

Biennial Report

July 1, 1995 -- June 30, 1997

North Dakota Department of Health



**Promoting
A
Healthier
Tomorrow**

INSIDE THIS PUBLICATION ...

| | |
|--|-----------|
| Message from the State Health Officer | 1 |
| Mission Statement | 1 |
| Department Overview | 2 |
| Administrative Services Section | 3 |
| Health Resources Section | 8 |
| Preventive Health Section | 13 |
| Environmental Health Section | 29 |
| State Health Council | 46 |
| Organizational Chart | 47 |
| Financial Summary | 48 |

Governor
Edward Schafer

Interim State Health Officer
Robert A. Barnett

Produced by the North Dakota Department of Health
Editor: Debra Anderson, Public Information Officer
Graphic Design: Barb Nechiporenko
Published: November 1997



North Dakota Department of Health
600 E. Boulevard Avenue
Bismarck, N.D. 58505-0200

HEALTH OFFICER'S MESSAGE



Public health continues to evolve and change. As diseases such as smallpox and polio disappear from the earth, other threats appear before us.

Such problems as AIDS, E. coli foodborne infection and infections with bacteria resistant to many antibiotics were not common until recently. These present new challenges to the public health community.

The North Dakota Department of Health is one of the most diverse departments in state government. It provides services from before birth to after death and covers a broad spectrum of topics from feedlots to hospital operating rooms.

The flexibility of the people in the department, their willingness to constantly learn and change explain how this wide variety of responsibilities can be handled so well.

As you read about the activities and actions of the North Dakota Department of Health, remember that these accomplishments require the hard work of dedicated state employees, as well as teamwork and perseverance. In view of the rapidly changing public health environment, the importance of maintaining such a skilled, flexible and committed staff cannot be overestimated.

The state health department has made great strides during the biennium, but many challenges lie ahead. We invite you to follow our progress.

Robert A. Barnett,
Interim State Health Officer

Our Mission

We, as public employees, are dedicated to the goal of assuring that North Dakota is a healthy place to live and to the belief that each person should have an equal opportunity to enjoy good health. To accomplish this mission, we are committed to the promotion of healthy lifestyles, protection and enhancement of the environment and provision of quality health care services for the people of North Dakota.



**Promoting
A
Healthier
Tomorrow**



The department logo is a symbolic representation of both apples and wheat.

An apple is the universal symbol for good health and well-being; it promotes the department's goal of assuring that the state is a healthy place to live and that each person has an equal opportunity to enjoy good health.

The wheat represents the richness of North Dakota's agricultural industry, the very foundation of our state's heritage.

A LOOK AT THE DEPARTMENT

The North Dakota Department of Health employs about 300 people dedicated to making North Dakota a healthier place to live. The four sections of the department include:

- Administrative Services
- Health Resources
- Preventive Health
- Environmental Health

Employees in these sections provide public health services which benefit citizens of the state. As of Aug. 1, 1995, the department name was changed from North Dakota State Department of Health and Consolidated Laboratories to North Dakota Department of Health.

Direction from the Health Council

The State Health Council governs the department and serves as its official policymaking body. As of July 1, 1995, nine members are appointed to the Council by the governor for three-year terms.

Four members are appointed from professional health care providers and five from the public sector.

Role of the State Health Officer

The state health officer carries out the rules and recommendations of the State Health Council. The health officer is appointed by the governor for a four-year term. As the primary spokesperson and authority on health issues, the health officer is chiefly responsible for voicing public health policies on behalf of the governor and serves on designated boards, councils and commissions. As administrative head of the department, the health officer oversees operations of the agency.

What the Future Holds

The North Dakota Department of Health serves the citizens of our state in a rapidly changing environment. We are on the verge of exciting new technological developments that have the potential of improving the health of North Dakotans. For example, telemedicine will enhance rural North Dakotans' access to health care services. It is anticipated this technology will lower health care costs and improve the quality of care. Telemedicine applications also may play a role in the delivery of public health. The department is committed to improving the public health services it delivers by exploring options that may more effectively meet the needs of North Dakota's citizens.

ADMINISTRATIVE SERVICES SECTION

The Administrative Services Section provides support services to all divisions of the North Dakota Department of Health and assists in coordinating department activities. Divisions within this section provide services in the areas of personnel administration, fiscal management, health statistics and research, and certification of vital events.

The section consists of the following divisions:

- Health Information Systems (HIS)
- Accounting
- Personnel
- Vital Records
- Crime Laboratory
- Office of the Forensic Examiner

Division of Health Information Systems

The Division of Health Information Systems (HIS) is a research and support division of the Administrative Services Section. HIS conducts research about the health of North Dakotans and the cost and use of health care services.

Staff members provide technical and data support to the North Dakota Department of Health, the State Health Care Data Committee and the State Health Council. They conduct research for legislative committees, health department divisions, health care providers, interest groups and citizens. HIS also administers the State/Community Matching Loan Repayment Program for primary care physicians and mid-level practitioners and the J-1 Visa Waiver Program for foreign medical graduates.

Accomplishments

- More than 100 reports were produced in support of legislative initiatives, public and environmental health activities, inquiries about the health of North Dakotans, and the use and cost of health care services.
- Ten primary care physicians, five mid-level practitioners and 11 foreign medical graduates were approved to practice in health professional shortage areas.
- HIS served as a source of technical and data support for department programs, including the development of grants.
- HIS provided support to the Task Force on Long-Term Care Planning and input into development of the task force report. The task force will recommend legislation to the Fifty-Sixth Legislative Assembly.

Goals

- To integrate and link the claims data system with other divisions of the North Dakota Department of Health.
- To conduct seminars for health department staff members about the interpretation of health data, survey design and basic data analysis.
- To attract additional health professionals to serve in health professional shortage areas of North Dakota.
- To compile summary reports about the average charges for physician services and about trends in health care costs in North Dakota.

Selected Health Indicators in North Dakota



1995-1997

How healthy are we?
Selected Health Indicators in North Dakota, produced by the Division of Health Information Systems, answers many questions about the health of North Dakotans. For a copy of this publication, call 701.328.2845.



Do you want to know more about the North Dakota Department of Health? Visit our website at: www.ehs.health.state.nd.us

Division of Accounting

The Division of Accounting provides accounting and financial control records which comply with state and federal requirements.

This data is distributed monthly to department managers to assist them with the monitoring of federal and state grant expenditures, revenue and state appropriations. The division prepares financial reports, reviews grant applications, collects revenue, pays expenses, processes the payroll and submits the department's biennial budget.

The latest technological advancement to benefit the Division of Accounting is availability of the Internet. The Internet is used to share data with state and federal agencies and various other users. This technology has been extremely useful because it provides rapid access to current information.

Accomplishments

- The North Dakota Department of Health returned to the state's general fund about \$664,000 for the biennium ending June 30, 1997. These savings occurred due to a more efficient blend of funding sources.
- As in past bienniums, the department submitted a biennial budget to the Office of Management and Budget (OMB) in compliance with the governor's general fund guidelines. The 1997-1999 biennial budget request was particularly challenging because of OMB's new online budget system.

Division of Personnel

The Division of Personnel provides a variety of services to the North Dakota Department of Health, including employee recruitment, classifying positions, training employees, salary administration, policy development and employee relations.

Accomplishments

- The personnel director conducted in-house training programs on sexual harassment, safety in the workplace, supervisory management development and various other topics.
- A risk management program was implemented; safety training, policies and procedures were developed, as was a safety committee.
- As part of the department's ongoing commitment to employee training, educational programs were made available via a satellite downlink. This allowed employees to spend more time training and less time traveling.

Division of Vital Records

The two primary functions of the Division of Vital Records are registration and certification of vital events which occur in the state. This includes births, deaths, fetal deaths, marriages and divorces.

Accomplishments

- During the biennium, the division registered 19,415 certificates of live birth; 12,793 certificates of death; 134 certificates of fetal death; 9,210 marriage records; 4,480 divorce records and 237 delayed registrations of birth. More than 120,000 requests for certified copies, record searches, amendments and verifications were processed. Fees collected for providing these services were deposited to the state's general fund.
- An annual Vital Statistics Report was compiled using data collected from vital event certificates. Data also was compiled for specific requests received from the public or other state agencies.

Goals

- The goal of the division is to maintain 100 percent registration of all vital events in North Dakota. To achieve this goal, much querying and follow-up is done. Providing timely responses to public requests for certified copies of vital event documents also is important. This information is needed for many reasons, including passport applications, school entrance, job applications, Social Security benefits, etc.

Division of Crime Laboratory

Forensic Laboratory

The Forensic Laboratory provides technical assistance to the criminal justice system in the investigation of crime. The laboratory accepts evidence from agencies, including prosecutors and law enforcement officers (local, county, state, federal and military), as well as defense counsel.

Lab assistance includes the recognition, recovery, packaging, marking and sealing of evidence. This evidence can be processed by the following techniques: examination for arson accelerates, drug identifications, firearm and tool mark examinations, serological tests, trace evidence examinations, special photographic techniques, developing latent fingerprints and comparison of tire and footwear impressions.

Drug identification is a major area of analysis and includes identification of clandestine drugs, pharmaceuticals and chemical compounds. The laboratory also provides urine drug screens to the state penitentiary, the Department of Parole and Probation and several county correctional centers.

Accomplishments

- Ten new computers were purchased, improving case management and report generation, as well as updating data systems on two laboratory instruments.
- A new data system was purchased for the gas chromatograph/mass spectrometer.
- A computer and blood sample collection kits were purchased for use in the DNA database of convicted sex offenders.

Vital Signs

On an average **day** in North Dakota:

- **23.5** babies are born, **5.5** of them are born out of wedlock, and **2** are born to teenage mothers.
- **16** people die, **5** of them from heart disease, and **3.75** from cancer.
- **13** people get married, and **6** people get divorced.

In an average **week**:

- **1.2** infants die,
- **1.4** children between ages 1 and 19 die,
- **1.5** people commit suicide,
- **3** die from diabetes,
- **4** die from influenza and pneumonia, and
- **4.4** die as a result of accidents.

In an average **month**:

- **1** person younger than age 20 commits suicide, and
- **2.7** people younger than age 20 die as a result of some type of accident.

The average age at death is **75.81**.

Forensic Laboratory staff members analyzed or examined 32,600 samples from 7,958 cases and testified at 71 trials.

- Staff members received training on DNA, firearms, drug analysis, and crime scene and clandestine lab investigations. They analyzed or examined 32,600 samples from 7,958 cases and testified at 71 trials.

