

Union County Health Department

Annual Report 2000-2001



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Dear County Residents,

I am happy to present to you the Union County Health Department Annual Report for the year 2000-2001. I am very proud of the staff in every Health Department program. They work diligently to provide preventive health services for our community. You, as citizens of Union County, can be proud of your public health program.

This report includes narrative descriptions and statistical information for each program of the Health Department. Our mission at the Union County Health Department is to promote health, prevent disease, and protect the health of the community. Through this annual report we present our action plan to accomplish this mission. The Union County Health Department, as part of the State team, provides excellent services Everywhere, Everyday, for Everybody.

Thank you for taking the time to review the many programs of the Union County Health Department for the fiscal year 2000-2001.

Sincerely,

A handwritten signature in black ink that reads "Lorey H. White, Jr." The signature is written in a cursive style with a large, stylized "L" and "W".

Lorey H. White, Jr.
Health Director

Table of Contents

[Maternal Health](#)..... 2

[Child Health](#)..... 6

[Child Service Coordination](#).....11

[Family Planning](#).....15

[Breast and Cervical Cancer Control](#).....17

[Communicable Disease Control](#).....18

[Dental Health](#).....22

[Health Promotions](#).....24

[Laboratory Division](#).....25

[Vital Records](#).....25

[Administrative and Processing Assistants](#).....26

[Women, Infants, and Children \(WIC\)](#).....28

[Environmental Health](#).....31

[School Health Nursing](#).....37

[Animal Control](#).....43

[Challenges for Public Health in Our Community](#).....46

[Total Revenues and Expenditures](#).....48

[Board of Health Members](#)..... [back cover](#)

Maternal Health

The Maternal Health Program strives to reduce infant mortality and morbidity in Union County through the provision of comprehensive prenatal care services to low income and underserved residents. The current focus is to provide routine and high risk clinical services as well as preventive and supportive services, and to increase cooperative relationships with private providers where the Union County Health Department provides support services such as maternity care coordination and postpartum/newborn home visits for Medicaid clients. The clinic also provides health education, nutrition services, and counseling.



The Clinic served 903 patients in the FY 2000-2001. 340 of these patients were high-risk clients, requiring more careful monitoring and increased services (117 white, 87 black, 129 Hispanic, and 7 other). The program has seen an increase in gestational diabetes requiring additional education and monitoring.



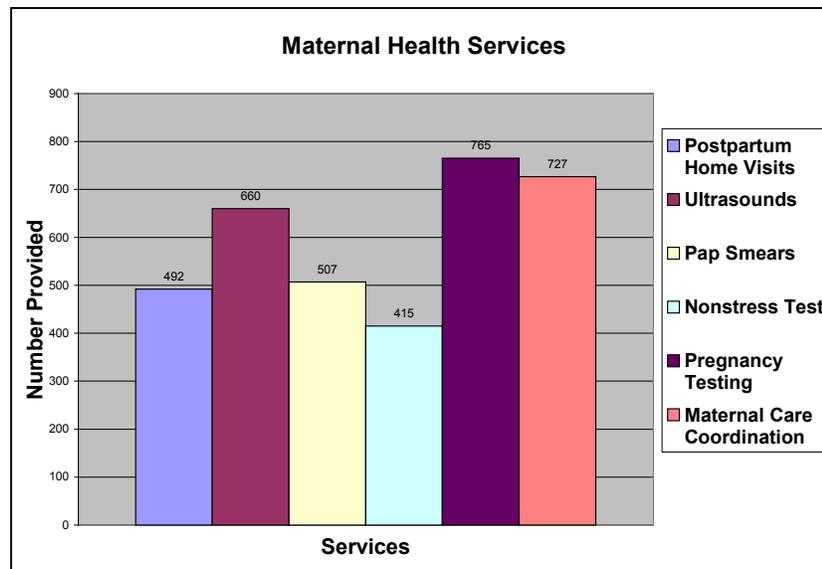


Social work is provided including maternity care coordination, referral and follow-up, and intensive psychosocial counseling. The social workers saw 269 clients providing a total of 1,583 counseling sessions. All women with positive pregnancy tests performed at the Health Department receive counseling and are offered appropriate care and

follow-up. The social work staff initiate a Medicaid application, if appropriate, and coordinate with the Department of Social Services to provide needed care. Parenting classes are provided at no cost to any interested person at Union Regional Medical Center by a Parenting Coalition (704-283-3720). The Health Department provides planning, services, and materials for the classes.



The following services were provided by the Maternal Health Clinic in FY 2000-2001.



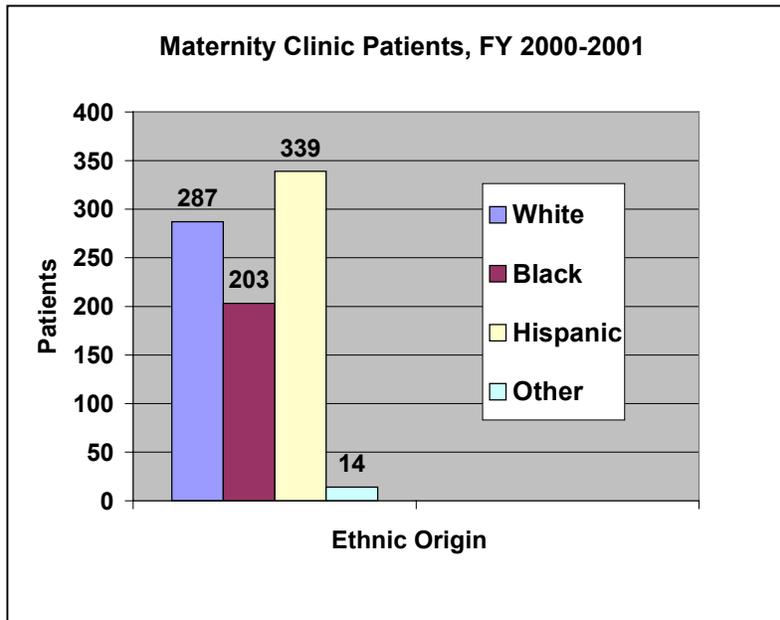
Postpartum assessments (as well as newborn assessments) are made at the patient's home by a registered nurse to help determine any problems with the baby, mother, or the home environment. The Health Department also provides these visits for Medicaid patients of private providers and new mothers who had no prenatal care. 256 of these visits required the additional staff of an interpreter. Ultrasounds are provided for all patients at 18-20 weeks for fetal anatomy and delivery date information. Additional ultrasounds are



available, if needed. Pap tests are given to all patients as well as needed repeat Paps and follow-up. The non-stress test machine monitors baby movements and any contractions to provide information about fetal health. All patients receive prenatal vitamins and iron, nutrition counseling, education, blood sugar testing, blood typing and group, TB skin testing for high risk groups and referral if needed, STD (sexually transmitted diseases) testing and

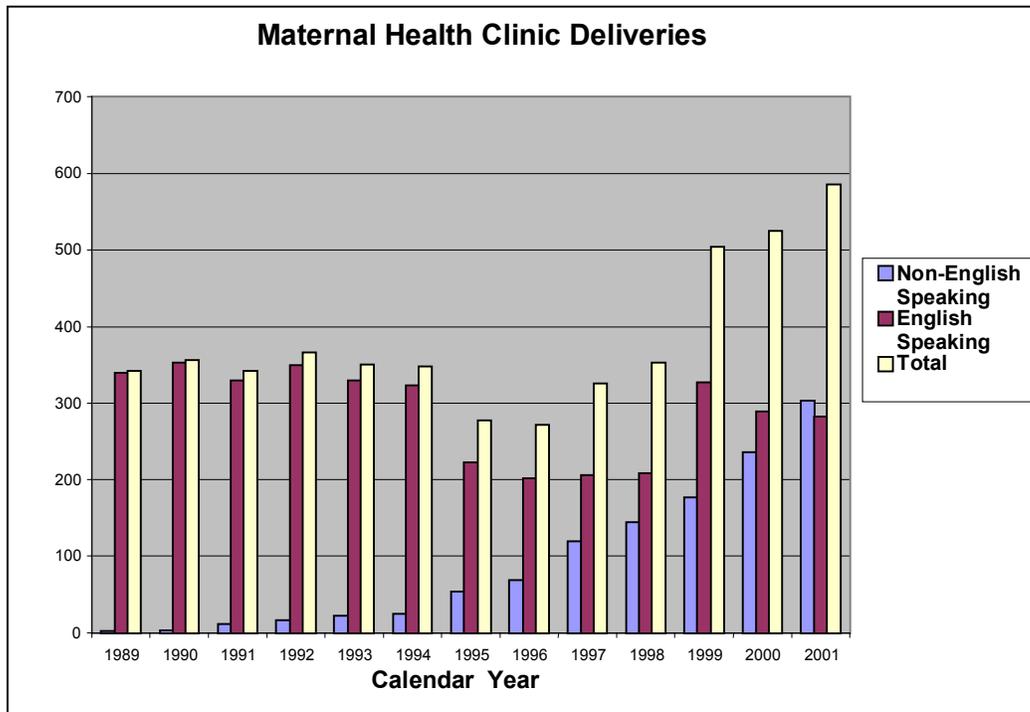
any needed follow-up, and appropriate referrals such as C-section, gestational diabetes, or neurological heart problems. Referrals are made to WIC (Women, Infants and Children) for most patients.

The following chart shows the ethnic breakdown of participants.



Four full-time interpreters are on staff to provide services for all Preventive Health Programs, and six bi-lingual staff members perform duties in English and Spanish as well as additional translation services. Translating increases appointment time needed and decreases the number of patients that can be seen in a clinic per day. There is a need for more Spanish speaking staff and interpreters.

The chart below show the increase in non-English speaking patients from 1989 to the present. This information is based on calendar year counts. In 1989 there were 2 Hispanic deliveries, while in 2001 there were 303.

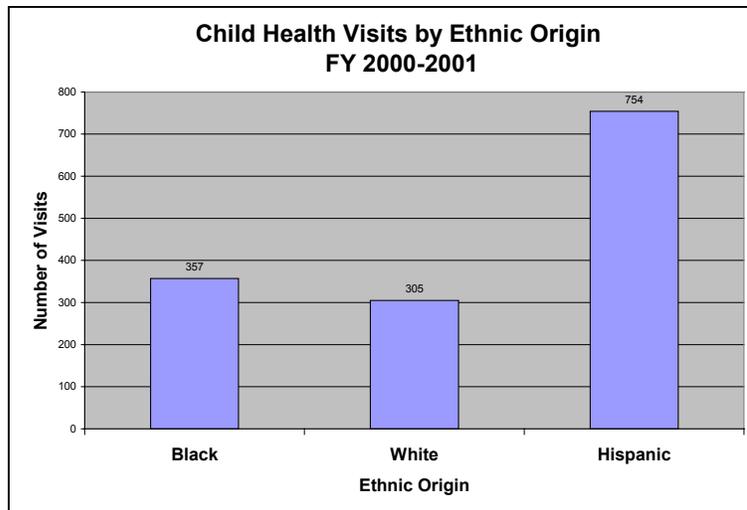
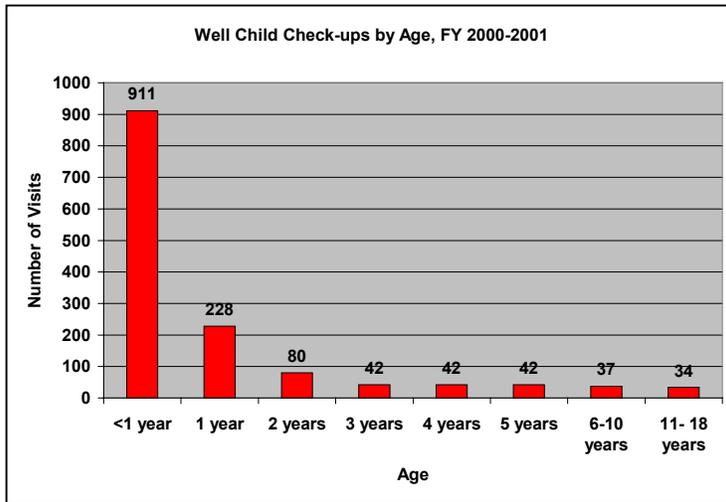


This dramatic and rapid increase has placed a financial burden on the program due to interpreter services that are needed and the fact that many Hispanics are undocumented and ineligible for Medicaid. Maternal Health services are important preventative services which improve birth outcomes and reduce the more expensive costs of services for complications. The Health Department must look for innovative ways to solve the financial problems and the increased needs in the Clinic. Grant awards and/or resources from industry may provide answers.

