

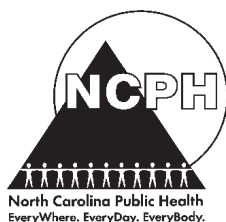
**STATE CENTER
FOR HEALTH STATISTICS**

ANNUAL REPORT

FOR

FISCAL YEAR 2005

North Carolina
Department of Health and Human Services
Division of Public Health
State Center for Health Statistics
1908 Mail Service Center
Raleigh, NC 27699-1908



September 2005





State of North Carolina

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SCHS FISCAL YEAR 2005 ANNUAL REPORT

Section I. Introduction

Foreword

The *SCHS Fiscal Year 2005 Annual Report* describes the work done in the State Center for Health Statistics (SCHS) during this past year and summarizes current and planned activities. The report also presents the challenges that are expected to confront SCHS during the upcoming fiscal year. SCHS operates in the Chronic Disease and Injury Section in the Division of Public Health within the North Carolina Department of Health and Human Services.

Vision Statement

The State Center for Health Statistics, by providing high-quality information on the health of North Carolinians, will positively influence decision-making and health policy, thereby improving the health of all our citizens. By making better use of our human and technical resources, we strive to provide health data to policy makers, researchers, and citizens as efficiently and quickly as possible. Internally, the State Center seeks to create a better work environment, resulting in both successful employees and satisfied customers.

Statutory Authority

The State Center is authorized by North Carolina General Statute under §§ 130A-371 to 130A-376 to collect, maintain, and analyze health and health-related data and to explore new or improved methods for obtaining data. The Center is also charged with managing the state's Central Cancer Registry (CCR) as established by General Statute under §§ 130A-205 to 130A-215, and the Birth Defects Monitoring Program (BDMP) as established by General Statute under §§ 130A-131.16 to 130A-131.24.

History

Created as the North Carolina Bureau of Vital Statistics by the State Legislature in 1913, the Bureau evolved by 1980 into the State Center for Health Statistics. In 1980, Governor James B. Hunt, Jr. directed the state health agencies (then known as the Division of Health Services) to administer the statistical activities mandated by the 1978 Public Law 95-623. Under this Act, the Division, through the State Center, was to coordinate all health data activity in the state and to explore new ways of obtaining, analyzing, and disseminating health data. Since 1998, the State Center has been part of the Division of Public Health in the N.C. Department of Health and Human Services.

Section II. Developments in SCHS During Fiscal Year 2005

Background

Prior to FY 2005, SCHS contained two additional units: Vital Records and Health Informatics. Vital Records has now become a separate section. Health Informatics staff were assigned to three separate agencies in DHHS, depending on their function and duties. Some were assigned to the new Vital Records Section, others transferred to the Administrative Support Section, and some were assigned to the newly created Office of Public Health Preparedness and Response in the Epidemiology Section. Since March 2002, SCHS has operated under its new structure, which has helped focus its mission of collecting, analyzing, and disseminating public health information. On June 6, 2005, SCHS was organizationally moved from the Legal and Regulatory Affairs Section into the Chronic Disease and Injury Section.

Organization of SCHS

The State Center is presently comprised of four programmatic units and one administrative unit.

- Birth Defects Monitoring Program (BDMP)
- Central Cancer Registry (CCR)
- Health and Spatial Analysis Unit (HSAU)
- Statistical Services Unit (SSU)
- Operations, Quality Control, and Administration Unit (OPS)

Descriptions of these units are given in Section III.

Changes During Fiscal Year 2005

Budget and Personnel: As with many other state agencies, SCHS suffered a budget cut of \$10,000 from state appropriations during FY 2005. This was in addition to previous cuts during the preceding two years. SCHS managed to continue operations without loss of positions but had to curtail some operations funded from state appropriations. In order to manage these cuts and maintain core functions, SCHS has continued to maximize the use of Federal Financial Participation (FFP) funds, grants, contracts, and receipts from the National Center for Health Statistics (NCHS) administered through the Vital Statistics Cooperative Program (VSCP). The State Center has also continued to enhance some categorical services such as the Central Cancer Registry and Birth Defects Monitoring.

Notwithstanding the cuts, the SCHS experienced modest growth during FY 2005 by creating two new positions funded through Centers for Disease Control and Prevention (CDC) grants to enhance work in the Central Cancer Registry (CCR). At this time, these positions are being classified and posted for recruitment, expected to be completed during FY 2006. The Birth Defects Monitoring Program Unit (BDMP), although not adding any new positions, expanded its surveillance coverage to include all acute-care hospitals providing labor and delivery and/or pediatric services in North Carolina. In addition, through the Center for Birth Defects Research and Prevention Project, the BDMP increased its collaboration with the University of North Carolina at Chapel Hill (UNC-CH) for research into the causes of birth defects.

The State Center has at present 65 full-time equivalent positions (FTEs). These positions are:

- 1 director
- 5 managers
- 5 administrative support staff
- 25 field staff or quality control staff
- 25 statisticians
- 4 applications programmers, computing consultants, or GIS specialists

Web Development: SCHS increased considerably the amount of information on its Web site during FY 2005 to more than 22,000 pages and documents, doubling the number from the end of FY 2004. Increasingly, the Web site has become a primary source for external and internal data users. At the same time, the State Center maintains a schedule of regular publications and an active distribution of printed special reports throughout the year. All regular and special publications are now accessible on the web at the SCHS web site: <http://www.schs.state.nc.us/SCHS/>.

