 85 health departments/health districts **lost** FTE positions during this period, and 18 out of 85 health departments **gained** FTE positions. Between FY2009 and FY2011, there was virtually *no* change in the number of FTEs for 13 health departments (they lost or gained one or fewer positions during this time period).



**Table 2. Health Department Staffing: Change in Number of FTEs, FY2009–FY2011, Number and Percent Change by Health Department**

	2009 FTEs	2011 FTEs	% Chg.		2009 FTEs	2011 FTEs	% Chg.
Alamance	111	112	1.1%	Jackson	57	50	-12.0%
Alexander	445	343	-22.8%	Johnston	113	114	1.0%
Appalachian District	45	34	-24.2%	Jones	17	17	1.5%
Anson	24	20	-18.0%	Lee	51	41	-19.4%
Albermarle District	92	82	-10.9%	Lenoir	56	58	5.2%
Beaufort	41	40	-3.9%	Lincoln	76	80	5.4%
Bladen	65	63	-2.9%	Macon	66	66	1.2%
Brunswick	87	88	1.1%	Madison	29	32	8.6%
Buncombe	233	143	-38.5%	Mecklenburg	518	535	3.3%
Burke	81	53	-34.8%	Montgomery	39	34	-12.1%
Cabarrus	213	157	-26.4%	Moore	62	52	-16.9%
Caldwell	114	95	-16.3%	Martin/Tyrrell/Washington	110	101	-8.4%
Carteret	65	60	-7.4%	Nash	128	116	-9.3%
Caswell	41	44	7.8%	New Hanover	172	206	19.9%
Catawba	146	151	3.2%	Northampton	75	58	-22.4%
Chatham	80	73	-8.8%	Onslow	126	97	-22.8%
Cherokee	37	32	-14.6%	Orange	95	93	-1.9%
Clay	28	26	-7.6%	Pamlico	21	17	-18.7%
Cleveland	217	229	6.0%	Pender	63	46	-26.8%
Columbus	66	64	-3.8%	Person	67	51	-23.6%
Craven	149	143	-3.7%	Pitt	137	130	-5.1%
Cumberland	262	193	-26.3%	Randolph	84	85	1.7%
Dare	106	91	-14.6%	Richmond	65	69	5.9%
Davidson	122	92	-24.0%	Robeson	174	151	-13.2%
Davie	54	50	-7.4%	Rockingham	86	77	-10.8%
Duplin	52	59	13.5%	Rowan	93	90	-2.8%
Durham	236	206	-12.7%	Rutherford/Polk/McDowell	136	121	-10.8%
Edgecombe	119	103	-13.4%	Sampson	43	41	-4.7%
Forsyth	248	249	0.5%	Scotland	52	39	-25.0%
Franklin	67	60	-11.0%	Stanly	64	64	-0.3%
Gaston	188	212	12.7%	Stokes	32	44	38.3%
Graham	23	29	26.4%	Surry	222	169	-23.9%
Granville/Vance	79	70	-10.9%	Swain	46	48	2.8%
Greene	26	29	13.9%	Toe River District	124	153	23.2%
Guilford	457	409	-10.5%	Transylvania	28	29	5.6%
Halifax	101	99	-2.5%	Union	108	57	-47.4%
Harnett	84	94	11.9%	Wake	680	648	-4.8%
Haywood	76	68	-10.7%	Warren	42	41	-2.5%
Henderson	90	89	-0.5%	Wayne	130	127	-2.2%
Hertford	71	67	-5.2%	Wilkes	60	58	-2.4%
Hoke	68	34	-50.5%	Wilson	148	147	-0.7%
Hyde	15	20	32.0%	Yadkin	38	34	-10.5%
Iredell	115	107	-6.8%				

Note: FTE figures do not include contract staff.

## Public Health Services (Section B)

According to North Carolina laws: “*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 services that appear in **Table 3** include all essential services established by this law as well as other services that were deemed to be essential to the public health of North Carolina citizens. For each service, counties were asked to indicate if the service was provided in their health department or health district.