Child Health

Child Health strives to improve the health status of the children in Union County through provision of primary care and health screenings, community and client education, lead poisoning screening and investigation, SIDS (Sudden Infant Death Syndrome) counseling, and child fatality reviews. The caseload for FY 2000-2001 was 1,557.

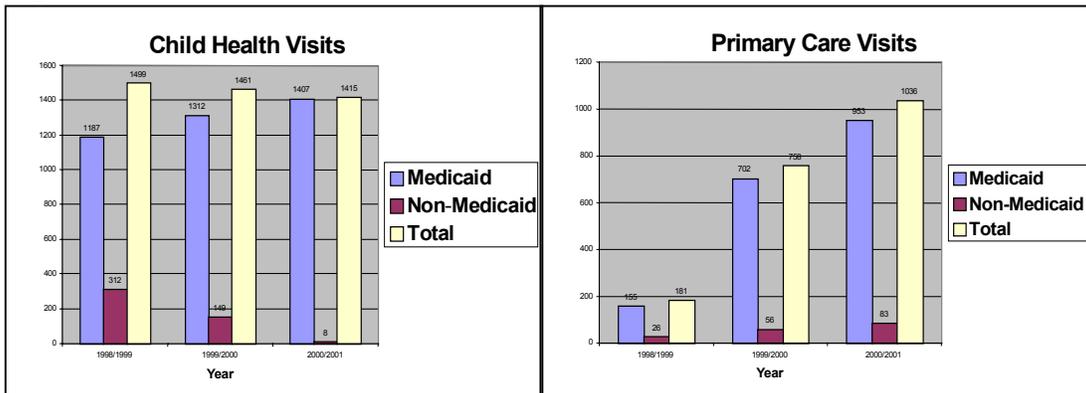
Well Child Clinic provides preventive health services for children which include immunizations up-date, height and weight, physical exam, developmental screenings, age appropriate lab work and referral and follow-up. In FY 2000-2001, the clinic provided 1,416 visits. The following charts show the age distribution and ethnic origin.



Child Health provided 1,036 **primary care visits** (sick visits) in the FY 2000-2001. Primary care was not provided until 1998, when the clinic became a Carolina Access provider. (Carolina Access is managed care for Medicaid for children under 21 in Union and other North Carolina counties.) The clinic also provides services for Health Choice (the State insurance program for children not eligible for Medicaid, but unable to afford health insurance).



While the number of well child checks has remained about the same, the number of sick child visits has increased dramatically. The predominant method of payment was Medicaid. Infants of Hispanic origin born in the United States are American citizens and can receive Medicaid, if eligible. Pregnant women can receive presumptive Medicaid and prenatal care can be provided for up to 60 days, if approved; and emergency Medicaid can cover delivery costs. The state of North Carolina experienced a \$240 million shortfall for Medicaid reimbursement. Medicaid pays a designated amount for services and does not provide additional interpreter costs. Fifty-three percent of the clinic required interpreters.



The Union County Health Department provided 492 **newborn home visits**. (Maternal assessments are made at the same visit). It is important to also assess conditions in the home that may affect the health of the child. 256 of these visits required the additional staff of an interpreter. In 1998-1999, 375 home visits were made; and in 1999/2000, 505 visits were made.



The Well Child Clinic provided 438 blood **lead tests**. Lead can have serious and long-term effects on children under 6 years of age. Elevated levels of lead can cause extensive physical damage including behavioral problems, learning disorders, anemia, delayed and/or slower growth, hearing problems, irreversible brain damage, seizures, coma, and death. The Union County Health Department provides screening, tracking, education, and on-site investigations by Environmental Health Specialists for elevated lead levels. If the level is from 10-14, services are offered but not mandatory. For levels 15 or above on two consecutive tests, services are required. Levels of 20 or above are considered lead poisoning. Testing is done annually in Well Child Clinic for ages 1-5 years. In calendar year 2000, 12 cases of confirmed elevated lead were investigated. Two of these were lead poisoning with levels over 20.



Parenting classes were offered by the Union County Parenting Coalition (a group representing 10 agencies). The Health Department spent \$400 for transportation services for clients to reach classes, \$791 for incentives and program materials, provided instruction for 3 classes, and helped provide coordination of the program. In FY 2000-2001, 23 parenting classes were taught with a total attendance of 296.

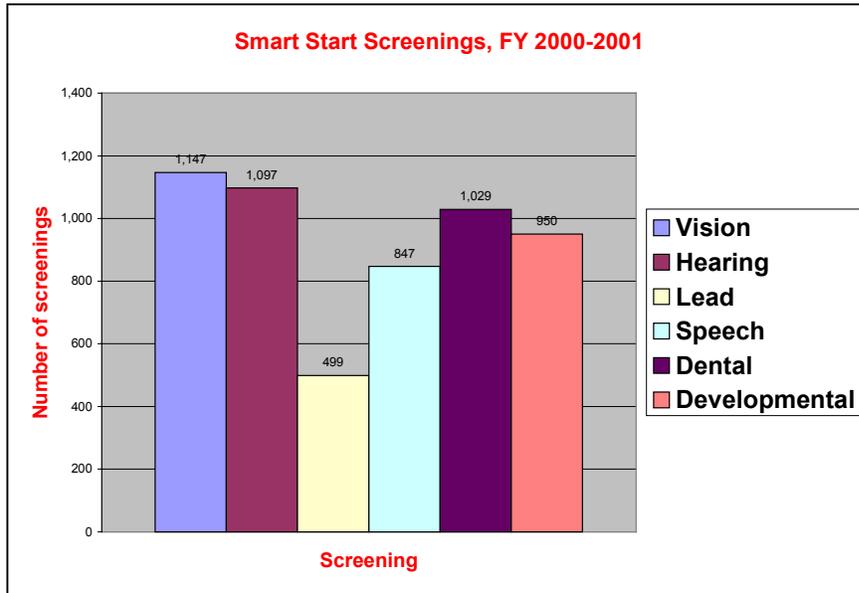


STAR transportation

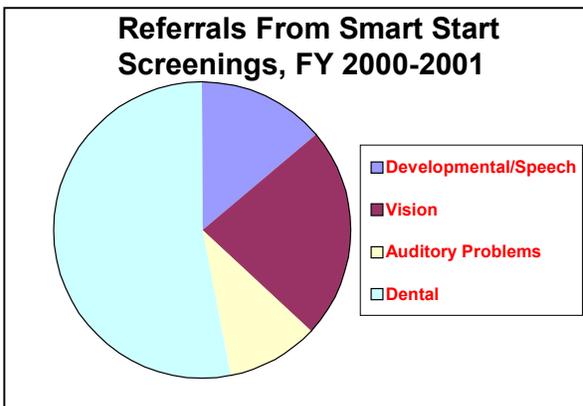
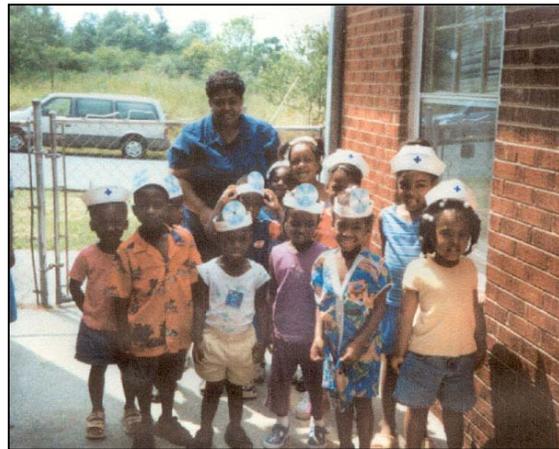


Smart Start provides screenings at licensed full-time day care centers to identify health and developmental problems and provide referral and follow-up services and education for parents. The program began in the winter of 2000 and is coordinated through a grant with Union County Partnership for Children.

Fifty-five of 78 licensed child care facilities (71%) participated in the program. 1,246 children were screened in FY 2000-2001. The following screenings were done.



The program is designed to provide early intervention to increase the effectiveness of the services. The focus of the program is to screen children 1 year and 9 months to 5 years and 9 months of age. 302 children were referred, and all received follow-up for further treatment and parent education was provided.



100% of participants were pleased with the program and recommended the program for other child care providers.

Child Health provides investigation of **Sudden Infant Death Syndrome** (SIDS) and counseling for families. Education concerning SIDS is provided throughout Maternal Health, Child Health, and WIC clinics as well as Parenting Plus. In FY 2000-2001, there were two SIDS deaths in Union County.



SIDS Counselor

The Health Department provides **education and awareness** for the general public for child health issues such as lead poisoning, Sudden Infant Death Syndrome, and safety information through newspaper articles and flyers. The staff provided a night-time clinic for immunizations in the Spring of 2001.

The Union County Health Department provides **triage** services for all its clinics. A nurse is available to answer questions during regular working hours, and after-hours calls are handled by contracted services. Approximately 4,940 calls were answered in the FY 2000-2001. Many of these calls were questions about health care for children.



Child Fatality Prevention Teams (CFPTs) are mandated by the State in each county. Local CFPTs review medical examiner reports, death certificates, and other records for



deceased county residents under age 18. Members discuss outcomes and services and circumstances surrounding the child's death. The law protects information shared at local CFPT reviews, even from introduction into court proceedings, to maintain each family's privacy. CFPT members cannot contact families of deceased children as part of the review. The reviews are to identify deficiencies in the delivery of services to children and families by public agencies, make and carry out recommendations for

changes, and promote understanding of the causes of child deaths. Two important contributions of CFPTs across the State are the change to a graduated driver's license program in North Carolina and new bike helmet laws.

Twenty-three children under 18 died in Union County in FY 2000-2001. The local fifteen-member CFPT has reviewed all child fatalities through 2000. The process has identified a need for parenting classes to be offered in Spanish in Union County.

Child Service Coordination

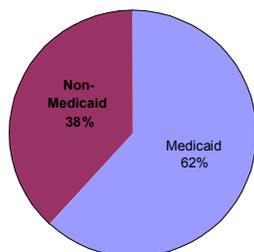
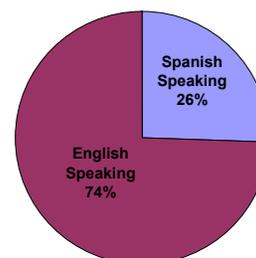
The Child Service Coordination Program provides assistance to children with actual or potential developmental delays and health problems to obtain their optimal level of functioning in preparation for entrance to school. Case management services are provided for children birth to 3 years of age identified as being at risk for developmental delay, and ages birth to 5 years for children diagnosed with a developmental delay or physical disability.



At the beginning of FY 2000-2001, the active caseload was 294 children. During the year, there were 232 referrals to the program. All referrals were investigated and services offered, if needed. There are no income guidelines, and participation is on a voluntary basis. The active caseload remains around 300 as children enter the program and others leave.

Research shows that the first three years are the most important time for learning in a child's life. Starting services early improves a child's ability to develop and learn. Also, it may prevent or decrease the need for special help later. It is the goal of Child Service Coordinators to provide early intervention for the most effective avenue for families to help their children develop to their full potential.