The increased use of the SCHS Web site by the public and other users is reflected in the increased number of requests for pages and documents related to health statistics. Excluding robots (automated programs that gather web-based information), the number of requests in FY 2001 was 157,392; and the next year it increased 36 percent to 214,377. The number increased even more (56%) in FY 2003 to 334,549. In FY 2004, there were 446,415 hits, an increase of 33 percent. During FY 2005, the number of non-robotic hits went up to 655,152, a further 47 percent increase. In four years, use of the SCHS Web has more than quadrupled, a dramatic increase. Figure 1 below graphically describes the trend.

Number of requests on SCHS Web site

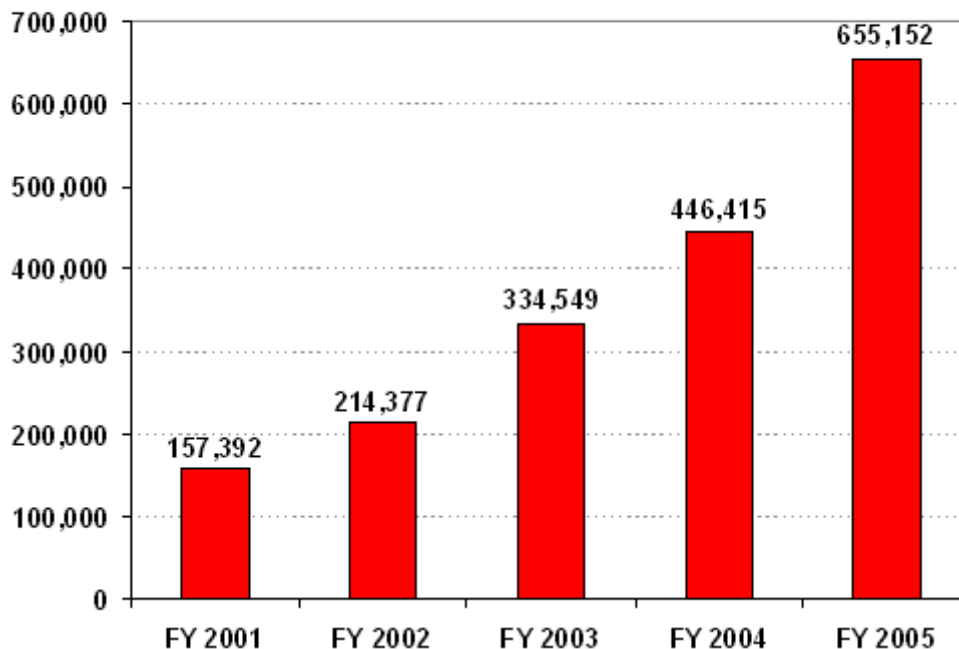


Figure 1

Furthermore, SCHS has increased Web support to other public health agencies by managing Web sites for the Early Intervention Branch and for the office implementing the Health Insurance Portability and Accountability Act (HIPAA) in North Carolina. The State Center also continued to manage the Office of Minority Health and Health Disparities Web site, maintain the Web sites of the Epidemiology and Vital Records sections, and host the N.C. Healthy Schools site. In addition, SCHS provides support for accessibility and online publications for the Division and the Department.

SCHS has embarked on a project to make its Web site more accessible and responsive to the needs of users. During FY 2005, we completed converting death files information into a queryable system that now permits users to enter specific parameters for key variables and get results quickly on-line. This is a key improvement over the previous passive system that allowed for more limited information retrieval. SCHS has already started a similar project for the birth data, which is expected to be completed during FY 2006.

Services to Users and Public: The SCHS's core mission is the dissemination of health information to administrators, policy makers, researchers, and the public at large. Although information is distributed in printed form as well as on the Web, many of the services are provided to people who call the SCHS main telephone line requesting health information. Despite a reduction of the positions devoted to answering data requests, the SCHS has arranged for this important function to be maintained with little decrease in timeliness or quality of responses.

The simpler requests, requiring referencing an existing publication or the Web, can be answered by support staff. However, most of the requests require more extensive search or programming. These requests are submitted to the statisticians in the various units within SCHS. SCHS answers the vast majority of these requests within a few hours or days at most. Only complex questions requiring extensive SAS programming take longer than one week.

SCHS tracks the information services that it provides to others. Using that tracking system, we know that there were at least 3,629 activities where health or demographic information was provided to users from July 1, 2004 to June 30, 2005. This is an increase from last fiscal year of 3 percent and it reflects that, in spite of substantial improved access to information on the Web site, many users continue to rely on staff to address their more complex data needs.

SCHS also handles many phone calls, related to programs or information, that are not recorded in the activity reports. The number of phone calls handled during FY 2005 by SCHS over and beyond those reflected in the activity reports was about 8,000.

Publications: SCHS produces a wide variety of publications. Many are part of the Center's core function of disseminating health information. Other publications are printed in collaboration with other health agencies and focus on a particular issue of interest to that agency. SCHS also has a system of special publications that reflect salient issues of public health interest. Occasionally, SCHS will publish a Statistical Primer explaining a technical issue concerning statistics or information processing. In addition, SCHS staff engage in extensive collaborations with

academicians and other health practitioners, sometimes resulting in joint authorship in a refereed professional journal.