### **Health Support Services**

A total of 76 out of 85 health departments/health districts in North Carolina (89%) provide registration of vital events (see Table 3). Vital records and statistical services are maintained in 93 percent of all health departments (n=79). Nearly all health departments indicated that they are engaged in bioterrorism/other emergency preparedness response planning/assessment (99%) and health education services (99%). In addition, most health departments report that they perform comprehensive community health assessment (98%), offer interpretation of spoken language (97%), lab services (97%), community health education (93%) and communicable disease surveillance (94%). However, significantly fewer reported that their health department/district is engaged in chronic disease surveillance (58%) or collects morbidity data (61%). Most health departments reported offering child health services (90%) and prenatal care services (88%). While 70 percent (n=59) health departments reported offering public health nurse pharmacy dispensing, less than half (47%) reported offering other pharmacy services. The health support service provided least frequently was pesticide poisoning investigation, with only 19 percent of health departments reporting that they offered this service.

### **Environmental Health**

Almost all county health departments reported offering restaurant and lodging inspections (98%) and on-site sewage and wastewater disposal services (98%). With regard to water sanitation and safety, 82 out of 85 county health departments (97%) offer private water supply services and 84 percent (n=71) offer water sanitation and safety services. Public swimming pool sanitation was available in all but one health department (99%). Lead abatement is offered by 74 percent (n=63) of the health districts surveyed. Regarding pest management, 29 health departments (34%) provide mosquito control and 14 health departments (17%) provide rodent control. Tick control is provided by 17 percent of all health departments (n=14) and bedding control is offered in 12 health departments (14%).

### **Personal Health**

Personal health services comprised the largest category of services. Slightly more than half of all health departments (54%) reported offering pediatric primary care services, while adult primary care was offered in fewer health departments (44%).

Under the sub-category of **Maternal Health** services, all 85 health departments reported offering pregnancy care management. Over 90 percent of health departments provided maternal WIC services (97%), SIDS counseling (94%) and most health departments (90%) reported that they

— text continued on page 12

**Table 3. Public Health Services  
(As of 7/1/2011 with 100 percent of Health Departments/Health Districts reporting)**

<b>Services Offered</b>	<b>Number of Health Departments Offering Service</b>	<b>Percent of Health Departments Offering Service</b>
<b>HEALTH SUPPORT</b>		
Registration of Vital Events	76	89.4%
Assessment of Health Status, Health Needs and Environmental Risks to Health Epidemic Investigations		
♦ Risk Assessment	60	70.6%
♦ Pesticide Poisoning	16	18.8%
Health Assessment		
♦ Comprehensive Community Health Assessment	83	97.6%
♦ Behavioral Risk Assessment	43	50.6%
♦ Morbidity Data	52	61.2%
♦ Reportable Disease	77	90.6%
♦ Vital Records and Statistics	79	92.9%
♦ Chronic Disease Surveillance	49	57.6%
♦ Communicable Disease Surveillance	80	94.1%
♦ Bioterrorism/Other Emergency Preparedness Response Planning and Assessment	84	98.8%
Policy Development Functions/Services		
♦ Health Code Development and Enforcement	60	70.6%
♦ Health Planning	66	77.6%
Health Assurance		
♦ Health Education	84	98.8%
♦ Child Health	76	89.4%
♦ Prenatal Care	75	88.2%
Community Health Education	79	92.9%
Interpretation, Spoken Language	82	96.5%
Laboratory Services	82	96.5%
Public Health Nurse Pharmacy Dispensing	59	69.4%
Other Pharmacy Services	40	47.1%
School Nursing Services	35	41.2%
<b>ENVIRONMENTAL HEALTH</b>		
Restaurant/Lodging/Institutions Sanitation and Inspections	83	97.6%
On-Site Sewage and Wastewater Disposal	83	97.6%
Water Sanitation and Safety	71	83.5%
♦ Private Water Supply	82	96.5%
♦ Milk Sanitation	6	7.1%
♦ Shellfish Sanitation	9	10.6%
♦ Public Swimming Pool	84	98.8%
Bedding Control	12	14.1%
Pest Management	25	29.4%
Mosquito	29	34.1%
Rodent	14	16.5%
Ticks	14	16.5%
Lead Abatement	63	74.1%