Goals

- The primary goal of the Forensic Laboratory is to provide rapid, accurate analysis of evidence. Minimizing case backlog is another important goal. The laboratory will implement a DNA database of convicted sex offenders and will update laboratory techniques.

Toxicology Laboratory

The Toxicology Laboratory provides technical assistance to the criminal justice system, coroners and the medical community for traffic safety, death investigations and other purposes. Staff members accept evidence from local, county, state, federal and military agencies. Assistance includes training officers in breath alcohol determination, maintenance of breath testing instruments, blood alcohol analysis, and chemical drug and toxic substance analysis. The laboratory also provides expert testimony in criminal prosecutions and traffic safety hearings.

Accomplishments

- Toxicology staff members conducted 44 breath testing classes and trained 494 law enforcement officers how to determine alcohol concentrations.
- Staff members also conducted 47 classes to train 602 officers in the use of preliminary breath testing devices.

- Toxicology staff members analyzed more than 4,723 specimens and testified at 102 hearings and trials.

Goals

- The overall goals of the Toxicology Laboratory are to provide accurate, rapid analysis of evidence and to ensure quality of breath alcohol testing. The laboratory will enhance the blood and breath testing programs as well as toxicological analysis.

Office of the Forensic Examiner

The position of state forensic examiner was added to the North Dakota Department of Health in August 1996. The role of the state forensic examiner is to provide medical examiner services to county coroners and law enforcement officials in the investigation of sudden and unexpected deaths in North Dakota.

Once a case has been referred to the state forensic examiner, the body is brought to Bismarck, N.D., for an examination or autopsy. Services provided include autopsy or examination of the body, photographic documentation, toxicological analysis, collection of evidence, follow-up with investigating agencies and certification of the death certificate.

Accomplishments

- From Aug. 1, 1996, through June 30, 1997, 149 cases were accepted, and autopsies were performed on the majority of them.

- Local county coroners have responded very favorably to the availability of forensic examiner services, and cases have been referred from all geographic areas of the state.
- Educational efforts have included statewide lectures to law enforcement officers, county coroners, state attorneys and hospital personnel.
- The state forensic examiner also participates in the North Dakota Child Fatality Review Panel.

Goals

- The forensic examiner's office plans to hire a full-time administrator to coordinate office activities and to assist in death investigations.
- The forensic examiner's office will pursue development of a forensic examiner's facility and adequate staffing to handle the caseload.
- The forensic examiner will continue providing educational activities for law enforcement officers, death investigators and coroners throughout the state.

In the first year of operation, the forensic examiner's office was involved in 149 cases referred by local coroners.

**North Dakota
Department of Health
staff members dedicated
308 work days to flood
response efforts
between April 18, 1997,
and May 7, 1997.
Employees worked
tirelessly for many long
days to aid Red River
Valley flood victims.**

HEALTH RESOURCES SECTION

The Health Resources Section consists of two divisions: Health Facilities and Emergency Health Services.

The section is responsible for:

- Licensing inpatient and outpatient health care facilities, basic care facilities, home health agencies, ambulance services, hospice programs, electrologists, electronic hair removal technicians and certification of emergency medical technicians;
- Certification surveys of all facilities and programs which provide service to people eligible for the federal Medicare and Medicaid programs; certification is voluntary, but required if the provider or supplier wants to receive payment through Medicare and Medicaid;
- Certification of all clinical laboratories that test human body substances for medical purposes;
- Administration of the alternative health care projects program;
- Administration of the nurse aide training and competency evaluation programs and registry; and
- Administration of the emergency health services system.

Division of Health Facilities

The Division of Health Facilities works to assure that buildings, equipment and staff of North Dakota's inpatient health care facilities and outpatient programs provide services consistent with generally accepted practices and meet applicable standards.

Licensure responsibilities of the division include:

- Institutions covered by the Medical Hospital Licensure Act, Chapter 23-16 of the North Dakota Century Code, including general acute, primary care and specialized hospitals; skilled nursing facilities and nursing facilities; and outpatient facilities.
- Home health agencies - 45
- Hospice programs - 14
- Basic care facilities - 41 facilities with 1,433 beds
- Residential facilities for children with autism - 1
- Electrologists and electronic hair removal technicians - 24

Contractual certification responsibilities include:

- Long-term care nursing facilities - 88 facilities with 7,026 beds
- Hospitals including swing beds and general acute services - 3,339 beds in 46 general acute care hospitals, 3 specialized hospitals with 402 beds
- Intermediate care facilities for the mentally retarded - 66 facilities with 780 beds
- Home health agencies - 38 certified
- Hospice programs - 14 certified
- Rural health clinics - 82 certified
- All clinical laboratories in the state as defined by the Clinical Laboratory Improvement Act (CLIA) - 470 certified in one of four test complexity categories
- Ambulatory surgical centers - 7 certified
- End-stage renal dialysis units - 15 certified
- Portable X-ray units - 2 certified

Staff members conduct annual surveys to determine compliance with state licensure requirements and federal certification Conditions of Participation contained in Title XVIII (Medicare) and Title XIX (Medicaid) and CLIA of the Social Security Act. In addition, the division is respon-

sible for investigating complaints about any program, whether licensed or certified.

The licensure and certification programs are conducted by surveyors who represent a wide range of professional disciplines including: certified lab technicians, licensed social workers, licensed registered dietitians, registered nurses, qualified mental retardation professionals and fire safety surveyors.

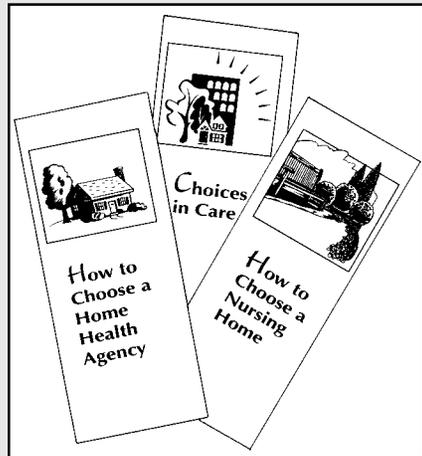
Additional programs administered by the division include:

- Alternative health care services projects: This program permits state laws and rules to be waived for innovative pilot projects.
- Nurse aide training and competency evaluation programs and registry: This program provides for state approval of nurse aide training programs and a registry of nurse aides in order to be consistent with federal certification requirements for long-term care facilities.

Accomplishments

- Division staff members are working with the Department of Human Services to implement automation of the Resident Assessment Instrument. Upon completion of this project, all nursing facilities will transmit resident-specific information which describes North Dakota's nursing facility population. The information will assist in shaping state policy, describe a population which receives more than \$128 million in patient care each year and form the basis upon which payment for Medicare and Medicaid will be based in the future.

The Division of Health Facilities was selected to receive the Francis T. Ishida Award for Excellence in Customer Service to beneficiaries of the Health Care Financing Administration.



Three public information brochures were developed to help people select home health agencies, nursing facilities or alternative living arrangements.

- Three public information brochures were developed to help people select home health agencies, nursing facilities or alternative living arrangements.
- The division significantly updated the following rules in response to statutory requirements associated with home health and long-term care:
 - The Home Health Agency Licensure Rules were rewritten in early 1997 and
 - The Long-Term Care Licensure Rules were rewritten and became effective July 1, 1996.
- Staff members evaluated the division's certification program and made it consistent with Health Care Financing Administration (HCFA) expectations. This process is called the State Agency Quality Improvement Program (SAQIP). It will help the division provide more consistent surveys and survey results.

Division Changes

- The division assumed direct responsibility for licensure and certification of Life Safety Code surveys of health care facilities. This responsibility previously was carried out by the Office of the State Fire Marshal in the Attorney General's Office.
- The regional office in Grand Forks, N.D., will be phased out during 1998. Staff members will be relocated to the Bismarck, N.D., office to increase management effectiveness and decrease operating expenses.
- Inspection of care in intermediate care facilities for the mentally retarded and institutions

serving the mentally ill was discontinued in April 1997.

- An outcome-based survey process was adopted in the clinical laboratory program in September 1996.

Goals

- To develop and implement a quarterly video newsletter that will improve communication and understanding of the state's long-term care industry.
- To work with the long-term care industry on development of a statewide program to recognize "best practices" in North Dakota's long-term care facilities. The program will provide information which accurately describes facility activities. It will provide a medium for the exchange of information and enhance care to residents of long-term care facilities.
- To develop a North Dakota Rural Health Plan in conjunction with the North Dakota Healthcare Association and the North Dakota Office of Rural Health. This plan will encourage development of critical access hospitals that may be reimbursed through the Medicare program.
- To train two surveyors for each program. This will allow more flexibility and efficiency in scheduling surveys.
- To ensure that new surveyors receive adequate training to pass the national Surveyor Minimum Qualifications Test (SMQT) on the first attempt.

Division of Emergency Health Services

The Division of Emergency Health Services is the lead agency for North Dakota's Emergency Medical Services (EMS) System. The division conducts the following activities:

- Annually licenses 141 ground ambulance services which meet standards for service availability, equipment and personnel training;
- Updates and maintains training, testing and certification programs for EMS advanced life support and basic life support personnel, including emergency medical technicians and paramedics;
- Administers an EMS grant program of about \$200,000 per year for training ambulance service personnel;
- Provides technical assistance to local EMS services regarding patient care issues as well as system design, administration and operation;
- Maintains an EMS personnel data system which contains about 10,000 certification records;
- Maintains an ambulance run report data system which adds about 30,000 ambulance run records per year;

- Provides critical incident stress debriefing services to law enforcement, fire and EMS personnel engaged in EMS;
- Maintains a certified nurse aide registry with about 9,500 registrants;
- Provides continuing education to emergency medical services through distance learning and videotape presentations; and
- Implements and maintains a statewide trauma system.

Accomplishments

In addition to EMS licensure and personnel training, testing and certification activities, the following activities were accomplished:

- The division implemented a program for providing information and continuing education to EMS services via video technology. The division produces videotapes which are distributed to licensed ambulance services, certified quick response units and rescue services, training institutions and trauma centers. Each videotape is made up of five segments, including: North Dakota EMS news, a North Dakota EMS service profile, an answer to a frequently asked question, trauma information and a training topic. Written materials which accompany the video also are distributed.



About 30,000 ambulance runs are made in North Dakota each year.



It is vital to maintain North Dakota's EMS system. In many rural areas, the EMS system provides the only access to emergency medical care. In urban and rural areas, the EMS system virtually can make the difference between life and death.