A title list of many of the publications done by SCHS can be found on the web site at: <http://www.schs.state.nc.us/SCHS/pubs/title.cfm>.

During FY 2005, SCHS staff had sole or joint authorship on 8 journal publications and published 11 internal studies. Additionally, SCHS staff did over 50 presentations and posters during the year; processed over 50,000 cancer records; investigated 30 cancer clusters in the state; and conducted 4 special cancer projects. SCHS staff also reviewed over 9,000 records suspected of having birth defects; engaged in 26 spatial analysis projects; and answered 14 special requests for geographic analysis. SCHS published 19 special reports, ranging from data about health disparities among America Indians and African Americans, to a comprehensive profile of health status state-wide, and an updated booklet on cancer statistics.

Collaborative publications usually appear in the Web site under “Journal Articles.” Many of these collaborative publications are listed here under the individual units’ descriptions of activities during FY 2005, found in Section III.

Collaborations: The four programmatic units in SCHS engage in extensive and varied collaborations with agencies, ranging from those within the Division of Public Health to national organizations and universities. Below are four examples of collaborations with other agencies carried out by SCHS during FY 2005.

1. The Birth Defects Monitoring Program is in its third year as a collaborator, with the UNC Department of Epidemiology, on the N.C. Center for Birth Defects Research and Prevention. The Center’s goal is to identify the causes and means of preventing birth defects. North Carolina is one of eight states being funded to participate in the CDC-funded National Birth Defects Prevention Study, which is the largest ongoing case-control study of birth defects in the world. Interviewing of cases and controls in North Carolina is ongoing.
2. The Central Cancer Registry has been working with the Comprehensive Cancer Control (CCC) program and the Advisory Committee for Cancer Coordination and Control to evaluate the 2001-2005 Cancer Control Plan and to develop the 2006-2010 Cancer Control Plan. The director of CCR attended national training with the CCC staff to best utilize cancer registry data in planning and evaluation. The CCR has provided data for both planning and evaluation, and the director serves on both the Care Subcommittee workgroup and Steering Committee in development of the 2006-2010 plan.
3. The Health and Spatial Analysis Unit continues to work closely with the HIV/STD Prevention and Care, Special Studies Unit on syphilis elimination. The North Carolina Syphilis Elimination Project started in 1998. Since 1999, the Health and Spatial Analysis Unit has created maps of new syphilis cases every quarter. These maps are used to identify neighborhoods where rapid outbreak response, testing, counseling and health

promotion might be needed. This targeted approach is leading to success – with a 71 percent decrease in early syphilis cases from 1998 through 2004 – and has led to further collaboration on the spatial analysis of syphilis and HIV disease co-morbidity.

4. Staff of the Statistical Services Unit worked with the Division of Environmental Health on a study of septic tank failure rates, comparing conventional (gravel) systems with two types of innovative septic tank systems. Staff of the Unit provided consultation to DEH staff on the design of the sampling plan, sample size determination, data collection instruments, and other study issues. The DEH is now in the process of collecting data in the field. SSU staff will participate in the data analysis and interpretation phase after data collection is completed.

A partial list of agencies with which SCHS collaborated on different projects during FY 2005 is given below:

Women's and Children Section, DPH
N.C. Chapters – March of Dimes
N.C. Child Fatality Task Force
UNC School of Public Health
Department of Maternal-Fetal Medicine, Wake Forest University School of Medicine
Division of Aging, DHHS
Division of Medical Assistance, DHHS
Office of Minority Health and Health Disparities, DHHS
Office of Research, Demonstrations, and Resource Development, DHHS
Epidemiology Section, DPH
Vital Records Section, DPH
Chronic Disease and Injury Section, DPH
Office of Healthy Carolinians, DPH
American Cancer Society
Indian Health Service
Local Health Departments
Cecil G. Sheps Center for Health Services Research
UNC Lineberger Cancer Center
Duke University Medical Center
Columbia University
UNC Carolina Mammography Registry
Battelle Center for Public Health Research and Evaluation
North Carolina Commission of Indian Affairs, Department of Administration
Breast and Cervical Cancer Control Program
Comprehensive Cancer Control Program
Division of Environmental Health, Department of Environment and Natural Resources
UNC School of Medicine, Center for Maternal and Infant Health
National Institute of Environmental Health Sciences (NIEHS)
University of South Carolina Department of Ob/Gyn-Genetics

Section III. SCHS Units

Operations, Quality Control, and Administration Unit

Description

The Operations, Quality Control, and Administrative Unit is responsible for the day-to-day management of fiscal, personnel, training, and facilities/repair functions within SCHS. This Unit facilitates the operations of the programmatic units while also ensuring that SCHS complies with all DHHS and DPH policies and requests. The Unit has responsibility for tracking and monitoring purchases and payments, contracts, grants, and assets.