**Table 3. Public Health Services  
(As of 7/1/2011 with 100 percent of Health Departments/Health Districts reporting)**

Services Offered	Number of Health Departments Offering Service	Percent of Health Departments Offering Service
<b>PERSONAL HEALTH</b>		
Primary Care		
♦ Adult	37	43.5%
♦ Pediatric	46	54.1%
Maternal Health		
♦ Prenatal and Postpartum Care	76	89.4%
♦ Pregnancy Medical Home	22	25.9%
♦ Pregnancy Care Management	85	100.0%
♦ Postnatal Home Visits	23	27.1%
♦ SIDS Counseling	80	94.1%
♦ WIC Services — Mother	82	96.5%
Family Planning		
♦ Preconceptional Counseling	82	96.5%
♦ Contraceptive Care	85	100.0%
♦ Fertility Services	39	45.9%
♦ Pregnancy Prevention — Adolescent	83	97.6%
Child Health		
♦ Well-Child Services	71	83.5%
♦ Genetic Services	20	23.5%
♦ Services to Children with Developmental Disabilities	32	37.6%
♦ Care Coordination for Children (CC4C)	82	96.5%
♦ Adolescent Health Services	59	69.4%
♦ School Health Services	38	44.7%
♦ Lead Poisoning Services	78	91.8%
♦ WIC Services — Children	81	95.3%
♦ Immunizations	84	98.8%
♦ Newborn Home Visiting Services	68	80.0%
♦ Children with Special Health Care Needs Services	27	31.8%
Chronic Disease Control		
Early Detection and Referral		
♦ Kidney Disease	19	22.4%
♦ Hypertension	58	68.2%
♦ Cancer	59	69.4%
♦ Diabetes	63	74.1%
♦ Cholesterol	48	56.5%
♦ Arthritis	20	23.5%
♦ Glaucoma	8	9.4%
♦ Epilepsy	11	12.9%
Patient Education		
♦ Kidney Disease	26	30.6%
♦ Hypertension	68	80.0%
♦ Cancer	59	69.4%
♦ Diabetes	69	81.2%
♦ Cholesterol	62	72.9%
♦ Arthritis	28	32.9%
♦ Glaucoma	24	28.2%
♦ Epilepsy	22	25.9%
Chronic Disease Monitoring and Treatment	36	42.4%

**Table 3. Public Health Services  
(As of 7/1/2011 with 100 percent of Health Departments/Health Districts reporting)**

<b>Services Offered</b>	<b>Number of Health Departments Offering Service</b>	<b>Percent of Health Departments Offering Service</b>
<b>PERSONAL HEALTH (continued)</b>		
Home Health Services	31	36.5%
Behavioral Health Services		
◆ Child Behavioral Services	11	12.9%
◆ Adult Behavioral Services	12	14.1%
Health Promotion and Risk Reduction		
◆ Nutrition Counseling	71	83.5%
◆ Injury Control	40	47.1%
◆ Tobacco Cessation	68	80.0%
Communicable Disease Control		
◆ 24/7 day Communicable Disease Response	81	95.3%
◆ CD Reporting Information for Health Care Providers	82	96.5%
Acute Communicable Disease Control		
◆ Surveillance	84	98.8%
◆ Case investigation	84	98.8%
◆ Post-exposure prophylaxis	80	94.1%
◆ Implementation of control measures	84	98.8%
◆ Outbreak investigations	84	98.8%
Tuberculosis Control		
◆ Surveillance	85	100.0%
◆ Case and contact investigation	85	100.0%
◆ Direct and observed therapy	83	97.6%
◆ Treatment of contacts	84	98.8%
◆ Isolation and other control measures	84	98.8%
STD Community Level Surveillance, Investigation, Prevention and Control		
◆ Examination and testing of at risk individuals for STDs within one workday of request	79	92.9%
◆ Examination, Testing, Treatment, Counseling and Referral	85	100.0%
Partner notification	76	89.4%
◆ Investigation of Disease Control Measure Violations	81	95.3%
◆ Counseling/education — community outreach	78	91.8%
◆ Counseling/education — individual	83	97.6%
AIDS/HIV Community Level Surveillance, Investigation, Prevention and Control		
◆ HIV/Syphilis Partner Notification Services	56	65.9%
◆ Case Management	17	20.0%
◆ Investigation of Disease Control Measure Violations	67	78.8%
◆ Opt-out testing in clinics	63	74.1%
◆ Community-based testing in partnership with CBOs	27	31.8%
◆ HIV seropositive counseling, follow-up and referral	68	80.0%
Hepatitis A and B Immunizations	83	97.6%
Rabies Control: Provide a full range of services when people are bitten by dogs or cats		
◆ Identify and confine the biting animal for observation or submitting animal for rabies testing	51	60.0%
◆ Receive reports from physicians of persons bitten by animals capable of transmitting rabies	76	89.4%