- A five-year EMS plan was developed with input from a wide range of stakeholders. The five-year plan addresses goals and objectives for the 10 components of an EMS system. The five-year EMS plan also prioritizes these objectives and contains implementation strategies.
- Legislation and administrative rules were created to implement a statewide trauma system. The trauma program was expanded to include six Level II and 20 Level IV trauma centers.
- Planning began on an emergency medical services for children project. The goal of the project is to improve pre-hospital and hospital care for children involved in emergencies.

Goals

- The division will make EMS training more accessible in rural areas through use of video technology for both continuing education and initial training.

PREVENTIVE HEALTH SECTION

The Preventive Health Section is responsible for maternal and child health, health promotion and education, disease control and public health microbiology services in the state. The section's responsibility is to promote health and prevent illness and disease. Many of these services are provided through district, county and city public health departments.

Seventy-eight employees work in the following five divisions of the Preventive Health Section:

- Maternal and Child Health
- Health Promotion and Education
- Food and Lodging
- Disease Control
- Microbiology

Division of Maternal and Child Health

The mission of the Maternal and Child Health (MCH) Division is to ensure healthy women, children and families. The division supports and encourages better health through education, policy development, advocacy and partnerships.

Programs within the division include:

- Adolescent Health/School Nursing
- Consumer Product Safety Commission
- Domestic Violence
- Family Planning
- Injury Prevention
- MCH Nurse Consulting
- MCH Nutrition
- Newborn Metabolic Screening

- Optimal Pregnancy Outcome Program (OPOP)
- Oral Health
- Sexual Assault
- Special Supplemental Nutrition Program for Women, Infants and Children (WIC)
- Sudden Infant Death Syndrome

Accomplishments

- In 1996, the infant death rate in North Dakota dropped dramatically to an all-time low of 5.3 deaths per 1,000 live births.
- The Oral Health Program completed a dental manpower study to assess the supply and distribution of dentists in the state. Twelve counties were designated as dental health professional shortage areas as a result of this study. The program also conducted a number of surveys to assess risk behaviors for dental disease. These surveys showed a lack of awareness about the benefits of preventive dental care and led to an expansion of oral health education and screening efforts.
- Results of the *New Mothers' Survey* about prenatal/infant care and education were shared with private and public health care providers throughout the state. The nutrition component of the survey provided valuable information about women's awareness and use of folic acid in the prevention of birth defects.

Preventive Health Section staff members played an important role in the public health response to the 1997 Red River Valley blizzard, flood and fire.

Home Visiting



Making a Difference

In 1997, the Children's Rights Council ranked North Dakota as the best state to raise children, and the Anne E. Casey Foundation ranked the health of children in North Dakota as third best in the nation. These positive reports are due, in part, to Maternal and Child Health programs and staff members.

- A survey showed less than one-half (40 percent) of all health care providers in the state provided newborn home visiting services. In collaboration with the North Dakota Department of Human Services' Division of Children's Special Health Services and with input from private and public providers, a publication titled, *Guidelines for Infant and Early Childhood Home Visiting* was developed. These guidelines reflect the concepts and principles essential to building effective home visiting services.
- The Newborn Metabolic Screening Program oversees the screening of all newborns for metabolic conditions. Early identification and treatment of metabolic disorders prevents mental retardation and saves thousands of dollars on special education and care of these children. Screening for Maple Syrup Urine Disease was discontinued due to extremely low incidence of this condition in the state.
- The Domestic Violence Program has been a part of increased collaboration and coordination of services among agencies which address domestic violence and sexual assault, including law enforcement, prosecutors, health care professionals and local domestic violence programs. This has led to increased training and effectiveness in identifying and responding to violent crimes against women.
- The Family Planning Program participated in the expansion of social marketing activities, both within the state and the region. Program efforts concentrated on issues such as HIV and the importance of family planning, parents as the primary sexuality educators of their children and unintended pregnancies. The program provided services to 14,274 residents in 1995 and 14,484 in 1996.
- The WIC Program provided food and support services to families who were evacuated from the Red River Valley because of flooding; services basically were uninterrupted for relocated families. Staff members are working with their counterparts in two other states on the Western Governors' Association Health Passport Project, a "smart card" which will contain personal health and demographic information.
- The Optimal Pregnancy Outcome Program (OPOP) director became certified as both a Nursing Child Assessment Satellite Training (NCASAT) instructor and an infant massage instructor. This will enhance parenting training opportunities for health care professionals and others in the state. An OPOP site was added in Ransom County during the biennium.
- The incidence of Sudden Infant Death Syndrome (SIDS) was reduced significantly during the biennium. This may be related to the Back-To-Sleep Campaign, which has been reported to reduce infant deaths from SIDS by 30 percent nationwide.
- MCH nurse consultants collaborated with the North Dakota Health Tracks Program to screen for childhood lead poisoning. During the biennium, 1,233 children were screened; three were found to have lead levels high enough to require intervention. Lead screening helps create awareness of the hazards of lead

exposure to children during early growth and development. The Division of Environmental Engineering contributed valuable information about the dangers of exposure to lead-based paint.

- The Injury Prevention Program provided 1,000 car safety seats to the WIC Program for distribution to low-income families. A survey of mothers of newborns showed 99.4 percent of their babies left the hospital in car safety seats. Three thousand bicycle helmets were provided to local public health departments for distribution to children through neighborhood bike safety block parties. Additional duties during the biennium included participation in the newly-formed Child Fatality Review Panel and special task forces which addressed emergency medical services for children and adolescent suicide.
- The Consumer Product Safety Commission (CPSC) is represented in the state by the Injury Prevention Program director. In 1996, CPSC began a new partnership with North Dakota Child Care Resource & Referral Centers. This relationship is resulting in more effective distribution of children's product safety information and better notification of product recalls.
- The Adolescent/School Health Program conducted a survey of schools to determine the prevalence of nursing services in elementary and secondary schools. The most frequently listed barrier to providing nursing services was lack of funding; the second most common barrier was lack of trained personnel. The

survey was conducted in cooperation with the Children's Special Health Services Division of the Department of Human Services and the Department of Public Instruction.

Goals

- STOP Violence Against Women is a federally funded grant of the Domestic Violence/Rape Crisis Program. Project funds will be used to increase apprehension, prosecution and adjudication of people who commit violent crimes against women. Domestic violence/sexual assault programs will provide crisis intervention and counseling for victims and children, as well as public education in schools, colleges and communities.
- Most dental diseases are preventable. Oral Health Program staff members will continue the development and implementation of oral health education projects designed to prevent dental diseases. Emphasis will be placed on educating pregnant women and mothers with young children about preventive oral health care techniques.
- The MCH Nutrition Program will continue to integrate nutrition services into all MCH programs as well as coordinate with nutrition programs in other divisions and agencies. MCH funding will support local nutrition services for the MCH population, including health promotion to prevent chronic diseases, nutrition counseling for special needs children, technical assistance and consultation, screening and educational activities in conjunction with programs such as Healthy Start and North Dakota Health Tracks.

WIC Because
You Care



The North Dakota WIC Program was awarded the Food and Consumer Service Administrator's Citation from the United States Department of Agriculture in May 1996. This award recognized efforts to tailor a training program for Standing Rock and Three Affiliated Tribes WIC Program staff members.



Three Maternal and Child Health staff members were recognized during the biennium (l to r). Deb Arnold was elected chair of the National State Family Planning Administrators. Carol Holzer received a Public Service Award from the National Highway Traffic Safety Administration for her dedication and commitment to achieving "Safe Communities" in North Dakota, and Kathleen Mangskau received a national award from Oral Health America for her contributions to dentistry and oral health.

- The Injury Prevention Program will continue to promote use of car safety seats and seat belts for children. Observational surveys to measure the use of both will be completed in 1998. More emphasis will be placed on preventing deaths and injuries to adolescents, particularly from motor vehicle crashes and suicide. A campaign to educate providers and the public about the dangers of Shaken Baby Syndrome will be initiated during the next biennium.
- The MCH nurse consultant will act as a liaison with North Dakota Child Care Resource and Referral Centers, the North Dakota School Nurse Association and local public health department nurses.
- The Family Planning Program will work with health insurers to obtain coverage of contraceptives, help agencies and programs understand managed care and address the issues of pre-family planning, statutory rape and out-of-wedlock births as they relate to welfare reform.
- The OPOP Program will continue to provide prenatal education to help pregnant women make healthy lifestyle choices for healthy babies. The program is in the process of developing a state manual for local programs and plans to enhance data collection by computerization.
- The Metabolic Screening Program will develop an advisory committee to assist in development of program guidelines.

Division of Health Promotion and Education

The mission of the Division of Health Promotion and Education is to enable communities to promote healthy behaviors that prevent and control chronic disease, thus reducing healthcare costs and improving the quality of life.

Intervention programs in communities, schools and local agencies focus on tobacco-free lifestyles, healthy eating, regular physical activity and use of preventive health services for early detection. Support programs collect data about healthy behaviors and incidence of disease; provide educational resources for communities, schools and health professionals; and offer graphic services to other divisions in the department.

Programs and services within the Division of Health Promotion and Education include:

- Cancer Prevention and Control
- Cardiovascular Disease Prevention
- Tobacco Prevention and Control
- School Health
- Behavioral Risk Factor Surveillance System
- Youth Risk Behavior Survey
- Cancer Registry
- Resource Library
- Graphic Design

Accomplishments

Cancer Prevention and Control Program

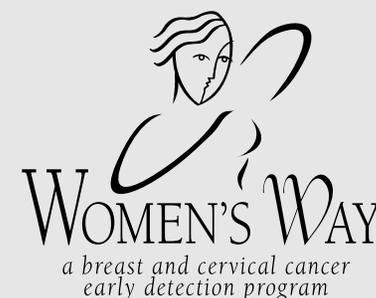
- The Cancer Prevention and Control Program continued to focus on breast and cervical cancer by participating in the

National Breast and Cervical Cancer Early Detection Program. Program staff members completed the development of all program components (public education, professional education, coalitions, quality assurance, tracking, follow-up, surveillance and evaluation) and developed a state infrastructure for delivering no-cost breast and cervical cancer screening to medically underserved women.

- Four local public health departments served as pilot sites for implementation of the breast and cervical cancer early detection program. The program was expanded to include seven additional local public health departments at the end of the biennium.
- In collaboration with the North Dakota Cancer Coalition, *Women's Way* was adopted as the name of the program. This name has been used to make the program identifiable for the purposes of public education and outreach.