Services

- Implements SCHS, section, division, departmental, state and federal policies, procedures and strategic plans with respect to budget, purchasing and spending, personnel, contracts, MOUs, grants, and safety.
- Develops and oversees all SCHS state, receipt, Medicaid reimbursement, and federal award budgets and activities, including accounts receivable and payable and contract expenditures, and provides budgetary analysis and data to SCHS, section, division and departmental managers.
- Prepares and monitors paperwork and revisions for all personnel and salary actions, and tracks and reports on SCHS employee training activities.
- Plans for SCHS space, furniture and equipment needs, and arranges for office space rentals, requisitions of equipment, and furniture purchases.
- Ensures all new SCHS employees receive SCHS Welcome Packet, including SCHS orientation, SCHS SOP guidebook, and starter supplies.

Accomplishments in FY 2004-2005

- Received approval for reallocation of Printing Phototypesetter II to Administrative Assistant I and to award a salary increase effective April 1, 2005.
- Received approval to grant an IRA for position 25070 effective April 1, 2005.
- Received approval to grant an IRA for position 25009 effective October 1, 2005.
- Approved training for Administrative Secretary II to receive Notary Public certification on behalf of SCHS.
- Arranged for Microsoft Word and Excel training and began onsite payables and purchasing training sessions for DPH purchasing/payables clerk.
- Conducted onsite training sessions for new Vital Records administrative employee.
- Completed updated Adobe PageMaker and In Design Training for Publications Coordinator and backup.
- To foster rapid responses to SCHS budget, purchase and payment needs, refined standardized procedures for communicating with budget, purchasing/payables clerk previously relocated to division office.

- Refined standardized procedures for keeping SCHS central files updated and purged according to state records retention schedules and the SCHS Director's guidelines.
- Established personnel file folder checklist to ensure completeness of all personnel records and forms.
- Reconciled and completed SCHS Timesheet audits biannually.
- Implemented weather event drills and began revising SCHS Safety Manual.
- Completed third draft of SCHS SOPs and appointed new SOP project coordinator.
- Developed SCHS Non-Disclosure Agreement form and revised SCHS New Employee checklist.
- Completed standardized formatting and cataloguing of SCHS internal forms.
- Began working with SCHS webmaster to ensure upload to the SCHS Intranet of finalized SOPs.
- Completed revision of publications mailing list, including preparing and mailing 650 update letters to external customers. Tracked and compiled their responses.
- Completed ServList email address update with SCHS webmaster.
- Created, revised, edited, arranged for printing and mail out of:
 - 3 SCHS annual publications (Pocket Guide, Volume 1, and Volume 2)
 - 5 SCHS Studies
 - 2 Minority Health fact sheets
 - 1 SCHS Annual Report for FY 2004
 - 1 Statistical Brief
 - Health Profile of N.C.: 2005 Update
 - N.C.'s Plan to Prevent Youth Suicide (report for Injury and Violence Prevention)
 - 6 WIC Brochures (English and Spanish)
 - Converted TB Manual to pdf for web page and inserted 24 forms in the Revised TB Manual
 - Revised 46 forms (WCH, Vital Records, and State Lab)
 - Created 4 new forms (3 WCH, 1 Vital Records)
 - Coordinated printing requests for Cancer Facts and Figures, BRFSS envelopes, and PRAMS supplies (surveys, brochures, calendars, Spanish index cards, fact sheets, envelopes).
 - Provided quality control and tracking services to the SCHS Survey Team for monthly mailing of 3,000 pre-survey letters.
- Completed and instituted SCHS New Hire Protocol and implemented Welcome Packet for new employees
- Served on the DPH Nutrition and Food Committee related to the Six Forks Move Project.
- Participated in various internal SCHS committees, including Data Disclosure Committee and Special Events Committee (chair).
- Cotton Building Roof Reconstruction Project November 2004 to January 2005:
 - Represented Cotton Building on Pre-Bid and Bid Committees and negotiated terms of temporary relocations with DOA State Construction, PC Lab, Vital Records, and Epidemiology Sections.
 - Coordinated with DOA and Epidemiology the relocation of cars parking in rental spaces in close proximity with Cotton Building to state parking deck for duration of construction project.

- Coordinated with DPH IT and DPH Administrative Services Branch timetable and logistics for temporary relocation of Cotton 2 personnel and their equipment.
- Implemented the temporary relocation of Cotton 2 personnel, including their equipment and files to Cotton 1, Cooper 6 , Cooper 1 and Cooper 2 and their return to Cotton 2.
- Began Cotton Building Beautification Project by completing repairs and painting to Cotton 1 bathrooms (including addition of new ceiling tiles, baseboards, and blinds), foyer, and stairwell.
- Arranged for installation of snack machine for SCHS employees.
- Updated and reorganized SCHS mailroom, including selecting and installing new accessories.
- Purchased, installed, and added caller I.D. function to new telephones for the CCR.
- Arranged for surplus of 296 items (desktop computers, furniture, office equipment).
- Purchased approximately \$140,000 in PCs (41), printers (8), servers (11), and software (13) for SCHS.
- For FY 2004-2005, prepared and initiated authorized budgets for requirements and revenue in approximately 18 cost centers in Fund 1160, totaling \$4,751,440 including \$3,086,358 in salaries and fringes across multiple various revenue sources, including:
 - \$2,240,180 in state appropriations
 - \$590,690 in state receipts
 - \$133,801 in federal receipts
 - \$1,786,769 in federal grant or cooperative agreement awards
- Ensured that HIPAA and Workplace Harassment mandatory training completed by all SCHS new staff and certification forms signed and turned in to DPH within specified deadline.
- Ensured that all SCHS employees' Work Plans contained provisions for:
 - Mandatory training
 - Customer service
 - Activity report completion
 - SCHS internal committee service