**Table 3. Public Health Services  
(As of 7/1/2011 with 100 percent of Health Departments/Health Districts reporting)**

Services Offered	Number of Health Departments Offering Service	Percent of Health Departments Offering Service
<b>PERSONAL HEALTH</b> <i>(continued)</i>		
◆ Provide rabies exposure risk assessments	69	81.2%
◆ Coordinate administration of rabies post exposure prophylaxis if necessary	75	88.2%
Rabies Control: Provide services when people are exposed to rabies vector species (bats, terrestrial carnivores)		
◆ Identify (if possible) the biting animal and submit for rabies testing	53	62.4%
◆ Receive reports from physicians of persons bitten by animals capable of transmitting rabies	76	89.4%
◆ Provide rabies exposure risk assessments	66	77.6%
◆ Coordinate administration of rabies post exposure prophylaxis if necessary	72	84.7%
Rabies Control: Provide services for domestic animals that are reasonably suspected of being exposed to rabies		
◆ Identify (if possible) the biting animal and submit for rabies testing	47	55.3%
◆ Order rabies booster, quarantine or euthanasia of the exposed animal	55	64.7%
Coordinate at least one annual rabies vaccination clinic in the county for dogs, cats and ferrets	53	62.4%
Canvas the county to search for unvaccinated dogs/cats/ferrets and appropriately administer all animal sheltering functions	26	30.6%
Administer the voluntary Certified Rabies Vaccinator Program in the county if one exists	25	29.4%
Dental Health		
◆ Dental Health Education	60	70.6%
◆ Topical Flouride Application	63	74.1%
◆ Sealant Application	50	58.8%
◆ Dental Screening and Referral	60	70.6%
◆ Dental Treatment	46	54.1%
◆ Community Fluoridation	13	15.3%
◆ "Into the Mouths of Babes" Dental Preventative Services	30	35.3%
Other Personal Health		
◆ Migrant Health	15	17.6%
◆ Refugee Health	21	24.7%

provide prenatal and postpartum care. Only 23 health departments (27%) reported that they offer postnatal home visits.

Within **Family Planning** services, all health departments reported offering contraceptive care (100%). In addition, most health departments also provide adolescent pregnancy prevention (98%) and preconception counseling (97%). Fertility services were less likely to be offered, with fewer than half of health departments (46%) reporting that they offered this service. Within **Child Health**, immunizations (99%), care coordination for children (97%), child WIC services (95%), lead poisoning prevention (92%) and well child services (84%) were provided by most health departments. Services which were offered less frequently included school health services (45%), services to developmentally disabled children (38%), services for children with special health care needs (32%) and genetic services (24%).

For services related to **Chronic Disease Control**, early detection and referral services were most often provided for diabetes (74%), cancer (70%), hypertension (68%) and cholesterol (57%). Less than 25 percent of health departments offered early detection and referral for kidney disease, arthritis, glaucoma and epilepsy. In every category, the provision of **Patient Education** services for these same chronic diseases tended to be somewhat higher than that of early detection and referral. Fewer than half (42%) of health departments reported that they offer chronic disease monitoring and treatment services.

Regarding **Health Promotion** efforts, the majority of health departments reported that they offer nutrition (84%) and tobacco cessation counseling (80%). However, slightly less than half (47%) reported health promotion efforts aimed at injury control.

Under services for **Communicable Disease**, the majority of health departments (greater than 95%) reported that they offer 24/7 communicable disease response and reporting information for health care providers. Nearly all health departments reported that they offer acute communicable disease control surveillance (99%), case investigation (99%), implementation of control measures (99%), outbreak investigations (99%) and post-exposure prophylaxis (94%).

With regard to **Tuberculosis Control**, all health departments reported offering surveillance, case and contact investigation. Nearly all (98%) reported offering direct and observed therapy, treatment of contacts, and isolation and other control measures.

Under the **STD** section, all health departments (100%) reported offering examination, testing, treatment, counseling and referral. Nearly all health departments reported that they investigate disease control measure violations (95%) and provide individual counseling/education (98%). Most health departments also report providing examination and testing of at-risk individuals for STDs within one workday of request (93%), community outreach counseling/education (92%) and partner notification (89%).