Cardiovascular Disease Prevention Program

- This program seeks to improve cardiovascular health of North Dakotans by promoting healthy lifestyles and policies that improve physical activity and eating behaviors.
- *5 A Day for Better Health*, a national nutrition campaign which encourages Americans to eat five or more servings of fruits and vegetables each day, was coordinated through this program.



“Women’s Way will serve women who normally fall through the cracks of the health care system because they can’t afford to go to a health care provider for routine screening,” said Jill Kaske, program epidemiologist.

Since 1995, North Dakota communities have passed 11 local ordinances to reduce illegal sales of tobacco products. “Communities are important in the fight for healthy, tobacco-free children,” said Jeanne Prom, program coordinator. “The community is where the rubber hits the road.”

- Local *5 A Day* nutritionists reached 92 percent of the state’s population through public awareness campaigns, lifestyle change programs and by creating supportive environments.
- A statewide coalition, the North Dakota Healthy Heart Council, was formed in 1996. Its mission is to support heart-healthy lifestyles. One activity of the council is to establish *5 Plus 5 Communities* to help North Dakotans increase fruit and vegetable intake to five servings per day and increase physical activity to five days per week.
- Grants and technical assistance were provided to six local public health departments for community assessment and mobilization as well as nutrition and physical activity interventions; 38 percent of the state’s population has been reached.

Tobacco Prevention and Control Program

- During the biennium, North Dakota communities passed 11 new ordinances which restrict cigarette vending machines, place licensing requirements on tobacco retailers or put tobacco products behind the counter. Now, nearly one-half of all North Dakota youth live in cities with ordinances designed to reduce illegal tobacco sales.
- In 1996, the department completed its first statewide compliance survey in which minors attempted to purchase tobacco at retail outlets. Valley City, N.D., and Jamestown, N.D., two cities which have enforced licensing ordinances, recorded the highest compliance.

- Since Jan. 1, 1996, North Dakota physicians have recorded if tobacco use contributed to death on the certificate of death. In 1996, tobacco use contributed to more than 900 — or one out of every six — deaths in the state.

School Health Program

- Fourteen middle schools across the state are working to create an educational system that better meets the needs of young adolescents. In collaboration with the University of North Dakota and the Department of Public Instruction (DPI), the School Health Program works to strengthen connections between schools and community health professionals. The health initiative of this middle school reform effort focuses on creating a healthy environment for students and staff, strengthening health education and accessing health services for the 5,900 students in these schools.
- A Youth Risk Behavior Survey and a School Health Education Profile are conducted biennially by the division and DPI. To help plan programs that address common youth health problems such as tobacco use, poor eating behaviors and physical inactivity, survey results are provided to local school boards, administrators, educators and other decision makers.
- The annual Roughrider Health Promotion Conference continues to be the farthest reaching health educator training activity in the state. This conference brings together school and community teams who return to their local communities with plans to protect youth

from health risks. These school-based teams carry out activities that reach more than 40,000 North Dakota residents.

- To connect North Dakota classroom teachers to training and teaching ideas, the division and DPI distribute *Dakota's Best Healthy Kids* newsletter to more than 1,800 educators in the state.

Behavioral Risk Factor Surveillance System (BRFSS)

- Since 1985, the BRFSS has collected information about North Dakota residents and the behaviors that put them at risk for disease and injury. Yearly surveys of 1,800 households provide information to assist program planners, lend insight to health professionals and inform the public about the status of a variety of health issues. Included in the survey are questions about healthcare coverage, oral health, diabetes, tobacco use, HIV/AIDS, cancer screening exams, cholesterol, hypertension, immunizations, injury control, alcohol use, physical activity, nutrition and weight control.

Cancer Registry

- With funding from the National Program of Cancer Registries, the department is establishing an incidence-based North Dakota cancer registry. The primary purpose of the registry is to support cancer control by targeting, monitoring and evaluating programs which promote early detection, diagnosis and treatment of cancer. The registry began collection of cancer case information in January 1997.

Resource Library

- The Resource Library serves as a reference clearinghouse for health professionals, educators, community leaders and department staff members. In response to changing technology, all audiovisual materials are available in video format. Internet searches are conducted regularly, and resource materials are listed in the state library's ODIN database.

Goals

- The Cancer Prevention and Control Program will implement a statewide comprehensive breast and cervical cancer screening program, thus making these services available to medically underserved women in all North Dakota counties by January 1999.
- The Cardiovascular Disease Prevention Program will continue to support assessment, coalition development, program implementation and evaluation in local communities. In addition, a state plan for cardiovascular health will be released. The plan will outline specific strategies to prevent and control cardiovascular disease. The health department will participate in a pilot physical activity behavior change program and will assist other agencies and communities with implementation of this worksite health promotion program.
- The Tobacco Prevention and Control Program will continue to work with communities to strengthen statewide tobacco-control policies. The program will offer train-the-trainer instruction in effective tobacco use prevention curricula for teachers across North Dakota. Two



“The 5 Plus 5 Communities program will help North Dakotans eat fruits and vegetables five times per day and increase physical activity to five days per week,” said Deanna Askew, program coordinator. “This program has great potential for improving the health of people in our state.”



The 1995 Youth Risk Behavior Survey showed that 66 percent of North Dakota's adolescents have two or more risk behaviors including:

- Tobacco use**
- Sedentary lifestyle**
- Insufficient consumption of fruits and vegetables**
- Binge drinking**
- Sexual intercourse**

curricula, Life Skills Training and Project TNT (Toward No Tobacco), have been proven to keep children from using tobacco.

- The School Health Program will continue to strengthen quality school health programs through training and technical assistance. Data collection about youth risk behaviors and school health program status will continue via collaboration between state agencies. Program planners and key decision makers will receive surveillance results.
- Behavioral Risk Factor Surveillance System staff members will work to increase the use of data for program planning and evaluation and to raise public awareness. Internally, the program will implement quality control methods to improve data reliability.
- The Cancer Registry will support efforts by community hospitals and health systems with respect to the evaluation of cancer patient care by:
 - Providing summary statistics about the distribution of cancer cases by type;
 - Following cancer incidence and treatment trends in the state;
 - Facilitating rapid reporting, thereby allowing state and local health officials to assess suspected cancer clusters or hazards in local communities; and
 - Providing accurate data for cancer-related reports.

Division of Food and Lodging

The Division of Food and Lodging is responsible for protecting public health through licensing and inspection of restaurants, hotels, motels, bars, mobile home parks, campgrounds, bed and breakfast facilities, retail food stores, meat markets and bakeries. Inspection procedures ensure that these licensed establishments meet both sanitation and certain fire/life safety standards before they open to the public and while in operation.

Under an agreement with the Department of Human Services, staff members also inspect preschools and day care centers which prepare food. The division provides educational courses in safe food handling, reviews plans for new establishments and extensive remodeling projects, and helps investigate possible foodborne illness outbreaks.

The division serves as the Food and Drug Administration's (FDA) liaison in the state on issues related to manufactured food and pesticide residues in food.

Changes

- During the 1997 legislative session, changes were made in several program areas. License fees for food establishments were increased, and the division was granted authority to prorate yearly license fees. A penalty for late license renewals was established, as was a license category for small food manufacturers.

Accomplishments

- A major accomplishment during the biennium was development and adoption of new food code rules. Administrative rules changes were modeled after the FDA's food code regulations. The new rules became effective July 1, 1997.

Goals

- The Division of Food and Lodging is preparing to adopt new administrative rules dealing with lodging facilities.
- The division will develop a new food establishment inspection form which will eliminate the 100-point scoring system and concentrate on critical items.

Division of Disease Control

The Division of Disease Control identifies and analyzes disease trends and implements appropriate intervention activities to reduce morbidity and mortality. The division also acts as a resource for health care providers and the public regarding public health questions and issues. The division often works with the media to provide timely public education.

Programs within the division include:

- Epidemiology
- Immunization
- Sexually Transmitted Diseases
- HIV/AIDS
- Diabetes
- Agriculture Health and Safety
- Tuberculosis Control

The division successfully sponsored several statute revisions during the 1997 legislative session related to:

- Rabies
- HIV/AIDS
- Tuberculosis

In addition, the division was instrumental in providing flood assistance and emergency response to communities affected by spring weather-related disasters including:

- Disease and injury surveillance
- Public information related to surveillance
- Immunizations for tetanus
- Supplemental clean-up kits
- Volunteer nurses

The division consists of 10 program personnel who coordinate activities, six field epidemiologists who conduct epidemiological activities throughout the state, five support staff personnel and four agricultural health nurses under contract with local public health departments to conduct surveillance and intervention activities related to agricultural illness and injury. Cooperative agreements with the national Centers for Disease Control and Prevention (CDC) provide program assistance and financial support to the division.

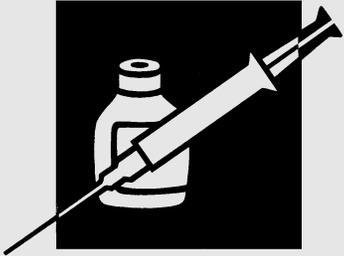
Epidemiology Program

Epidemiological activities of the division include:

- Providing consultation with providers regarding testing, treatment and follow-up;
- Conducting surveillance and data analysis of reportable conditions; and
- Conducting investigations, studies and recommending intervention actions.



The adoption of new state and federal food regulations represents the latest and best scientifically based food safety information since 1976.



About 30,000 tetanus immunizations were provided for people involved in flood preparation and response efforts.

Accomplishments

- In 1995, outbreaks of shigellosis, a diarrheal illness, were associated with day care centers in Bismarck and Mandan, N.D. Fifty-four confirmed cases occurred, and four people were hospitalized.
- Program staff members identified reptile-contracted salmonellosis that occurred as a result of contact with iguanas.
- A pertussis outbreak was identified in a North Dakota long-term care facility, and preventive measures were taken.
- Hepatitis A outbreaks in 1996 resulted in more than a 500 percent increase in the number of cases; 23 cases were identified in 1995 and 140 cases were identified in 1996. An outbreak in Fingal, N.D., resulted in more than 90 people receiving immune globulin (IG) and hepatitis A vaccine. Another outbreak involved a food handler at a restaurant in Hillsboro, N.D.; more than 500 people received IG. An earlier outbreak occurred in a Hillsboro neighborhood. As a result, 35 people received IG, and 20 children were vaccinated for hepatitis A. An outbreak in Rolette County resulted in implementation of a hepatitis A immunization program on North Dakota's Indian reservations.
- A puppy taken to an elementary school in Edgeley, N.D., later was determined to be rabid. As a result, more than 80 people received post-exposure rabies prophylaxis.