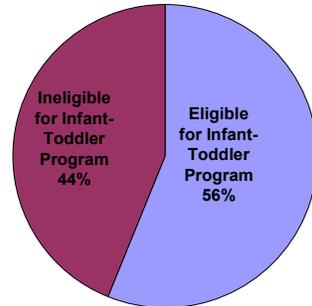
The active caseload of 294 children was 26% Spanish speaking. These clients required an interpreter for services, representing an added expense and additional time required by the Child Service Coordinator. Due to lack of resources, the program could not provide all services needed (such as specialized therapy). Parents and Children Together (PACT) provided by the State through a federal mandate and the preschool program of Union County Schools have provided some services. There has been a steady increase in Hispanic clients since 1990.



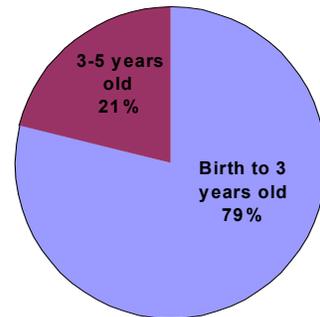
Medicaid provides funds for those eligible, and funds from a Maternal and Child Health Block Grant are used for Maternal and Child Health programs including Child Service Coordination. These funds are finite and not based on caseload. Children of Hispanic origin born in the United States are American citizens and can receive Medicaid, if they meet income requirements. No additional money is provided for interpreters. The County has experienced tremendous growth in

population (mainly in the western section of the County), and the proportion of non-Medicaid has increased in the last few years and represents a financial challenge for the program.

The North Carolina Infant-Toddler Program (which is federally mandated) provides services for children younger than 3 years old who have a developmental delay in cognitive, physical, communication, social-emotional, or adaptive development or have atypical development or are high risk. Some examples of high risk are vision or hearing problems, seizures, cerebral palsy, and Down Syndrome. Children in the program received mandated services including extensive screening, tracking, counseling, and referral services.



Sixty-two children in the program were aged 3-5. These children have diagnosed developmental delay or physical disability and need continued services or were not diagnosed or referred until age 3 to 5.



Child Service Coordinators provide identification of infants and children at risk. Referred children received developmental screening, referral to other services, family support, and information.



Families were given information concerning community resources and helped in making the appropriate applications as well as assistance with services. Each child was handled on an individual basis to best meet the needs of the child and his family. Parents or caregivers were educated concerning the needs of the child and the importance of the family in meeting these needs.



Home visits were made to check on the progress of a child and provide support and assistance.

This child with spina bifida has extensive needs, and a child service coordinator has provided referrals to various resources for medical, educational, and emotional help as well as special equipment needed. Most individual families do not have the resources to handle major medical problems such as this.



Only a small number of children have been referred to the Union County Child Service Coordination Program due to suspected abuse/neglect or substantiated abuse/neglect. Local data indicates that this represents a lack of referrals and not a low incidence in the County. The Union County Department of Social Services received 1,648 reports of child abuse and neglect representing 3,382 children in FY 2000-2001.

In FY 2000-2001, the 232 new referrals addressed 329 risk factors. The families of some of these children chose not to participate, and others joined the active caseload. Children who reach their third birthday are removed from the active caseload unless they have a diagnosed developmental delay or physical disability. The active caseload at the beginning of the fiscal year (294 children) addressed 757 risk factors.

Risk Factors Addressed, FY 2000-2001

Risk Factor	New Referrals	Active Caseload
Potential high risk	44	54
Significant parental concern	33	75
Respiratory distress	32	89
Difficulty in providing parenting	32	50
Failure on standard test	26	31
Developmental delay	25	63
Parental substance abuse	19	46
Gestation age < 32 weeks	14	67
Birth weight < 1500 gm	10	59
Parental mental illness	10	23
Atypical development	8	8
Lack of stable housing	8	12
Congenital malformation	8	25
Difficulty in parent-infant bonding	8	16
Maternal age < 15	7	23
Suspected abuse/neglect	6	14
Maternal use of anticonvulsant, antineoplastic or anticoagulant	6	5
Chromosomal anomaly	5	13
Lack of familial and social support	5	10
Suspected hearing impairment	4	16
History of abuse of parent	4	0
Vision disorder	3	6
Neurologic disorder	3	13
No Well-Child care by age 6 months	3	10
Neonatal seizures	1	5
Hypoglycemia	1	4
Hyberbilirubinemia	1	3
Parental mental retardation	1	5
Metabolic disorder	1	7
Toxic exposure	1	5

Family Planning Clinic

The Family Planning Clinic provides outreach, education, clinical services and follow-up to low income Union County residents. The services are available on a sliding scale fee schedule. The program allows residents to plan their families who otherwise would not be able to afford the services. The program offers pregnancy testing, physical exams, education, abnormal Pap Smear follow-up, and birth control methods and counseling. Additional services include improved health status through health promotion and health screening, appropriate referrals, counseling, and support.

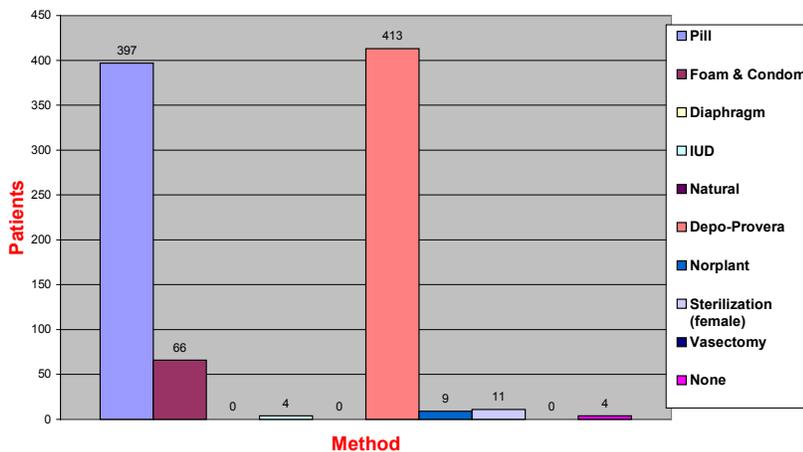


The goals of the program are to:

- Improve maternal and child health through helping families plan the timing and number of their children.
- Lower the number of high risk births.
- Lower the number of unwanted pregnancies.
- Lower the number of teen pregnancies and repeat teen pregnancies.
- Improve the health status of women and children through health screening and health promotion.
- Encourage women to continue their education to obtain a high school diploma or GED.

The chart below shows the birth control method chosen and the number of patients. Of the 1533 patients, 198 were new to the Clinic.

**Birth Control Methods Chosen
FY 2000-2001**



Many women are choosing Depo-Provera, an efficient and convenient method but also more expensive. The Clinic offers vasectomy services to any male for \$275 or less. From FY 1996-1997 to FY 2000-2001, sixteen have been done.



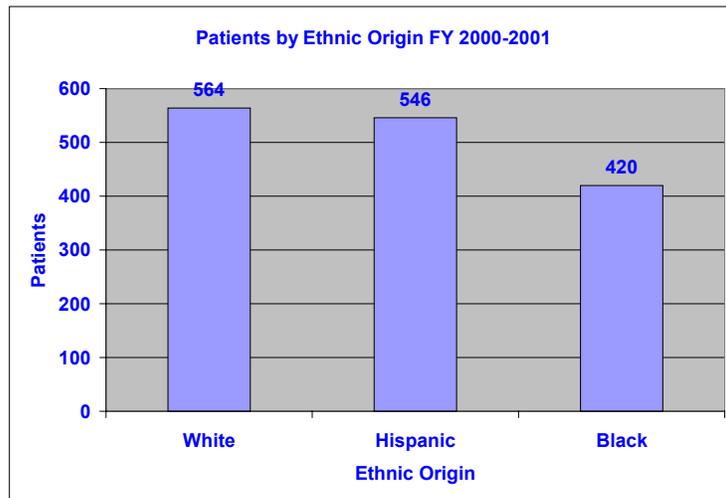
The program served a total of 441 teens in the FY 2000-2001. The continuation rate for teens from the previous year was 57.1%. Although better than the State rate, the clinic would like to increase this number through improvements in the teen incentive program.



In the FY 2000-2001, 1,516 Pap Smears were done in the Family Planning Program. In addition approximately 500 repeat Paps, 94 colposcopies, and 36 cryotherapies were needed. A colposcopy uses a colposcope (pictured to the left) to magnify the cervix and helps the healthcare provider identify problems when a repeat Pap confirms a need for additional study. If the colposcopy shows abnormal cells, cryotherapy is done. Abnormal tissue is frozen causing the tissue to die, and the tissue that grows back is most often normal. Constant tracking and follow-up is required in the program. Cervical cancer

is a preventable disease; with proper care no woman would ever die of cervical cancer.

The adjacent chart shows the number of Family Planning patients by ethnic origin. There has been a dramatic and rapid increase in the number of Hispanics in the last 10 years. The increase in non-English speaking clients has increased the need for interpreters. There is a decline in the percent of funds from Medicaid due to Hispanic patients who do not qualify for Medicaid. 43% of the clinic in FY 2000-2001 was Medicaid paid, and this represents a financial challenge to the program.



Breast and Cervical Cancer Control Program (BCCCP)

The Breast and Cervical Cancer Control Program provides breast and cervical cancer screening services for uninsured and underinsured women aged 40-64 who do not have Medicare or Medicaid and are below 200% of the Federal Poverty Guidelines.

Education and outreach in the community play a key role in the prevention and detection of breast and cervical cancer by increasing the client's knowledge for self-care practices and awareness of services available. In FY 2000-2001, 90 women participated. These women received a breast exam, mammogram, and Pap smear as often as was deemed necessary with appropriate referral and follow-up. Women aged 18-64 (instead of 40-64) could receive a Pap smear if all other eligibility requirements were met.



The Wise Woman Program (Well Integrated Screening and Evaluation for Women Across the Nation) is offered through the Breast and Cervical Cancer Control Program using the same eligibility guidelines. These women were offered screenings and



education for weight control, sedentary lifestyle, poor dietary habits, high blood pressure, high cholesterol, and received appropriate referral and follow-up services. Services included cholesterol screening, H_{A1c} testing for clients with diabetes, blood pressure monitoring, height and weight measurement, diet and exercise

education, free dynabands, pamphlet material, and an individualized notebook. All 90 BCCCP clients took advantage of the Wise Women Program in FY 2000-2001.

More community outreach activities to educate and recruit eligible women to the BCCCP and Wise Woman programs are needed. All services are preventive, and potential clients must be educated concerning the availability and need for these preventive services.

Communicable Disease Control

Under the umbrella of communicable disease are immunizations and communicable diseases required to be investigated by State law including STD (sexually transmitted diseases), HIV testing and counseling, and TB (tuberculosis). Clinics for all disciplines are held daily and can be accessed by appointment or as a walk-in. Evening clinics are offered as deemed necessary to meet the needs of the community.

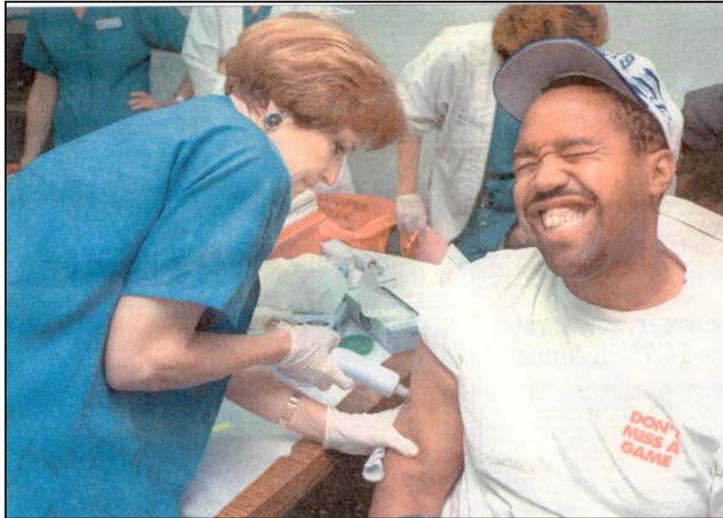
A total of 11,514 immunizations were given FY 2000-2001 (608 patients were Hispanic requiring an interpreter). The immunization nurse provides tracking and follow-up on the immunizations of all children two years and younger that have received services in any Clinic in the Health Department. The follow-up is very time intensive requiring calls to parents and doctors' offices to ascertain the immunization status of children. In 2001 the immunization rate for children under 2 years of age for appropriate immunizations for DTP (diphtheria, tetanus or lockjaw, and pertussis or whooping cough), IPV (inactivated polio vaccine) and MMR (red measles, mumps, and rubella or German measles) was 61%. The North Carolina rate is currently 66%. These non-compliant children may have received some vaccinations but are not current or have not been tracked. The Clinic should be able to meet or exceed the State rate next year. Patients are counseled on the importance of immunizations in Family Planning, Child Service Coordination, Child Health, Maternal Health, and WIC Clinics as well as at 36 weeks gestation and at newborn assessments (where an appointment can be made).