Proposed Initiatives for FY 2005-2006

- Complete final draft of SCHS SOPs and upload to SCHS Intranet; keep updated.
- Begin pilot to ensure viability of SOPs.
- Publish main SOP directory, as well as a summary guidebook for all SCHS new employees.
- Continue to refine SCHS New Employee Orientation Protocol.
- Get approval for reallocation of position 25052 to a classification more schematically appropriate than its new Administrative Assistant I reallocation.
- Complete training of and transition work to division purchasing/payables personnel.
- Maintain SCHS Central Files System and ensure adherence to the standardized procedures for keeping files updated and purged according to state records retention schedules and the SCHS Director's guidelines.
- Organize and facilitate relocation of SCHS Survey Lab to new building.
- Complete Cotton Building repair and painting project.

- Purchase new furniture for Cotton 1 and 2 bathrooms.
- Purchase, install, and add caller I.D. function to new telephones for SSU, BDMP, HSAU, and Operations, as needed.
- Finalize CCR Unit personnel consolidation plan; coordinate and implement relocation of personnel and equipment with other SCHS units.
- Request vendor quotations for new cubicles and new carpet for Cotton 2, and begin paperwork to initiate purchases.
- Coordinate temporary relocation of SCHS personnel for possible staff relocation project and coordinate purchase and installation of new cubicles and carpet at the same time.
- Ensure that all new employees complete HIPAA and Workplace Harassment mandatory training, with certification forms signed and turned in to DPH within initial 90 days of employment with SCHS.
- Ensure that all new SCHS employees' Work Plans contain provisions for:
 - Mandatory training
 - Customer service
 - Activity report completion
 - SCHS internal committee service

N.C. Birth Defects Monitoring Program

Description

The North Carolina Birth Defects Monitoring Program (BDMP) was formally established by the N.C. General Assembly in 1995. The BDMP ascertains data on infants who are born with serious congenital anomalies diagnosed within the first year of life (approximately 4,000-5,000 infants per year). Data are collected by trained field staff who systematically review and abstract hospital medical records, supplemented by information from administrative health databases such as hospital discharge data, vital records, and other sources. This intensive method of case ascertainment provides the most complete, accurate, and timely data on the incidence of birth defects, thereby enhancing its usefulness to public health programs. The program maintains a central registry with patient identifying information which is considered confidential under state law. The BDMP works closely with other sections in public health, including genetics and the Child Service Coordination Program, as well as with university-based researchers, advocacy groups, and other stakeholders. In addition, the BDMP carries out data analyses for the North Carolina Child Fatality Prevention Task Force and maternal mortality surveillance, and provides other statistical support to programs within the Children and Youth Branch, Women's and Children's Health Section.

Services

- Respond to inquiries from health departments, physicians, legislators, and the public concerning the occurrence of birth defects in their communities.
- Provide data needed to help design, target, and evaluate public health prevention activities.
- Conduct descriptive epidemiologic studies of risk factors for birth defects in North Carolina, and collaborate with universities and others on etiologic studies of birth defects in order to identify new avenues of prevention.
- Improve delivery of services to children with special needs through identification and referral to appropriate services.

Accomplishments in FY 2004-2005

- The BDMP has been collaborating with the UNC School of Public Health on the N.C. Center for Birth Defects Research and Prevention. Efforts over the past year have led to improvements in the quality and timeliness of National Birth Defects Prevention Study (NBDPS) clinical data, including streamlining the process of initial data collection and clinical review.
- As an extension of the above project, the BDMP has submitted a request to CDC for supplemental funding to study the cost and utilization of services among children with craniofacial anomalies who are on Medicaid. Preliminary work on this project is currently under way, with funding expected to begin in September 2005.

- The BDMP has implemented a new clinical database for its central registry, and is in the process of deploying the database in the field in order to implement a fully electronic data system. This new electronic database, which will be fully in place by August 2005, is improving the efficiency of data collection for the program. The new system will enhance the timeliness of case ascertainment and facilitate identification and referral of children and families for services.
- Working with the UNC Center for Maternal and Infant Health, the BDMP has developed a system for tracking the birth outcomes for women who received maternal serum screening at UNC Hospitals. This system will help researchers evaluate the performance of the prenatal screening program, and to assess possible adverse pregnancy outcomes that may be predicted using prenatal serum markers.
- The BDMP has initiated a data exchange agreement with the Virginia Department of Health to improve ascertainment of North Carolina resident infants who are treated out of state.

Proposed Initiatives for FY 2005-2006

- Continue participating in the National Birth Defects Prevention Study.
- In conjunction with the UNC Department of Epidemiology and other collaborators, contribute to the development of a long-term research agenda for the North Carolina Center for Birth Defects Research and Prevention.
- Collaborate with NIEHS and the University of South Carolina Division of Genetics on the multistate Anencephaly Genetic and Environmental Links (ANGEL) Study.
- Collaborate with the National Birth Defects Prevention Network on upcoming multistate research projects.
- Update BDMP web pages to provide more current and complete data on birth defects occurrence, risk factors, prevention, and services.