- Raccoon babies taken to an elementary school in Velva, N.D., resulted in about 50 people receiving post-exposure rabies prophylaxis.
- A scabies outbreak related to clients of life skills training programs in the Bismarck, N.D., area resulted in more than 400 clients and staff members receiving treatment.
- In 1996, the State Health Council began requiring all laboratories in the state to report specific health problems called "mandated conditions" to the North Dakota Department of Health.

Immunization Program

The role of the Immunization Program is to ensure that children, adolescents and adults receive proper immunizations to protect against vaccine-preventable diseases.

Accomplishments

- The 1996 National Immunization Survey (NIS) sponsored by CDC shows 83 percent of the 2-year-olds in North Dakota are age-appropriately immunized. This represents a 2 percent increase since 1995, but falls short of the Healthy People 2000 goal of 90 percent.

- According to the NIS, the following immunization data apply to children born in North Dakota between February 1993 and May 1995:

83%* have 4 DTP, 3 Polio and 1 MMR
 96% have 3 DTP
 86% have 4 DTP
 92% have 3 Polio
 90% have 1 MMR
 93% have 3 Hib
 85% have 3 Hep B

* *The national average was 78 percent.*

- Because of high immunization levels in the state, no cases of the following diseases were reported during the biennium: diphtheria, measles, polio, rubella, Haemophilus influenza type B in children age 5 or younger and tetanus in children age 15 or younger.
- Seventh-graders received hepatitis B, MMR, tetanus and chickenpox vaccinations at a remarkably high rate. More than 90 percent of these students received the vaccines through a school-based program administered by local public health departments.
- The North Dakota Immunization Program recommended implementation of a hepatitis A vaccination program for children ages 2 to 12 in five communities with past histories of outbreaks. The immunization program also recommended implementation of a varicella vaccination program for children 12 to 15 months old, children entering kindergarten who have not had chickenpox and seventh graders younger than age 13 who have not had chickenpox.

- The North Dakota Immunization Information System (NDIIS) makes it possible for health care providers anywhere in the state to access a central registry of immunization data. As of June 30, 1997, 48 public providers and 47 private providers were retrieving immunization records and entering immunization data into NDIIS.

STD Program

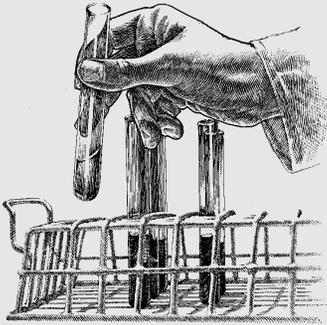
The goal of the Sexually Transmitted Disease (STD) Program is to prevent and control the spread of sexually-acquired infections. Staff members provide STD clinical services, education, screening, interviews and partner notification, and make referrals for medical treatment.

Accomplishments

The STD Program continued its involvement in several programs and projects designed to reduce STD morbidity in North Dakota. During the 1995-1997 biennium:

- No cases of primary, secondary or early latent (less than one year in duration) syphilis were reported.
- Reported chlamydia cases decreased 4.5 percent from 2,106 cases in the previous biennium to 2,011 cases in the current biennium.
- Reported gonorrhea cases increased 7.3 percent from 82 cases in the previous biennium to 88 cases in the current biennium.

Because of high immunization levels in the state, no cases of the following diseases were reported during the biennium: diphtheria, measles, polio, rubella, Haemophilus influenza type B in children age 5 or younger and tetanus in children age 15 or younger.



North Dakota continues to have the lowest prevalence of HIV/AIDS in the nation; 209 HIV infections have been reported since 1985.

- Genital herpes, chancroid, granuloma inguinale and lymphogranuloma venereum were removed from the list of reportable diseases.
- Contractual agreements with eight private clinics that provide STD services to high-risk individuals were maintained; 230 people used these services.
- The STD and Family Planning Programs and the Division of Microbiology continued to participate in the Region VIII Chlamydia Project.

Chlamydia Facts:

- More than 25,000 females were screened for chlamydia at participating clinics.
- More than 1,000 cases of chlamydia were diagnosed as a result of this screening.
- More than 1,000 males also were tested at the clinics, resulting in the diagnosis of about 200 cases of male chlamydia.

HIV/AIDS Program

HIV/AIDS Program activities are funded through three federal grants: HIV Prevention, HIV Surveillance and the Ryan White C.A.R.E. Act. Program activities focus on preventing the transmission of HIV, reducing the associated morbidity and mortality of HIV-infected people and assisting those infected with HIV in accessing medical care.

North Dakota continues to have the lowest prevalence of HIV/AIDS in the nation; 209 HIV infections have been reported since 1985.

Reports received by the North Dakota Department of Health include the names of people diagnosed with HIV; 28 other states also report HIV cases by name.

The Microbiology Laboratory analyzed 25,873 HIV tests during the 1995-1997 biennium compared to 15,260 during the previous biennium.

The HIV/AIDS Program contracts with 16 sites to conduct HIV testing. Sites include 10 local public health departments, three family planning clinics, two college health centers and the North Dakota State Hospital. The local public health departments and college health centers also provide community HIV prevention education.

Ryan White C.A.R.E. Act services include financial assistance for outpatient medical services and prescription drugs. These services are available to people with HIV infection at the 10 local public health department test sites.

HIV/AIDS-related legislation approved in 1997 includes:

- The provision of funding to assist with payment of health insurance premiums so that private insurance can be maintained as long as possible;
- The elimination of certain architectural features of adult entertainment centers to discourage the likelihood disease will be spread through anonymous sexual encounters; and
- The provision of power to the judicial system regarding people who are possible sources of HIV/AIDS infection, but decline testing.

Tuberculosis Program

The role of the Tuberculosis Program is to assist in identifying TB infection and disease, in preventing the spread of TB disease and in providing treatment for infected people. Tuberculosis continues to be a disease of low morbidity with an average of only eight cases per year reported during the past five years (1992 to 1996).

Accomplishments

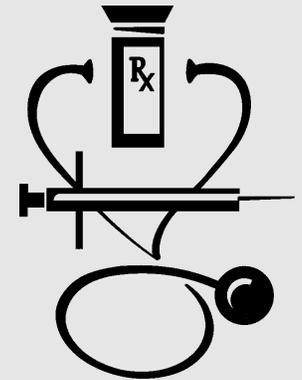
- A total of 345 people were placed on preventive therapy in 1995, and 248 were placed on therapy in 1996. In both years, 39 percent of these people were refugees from foreign countries.
- The 1997 legislature approved revisions to the tuberculosis treatment statute including:
 - Allowing a clinical diagnosis of tuberculosis in the absence of or pending a culture confirmation, and
 - Providing power to the judicial system to charge people who have TB and refuse evaluation or treatment with a class A misdemeanor.

Diabetes Control Project

Diabetes is a major public health problem associated with one out of every seven deaths in North Dakota. The goal of the North Dakota Diabetes Control Project (ND-DCP) is to reduce the burden of diabetes by implementing preventive care programs that enable the health care system and communities to better respond to the disease. This includes implementing programs that promote prevention of diabetes-related complications through early detection and treatment.

Accomplishments

- The ND-DCP completed and distributed a state plan for control and prevention of diabetes and its associated complications. This included plans to:
 - Establish a state-based surveillance system of diabetes health behaviors, care practices and health outcomes;
 - Provide education about the importance of preventive care exams and self-care education to health care professionals and people with diabetes; and
 - Increase access and availability to preventive care and education services.
- In 1996, the ND-DCP received a \$235,000 grant from the Centers for Disease Control and Prevention (CDC) to implement objectives outlined in the North Dakota Diabetes Disability Prevention Plan.
- The ND-DCP, in cooperation with the American Diabetes Association, the North Dakota Medical Association and Provider Review Organization, developed diabetes practice guidelines which include quality management indicators that promote health system adoption of diabetes care standards.
- ND-DCP assisted the American Diabetes Association and the North Dakota Dietetic Association to obtain reimbursement coverage for education services for certified diabetes educators and registered dietitians.



Diabetes is a major public health problem associated with one out of every seven deaths in North Dakota.



The North Dakota Department of Health was the only state health department to receive both a surveillance grant and an intervention grant through NIOSH's Community Partners for Healthy Farming initiative.

- The ND-DCP worked with Prairie Public Broadcasting to develop public awareness campaigns and health promotion programs about diabetes and its associated complications. This included participating in the production of a Health Works television special about diabetes and in the development of four public service announcements.
- To increase access to professional education about diabetes care standards, the ND-DCP and the UND School of Medicine conducted MedStar satellite seminars on care standards for 35 rural health care systems. Also, physician education self-study modules and seminars were provided to more than 1,000 health care providers.

Agriculture Health and Safety Program

Through cooperative agreements with the National Institute of Occupational Safety and Health (NIOSH), the Agriculture Health and Safety Program administered two grants during the biennium. The first grant, awarded in 1990, established a statewide agricultural reporting system which identified about 5,000 agriculture-related injuries and illnesses. Funding for this grant ended in 1996. The second grant narrowed surveillance to the Red River Valley and targeted two specific groups — children who experience agriculture-related injuries and migrants. This grant includes evaluation of two adolescent agricultural safety education initiatives. The goal of the Agriculture Health and Safety Program is to prevent and control the occurrence of agricultural injury and death through surveillance and educational efforts.

Accomplishments

- A childhood farm safety poster display titled *Age Appropriate Task Assignment* won first place in three different categories at the 1995 NIOSH annual agricultural health and safety conference. The poster project also was selected in 1996 by Farm Safety for Just Kids to be replicated and sold through their farm safety materials catalog.
- *Ask an Ag Nurse*, a monthly farm safety and health newspaper column, received a National Safety Council Education Award in 1996, one of 12 awarded in the nation.
- *ABC — Always Be Careful on the Farm*, a school-based agricultural safety program developed in conjunction with the North Dakota Farm Bureau and taught by farm bureau volunteers, received a National Safety Council Award for Excellence in Community-Based Education in 1996; it was one of four awarded in the nation.
- The North Dakota Department of Health was the only state health department to receive both a surveillance grant and an intervention grant through NIOSH's Community Partners for Healthy Farming initiative. This grant award provides about \$267,000 in funding per year for three years.

Goals

- The Division of Disease Control will continue its commitment to preventing disease and disability through epidemiology, education and intervention.