The Health Department provides State required immunizations at no cost. Others may be available at no cost or low cost. Appropriate immunizations are given to any age including infants, prospective college students or senior citizens.

The Immunizations Section is responsible for handling outbreaks of communicable disease. From May 6 through August 10, 1999, there were 25 active cases of rubella (German measles). Active rubella in a pregnant woman can cause severe damage to the unborn child. Efforts to contain these outbreaks represent preventive health that is cost effective to the community and the preservation of quality of life. Occupants in 5 different residencies, 2 churches, and 8 businesses received rubella vaccine unless proof of vaccination was presented. The total cost to contain the outbreak (including salaries) was \$83,299. The State provided the vaccine (\$37,897) and the March of Dimes gave a grant of \$2,000. The state of North Carolina provided a comprehensive statewide effort to contain the disease, no single effort would be effective. From March to May of 2000, there were 8 cases where a total of 1081 vaccinations were given. In the FY 2000-2001, there was no

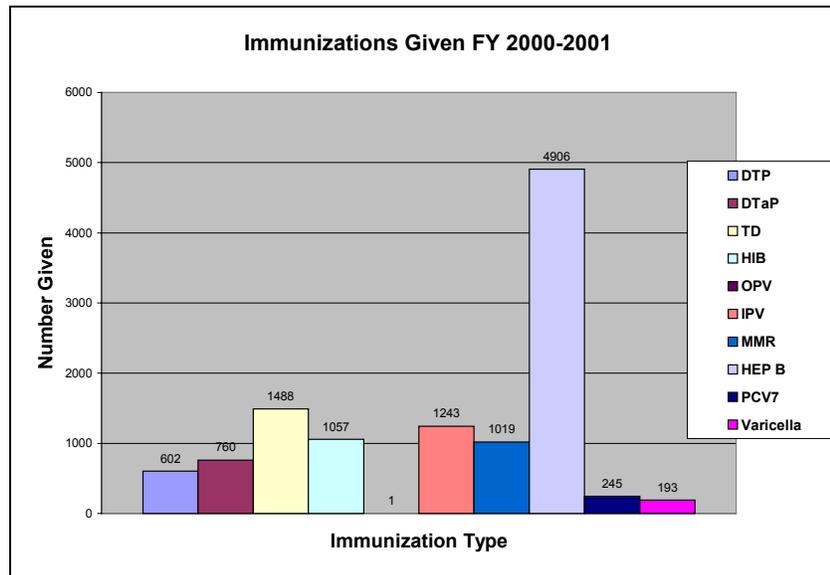


rebella outbreak. German measles vaccine is now being given in Mexico, and additional effort is made to get Hispanics properly protected.



May 1999

The following immunizations were given in FY 2000-2001.

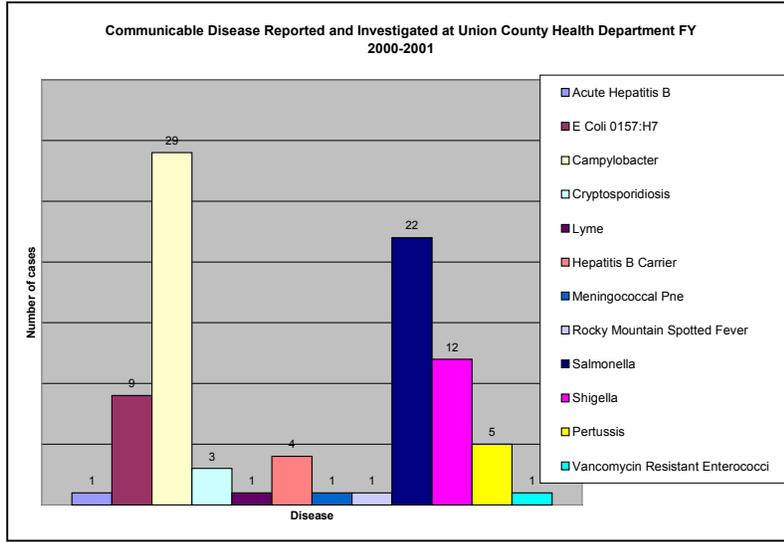


The HEP B is also reported in the School Health Nursing section.

DTP = diphtheria, tetanus (lockjaw), pertussis (whooping cough)	DTaP = diphtheria, tetanus (lockjaw), acellular pertussis (whooping cough)	TD = tetanus (lockjaw), diphtheria	HIB = haemophilus Influenza type B	OPV = oral polio vaccine
IPV = inactivated polio vaccine	MMR = red measles, mumps, rubella (German measles)	HEP B = hepatitis B	PCV7 = pneumococcal conjugate vaccine, 7 strains	Varicella = varicella or chicken pox

The North Carolina Communicable Disease Laws and Regulations are the guidelines followed by the Communicable Disease Nurse to assist in investigations and follow-up of reported cases. The Nurse investigates and educates clients about the disease and

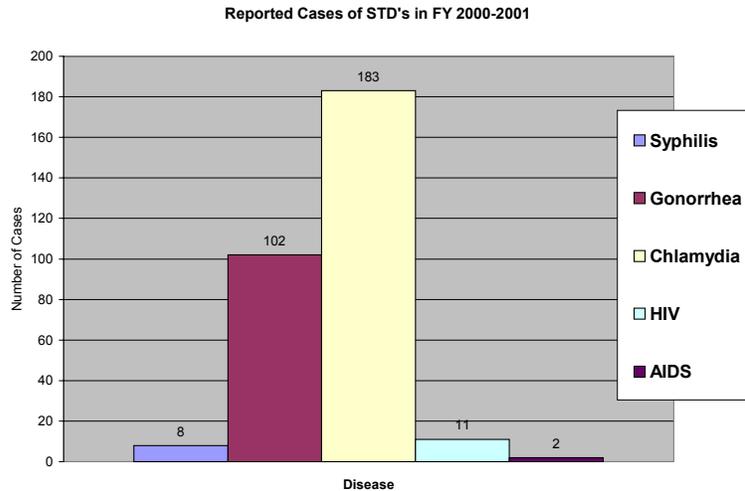
appropriate ways to prevent transmission. In FY 2000-2001, 89 cases of illness were reported and investigated.



In the STD (Sexually Transmitted Disease) Clinic, testing is offered confidentially and free of charge. Counseling is an integral part of the clinic service. Clients are given information and encouragement to participate in a healthy lifestyle. In FY 2000-2001, 901 patients received STD services (73 of these required an interpreter). Of this 289 received HIV testing and 149 returned for the HIV test result (36 of these required an interpreter).



The following cases of STD's were reported in FY 2000-2001. Reporting of Genital Herpes is not required by the State, and the number of cases is unknown.

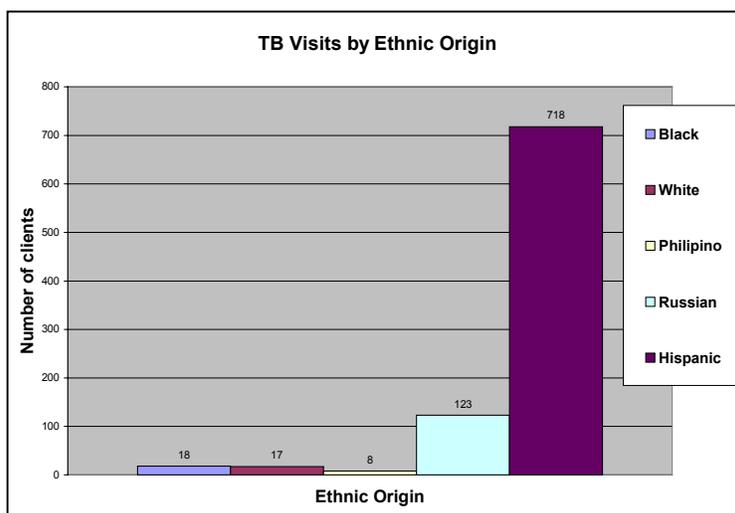


The Health Department has an HIV case manager who assists clients in managing a very complex disease and is an advocate for community resources. The number of people in the County with the disease is unknown due to diagnosis in other states (before moving to North Carolina) and unreported or undetected cases. The HIV case manager had an average caseload of 18 patients.



The Union County Health Department provides tuberculosis control services consistent with the State TB policy for residents of Union County. The program has experienced financial trouble due to the need for interpreters, and the fact that the cost for the required physician consultation services exceeds the amount allocated by the State for TB medical services. The number of latent and actual cases has increased sharply due to the increase in Hispanic residents.

In 2000-2001, 941 skin tests were administered. Six new cases were found. There were 89 patients with latent TB infection requiring a total of 681 visits (440 required an interpreter). There were 1,341 TB patients who received 3,146 visits. 247 chest X-rays were done. The total number of visits for directly observed therapy was 884. The ethnic breakdown for these visits is shown in the following chart.



Dental Health

Union County Health Department Dental Clinic

The Union County Health Department Dental Clinic serves children with Medicaid or North Carolina Health Choice ages 3-18.



The clinic provides:

- Preventive services -- prophylaxis (cleaning), fluoride, and sealants
- Restorative services -- fillings, extractions, stainless steel crowns, and root canals
- Diagnostic services – exams and X-rays

In the year 2000-2001, the clinic operated with a part-time dentist and full-time dental assistant /office manager providing services for a total of 1,778 patients. The following services were provided:

- Exams 595
- X-rays 3,142
- Prophylaxis and Fluoride 532
- Sealants 412
- Extractions 109
- Endodontic(root canal) treatment 25
- Fillings 502
- Stainless steel crowns 14



With the opening of the clinic in 1999, the severe access-to-care problem was partially alleviated. Many of the children receiving services at the clinic had never received dental care because only one dentist in Union County accepts Medicaid.

Dental Health

Community Dental Health

The North Carolina Oral Health Section provides a Public Health Dental Hygienist to serve Union County residents with a community-based dental health program.



The hygienist provides dental health education for children and adults in the Union County public schools, Union County public schools after school programs, Head Start, day care centers, public libraries, business and industry, and other community organizations. In the year 2000-2001, 3,619 school age children (down from over 8,000 the previous year due to a cut in funds), 223 preschool children, and 300 adults received programs.

All kindergarten and fifth grade students in the Union County Public Schools and the charter school, Union Academy, are screened for dental problems and appropriate referrals are made. In the reporting year, 3,667 students were screened and 374 referrals were made.



The dental hygienist coordinates and monitors the once weekly fluoride mouthrinse program in 12 elementary schools. 6,099 children were participants in the program in 2000-2001.

With the combined efforts of the Union County Health Department Clinic and the North Carolina Oral Health Section Public Health Dental Hygienist, many Union County children are experiencing better dental health.

Health Promotions

The Health Promotions program is funded by a State grant to counties to provide interventions in healthy lifestyles. A part-time person (20 hours a week) administers the program. In Union County the \$21,000 grant was supplemented by a Kate B. Reynolds Charitable Trust grant. This grant provided resources to work in the area of diabetes in the County.