Central Cancer Registry

Description

The Central Cancer Registry (CCR) collects, processes, and analyzes data on all cancer cases diagnosed among North Carolina residents. All health care providers are required by law to report cases to the CCR (as in nearly all other states), but the primary data source is hospitals. The CCR supplements hospital data with reports from physicians who diagnose cases that are not seen in a hospital. Death certificates and pathology laboratory reports are used to help identify cases that are missed in the routine reporting. Duplicate reports are consolidated in the data editing process. This is primarily a cancer surveillance activity – monitoring the incidence of cancer among the various populations of the state.

Services

The data are used by:

- State and county health departments to target resources for health education and screening services.
- Researchers for investigations into the causes and treatment of cancers.
- Public health advocates for focusing attention on the risk of cancer.
- The CCR staff to educate the public and provide evaluations of geographic and behavioral risk. Summary data are published on the Internet and in several periodic publications.
- National organizations (CDC and NAACCR) that pool the data for national estimates of cancer incidence. These data submissions are also used to evaluate the quality and completeness of the CCR data.

Accomplishments in FY 2004-2005

- The CCR was certified by the North American Association of Central Cancer Registries (NAACCR) as a high-quality registry for the fifth consecutive year.
- Completed migration of all data on an Access-based system to an Internet-based data management system. The Web-based system has allowed staff to run more ad hoc quality reports, and to provide instantaneous feedback to facilities submitting data, and its “Town Square” feature facilitated communication among staff and with reporting facilities.
- Filled a number of critical positions with highly qualified staff, including a field staff, three statisticians, an office assistant, and a director.
- In collaboration with the American Cancer Society, published *2004 Cancer Facts and Figures* both in hardcopy and on the Web site. Published *2005 County Cancer Profiles* on the Web site; it will be printed by the American Cancer Society in June 2005.
- Produced the *Cancer Collection and Reporting Manual* for use by all facilities required to report to the CCR.
- Implemented reporting from three freestanding radiation centers (one of 15 are remaining), three large urology practices, one dermatology practice, and two out-of-state pathology labs.

- Conducted an annual basic registrar workshop in Asheville, which was attended by 27 registrars. This training is nationally recognized, and attended by registrars from other states, and the training materials developed by CCR staff are used by the National Cancer Registrars Association. This year's course material included the FORDS, treatment, coding, quality control, TNM 6th edition and data collection of non-malignant Central Nervous System tumors. The CCR also conducted three training workshops on non-malignant Central Nervous System tumors and three workshops for non-registrars on implementation of Collaborative Staging.
- Participated in the second NPCR linkage with the Indian Health Service to identify American Indians in the CCR database. Also completed manual linkage with tribal rosters for two tribes that are not served by the Indian Health Service.
- Hired temporary employees through the National Program of Cancer Registries grant to help with Death Clearance, doubling the speed and efficiency of the process for 2003 cases.
- The CCR is a member of the North American Association of Central Cancer Registries (NAACCR), seven staff members belong to the National Cancer Registrar's Association (NCRA), and 10 staff members belong to the Association of North Carolina Cancer Registrars (ANCCR). The CCR has five staff members who serve on committees or taskforces of NAACCR or NCRA and three staff members who served on the board of ANCCR. Three staff members serve on subcommittees of the Advisory Committee for Cancer Coordination and Control and one member serves on its Steering Committee. The CCR has been actively involved in developing North Carolina's new five-year cancer control plan.
- Completed update to study of cancer around asphalt operations in the state. Several other large-scale cluster investigations are ongoing and in various levels of completion, including pediatric leukemia in Forsyth and surrounding counties, brain cancer in New Hanover County, and lung cancer in Wilkes and surrounding counties. The CCR responded to over 30 cluster inquiries this year, many of them requiring more than cursory analyses.
- Historically, the Veterans' Administration hospitals have not reported cancer incidence. However, during 2004-2005 the CCR received a large amount of data from them.
- Every year at the time of the NAACCR submission, a number of last-minute edits are made to the data, on a snapshot of the database. This year, those changes were implemented using a database with a data entry interface, enabling staff to make changes quickly, store the changes made, and track that these changes were made to the main database after the NAACCR submission.

Proposed Initiatives in FY 2005-2006

- Develop a system for efficiently processing pathology lab data, incorporating the newly identified cases into the CCR's main database.
- Develop a system for incorporating all paper records into the electronic data system.
- Enhance the Web-based data management system with the following: development of simpler data entry screens for small facilities, a module for rapid case ascertainment staff to enter reports directly into the CCR database, and automated record updating.
- Fill open positions, including a statistical supervisor, one statistician, and one field staff, and complete the establishment of two CDC-funded quality control (QC) positions.
- Establish a more efficient process for resolving county and address inaccuracies, including linkage with the Division of Motor Vehicles.
- Add a geographic analysis component to our data analysis capabilities to facilitate our response to requests for cancer cluster investigations.
- Enhance our research activities by having a staff person devoted full time to research.
- Work with the Commission on Cancer's Liaison Program to initiate reporting by medical oncologists. One of the QC staff will do a casefinding study on a large oncology practice in the Triangle area.
- Work with hospitals and physicians to improve reporting to 98 percent complete.
- Work with the Veterans' Administration hospitals to improve regular reporting.
- Collaborate with researchers and other outside data sources to improve the quality and completeness of the CCR's data through data linkages.