Division of Microbiology

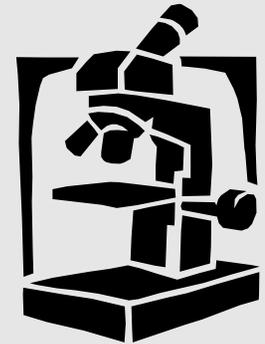
The Division of Microbiology (the Public Health Laboratory) provides diagnostic and referral services to physicians, veterinarians, clinics, hospitals, local public health departments, other divisions of the North Dakota Department of Health, other state agencies and the public in the areas of bacteriology, mycology, mycobacteriology, parasitology, immunology, virology, and dairy and water bacteriology.

The laboratory conducts testing for many exotic diseases and emerging infections (i.e., hantavirus, rabies, encephalitis) that private hospitals and clinics don't have the expertise or resources to provide. The laboratory continues to serve as the state's central laboratory and certifying agency for the FDA and the Environmental Protection Agency (EPA) dairy and water bacteriological testing programs.

Accomplishments

- The virology and immunology laboratory continues to serve as the Region VIII reference laboratory for vaccine-preventable diseases such as measles, mumps and rubella. It also provides the same consultation services for Nebraska in Region IV.
- Chlamydia testing capabilities were expanded to include DNA testing using Ligase Chain Reaction (LCR) technology. LCR testing is used for confirmatory testing as well as non-invasive testing of urine specimens. A male prevalence study for chlamydia using urine specimens was initiated in August 1996.

- Labotech, a fully automated instrument, was evaluated for use in the HIV and prenatal hepatitis testing programs. This system has the ability to use compatible test kits from different manufacturers. It has been incorporated into the division's routine daily testing.
- The division began studying the Organon Teknika Automated Tuberculosis system in June 1997; these studies are ongoing. This system is computerized, fully automated and would eliminate the radioactive carbon 14 media currently being used.
- Laboratory personnel completed back-up training as laboratory evaluation officers (LEOs) for both the FDA dairy and EPA water testing programs. During the biennium, laboratory evaluations were completed and certification was granted to seven dairy and 10 water laboratories.
- The laboratory data management system was changed to a multi-user system; testing areas now are fully computerized with access to host computers.
- The division successfully completed three federal certification programs and is fully certified by FDA for Grade A dairy product and Appendix N antibiotic testing, EPA for safe drinking water testing and Health Care Financing Administration (HCFA) for clinical laboratory testing.



The division received a perfect score in the 1997 Clinical Laboratory Improvement Act (CLIA) inspection which includes personnel qualifications and competency, lab procedures, proficiency testing and corrective actions.

25,873 HIV tests were completed during the 1995-1997 biennium, compared to 15,260 during the 1993-1995 biennium. A breakdown of the testing follows:

| | |
|---|-------------|
| Private Physicians & Clinics | 45% |
| Prenatals | 26% |
| Alternate Test Sites | 12% |
| Prisons/Correctional Facilities | 8% |
| Health Care Worker Exposures | 5% |
| Sexually Transmitted Diseases | 2% |
| Chemical Dependency Units | 1% |
| Other | 1% |
| | 100% |

- The division played an active role in the 1997 flood response, providing supplies and testing to flood-stricken areas. The Arbovirus/Mosquito Surveillance and Control Program was expanded in anticipation of an increase in mosquitoes due to standing water in low-lying flood areas.
- Continuing education continues to be a priority. The division provides training courses or co-sponsors them with UND Laboratory Education for North Dakota (LEND) and National Laboratory Training Network (NLTN). A total of 55 teleconferences and two on-site workshops were produced.

Goals

The division will:

- Complete the Organon Teknika TB study and assess applicability to the laboratory;
- Expand male chlamydia testing to include Indian Health Services, state colleges and UND Family Practice Centers;
- Prepare and distribute an educational needs survey to North Dakota-licensed laboratorians and pathologists; compile the results and use them to design training programs for the 1997-1999 biennium; and
- Compile data and address concerns from the clinical and environmental customer satisfaction surveys conducted in 1997.

ENVIRONMENTAL HEALTH SECTION

The Environmental Health Section's five divisions work closely with the federal Environmental Protection Agency (EPA) to safeguard the quality of North Dakota's air, land and water resources. Staff members deal with issues that affect the comfort, health, safety and well-being of all North Dakota citizens and their environment. Enforcement of state and federal environmental laws is accomplished through permitting, inspecting, sampling, analytical services and monitoring activities.

An important department goal is to maintain delegation of all federal environmental programs for North Dakota and to ensure that the regulated community complies with state environmental statutes.

The Environmental Health Section consists of the following divisions:

- Water Quality
- Chemistry
- Waste Management
- Environmental Engineering
- Municipal Facilities

Division activities are coordinated by the section chief's office. Employees in this office oversee quality assurance procedures and coordinate computer and data management activities and environmental emergency response efforts for the section.

The section's role in the initial response to an environmental incident is one of support to local responders and the Division of Emergency Management. The section customarily takes the lead role in post-emergency environmental cleanup activities.

The section chief's office coordinates the annual State/EPA Agreement. This agreement defines the scope of environmental program responsibilities and commitments made by the section and the EPA.

The Office of Enforcement, located in the section chief's office, provides legal counsel to all divisions of the section. The office has responsibility for enforcement procedures regarding any violation of state environmental laws. During the biennium, the office was involved in resolving violations of air, water pollution, hazardous waste and solid waste management statutes and rules.

The section chief's office also has a Small Business Ombudsman. The ombudsman serves as an advocate for small businesses in need of assistance to understand and comply with environmental laws and rules.

The section encourages public participation through opportunities for public comment, public hearings and the establishment of ad hoc task forces and advisory groups.



The Environmental Health Section works to safeguard the quality of North Dakota's air, land and water resources.

North Dakota was the first state where all wastewater dischargers met secondary treatment requirements (biological oxygen demand and total suspended solids).

Division of Water Quality

The primary statute providing for water quality protection is the federal Clean Water Act of 1972. This act and its amendments have proven to be the driving force behind many water quality improvements in recent years.

Even before the federal Clean Water Act, North Dakota had its own law to protect water quality in the state. The North Dakota Water Pollution Control Act was enacted in 1967. The North Dakota Department of Health is largely responsible for monitoring the quality of the state's lakes, streams and rivers. The Division of Water Quality helps assure that water stays clean for people today, as well as for future generations.

Pollutant Discharge Elimination System Permit Program

Point source pollution is defined simply as pollution coming from a specific source, like the end of a pipe. Environmental regulations implemented during the last 20 years have resulted in a significant reduction in pollution from some major point sources, for example, municipal and industrial wastewater treatment facilities.

Since 1975, the North Dakota Pollutant Discharge Elimination System Program has issued about 500 wastewater discharge permits (25 percent industrial and 75 percent municipal). In 1992, the program also began requiring permits for storm water discharges/runoffs from industrial facilities. Currently, about 500 facilities are covered under general permits for storm water discharges. In addition to general permits, program staff members have been working with major

municipalities on development and implementation of a guidance document for snow disposal/storage.

Accomplishments

- Impacts to waters of the state from livestock operations are an increasing concern in North Dakota. Currently, there are more than 900 livestock facilities on record as having been approved to operate by the Division of Water Quality. Most of these are cattle wintering, hog and dairy facilities that are part of the farmer's total farm operation. However, during the past few years, there has been an increase in strictly confined feeding operations for large numbers of turkeys, hogs and dairy cattle. With an increase in this type of operation, the division has updated its approval process to require better management of animal waste.
- The division continues to provide educational material about the impact livestock waste has on waters of the state to livestock producers and the public. In addition, the division continues to work closely with various local, state and federal entities and producer groups to provide information about livestock pollution concerns and state regulations.

Surface Water Program

Historically, surface water quality monitoring conducted by the Division of Water Quality consisted of a statewide network of chemical monitoring stations. Typical water quality variables for which monitoring was conducted included temperature, dissolved oxygen, pH, major ions, nutrients (i.e., phosphorus, ammonia, nitrate) and fecal coliform bacteria.

At its peak in 1993, the department's monitor-

ing network included 61 ambient chemical monitoring sites on 31 rivers and streams. In 1994, the division reduced the number of ambient chemical monitoring sites to 27. The division intends to maintain these as long-term monitoring sites for the purpose of assessing water quality trends and to describe the general chemical character of the state's major river basins.

Accomplishments

- In response to the growing need for better assessment information, the division initiated a biological monitoring program in 1993 to run through 1994. This program involved about 100 sites in the Red River Basin. The program continued in 1995, with an additional 50 biological monitoring sites in the Upper Red River Basin, including the Sheyenne River and its tributaries. Future plans call for the integration of biological and chemical monitoring through the watershed approach, which takes into consideration the impact of all activities occurring throughout the watershed.
- In 1991, through a grant from the EPA Clean Lakes Program, the division initiated the Lake Water Quality Assessment (LWQA) Project to describe the general physical and chemical condition of lakes and reservoirs. North Dakota's LWQA Project presently is addressing its fifth set of lakes and is in its sixth year of data collection and analysis. To date, data collection, analysis and reports have been completed on 87 lakes and reservoirs.
- Fish tissue monitoring also has become a regular part of the division's Surface Water

Program. Based on data at the end of the biennium, a fish consumption advisory for mercury exists for 31 lakes and two rivers. The monitoring of fish flesh for mercury and other contaminants continues each year with the collection of fish from additional rivers and lakes, as well as from those under existing advisories. The fish consumption advisory is updated annually.

Nonpoint Source Pollution Management Program

Most threatening to surface water resources is nonpoint source (NPS) pollution. In contrast to point source, this pollution does not come from one point. NPS pollution includes runoff from construction sites, city streets, livestock feedlots and agricultural lands. Runoff carries pollutants such as sediment, nutrients and pesticides, and deposits them in the state's waters.

Efforts to control NPS pollution are primarily achieved through the North Dakota NPS Pollution Management Program. This nonregulatory program came into existence with the addition of Section 319 to the Clean Water Act in 1987. Under Section 319, EPA is authorized to award grants to state or local groups to control NPS pollution. The NPS Pollution Task Force provides input and recommendations on local projects funded through Section 319. The task force is composed of representatives from a number of public and private entities. The health department's Division of Water Quality is responsible for administering these funds and implementing the NPS Pollution Management Program in North Dakota.

One example of a successful NPS pollution project is the Bowman-Haley Watershed Project. Located in southwestern North Dakota, it was designed to restore deteriorating water quality in the Bowman-Haley Reservoir. In the first four years of the program, landowners agreed to implement erosion control projects on more than 110,000 acres, cutting reservoir pollution by about 25 percent. By program's end, sponsors expect one-half of the acreage in the watershed to have erosion controls. The project also has an education component which has been extremely successful in informing watershed residents about the impacts of NPS source pollution.