In 2000-2001 *Union County Diabetes Today* (a coalition formed by the Health Department) provided the following services:

- A partnership with the Lions' Clubs of Union County to provide free eye screenings – screened 126
- Nine programs (combined attendance, 209, plus one hour long cable TV program)
- Articles for the Union Observer medical insert which is published quarterly
- A seven session class, *Living with Diabetes*, at Ellen Fitzgerald Senior Center (average attendance 11)
- Efforts to recruit an endocrinologist to the area for at least one day a week
- A speaker for the Union County Diabetes Support Group (32 present)
- A program in diabetes for Grand Rounds providing Category I continuing medical education (attendance 22)
- A foot clinic at Monroe Family Shoe Center with volunteer podiatrists (attendance 24)
- Shoes for 10 indigent diabetics through funds from the Kate B. Reynolds grant
- Promoted the ABLE program (All Bodies Like Exercise) developed by Mecklenburg County
- Plans to bring the Winner's Circle program to Union County (food rating program for participating restaurants)
- Individual and group education and laboratory tests for 9 women with diabetes in the Wise Women program of the Health Department's Breast and Cervical Cancer Control Program
- Funds for in-service education for four coalition members
- Immediate one time emergency medicines for 42 indigent diabetics through funds from the Kate B. Reynolds grant
- Planning for a Teen Clinic that would help teens with weight management
- Instruction for students at South Piedmont Community College in the LPN program.



Diabetes Coalition

Health Promotions maintained a newspaper column on Healthy Lifestyles, provided services, materials, and program planning for the Union County Parenting Coalition, and served on the Steering Committee and the Healthy Lifestyles committee of Union United for Better Health (a Healthy Carolinians group).

Laboratory Division

The Laboratory Division of the Union County Health Department has the responsibility of providing prompt, reliable, quality assured laboratory test results to each of the divisions and programs within the Health Department. This service includes both clinical and environmental testing and is performed in the most cost-effective manner possible for the citizens of Union County.

The Laboratory Division performed 23, 292 procedures in house in the 2000-2001 fiscal year and performed the phlebotomy procedures for 10,092 sent to other labs for analysis.



642 water samples were tested for the Environmental Health section.

Vital Records



Deputy Registrar

The Department registers and processes all birth and death notices in Union County. In the FY 2000-2001, 2,234 birth certificates were issued and 842 death certificates were completed.

Administrative and Processing Assistants

Vital to the delivery of health services is the administrative and processing assistant staff.



Staff determine eligibility and assess fees, schedule appointments, handle phone calls, provide data entry and billing, manage fees and collection, provide patient files for clinic visits and maintain files in the record room, send documents for imaging and shred confidential documents from closed records, order all supplies, receive and deliver mail, provide copying and in-house printing, schedule transportation services, fill out and code encounter forms which provides statistical data for the Department, and answer Health Department services questions.



Two receptionists (one fluent in Spanish and English) provided assistance for all clients and visitors to the Health Department, manned telephones, and checked-in participants. Approximately 90 people a day were seen. In addition, the switchboard operator handled approximately 250 calls per day.

All clients at the Health Department must be interviewed for eligibility. Required documents must be submitted to determine fee charges. Processing assistants determine eligibility, assess and collect fees.





An estimated 22,850 active records were maintained in the record room. In FY 2000-2001 approximately 5,000 records were sent for imaging, and confidential documents were shredded. All Health Department records from 1937 to the present are maintained on microfilm, imaging, or are active records. Staff can access these records for documentation of health information.

One full-time and one part-time (.5 FTE) employee provide all data entry and Medicaid billing services. Staff provides accounts receivable reporting for processed and submitted Medicaid claims, investigates denials and corrects edit errors for rebilling. An estimated 40,000 patient services were entered in FY 200-2001. In July of 2000 a new billing method was mandated. Bundled billing was discontinued, and data entry for each procedure was required by the State. This increased billing time at the local level.



The administrative secretary provides assistance for the administrative staff in budgetary planning and reporting, monitoring of revenues, Board of Health coordination, correspondence, and personnel matters. The accounting technician provides bookkeeping services for accounts payable and purchasing, budget maintenance, outsourced patient billing resolutions, time card reports, and time equivalency reports.



A computer technician provides support of computer systems and equipment, telephone service, reports to an immunization registry for the State, and billed approximately 720 private insurance and Health Choice and 1,800 Medicare claims in FY 2000-2001. The technician collects and maintains health services information systems statistics. The Health Department had 64 computers in FY 2000-2001. The use of computers has greatly increased the productivity of the Department.

Women, Infants and Children (WIC)

The Special Supplemental Food and Nutrition program for Women, Infants and Children is better known as WIC. The program's goal is to improve the health and well being of its participants through individual and group nutrition education sessions and providing healthy supplemental foods. WIC services are provided to eligible pregnant women, breastfeeding women, women who have an infant less than 6 months old, and infants and children up to 5 years of age. WIC also refers to other health care agencies and social services.

The program has proved to be very effective.

Women who participate in WIC have:

- More prenatal care
- Fewer premature births
- Fewer low birth weight infants
- Fewer fetal and infant deaths
- Breastfeeding support



Infants and children who participate in WIC have:

- Improved diets
- Added nutrients during critical times of growth and development
- Improved mental development
- Referrals for well child check-ups
- Increased immunization rates
- Lower rates of anemia

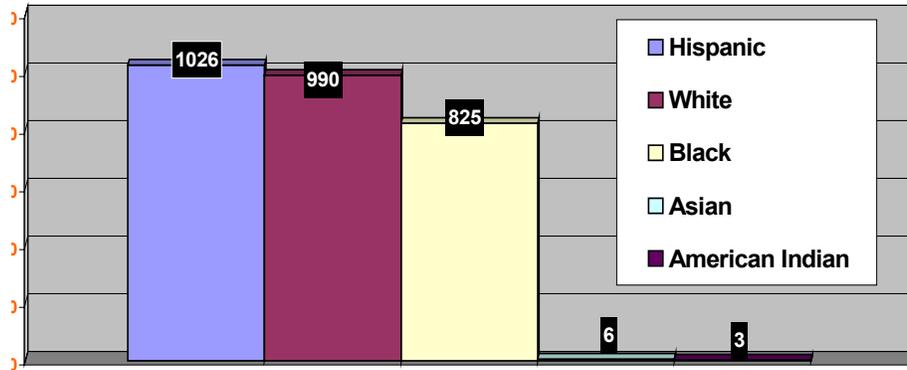


WIC is a strong supporter of breastfeeding and has established a Breastfeeding Peer Counselor Program. The peer counselors lend support through regular phone contacts to prenatal women and postpartum breastfeeding mothers. This program also offers breastfeeding instruction through weekly classes or individual one-on-one counseling. Breastfeeding women have the additional benefits of the breast pump loan program that provides an electric

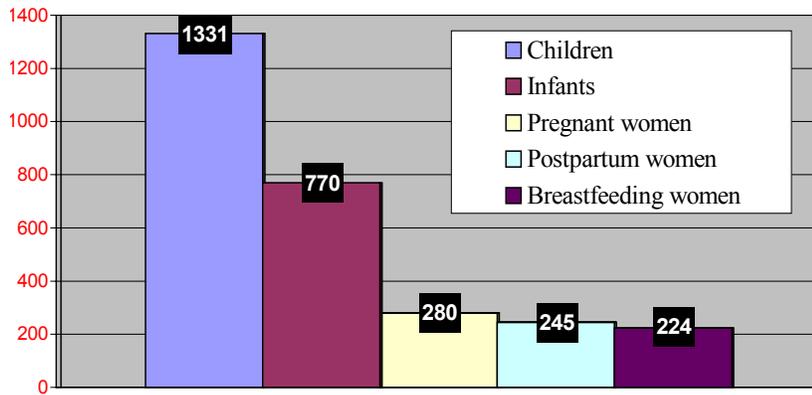
breast pump free of charge.

The WIC Program participation is approximately 2,850 persons per month. Current participation by ethnic origin and category is:

**WIC ENROLLMENT BY ETHNIC ORIGIN
2000-2001**



**WIC PARTICIPATION BY CATEGORY
2000-2001**



Adequate services for the growing Hispanic community in Union County is a major challenge for the WIC Program. WIC served 450 Hispanics in October of 1998. This was approximately 21% of the total participation of 2,067 persons. By June 2001, the program was serving 1010 Hispanics (36%) of the current 2800 clients. WIC has three clerical staff members who are fluent in Spanish. Nutritionists work through an interpreter to give nutrition education during the 12 hours per week of Hispanic clinic. WIC is currently looking at ways to increase interpreter time to serve this population and decrease the wait



time to enroll (which is currently 12 weeks). It is very important to provide education and supplemental foods during critical times of growth and development to prevent and improve health problems.



The number of overweight participants in the program is another major concern. Many studies confirm that excessive body fat substantially increases the risk of diseases and premature death. North Carolina youth are three to four times more likely to be obese as their national peers. Nutritionists address this issue with participants and parents. The program is also in the process of developing a toddler class that will focus on healthy foods, snacks, and

physical activity. The percentage of participants classified as overweight is:

Pregnant women (overweight prior to conception)	37.3%
Postpartum non-breastfeeding	40.7%
Postpartum breastfeeding	38.5%
Children	24.4%

WIC has 21 vendors and 3 pharmacies that serve its clients. The food vouchers redeemed account for a total of approximately \$1.5 million annually.



Environmental Health

Environmental Health is the portion of Public Health that focuses on the art and science of the protection of good health, and the prevention of disease and injury through the control of positive environmental factors and the reduction of potential hazards -- physical, biological, chemical, and radiological. A fundamental knowledge of scientific principal, engineering concepts and sound sanitation practices is a basic requirement to evaluating a changing environment, which continually shifts Public Health needs of the County. The role of the Local Environmental Health Division is to serve as the first line of defense against adverse environmental conditions and infectious or communicable diseases. Virtually all environmental health laws, rules and technical guidelines and procedures are designed and dedicated to controlling or eliminating disease causing agents before they can reach citizens.

A staff of one division director, two supervisors, twelve environmental health specialists, and three processing assistants provide services in a variety of programs.