Health and Spatial Analysis Unit

Description

The Health and Spatial Analysis Unit uses Geographic Information Systems (GIS) and other software to describe and analyze the spatial and temporal relationships that exist among mortality, morbidity, births, and population characteristics, along with the environment in which they occur.

The Health and Spatial Analysis Unit also develops and maintains the SCHS Web site. In addition, the Unit supports other sections in the Division of Public Health with their Web sites, the use of GIS and spatial analysis.

Services

- Responds to map requests from state and local public health agencies, organizations, universities, and the public.
- Supports SCHS research, publications and presentations by providing maps and other spatial analyses.
- Provides spatial analysis expertise to other state, local agencies and programs on long-term projects. Collaborations include Epidemiology Section: HIV/STD Prevention and Control Branch, Special Studies Unit; Women's and Children's Health Section: Nutrition Services Unit and Early Intervention Unit.
- Provides GIS technical support to other DHHS Divisions.
- Manages the SCHS Web site and provides support in website development for other DPH sections, the Office of Minority Health and Health Disparities, and the interdepartmental N.C. Health Schools Web site.

Accomplishments in FY 2004-2005

- Continued work with HIV/STD on Syphilis Elimination Project (SEP).
- Continued geocoding of 2003 Vital Records.
- Developed North Carolina Health Data Query System.
- Developed an implementation plan for an address geodatabase.
- Updated time series maps on the Web site.
- Continued support of the Family Day Care Homes (FDCH) Project.
- Updated and maintained information on SCHS Intranet.
- Maintained and provided to users a GIS database of licensed medical facilities.
- Provided layouts of poster presentations for all SCHS Units.
- Produced and presented posters at ESRI International GIS Conference and N.C. State Conference.
- Presented spatial analysis project on syphilis and HIV Disease at the N.C. State GIS Conference.
- Provided staff to serve as a member of the North American Association of Central Cancer Registries (NAACCR) GIS Workgroup.

- Provided staff to serve on the State Government GIS Users Committee (SGUC); one staff person chairs the committee and all staff are members.
- Provided staff to serve as a member of the Geographic Information Coordinating Council (GICC), by appointment from the Secretary.
- Provided staff to serve as chair of the SCHS Presentation Committee.
- Provided staff to serve as a member of the N.C. GIS Conference Planning Committee.

Proposed Initiatives for FY 2005-2006

- Upgrade software for and update content of the online Health Atlas.
- Become a participating member of N.C. OneMap.
- Execute the implementation plan for the address geodatabase.
- Expand the North Carolina Health Data Query System for births and birth defects data.
- Test the streamline geocoding processes.
- Conduct additional spatial analysis of syphilis and HIV disease.
- Implement a state agency license scheme for ESRI GIS software.

Statistical Services Unit

Description

The Statistical Services Unit collects, analyzes, and disseminates data on the health status and health care use of North Carolinians. Staff also measure the effects that health services and programs have on the citizens of North Carolina. The Statistical Services Unit consists of three main work teams:

Survey Operations: Operates the Behavioral Risk Factor Surveillance System (BRFSS) and Pregnancy Risk Assessment Monitoring System (PRAMS) for North Carolina, two CDC-sponsored health surveys. Provides survey and data analysis support to state and local public health programs in North Carolina. Designs, tests, and conducts special public health surveys.

Vital Statistics: Produces the annual vital statistics and induced abortion files for data analysis and reporting, provides data for the national Vital Statistics Cooperative Program, and works with the Vital Records Section on data quality improvement efforts.

Health Services Analysis: Analyzes and disseminates data related to Medicaid, Health Choice, and hospital discharges. Staff work closely with the Division of Medical Assistance and the Office of Research, Demonstrations, and Rural Health Development on issues of mutual interest to these programs and the Division of Public Health.

Services

- Answer thousands of requests a year from all segments of North Carolina's population.
- Maintain and link together various data sets enabling the SCHS to do comprehensive data analysis and health research.
- Publish a number of special research and evaluation studies and about six annual publications.
- Present educational and training sessions to public health professionals, university students, and other groups on data use, analysis, and interpretation.
- Provide extensive data analyses and reports for state and local public health agencies.
- Carry out special analyses of the Health Services Information System (HSIS), Medicaid, Health Choice, and hospital discharge data files.
- Produce an annual online *County Data Book* as part of the North Carolina Community Health Assessment Process.
- Provide statistical and other support to the Office of the Chief Medical Examiner and analyze the medical examiner data to meet the needs of North Carolina public health programs.