With regard to **AIDS/HIV**, the majority of health departments offered HIV seropositive counseling, follow-up and referral (80%) and investigation of disease control measure violations (79%). Many provide opt-out testing in clinics (74%) and HIV/syphilis partner notification services (66%). Only about a third (32%) report offering community-based testing in partnership with Community Based Organizations (CBOs), and only 20 percent provide AIDS/HIV case management.

Under **Rabies Control** services, most health departments receive reports from physicians of persons bitten by or exposed to animals capable of transmitting rabies (89%) and most coordinate administration of rabies post-exposure prophylaxis if necessary for those bitten (88%) or exposed (85%). Over half of health departments report that they identify the biting animal and submit it for rabies testing (55%) and coordinate at least one annual rabies clinic in the county for dogs, cats and ferrets (62%). However, only one in three health departments report that they canvas the county to search for unvaccinated dogs, cats, or ferrets, appropriately administer all animal sheltering functions (31%) and administer the voluntary “Certified Rabies Vaccinator” Program (29%).

Under **Dental Health** services, more than 70 percent of health departments report offering topical fluoride application (74%), dental health education (71%) and dental screening and referral (71%). Slightly more than half (54%) of all health departments report that they offer dental treatment and 50 health departments (59%) offer dental sealant application. Slightly more than one-in-three (35%) health departments participate in the “Into the Mouths of Babes” dental preventative services program. Only 15 percent of health departments (n=13) indicate that they have community fluoridation.

With regard to **Other Personal Health** services, 15 health departments (18%) report that they offer migrant health services and 21 health departments (25%) provide refugee health services.

**Table 4. Bilingual Health Initiatives:  
Change in the Number of FY2011 Bilingual Staff from FY2009,  
by Health Department**

	FY2009 Bilingual	FY2011 Bilingual	Chg.		FY2009 Bilingual	FY2011 Bilingual	Chg.
Alamance	7	7	0	Jackson	2	2	0
Albemarle District	2	2	0	Johnston	0	20	20
Alexander	1	1	0	Jones	4	3	-1
Anson	3	3	0	Lee	7	5	-2
Appalachian District	0	0	0	Lenoir	4	5	1
Beaufort	2	2	0	Lincoln	2	1	-1
Bladen	2	3	1	Macon	2	2	0
Brunswick	8	8	0	Madison	2	3	1
Buncombe	38	7	-31	Martin/Tyrrell/Washington	1	2	1
Burke	2	3	1	Mecklenburg	17	30	13
Cabarrus	16	25	9	Montgomery	6	5	-1
Caldwell	4	4	0	Moore	2	2	0
Carteret	2	1	-1	Nash	6	8	2
Caswell	0	*	N/A	New Hanover	8	7	-1
Catawba	8	10	2	Northampton	0	*	N/A
Chatham	10	10	0	Onslow	2	3	1
Cherokee	2	0	-2	Orange	8	11	3
Clay	0	0	0	Pamlico	3	1	-2
Cleveland	1	1	0	Pender	6	6	0
Columbus	3	2.5	-0.5	Person	1	1	0
Craven	3	4	1	Pitt	2	5	3
Cumberland	5	*	N/A	Randolph	14	14	0
Dare	3	3	0	Richmond	1	1	0
Davidson	3	*	N/A	Robeson	14	11	-3
Davie	3	1	-2	Rockingham	3	4	1
Duplin	10	13	3	Rowan	9	9	0
Durham	17	17	0	Rutherford/Polk/McDowell	5	6	1
Edgecombe	2	2	0	Sampson	7	5	-2
Forsyth	*	35	N/A	Scotland	1	0	-1
Franklin	0	3	3	Stanly	2	2	0
Gaston	15	8	-7	Stokes	1	1	0
Graham	0	0	0	Surry	9	10	1
Granville/Vance	1	3	2	Swain	0	0	0
Greene	4	4	0	Toe River District	7.5	8	0.5
Guilford	15	15	0	Transylvania	1	1	0
Halifax	2	1	-1	Union	*	7	N/A
Harnett	3	3	0	Wake	*	*	N/A
Haywood	7	6	-1	Warren	1	*	N/A
Henderson	15	13	-2	Wayne	8	6	-2
Hertford	0	0	0	Wilkes	11	6	-5
Hoke	3	5	2	Wilson	5	2	-3
Hyde	0	0	0	Yadkin	3	3	0
Iredell	11	13	2	<b>N.C. Total</b>	<b>420.5</b>	<b>456.5</b>	<b>36</b>

\* Changes in Bilingual staff data are not available for this health department due to missing data for FY2009 and/or FY2011.