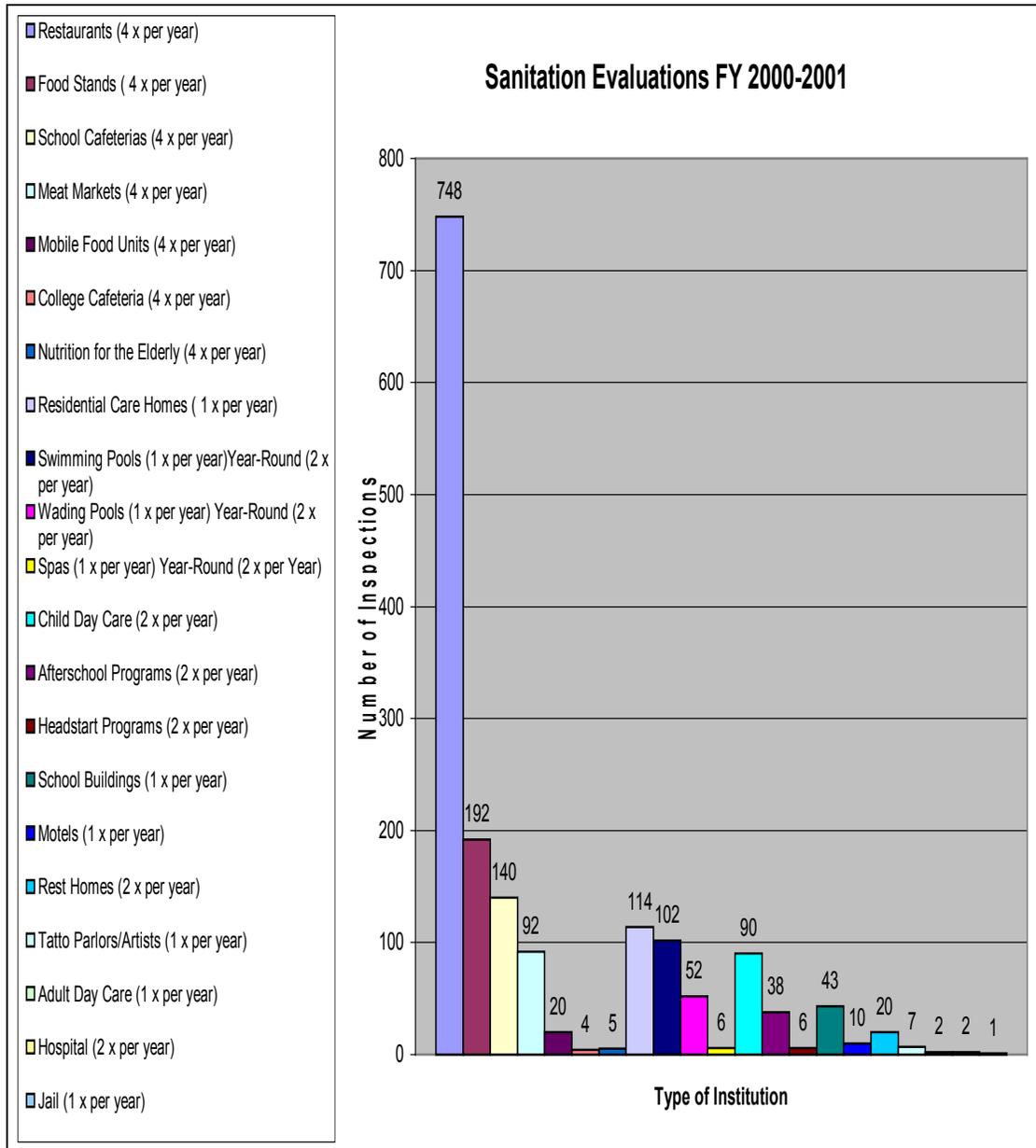


Environmental Health Staff

Food, Lodging & Institution Program

For over 60 years North Carolina has had regulations dealing with the need to meet minimum sanitation standards for food service facilities, meat markets, and institutions in order to prevent the spread of disease. Environmental Health Specialists act as authorized agents of the State of North Carolina to conduct these programs. Institutions such as schools, hospitals, nursing homes, residential care, day care, and local confinement facilities are also subject to minimum sanitation standards established by the State of North Carolina. In order to address the potential spread of disease, North Carolina has added other facilities that must also meet minimum sanitation standards; these include public swimming pools, tattoo parlors, and adult day care facilities. Environmental Health Specialists make unannounced visits to these facilities in order to evaluate their compliance with minimum standards that have been established by the State of North Carolina. In FY 2000-2001, 617 facilities were evaluated by the Environmental Health Division. Environmental Health Specialists made 1722 compliance

evaluations of these facilities, achieving 100% compliance with State law. The breakdown of the facilities and the number of times per year inspected are as follows:



The activities of this program extend well beyond the actual compliance inspections. Before permits can be issued for construction or operation of any food service facility, the Environmental Health Division must do a comprehensive plan review of the proposed operation. This includes the evaluation of the materials to be used on floors, walls, ceilings, as well as the proposed equipment and equipment placement. The menu is used to determine the needs of the facility and compliance with regulations. The review also makes an evaluation of how food moves through the facility from entering, to storage, to preparation, to holding, and then to serving. This maximizes the effective use of the

facility while making sure that the food is protected from potential cross contamination. Nineteen restaurants, 11 food stands, 10 meat markets, and 3 school cafeterias opened or had a transfer of ownership in FY 2000-2001. All received appropriate plan reviews and “walk-throughs”.



Education is an important component of this program. Environmental Health Specialists provide basic information to owners, managers, and key staff to better enable compliance with existing rules and regulations. Under North Carolina laws, the Environmental Health Division can close an establishment that is not in compliance. Forty-five establishments received B grades, but after one or two visits all made the necessary changes to achieve an A rating.



The National Restaurant Association food worker education program, ServSafe, was provided two times (6 three-hour classes) in FY 2000-2001. A total of 33 school cafeteria managers, restaurant managers and key operational staff attended. The staff also provided 4 programs for civic and community groups and service providers.



The “Gerbuster” program was presented to 15 groups at After School Programs with a total attendance of 446. “Gerbusters” was taught for a group of 40 After School Directors and staff at South Piedmont Community College. “Hooray for Handwashing” was taught for 3 child care centers with a total attendance of 39 children.

All day care centers are inspected 2 times a year. In addition to cleanliness standards, Environmental Health Specialists look for potential hazards for children at the center. Seven received re-inspections before meeting standards.



Plan review must be performed prior to the construction of any public swimming pool to ensure that it is in compliance with the North Carolina Pool Regulations. Swimming pools can be the source of water borne disease. In FY 2000-2001 approximately one third of the swimming pools in Union County were

temporarily closed after routine inspections. These pools reopened when compliance with North Carolina rules and regulations were met.



All tattoo artists must pass inspection for proper sanitation and mandated sterilization procedures to protect clients from potential infection.

The population growth experienced by Union County has had an impact on the number of facilities that fall under the Food, Lodging and Institution Program. The total number of facilities that must be evaluated grew by 180 or 42% from 1996 to 2001. The number of food service facilities grew by 34 or 12% during this period. The growth in the food service sector alone accounts for an additional 136 evaluations per year (3.4 weeks of manpower).

On-Site Wastewater

The Environmental Health Specialist checks the site to determine what type of wastewater system is needed. All private sewage treatment and disposal systems plans must be



approved by Environmental Health and inspected after installation. Subsequent inspections are not mandated for conventional systems unless the system has a pump (inspection every five years). All alternative systems have an inspection schedule depending on the system type. Union County is in the Carolina Slate Belt which does not provide deep soils and mandates the use of many alternative systems. The County has more alternative systems than any county in the State except Brunswick County. In FY 2000-2001, 476 conventional systems and 285 conventional systems with a pump and alternative systems that require inspections (every 5 years, every 3 years, annually, or every 6 months) were permitted. Evaluations were made of 876 new and repaired systems in 2000-2001. The County had a total of 4,042 installed systems that required inspection by the Environmental Health Division. The Division does not have adequate staff to provide the necessary inspections, and no positions were added in FY 2000-2001. Two full-time employees would be needed for the program and another full-time Environmental Health Specialist added in 2003. Improper sewage disposal can be the source of a number of diseases and can contaminate streams and individual water supplies.



Additional Environmental Health Programs

All reports of suspected **food borne disease** cases are investigated by the Environmental Health Division staff. The staff also responds to calls and complaints from the public regarding possible food safety or sanitation problems that they have experienced at one of the food service, lodging establishments, or institutions that fall under Environmental Health regulations. In FY 2000-2001 there were 35 complaints.

The Environmental Health Division is responsible for permitting all of the **drinking water supply wells** for homes and businesses that are not served by community water supplies. During the year the Division issued 523 permits for the construction of wells

and collected 642 water samples. The Division also serves as a source of education and information about water problems and groundwater contamination.

On-site investigations are required by Environmental Health Specialists when a child shows a blood **lead** level of 15 or more. The source of contamination may be at the child's home or a place frequented by the child (such as a relative's home). The services are offered at lead levels of 10-14, but are not mandatory. Twelve cases of confirmed elevated lead levels were investigated in the calendar year of 2000. Two of these lead levels were over 20, a score that indicates lead poisoning.



The Division deals with **solid waste** including garbage and other discarded materials that could serve as the breeding area for insects or rodents that serve as vectors of disease. During the year the Division responded to 55 complaints regarding solid waste. The Environmental Health Division also enforces the Union County Solid Waste Ordinance, which includes the regulation of reclamation and land clearing landfills.

The Division's **Insect and Vector Control Program** involves information and control of organisms that serve as carriers of disease. Currently the program primarily responds to complaints. During the FY 2000-2001 the Division responded to 30 complaints regarding problems with flies, mosquitoes, cockroaches, and rodents. The Division has seen an increase in disease in residents from ticks and mosquitoes in Union County. North Carolina continues to see problems with tick borne illnesses such as Rocky Mountain Spotted Fever, Lyme Disease, and Ehrlichiosis and LaCrosse Encephalitis. West Nile Virus has been found in birds in North Carolina, which confirms the presence of the organism and the potential for human cases. Environmental Health serves as a community resource for questions regarding vector control. The Division is planning to expand its activities in insect and vector control.



The Division has responded to requests for information and referrals for problems with **ambient air and indoor air problems**. It also serves as a source of information about **ground level ozone**. The Division provides e-mail to County government concerning ozone levels and alerts workers of days when ozone levels are hazardous.

School Health Nursing

Union County is served by eight school health nurses who are employees of the Union County Health Department. Union County Public Schools contracts for school nursing services with the Health Department. The eight nurses fill 6.2 full-time equivalent positions (1 FTE=37.5 hours weekly). In May of 2001, there were 22,819 students in the Union County Public School System for a nurse to student ratio of 1:3635. (The American Nurses' Association recommends a ratio of 1:750.) Six new schools are planned for the next seven years, and projections show two more are needed. Since May of 1994 the student population has increased by 6,253 students or 38%. There are 18 elementary, 6 middle, and 6 high schools as well as one Career Center, one developmental school and one alternative school in Union County. The nurses spend at least one day a week in the developmental school, the elementary, middle, and high schools, and come as needed to the career center, Pre-K classes, and alternative school. All of the school nurses have BSN degrees and five of the nurses hold national school nurse certification through the American Nurse's Association. There is a critical need for more school health nurse positions.

The goal of the school nurse program is to improve academic performance by improving access to health care, and reducing the number of absences and early dismissals. Healthy students can spend more time in the classroom and participate more fully. School nurses are needed to help the schools provide a safe environment for its students.

The school health nurses have written, board approved policies to administer medication, provide emergency care, implement prevention and control of communicable disease, provide certain screenings, and maintain student health records. Certain school employees are given a one hour training to administer medications and can provide these services when needed. In 2000-2001, approximately 25



were trained. Each school maintains a list of personnel trained to administer medications. A school health nurse monitors the medications documentation every 4 to 6 weeks. Emergency medications in the schools include inhalers for asthma, albuterol via nebulizer, Epi-Pens, glucagon, Advil, Tylenol, Aleve, and Ana kits.

MEDICATIONS

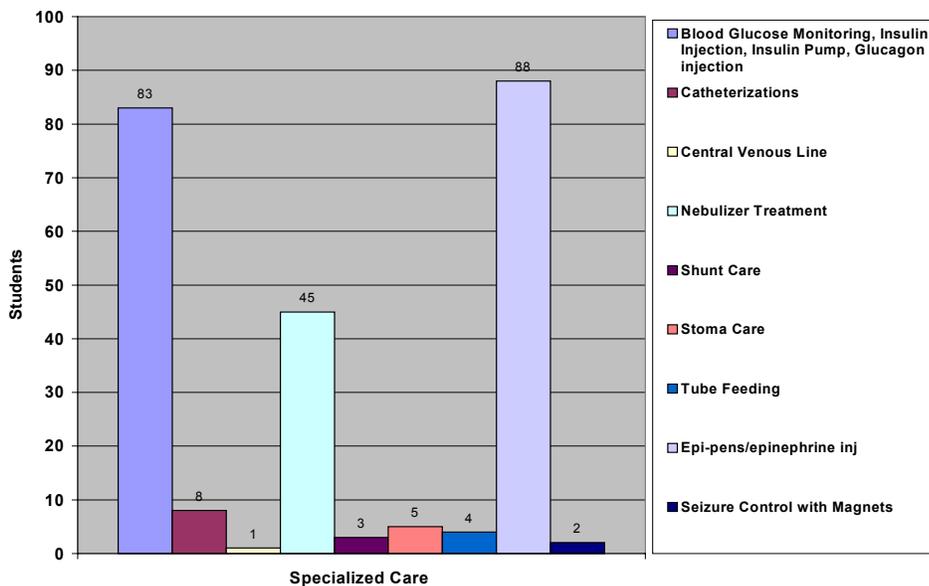
Number of students on long-term meds (longer than 3 weeks)	788
Number of students on short-term meds (less than 3 weeks)	1103
Number of students on PRN/emergency medicines	606