Accomplishments in FY 2004-2005

- Produced five major annual publications and eight special reports in addition to the ones listed below.
- Published two Minority Health Fact Sheets, one for American Indians and one for African Americans, in cooperation with the Office of Minority Health and Health Disparities.
- Published the *Health Profile of North Carolinians: 2005 Update*.
- Published the *2003 North Carolina Health Statistics Pocket Guide*.
- Published, on the State Center for Health Statistics Web site, data tables for live births broken out by receipt of Medicaid, WIC, health department prenatal care, Maternity Care Coordination, and Child Service Coordination.
- Published, on the State Center for Health Statistics Web site, extensive county-level graphs showing time trends in key health indicators.
- Established the Child Health Assessment and Monitoring Program (CHAMP), a state-wide, representative household telephone survey that collects data on children's health issues.
- Produced the Local Public Health Department Expenditures report for the chief of the Administrative Support and Community Liaison Section.
- Produced extensive data for the Health Carolinians 2010 Midcourse Review.
- Published, on the State Center for Health Statistics Web site, extensive data tables based on the BRFSS and PRAMS surveys.
- Enhanced quality control activities in the Vital Statistics Unit to improve the accuracy of the birth, death, and other vital data for North Carolinians.

Proposed Initiatives for FY 2005-2006

- Continue to provide technical support to the State Infant Mortality Collaborative (SIMC), both for the North Carolina "home team" and for the national group.
- Publish focused-care study on children with special health care needs, in cooperation with the Quality Management Unit of the N.C. Division of Medical Assistance.
- Participate in the evaluation of expanded Medicaid coverage of family planning services (family planning "waiver"), in cooperation with the Sheps Center for Health Services Research, the Women and Children's Health Section, and the Division of Medical Assistance.
- Provide technical assistance to the Occupational and Environmental Epidemiology Branch to implement a study of the impact of water quality on the health of swimmers in Falls Lake.
- Complete publication on estimates of the number of medically fragile children in North Carolina and their health care costs.
- Continue to work with the Carolina Population Center on the North Carolina Birth Outcomes Project and publish a *SCHS Studies* report on the effect of neighborhood contextual factors on preterm births.

Section IV. Summary

During Fiscal Year 2005, SCHS moved to address changing needs in the area of health information and dissemination. The old Geographic Analysis Unit (GAU) was renamed Health and Spatial Analysis Unit (HSAU) to better reflect changes in its functions and to further differentiate it from generic Information Technology functions. The differentiation was made to clarify the roles of the unit as a result of a multi-year study carried out by the Department examining all potential IT work within the Division of Public Health. Because the HSAU mainly provides statistical and geographical analysis in support of health business functions, it is important to maintain its identity as separate from traditional IT functions which are mainly designated to provide technological support.

SCHS also continues to expand its research component in the areas of Birth Defects and Central Cancer Registry. During FY 2005, a comprehensive and interactive database management system was completed, allowing BDMP staff to dynamically enter field data from hospitals and have access to the latest edited database. Both of those improvements permit quicker and more accurate case abstracting work and should enrich the already expanded data base. This initiative was part of the collaboration between the School of Public Health at UNC-Chapel Hill and the BDMP at the SCHS and was made possible when UNC was awarded a CDC grant as a Center for Excellence for Birth Defects Research in 2002, which facilitated investigations of birth defects research questions. Cooperating with the N.C. State Laboratory of Public Health has also expanded the available data from early screening tests that is used for the surveillance of newly born infants with birth defects.

The Cancer Registry also saw the benefits of its Web-based case abstraction system which began to bear fruit in increased accuracy and timeliness. This system, implemented in FY 2004, allows field staff to enter data with greater accuracy and rapidity. CCR has also begun several collaborative data-share agreements with investigators in several universities. Studies during FY 2006 should provide enhanced knowledge on key items of surveillance, prevention, early detection, and treatment of cancer.

SCHS will continue to improve its Web site and postings, as that medium has become a central piece in health data distribution and dissemination. SCHS has moved to increase health information accessibility by posting all publications on its Web site and making the site easier to use. Additionally, the SCHS initiated the creation of a queryable site that allows users much greater flexibility in shaping inquiries into the death files. SCHS will continue to create dynamic data systems on its Web sites during the coming year.

Once again, the SCHS experienced another significant growth in its BRFSS survey with increases in the sample size and in the number of questions designed to address specific health concerns from local and state agencies. Updated data from PRAMS was posted on the Web in a more timely manner than in the past. Furthermore, a new survey designed to measure health risk behaviors was started in January 2005. This system, called the Children's Health Assessment Monitoring Program (CHAMP), promises to complement the information that the BRFSS already gathers for adults.

During FY 2005, SCHS collaborated extensively with all sections of the Division of Public Health, resulting in several publications. SCHS continued its policy of adjusting to reduced state appropriations by increasingly relying on grants and receipts. This trend is likely to continue in the foreseeable future. SCHS continues to answer thousands of inquiries each year from administrators, legislators, researchers, and citizens, and its accountability system for capturing work activities has been improved.

The four programmatic units were productive during the year in addition to doing their mandated and routine work; they also contributed to extensive data dissemination through regular and special reports. The Operations, Quality Control, and Administration Unit, working closely with the DPH Budget Office, was key in helping with the logistical complexities of having to relocate all second floor staff to permit State Construction to put a new roof on the Cotton Building. This dislocation of staff and work was effected as smoothly as possible thanks to the leadership of the Operations, Quality Control, and Administration Unit and the flexibility of the staff who had to be moved to alternative locations for several weeks. This Unit also continues to do an excellent job in monitoring all components of operational support, including budget and personnel challenges.

SCHS looks forward to engaging in future collaborations with health agencies, and will continue to use its resources to serve the health information needs of the state in an efficient and effective manner.

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MEDIA RATE