Accomplishments

The North Dakota NPS Pollution Management Program has provided financial support to 31 projects since 1990. Of these projects, 15 are currently active, and 16 have been completed. While the size, type and target audiences of these projects may vary significantly, they all share the same basic goals:

- to increase public awareness of NPS pollution;
- to reduce and/or prevent delivery of NPS pollutants to waters of the state; and
- to disseminate information about solutions to NPS pollution.

Groundwater Program

Nearly 95 percent of the state's rural population and 60 percent of the state's total population rely on groundwater to supply water for daily consumption. Agriculture and industry also use large quantities of water on a routine basis.

North Dakota's groundwater protection programs are designed to control potential sources of contamination. This is accomplished through permit programs, waste discharge limits, performance and design standards, contaminant remediation and best management practices (BMPs) for NPS pollution. The degree to which contamination incidents are investigated or remediated depends on the contaminant, its impact on the beneficial use of the resource and the overall risk it poses to the public or environment.

Accomplishments

- To determine where to direct the limited financial and human resources required to implement groundwater assessment and protection activities, the Division of Water Quality developed

the Geographic Targeting System (GTS). The GTS was developed in 1992 to prioritize the state's aquifers in order of their susceptibility to contamination. It is currently used to target aquifer systems for increased protection, education and monitoring activities.

- In 1992, the division also initiated a five-year ambient groundwater monitoring program to determine the occurrence of 50 selected agricultural pesticides in the 50 most vulnerable aquifer systems. Since 1992, about 760 wells in these aquifer systems have been monitored. Monitoring of the most vulnerable aquifers will be conducted once every five years.
- Other activities designed to enhance protection of the state's groundwater quality include:
 - implementing rules for construction and abandonment of monitoring wells and
 - evaluating the need to develop groundwater quality standards.

Wellhead Protection Program

The Wellhead Protection Program protects groundwater resources by addressing the link between land uses and groundwater quality. This program identifies potential contaminant sources in a defined protection area around a community's drinking water wells. Communities then can determine if these sources should be removed, restricted or monitored.

Accomplishments

- Currently, 170 water systems participate in this voluntary program.

Underground Injection Control Program

The Underground Injection Control Program helps prevent contamination of underground sources of drinking water by injection wells, such as domestic or industrial wastewater disposal wells.

Accomplishments

- In early 1997, the division completed assessment of specific injection wells on groundwater quality through a statewide survey.

Goals

To further reduce pollution to the state's ground and surface water resources, the Division of Water Quality recommends the following:

- Use of the Watershed Approach: The division recommends that a watershed approach be included in all of its monitoring, assessment and control programs. However, local government entities should be the primary sponsors in implementing watershed management.
 - Development of BMPs for Groundwater Protection: BMPs should be developed for agricultural chemical storage facilities. BMPs also should be designed to minimize nutrient loadings to groundwater from irrigated land.
 - Enhanced federal funding for source water protection areas: Federal funding should be used to help local public water supply systems manage source water protection areas, including wellhead protection areas.
 - Increased Funding for NPS Pollution Projects: The division has developed a close working
- relationship with the U.S. Department of Agriculture. This relationship will ensure that sufficient resources are available to adequately address NPS pollution in the state. To maintain this coordinated effort, it will be necessary to continue funding through the NPS Pollution Management Program.
- Expanded Livestock Waste Pollution Prevention Program: The division has taken a more aggressive role in addressing livestock waste pollution; one primary area of focus is public education. The division will continue to work closely with other entities to implement approved livestock waste systems that do not adversely impact water quality.
 - Public Education on Underground Injection Wells: Efforts should be made to increase public awareness of the proper construction, use and potential hazards of underground injection wells.
 - Greater Focus on Storm Water Issues: General permits have been issued for storm water discharges by industries. Storm water pollution prevention plans are updated continually. The division will place even greater emphasis on storm water concerns in selected watersheds of the state.
 - Greater Use of Biological Assessment: It is generally believed that one of the best indicators of aquatic life use is the instream biological community (e.g., fish, aquatic insects). The division hopes to further incorporate biological assessment methods into its water quality monitoring program.



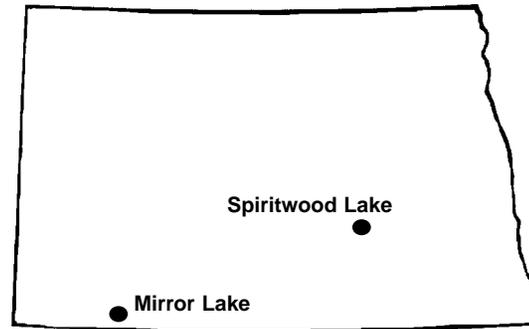
In the North Dakota Wellhead Protection Program, the citizens of a community are the driving force behind maintaining groundwater quality for themselves and future generations.



Recreational and fishing benefits have been restored on untold numbers of lakes as a result of EPA's Clean Lakes funding.

- Increased Monitoring for Toxics: Efforts to monitor for toxics should be expanded. To date toxics control programs emphasis has been on the 126 priority pollutants established by EPA. Information about toxics should be revised, and criteria should be developed to include pesticides currently in use.

- Increased Funding for Restoration of Lakes: The EPA's Section 314 Clean Lakes Program has been recognized as a success by both the private and public sectors. In North Dakota, both Spiritwood and Mirror Lakes were improved and restored with Section 314 funding. While there is a growing list of potential clean lakes projects, funds virtually have disappeared.



- Improved GIS Capabilities: Greater GIS capabilities will help ensure multi-agency and public access to water quality data. Better access will be valuable to the management of ground and surface water resources.

- Improved Communication and Data Sharing: Many federal, state and local agencies throughout the nation address water quality issues. Inadequate communication and data incompatibility can pose problems. Communication among all levels of government is crucial to management of water resources. Without a good communication network, different agencies may duplicate efforts. Consistent, compatible data shared between agencies is essential.

Conclusion

Polluted water carries with it a price. Such water may carry certain diseases, resulting in dangerous illnesses and increased health care costs. Contaminated water costs more to treat and is less appealing for recreational uses. And, of course, there is an environmental cost since polluted water affects the plants and animals dependent upon it.

Water quality in North Dakota and the nation has improved since passage of the Clean Water Act in 1972, but much remains to be done if the goal of restoring and maintaining the quality of the state's and nation's waters is to be achieved.

Division of Chemistry

The Division of Chemistry provides analytical services and laboratory certification to a variety of environmental protection, public health, agricultural and petroleum regulatory programs. The North Dakota Department of Health's environmental protection programs use analytical data generated by the chemistry laboratory to regulate: air quality; solid and hazardous waste; municipal wastewater; agricultural runoff; surface, ground and drinking water quality; petroleum products; and other media of environmental and public health concern.

The Department of Agriculture uses analytical data generated by the laboratory to regulate pesticides, livestock and pet foods, agricultural and home-use fertilizers, and to verify instances of misapplication of pesticides.

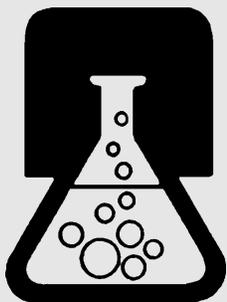
The division maintains a highly-skilled staff and state-of-the-art instrumentation. The laboratory is comprised of seven analytical areas and one laboratory certification area. This includes: demands, feed and fertilizer, mineral, organic, petroleum, radiation and spectroscopy labs. These laboratories conduct specific analytical functions in response to private and public requests. A description of each analytical laboratory follows:

- The Biochemical Oxygen Demands Analytical Lab: performs tests such as biochemical oxygen demand, total suspended solids and chemical oxygen demand. It provides analytical data used to determine the compliance of municipal and industrial wastewater discharges with permit requirements.
- The Feed and Fertilizer Lab: provides analytical data to the Department of Agriculture,

Registration Division. This lab tests agriculture feeds and fertilizers, as well as pet foods and lawn and garden fertilizers to determine compliance with labeling.

- The Mineral Lab: tests a variety of matrices for major cation and anion parameters. Typical analyses include fluoride, chloride, nitrate, sodium, ammonia and total Kjeldahl nitrogen.
- The Organic Lab: provides identification and quantification of insecticides, herbicides, volatile and semi-volatile organic compounds, PCBs and other synthetic organic compounds in multiple matrices. Matrices include: drinking water, surface water, groundwater, soil, river and lake sediments, foliage, fish tissue, sludge, oil, landfill wastes, pesticide formulations and other environmental sources.
- The Petroleum Lab: is responsible for testing the quality of petroleum products such as gasoline and diesel.
- The Radiation Lab: identifies and quantifies radioactive elements in samples collected from abandoned uranium mines, low-level radioactive material disposal sites, indoor air quality monitors, industrial radioactive sources and public drinking water supply systems.
- The Spectroscopy Lab: identifies and quantifies metal concentrations in drinking water sources and distribution points, surface and groundwater resources, hazardous waste, solid waste, fish, river and lake sediments, and other environmental matrices.

Quick response from the Division of Chemistry aided restoration of a potable water supply to United Hospital in Grand Forks, N.D., shortly after the flood.



During the 1995-1997 biennium, the Division of Chemistry analyzed nearly 31,000 samples for more than 301,000 analytical components.

Accomplishments

- The Division of Chemistry provides immediate analytical response to the Environmental Health Section during environmental emergencies. This aids in the application of timely and appropriate remedial actions and decisions to protect public and environmental health. For example, when the Red River and Devils Lake flooded in the spring of 1997, the laboratory tested area water for general quality and for specific drinking water components. During major emergencies, the laboratory provides 24-hour services to ensure timely response.
 - The Division of Chemistry continues to provide analytical support for public water systems. During the 1995-1997 biennium, it provided analytical services to comply with federal and state drinking water rules and regulations. About 9,300 samples were tested for many analytical components including: analytes such as nitrates, metals such as lead and copper, fluoride, pesticides and volatile organic compounds such as benzene and toluene.
 - The Division of Chemistry provides analytical services needed to monitor groundwater quality across the state. Program goals are accomplished by measuring the chemical components of specific aquifers in North Dakota. Monitoring is based on samples taken from observation wells in addition to private, livestock and irrigation wells. Testing includes nitrates, metals, pesticides and general water quality components.
 - In addition to routine analyses, the Division of Chemistry is involved in special projects.
- During the biennium, for example, groundwater from the Oakes Aquifer was analyzed. Testing concentrated on nitrate contamination of the aquifer from irrigation. This was a cooperative project between the North Dakota Department of Health which supplied the analytical work and North Dakota State University which provided the sampling teams.
- During the 1995-1997 biennium, the Division of Chemistry established a wide area network (WAN) with divisions of the Environmental Health Section located in the Missouri Office Building. This resulted in improved communication among the computer systems in the two buildings and facilitated more efficient use of employee resources.
 - The Division of Chemistry participates in about 15 laboratory performance evaluation programs and successfully completes these evaluations. The division also is responsible for certification of North Dakota's environmental chemistry laboratories and offers reciprocal certification for out-of-state laboratories that do business in state. During the 1995-1997 biennium, about 20 new out-of-state laboratories were added to the certification program.
 - The Division of Chemistry has been participating actively in the development of standards for a proposed national environmental laboratory accreditation program. The division also provides information to other laboratories through training and conferences. The quality assurance officer presented a two-hour class on laboratory quality assurance and quality control at the Energy Generation Conference in Bismarck in January 1997.