## Bilingual Health Initiatives (Section C)

### ***Non-English Information and Education Material in LHDs***

The majority of health departments reported providing educational and informational materials in other languages, with 98 percent of them reporting that they offer materials in Spanish (n=83). In addition to Spanish, a few health departments also provided educational material in other languages such as Hmong (7%), Mandarin (2%) and Arabic (2%).

Regarding the use of non-English material in health department service areas, all health departments (100%) reported that their Family Planning clinics use non-English material. In addition, most health departments stated that they use non-English material for Maternal Health (94%), Patient Education (93%), Child Health Services (89%), Communicable Disease Control (92%) and Health Promotion (86%). Non-English materials were least likely to be available for Chronic Disease Control (65%) and Dental Health (69%).

Examining the need for non-English education/information material, Chronic Disease Control, Health Promotion, Communicable Disease Control, Patient Education and Dental Health were the areas where some health departments reported needing non-English materials.

### ***Bilingual Staff***

Seventy-two health departments (85%) reported having staff positions designated as interpreters and 13 health departments (15%) did not report having designated interpreters.

**Table 4** shows the number of FY2009 and FY2011 bilingual staff by county. In FY2011, health departments reported that there were approximately 456 local health department staff members (including contract staff) who were bilingual. This figure is slightly higher than the number of bilingual staff reported in 2009 (n=420). The number of bilingual health department staff ranged from zero (8 health departments) to 35 (one health department). The number of bilingual staff increased for 22 health departments and decreased in 20 health departments. For 35 health departments, the number of bilingual staff remained virtually unchanged. Six counties reported that they had no bilingual staff members in both the FY2009 and FY2011 surveys. Eight counties left this field blank in either FY2009 and/or FY2011, so for those counties no changes in bilingual staffing could be calculated.

### ***Bilingual Training***

More than half of health departments (60%) reported that special training is provided for health care providers who work with non-English speaking clients. In addition, 66 percent of health departments report that their service population is becoming more non-English speaking. In light of this, all health departments report that their staff has undergone cultural diversity training (100%) and only four health departments (5%) indicated that cultural diversity training is needed. Slightly less than half of health departments (48%) report that their department has specific outreach efforts targeting non-English speaking populations.