There were 47 diabetic students (14 had insulin pumps and 21 had glucagon prescribed in case of insulin coma), 806 students with asthma that required use of a nebulizer or metered dose inhaler, 88 had allergies severe enough to require epi-pens at school, 107 with seizure disorders, 4 who required tube

feedings, and 8 who required intermittent urinary catheterization for a total of 1060 students. The specialized care provided included:

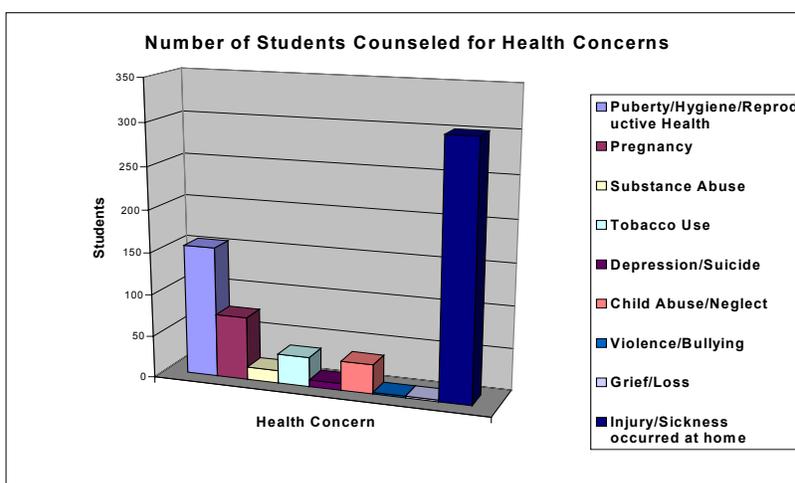
Specialized Health Care



There were no at-school injuries that resulted in permanent disability or death. The following table shows injuries in 2000-2001 requiring EMS response or immediate care by a physician or dentist and loss of ½ or more days of school.

Type of Injury	Bus	Hall	Class-room	Play-ground	PE	Shop	Rest-room	Lunch-room
Respiratory Emergencies			1	7	11			
Back Injuries				3	1			
Dental Injury				5	6			
Eye Injury			1	2	3			
Fracture		1	1	21	1		1	
Head Injuries			3	3				
Laceration			5	12	1			
Psychiatric Emergency			4					
Seizures		1	2					
Sprain or Strain			1	16	12			

The School Health Nurses provided counseling on an individual basis in the following areas to a total of 628 students.



There were 2 pregnancies in the middle grades (the students dropped out of school) and 36 pregnancies in high school. Four of these high school students dropped out of school, and 18 received homebound services. In the year 2000-2001, one high school student committed suicide.

The school health nurses provided the following screenings in the year 2000-2001.

Screening	# Screened	# Referred	# Completed (secured help)
Blood pressure	12	2	2
Dental	45	20	14
Pediculosis (lice)	26,794	375	375
Spinal	663	7	3
Vision	13,154	617	392



Each year the school nurses work in cooperation with other health department nurses and clerical staff to give hepatitis B and tetanus /diphtheria (Td) vaccine to sixth grade students. In 2000-2001, 1245 students received the first hepatitis B vaccine, 1188 students received the second dose and 1198 received the third dose of hepatitis B vaccine. 995 sixth graders were vaccinated against tetanus/ diphtheria.



The school nurses presented 148 Health Education classes in 2000-20001, and arranged for and helped teach 2 first aid/CPR classes in which 25 Union County School staff were trained and received certification. In collaboration with Union United for Better Health, one Sports Safety Training class was held in which 15 school staff were taught to manage sports injuries. The nurses arranged for Dr. Donald Nelson, MD, ER physician at Union Regional Medical Center, to teach 2 classes to certify 24 school staff to recognize anaphylaxis and administer an Epi-Pen to sting victims. Sixty-five home visits were made involving assessment, infestation, chronic illness, immunization compliance, sexually transmitted disease follow-up, Individual Medical Plan development, absenteeism, parent/family education, and follow up care. The nurses taught a program,

Open Airways, for 41 students with asthma. School nurses monitor asthmatic students on an individual basis.

One or more school health nurses serve on the Substance Abuse Task Force, American Lung Association Board, Union County Tobacco Coalition, Adolescent Pregnancy Committee, March of Dimes Committee from the Health Department (co-chair), Healthy Teens (a nutrition and weight management program which is in the planning stages) and Union United for Better Health (a Healthy Carolinians organization). School Health Nurses helped with *A Day in the Park*, a drug-free celebration providing information about substance abuse, and were instrumental in working with Union United for Better Health in organizing and implementing *Girls on the Run*, a physical activity and self-esteem program, in which 180 girls participated.

The number of students with known health conditions in the public schools that are of special concern to the school health nurse are:

Condition	Elementary	Middle	High	Total
ADD/ADHD	402	286	103	791
Allergies (severe)	126	48	85	259
Anorexia/Bulimia		4		4
Asthma	352	130	324	806
Cerebral Palsy	13	1	4	18
Cystic Fibrosis	1	1	1	3
Diabetes	14	12	21	47
Down's Syndrome	29	6	3	38
Epilepsy	53	21	33	107
Genetic diseases, Other	12	4	2	18
Congenital/Other Cardiac	14	27	35	76
Hemophilia/Bleeding Disorder	3	1	1	5
Hepatitis B			1	1
HIV/AIDS	1			1
Malignant Disease	4		3	7
Migraine Headaches	32	35	44	111
Muscular Dystrophy	1			1
Orthopedic Disability (Permanent)	21	1	13	35
Psychiatric Disorder	8	4	18	30
Renal Disease	8	4	9	21
Rheumatoid Arthritis	6		8	14
Sickle Cell Disease	3	2	1	6
Substance Abuse (Known)	1			1
Ulcers	1			1
Autism	28		5	33
Graft vs Host	1			1
Lactose Intolerance	2	6		8
Hypoglycemia	3		9	12

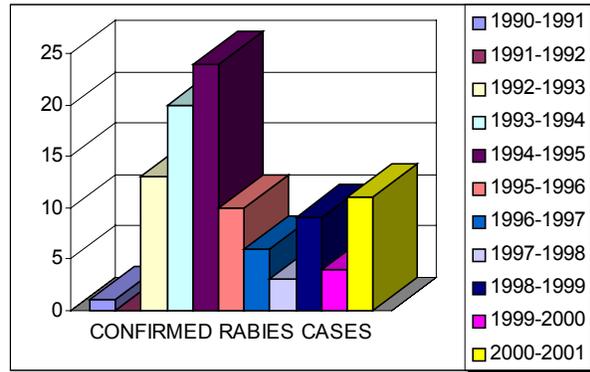
Condition	Elementary	Middle	High	Total
Food Allergies (not Anaphylactic)	14	3	16	27
Irritable Bowel Syndrome/Reflux	5	6	16	27
Nosebleeds (Severe)	6	5		11
Klinefelters Syndrome	1			1
Hydrocephalus with shunts	3		2	5
Eczema	3			3
Seasonal Allergies	15	23		38
Febrile Seizures	2	1		3
Anaphylactic Purpura	1			1
Dermographia	1			1
Meniere's Disease		1		1
Testicular Strangulation Alert		1		1
Vascular Malformation, Lower Leg		1		1
Marfan's Syndrome		1		1
Chronic Mucooid Conditis		1		1
Retinoschisis		1		1
Post Traumatic Stress Syndrome		1		1
Mastocytosis		1		1
Rheumatic Heart Disease		1		1
Syncope		1		1
Crohn's Disease			3	3
Hypothyroidism			3	3
Cruzan's Syndrome			1	1
Glaucoma			1	1
Sleep Disorder	1		1	2

There is a need to provide more training for school staff in first aid, CPR, sports safety training, first responder training, and proper administration of medicines. An increase in the number of nurse positions would allow more time for training. The nurse is generally only at a school one day a week, and school staff need expertise in handling health and injury problems. The school nurses are not equipped with computers, which would make service documentation and coordination more cost effective.

ANIMAL CONTROL

Union County Animal Control has faced many changes and increased challenges in the past year. The County has experienced rapid growth and the number of cats and dogs has correspondingly increased.

One of the most serious challenges is the spread of rabies in Union County. In this area, the major carriers of the disease are the raccoons, foxes, skunks, bats, dogs, and cats. Union County was one of the first counties to experience the current rabies epidemic with a marked increase in rabies in the 1992-1993 fiscal year. The Union County outbreak peaked in the 1994-1995 fiscal year, sharply declined in the following year, and has since stayed at a fairly stable rate.



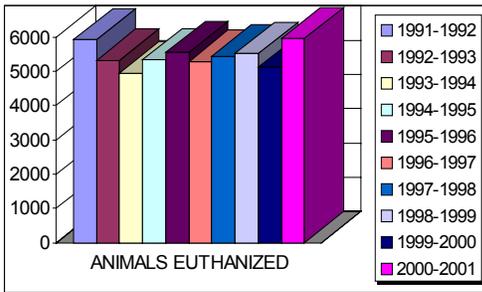
The vaccination of cats and dogs is important in the control of rabies. Each year Animal Control is forced to destroy many unvaccinated pets that have been exposed to rabid animals. Many pet owners think that a pet in a fenced-in area or a home cannot be exposed to rabies, but rabid animals can go through the fences -- even inside homes through the screen door or cat and dog doors. Animal Control staff strive to educate the public concerning the required rabies vaccinations for their cats and dogs and how to reduce the risk of contact with a rabid animal through one-on-one contact between the Shelter staff and county citizens, programs, presentations, and literature designed



for school and civic groups. Union County Animal Control also coordinates and sponsors, along with area veterinarians, the low cost rabies vaccination clinics held throughout Union County each year in May. In the 2000-2001 fiscal year, 2,828 pets were vaccinated against rabies at these clinics.

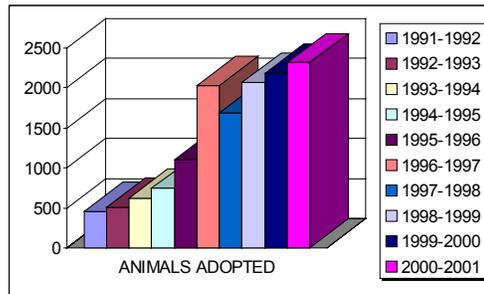
Animal Control also worked closely with Union Regional Medical Center's Emergency Department and various medical offices across the county to ensure that the

296 animal bites treated in 2000-2001 were reported promptly and handled properly according to North Carolina law.



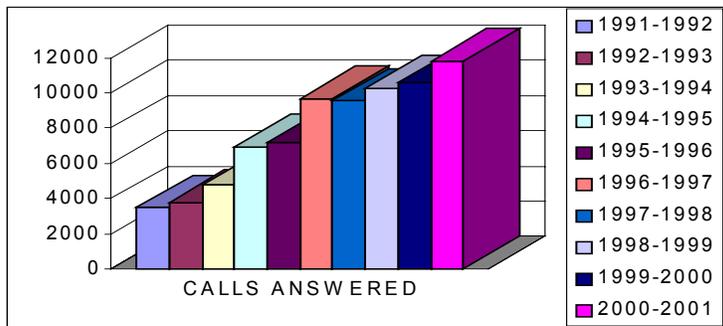
Another challenge is the grim duty of destroying unwanted pets and strays. The number of animals euthanized has remained fairly constant in the last ten years despite the increase in impounded animals due to an increase in adoptions from 455 animals in 1991-1992 to 2,315 in 2000-2001. **In 2000 –2001, 5,960 animals were euthanized.**

The adoption rate for fiscal year 2000–2001 of 28%, ranks Union County among the top five counties in the State. An adoption area was set up at the shelter where potential owners can interact with the animals to help them make a compatible selection. In 1991, the Shelter adopted a program making it mandatory that all animals adopted must be spayed or neutered and the fees include some of the first shots, health checks, and deworming. Efforts have been made to make the Shelter a friendly place to visit, and some of the animals for adoption are featured in the media. The staff has worked diligently to educate new, present, and potential pet owners in the proper care of their companion animals.