**Table 5. Information Technology:  
Summary of Technological Capabilities Among Health Departments, FY2011**

	<b>Number</b>	<b>Percent</b>	<b>Number of Personal Computers by Model and Operating System</b>	
<b>Local Area Network (LAN) Administrator</b>			<b>Desktops:</b>	
Health Department Staff	18	21.2%	Less than 5 years old–Windows 7	1,067
County Staff	64	75.3%	Less than 5 years old–Windows Vista	306
Contracted	13	15.3%	Less than 5 years old–Windows XP	4,369
<b>Internet Provider Type</b>			Less than 5 years old–Windows 2000	107
State WAN (ITS)	20	23.5%	Less than 5 years old–Other OS (Mac, Linux)	0
County Government	32	37.6%	Total Less than 5 years old	5,849
Cable	7	8.2%		
DSL	7	8.2%	5 or more years old–Windows 7	91
Fiber Optic	33	38.8%	5 or more years old–Windows Vista	14
<b>Connection Level</b>			5 or more years old–Windows XP	2,381
56kb or less	1	1.2%	5 or more years old–Windows 2000	40
Fractional T1	3	3.5%	5 or more years old–Other OS (Mac, Linux)	3
T1	20	23.5%	Total 5+ Years Old	2,529
T3	5	5.9%		
Better	51	60.0%	<b>Total Desktops</b>	<b>8,378</b>
<b>All Staff Have Access to Internet at Work</b>	71	83.5%		
<b>Wireless Protocol:</b>			<b>Laptops:</b>	
None	15	17.6%	Less than 5 years old–Windows 7	680
A	21	24.7%	Less than 5 years old–Windows Vista	141
B	34	40.0%	Less than 5 years old–Windows XP	1,710
G	49	57.6%	Less than 5 years old–Windows 2000	0
N	28	32.9%	Less than 5 years old–Other OS (Mac, Linux)	10
<b>LAN accessible via Virtual Private Network (VPN)</b>	61	71.8%	Total Less than 5 years old	2,541
<b>High Bandwidth</b>	57	67.1%	5 or more years old–Windows 7	52
<b>Content filtering can be/has been applied</b>	74	87.1%	5 or more years old–Windows Vista	12
<b>Business Continuity/Disaster Recovery Plan in Place</b>	79	92.9%	5 or more years old–Windows XP	571
Plan has been tested	41	48.2%	5 or more years old–Windows 2000	3
<b>Geographic Systems:</b>			5 or more years old–Other OS (Mac, Linux)	0
County-wide GIS	70	82.4%	Total 5+ Years Old	638
Health Department GIS	11	12.9%	<b>Total Laptops</b>	<b>3,179</b>
Global Positioning Systems (GPS)	24	28.2%		
<b>Desktop Video Conferencing</b>	44	51.8%		
<b>Department has a website</b>	79	92.9%		
<b>Network Enabled Devices:</b>				
Smartphones	49	57.6%		
Tablet PCs	37	43.5%		
Plan to upgrade PC's this Fiscal Year	59	69.4%		
<b>Plan to make major IT upgrades in the next Fiscal Year</b>	27	31.8%		
Build wireless access	8	9.4%		
Build County GIS	0	0.0%		
Add server(s)	14	16.5%		
Other	18	21.2%		
<b>Server Administration Environment</b>				
Novell Netware	3	3.5%		
Windows Server 2003	55	64.7%		
Windows Server 2008	59	69.4%		
Unix/Linux	9	10.6%		
None	2	2.4%		
Other	5	5.9%		
<b>Internet Browser</b>				
Internet Explorer	84	98.8%		
Firefox	25	29.4%		
Chrome	6	7.1%		
Other	0	0.0%		
<b>Use Clinical Software (in addition to HIS)</b>	36	42.4%		
<b>Use Billing Software (in addition to HIS)</b>	54	63.5%		

## Information Technology (Section D)

**T**able 5 and Table 6 provide a summary of the technological capacity of North Carolina health departments. As shown in Table 5, there were a total of 8,378 desktop/personal computers (PCs) in use in 2011. This figure is up approximately 10 percent from the number of PCs reported in the FY2009 survey (Table 6). The majority of health department PCs are less than five years old (70%), with only one-third (30%) being five or more years old. Most health department PCs, regardless of age, employed the Microsoft Windows XP operating system (81%). In addition to desktop computers, health departments reported having more than 3,000 laptop computers (n=3,179); up 25 percent from the number of laptops reported in FY2009 (n=2,545). As with PCs, most laptop computers (80%) were less than five years old and most used the Microsoft Windows XP operating system (72%).

For the first time in this survey, all health departments reported having a Local Area Network (LAN). Three-quarters of all health departments (75%) had a LAN administrator on staff with their county, while only one in five (21%) had a LAN administrator on staff in their health department (Table 5). In past surveys, most health departments reported that their Internet provider was the State Wide Area Network (ITS WAN). However, in FY2011 39 percent of health departments reported a fiber optic provider, 38 percent reported a county government provider, and only 24 percent reported utilizing the state ITS WAN. The majority of health departments reported having an internet connection of T1 or better (89%). More than half had LANs that were accessible via virtual private networks (72%), which was the same number as reported in FY2009.

Business continuity and recovery planning is a process developed to assess and minimize the impact of IT systems failure. In FY2011, more health departments reported having a business continuity or disaster recovery plan in place (93%) when compared with FY2009 (55%). However, only about half (48%) had a recovery plan that had been tested; up from just 12 percent in FY2009.

While 70 percent of health departments report that they plan to upgrade PC's this fiscal year (n=59), only 27 health departments (32%) report that they are planning to make major IT upgrades in the next fiscal year. Among those making IT upgrades, eight health department are planning to build wireless access, 14 health departments are adding servers and 18 health departments plan to make other IT upgrades.