The continued rise in the pet population has Animal Control staff seeing more problems than ever before. Some of the problems encountered include damage to property by roaming pets or strays, animal bites, animals fighting, children and adults being attacked, damage to livestock, problems for bikers and walkers, reports of abuse or neglect of animals, and pet related automobile accidents. The number of calls for services answered in the 1991-1992 fiscal year was 3,480.

These calls were handled by three Animal Control Officers and one Lead Officer. In the 2000-2001 fiscal year, four Animal Control officers and one Lead Officer answered 11,834 calls. The staff struggled to provide mandatory services; and with the increases in the pet population, innovative changes and more staff will be needed to provide adequate services in the future.





Another challenge faced by Animal Control due to pet overpopulation is increased impoundment of animals. From the 1991-1992 fiscal year through the 2000-2001 fiscal year, the number of animals impounded had risen from 6,329 to 8,281 animals. This is an increase of over 31%.



This has caused increased officer time needed to pick up animals, time and money needed to board the animals, efforts to arrange adoptions (which were at an all time high in 2000-2001 of 2,315), and a small increase in the euthanasia of unwanted pets and strays.



Sliding-fee scale spay and neuter services would reduce operations costs and reduce the number of animals euthanized. Pet owners who meet financial eligibility requirements could take advantage of the reduced fee or free service. With start-up money from a grant, the program could eventually become cost effective for the County.



Challenges for Public Health in Our Community

Dramatic Increase in Hispanic Population

In the last decade the County has seen the Hispanic community grow from less than 600 to 7,637 according to the 2000 census. Personnel at the Health Department estimate the actual number is over 20,000. Due to the undocumented status of many, Hispanics tended to avoid census workers.

All Health Department clinics have seen a rise in the number of Hispanic participants -- the largest increase being in Child Health (53% Hispanic) and Maternal Health (40% Hispanic). In 1989 of the 344 babies delivered, 2 (less than 1%) were to non-English speaking women. In 2001 there were 585 deliveries, and 303 (52%) were to non-English speaking women. The increase in non-English speaking clients has created a tremendous need for interpreters. Currently there are 4 full-time interpreters and 6 bilingual employees as well as contracted interpreters. Funds for these services have taken precedence over other needed services such as social work and education. More bilingual staff and interpreters are needed. The Department has seen a steady increase in Spanish speaking clients since 1989 with a very dramatic increase since 1996.

Funds are needed for mandated services provided to individuals who do not have Medicaid, Medicare, Health Choice, insurance, or ability to pay. The Health Department will explore ways to meet the need for quality service and education for all clients. The preventive services of the Health Department are cost effective for the County. Babies who have not received prenatal care tend to have more health problems and are more likely to be premature. Healthy babies reduce the cost of newborn care. (One baby with spina bifida can generate medical bills throughout his life close to one million dollars.) Many other services of the Health Department are preventive in nature such as Family Planning (36% Hispanic), Child Service Coordination (26% Hispanic), Breast and Cervical Cancer Control (7% Hispanic), Communicable Disease Control (Sexually Transmitted Disease services -- 8% Hispanic, TB services -- 81% Hispanic, immunizations -- approximately 25% Hispanic), Health Education, Social Work, Children's Dental Clinic (approximately 20% Hispanic), and Women, Infants, and Children (36% Hispanic). Plans are to look to foundations and private resources as well as State and Federal grants in order to deal with the crisis.

Heart Disease

Heart disease is the number one cause of death in Union County (242 of the 820 deaths in the year 2000). Healthy lifestyles are the key to reduction of this number. The Health Department coordinates a Diabetes Coalition dedicated to the prevention and improved management of diabetes. Heart disease is 2-4 times more common in people with diabetes, and heart disease is present in 75% of diabetes-related deaths.

The Health Promotions coordinator will begin a tobacco prevention and control program in 2001. A smoker's risk of suffering a heart attack is more than twice that of a non-smoker. Tobacco is the primary risk factor for sudden cardiac death -- smokers who have a heart attack are more likely to die and die suddenly (within an hour) than are nonsmokers.

RAND Health (www.rand.org/health) researchers have conducted studies showing obesity is the most serious problem linked to chronic health conditions and health expenditures. Americans are getting heavier. One in five Americans is obese; three in five are either obese or overweight. The obesity rate has accelerated dramatically in the past 20 years, and has become a major public health concern. Obesity is a risk factor for heart disease and many other health problems. More resources are needed in nutrition education and exercise opportunities.

Union County currently has a total of \$21,000 (from a State grant) to provide staff and services in Health Promotions. The Health Department is looking for grant monies and community partners to provide these services.

On-Site Wastewater Program

Improper sewage disposal can be the source of a number of diseases and can contaminate streams and individual water supplies. Soils must be at least 48 inches deep for conventional on-site sewage systems, 36-48 inches deep for modified conventional systems, and less than 36 inches require alternative systems such as low pressure pipe (lpp) or mound systems. Over 90% of Union County is in the Carolina Slate Belt which does not provide deep soils, and the majority of the sites evaluated in Union County cannot use conventional systems (less than 36 inches deep). Union County has the second highest number of alternative systems in the State. In 2000, more on-site systems were installed in Union County than all the counties in its region combined (including Mecklenburg, Gaston, Lincoln, Iredell, Catawba, Cabarrus, Rowan, and Stanley counties).

From 1982 to 1992 a total of 2,674 alternative on-site wastewater systems were installed in Union County. In 1992 the NC sewage regulations were revised; and systems using lpp or mound required that the owner enter into a contract agreement with a certified operator to do ongoing maintenance inspections. It also required that the Environmental Health Division make an inspection and evaluation of the system every three years. Conventional type systems with a pump were not required to have a certified operator, but they were to be inspected by the Environmental Health Division every five years. Since July of 1992 there have been 1,378 systems installed that require a contract with a certified operator and three-year inspections and 2,664 pump to conventional systems requiring an inspection every five years. This makes a total of 4,042 installed systems that require inspection by the Environmental Health Division. Approximately 43% of the systems installed in Union County each year will require inspections with an average of 15% the three-year inspection and 28% the five-year inspection.

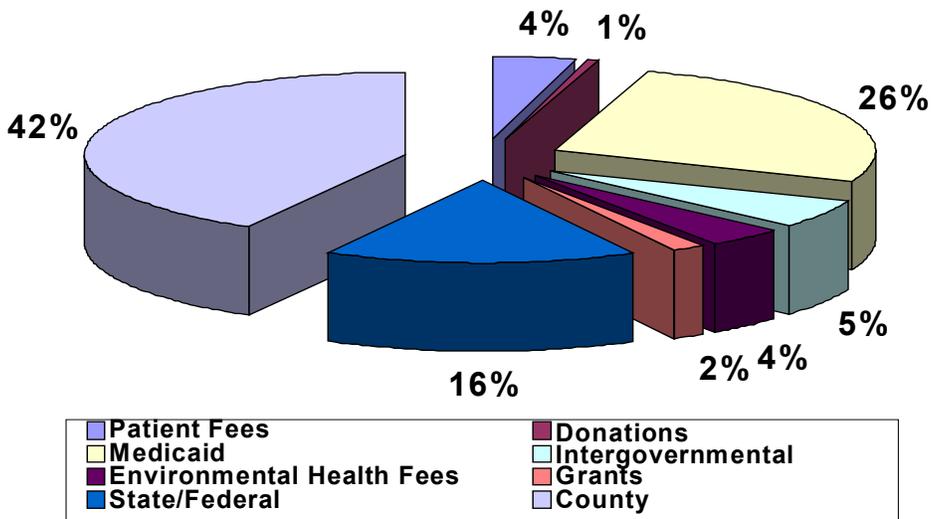
The North Carolina sewage rules are undergoing a revision. The current draft states that unless the local health department has a management program that is specifically authorized, funded and operational to inspect Type IV, Type V or Type VI systems, they could not issue permits for construction or operation of these systems. This would include any system with low pressure pipe distribution and most other alternative and larger more complex systems. Environmental Health has not been provided the manpower to be compliant with the inspection requirements. In June of 2000 the State's On-Site Wastewater Program noted that two full time employees would be needed for the program with another full-time Environmental Health Specialist added in 2003. No positions were added in 2000-2001.

Unwanted Pets and Strays

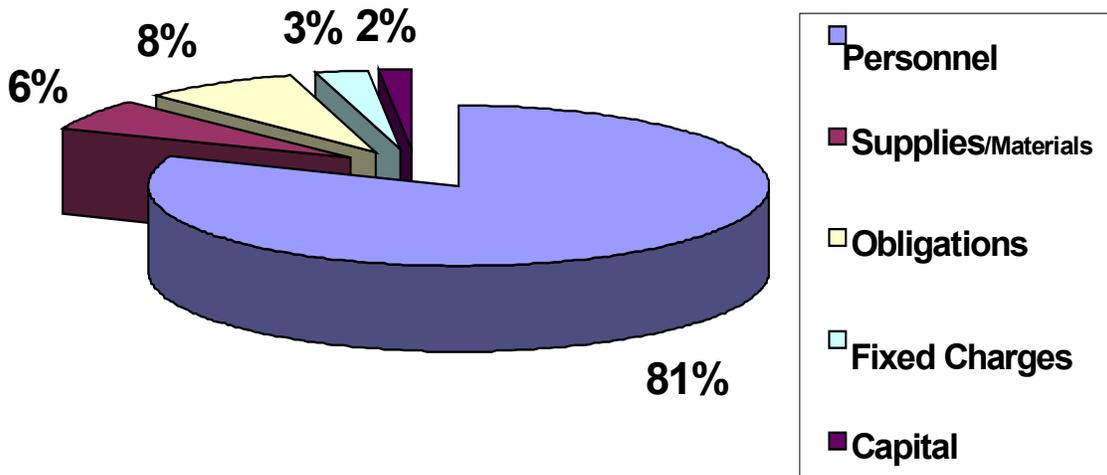
From 1991- 1992 fiscal year through the 2000-2001 fiscal year, the number of animals impounded rose from 6,329 to 8,281 (a 31% increase) due to the increase in the population and corresponding increase in the pet population. The number of animals euthanized has remained fairly constant in the last ten years due to an increase in the adoption rate (28% --which ranks among the top five counties in the State). Still a large number of puppies and kittens were born who were unable to find homes and are included in the 5,960 animals that were euthanized in the FY 2000-2001. Unwanted pets and strays not picked up represent other more costly problems for the County.

In 1991-1992, three Animal Control officers and one Lead Officer handled 3,480 calls for services; while in 2000-2001, four Animal Control officers and one Lead Officer answered 11,834 calls. Many of the calls concern unwanted pets and strays. Additional staff will be needed to handle the increased pet population. In addition, initiative needs to be taken to find viable options for reducing unwanted pets and strays. One possible solution would be a sliding- fee spay and neuter service with eligibility starting at a certain percent of the poverty level. Funding from grants and/or organizations would be needed to start the project. Eventually it could become cost effective.

**Union County Health Department
Total Revenues FY 2000-2001
\$5,063,635.76**



**Union County Health Department
Total Expenditures FY 2000-2001
\$ 5,063,635.76**



Obligations includes travel, utilities, telephone, postage, maintenance and repairs, and contracted professional staff. Fixed charges includes rental of equipment, dues, and memberships. Capital expenses includes equipment over \$2,000 (such as motor vehicles). Any unexpended funds from Federal, State or County sources are returned at the end of the fiscal year.

Union County Board of Health

2000-2001

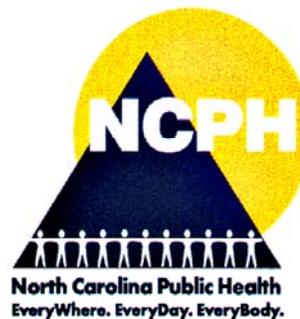
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*The mission of the
Union County Health Department
is to promote health, prevent
disease, and protect the health
of the community.*



Public Health

Everyday, Everywhere, Everybody

Union County Health Department
Monroe, N. C.

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