**Table 6. Information Technology:  
Percent Change in Selected Technologies from FY2009 to FY2011**

Health Departments with:	Number in FY2009	% of Health Depts Having	Number in FY2011	% of Health Depts Having	Percent Change in Number
Total PCs in Health Departments	7,630	n/a	8,378	n/a	9.8%
Total Laptops in Health Departments	2,545	n/a	3,179	n/a	24.9%
Internet Connection Level of T1 or better	69	81.2%	76	89.4%	10.1%
Virtual Private Network	61	71.8%	61	71.8%	0.0%
Business Continuity/Disaster Recovery Plan in Place	47	55.3%	79	92.9%	68.1%
Business Continuity/Disaster Recovery Plan has been tested	10	11.8%	41	48.2%	310.0%
Desktop Video Conferencing	41	48.2%	44	51.8%	7.3%

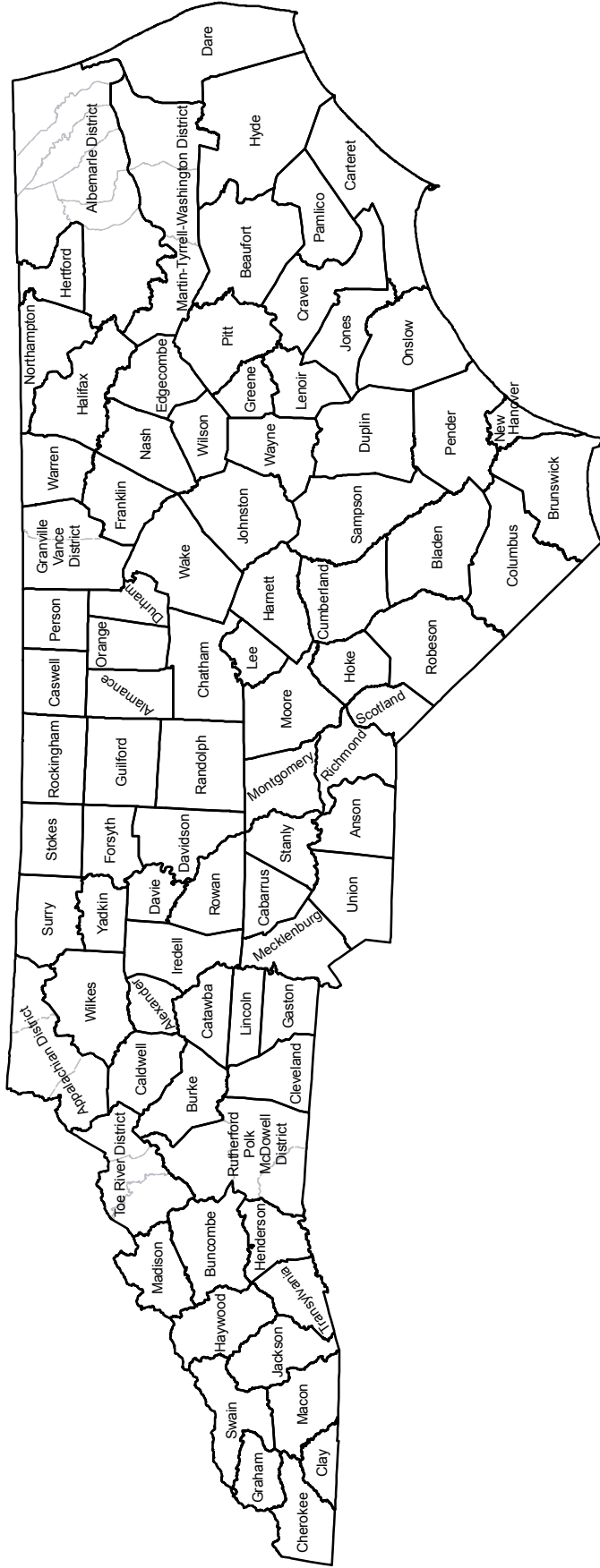
n/a = Not Applicable

Seventy-nine health departments (93%) reported that they had a website in 2011, which is roughly consistent with the 2009 report (n=78). The availability of Geographic Information Systems (GIS) decreased in 2011, with only 11 counties (13%) reporting GIS capabilities in their health department compared with 14 counties in FY2009. However, 70 counties (82%) reported that their county maintains county-wide GIS services (**Table 5**).

With regard to clinical and billing software, 36 health departments (42%) reported that they use clinical software applications and 54 health departments (64%) reported that they use billing software.



# North Carolina Local Health Departments



Department of Health and Human Services  
State Center for Health Statistics  
1908 Mail Service Center  
Raleigh, NC 27699-1908  
(919) 733-4728