Goals

- Goals of the Division of Chemistry include increased laboratory efficiency and responsiveness, continued analytical support for environmental protection, public health, agricultural and petroleum regulatory programs. It will maintain current EPA laboratory certification and obtain certification for new drinking water components as mandated by EPA.

Division of Waste Management

The Division of Waste Management administers the following programs:

- Hazardous Waste
- Polychlorinated Biphenyls Inspection
- Solid Waste
- Abandoned Motor Vehicle
- Underground Storage Tank

Hazardous Waste Program

The Hazardous Waste Program regulates facilities that generate, store, treat, dispose of and transport hazardous waste. The program works to ensure safe waste management so that hazardous waste generated or managed in North Dakota does not adversely affect human health or the environment.

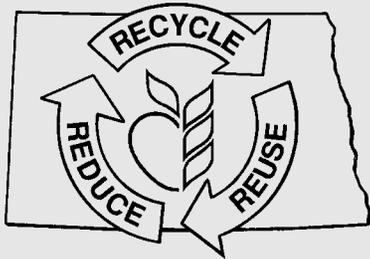
Accomplishments

- North Dakota Administrative Code (NDAC) 33-24 rules governing hazardous waste were revised to include changes and additions in accordance with federal regulation changes. These revised rules will become effective

July 1, 1997. During the 1995-1997 biennium, new federal regulations expanded the Hazardous Waste Program to include: controls on boilers and industrial furnaces which burn hazardous waste; additional hazardous waste disposal requirements; and regulations for control of organic air emissions from tanks, containers and surface impoundments. Federal regulations also reduced the regulation of three types of hazardous waste (recalled pesticides, mercury-containing thermostats and small batteries) to encourage recycling. These wastes now are known as universal waste. Program staff members conducted permitting and routine inspections of the regulated community which consists of about 750 businesses that notify the division of hazardous waste activities. This includes about 200 small quantity generators, 35 transporters, 13 large quantity generators and nine permitted treatment, storage and disposal facilities.

- Hazardous Waste Program staff members held one-day training sessions for small businesses which generate hazardous waste. The purpose of the training was to help them comply with hazardous waste rules. About 200 people attended these sessions during the 1995-1997 biennium.
- The Hazardous Waste Program issued corrective action permits to all permitted facilities. A corrective action permit requires the facility to investigate, and, if necessary, remediate contaminated soil or groundwater. Four facilities currently are conducting corrective action.

During the 1995-1997 biennium, Hazardous Waste Program staff members provided training and technical assistance to about 200 members of the regulated community.



The overall state recycling rate for municipal solid waste increased from 14 percent in 1995 to 25 percent in 1997.

- During the 1995-1997 biennium, the program inspected about 100 facilities that generate or manage hazardous waste. The program issued a hazardous waste storage permit to a new facility and reissued permits to three facilities. The program also modified or approved modifications to several existing permits.

Goals

- Hazardous Waste Program activity is expected to remain at the present level. The program will reissue hazardous waste storage permits to four facilities with permits that expire during the 1997-1999 biennium.
- Program staff members will focus on the review of investigation reports and proposed remedies for remediating contamination at facilities which have corrective action permits.
- The Hazardous Waste Program conducts training for the regulated community. This training has been structured to give businesses that generate hazardous waste a general overview of regulations and requirements. In the 1997-1999 biennium, the Hazardous Waste Program will continue to conduct workshops to help businesses comply with state rules.
- The philosophy of the Hazardous Waste Program has been, and will continue to be, that a partnership exists between the program and the regulated community. This philosophy has had a positive impact on the regulated community's compliance with rules and thereby protects public health and the environment from mismanagement of hazardous waste in North Dakota.

Polychlorinated Biphenyls (PCB) Inspection Program

The PCB Inspection Program, funded through an EPA Toxic Substance Control Act grant, conducts inspections at facilities known or suspected to have equipment containing PCBs.

Accomplishments

- About 35 inspections were conducted during the biennium; emphasis was placed on electrical utilities and facilities that previously had not been inspected. Inspection reports were forwarded to EPA, and noncompliances with federal rules requiring enforcement action were initiated by EPA.
- The PCB Inspection Program encouraged facilities to manage unregulated PCB articles such as fluorescent light ballasts the same way they manage regulated PCB articles.

Goals

- North Dakota is one of only six states which received federal grant monies to administer a PCB inspection program in lieu of EPA inspections. The health department program is viewed as successful by EPA and is popular with the regulated community. The Hazardous Waste Program anticipates continuing the inspection portion of the PCB Program.

Solid Waste Program

The responsibility of the Solid Waste Program is to plan for and regulate the safe collection, transportation, storage and disposal of inert, industrial, special and municipal solid wastes. The program

assists individuals, businesses and communities in providing efficient, environmentally acceptable solid waste management systems. It promotes resource recovery and recycling systems which preserve and enhance the quality of our natural resources.

Changes

- The 1995 legislature discontinued the solid waste planning program requirement for most areas of the state except ten northeastern counties. The solid waste management surcharge also was discontinued. Surcharge fees had been used for regional planning and to fund grants for recycling equipment and educational purposes. All remaining funds should be allocated by July 31, 1997, or revert to the state's general fund.

Accomplishments

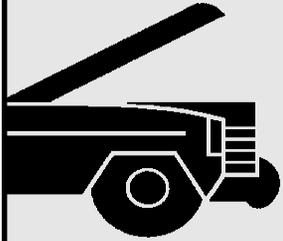
- The Solid Waste Program oversees and regulates 290 waste haulers, 14 municipal solid waste landfills, 27 transfer stations used to facilitate transport of municipal solid wastes to landfills, two industrial waste landfills, 25 special waste (energy industry) landfills and 161 inert waste landfill facilities.
- The program was responsible for permitting and construction/operation of five new special waste landfill facilities; four facilities were permitted for ash wastes from the state's largest power plants, and one was permitted for the cleanup and closure of the AKZO Salt Plant (formerly Hardy Salt) near Williston, N.D.

- The program continued to assist 14 municipal solid waste landfills in meeting the siting, design, monitoring, operation, closure/post-closure and financial assurance requirements of the state's federally approved solid waste management rules.
- The overall state recycling rate for municipal solid waste increased from 14 percent in 1995 to 25 percent in 1997. Post-consumer waste recycling increased from 3 percent to 10 percent.
- Solid Waste Program staff members made numerous presentations to schools, preschool reading groups, community groups and political subdivisions across the state. Teacher training workshops were held across North Dakota. The Waste Education Tri-State Conference was held in Wahpeton, N.D.
- The division developed a working relationship with the *Keep North Dakota Clean* program; a recycling poster campaign reached 18,000 children each year.
- In 1995, the Solid Waste Program helped conclude the district solid waste planning programs by assisting most districts with local solid waste symposiums.
- The solid waste grant program was concluded with the purchase of waste recycling equipment by numerous political subdivisions. Purchases included a number of waste oil tanks for communities interested in recycling this toxic material, thus keeping it out of the waste stream.

In 1996, North Dakota residents recycled 62,500 tons of:

- Paper and cardboard
- Aluminum and steel cans
- Glass and plastic containers

Recycling in the state continues to grow!



A total of 1,091 tons of obsolete vehicles and other bulky scrap metals were collected.

- The division helped facilitate the creation of a statewide North Dakota Solid Waste Management Association. The goal of this group is to provide educational information and training on solid waste and recycling issues.

The Solid Waste Program

- Conducted annual operator training programs for landfill operators;
- Initiated a continuing education program for landfill facility operators;
- Sponsored and planned the 1996 Solid Waste and Recycling Symposium conducted in Bismarck, N.D.;
- Conducted a number of inert waste, yard waste and recycling workshops to promote careful implementation of inert waste landfills and yard waste composting systems, as well as effective recycling programs for communities throughout the state;
- Continued the statewide Waste Education and Recycling Awards; and
- Produced and distributed a series of household hazardous waste brochures which focus on specific health, safety and environmental concerns about toxic materials in the waste stream.

Goals

- The Solid Waste Program will continue to permit, inspect and enforce solid waste rules to guard against flagrant offenders; however, education of the public and the waste industry will greatly diminish the number of environmental offenses committed.

- The program will continue its educational and technical assistance programs to make the public, businesses and city leaders aware of the requirements and principles of sound solid waste management practices. The emphasis will continue to be on treating solid waste services as a utility. For example, communities will be provided with information about volume-based services (pay for what you throw) and about true cost accounting (solid waste services should be self-financed).
- Educational materials about yard waste management (including grass recycling), backyard composting and community composting will be provided. Emphasis also will be placed on the need to reduce the toxicity of wastes going into landfills, as well as recycling opportunities for businesses.

Abandoned Motor Vehicle Program

The Abandoned Motor Vehicle Program provides for collection of abandoned motor vehicles and other scrap metals to reduce health and safety hazards, improve the appearance of the landscape and recycle useful metals.

Accomplishments

- Projects were completed in Bowman and Walsh Counties. A total of 1,091 tons of obsolete vehicles and other bulky scrap metals were collected. The program provided a grant to the city of Bismarck, N.D., to purchase tire shredding equipment for production of tire-derived fuel. By the end of the biennium, about 1,100 tons of tire-derived fuel were delivered to a coal-fired electrical generating plant north of Mandan, N.D.

Underground Storage Tank Program

The Underground Storage Tank (UST) Program defines the types of tanks which may be installed, establishes technical standards for underground storage tanks, maintains a tank notification program, establishes financial responsibility requirements for tank owners and provides for state inspection and enforcement.

UST regulations were developed to ensure attainment of the following goals: find leaks and spills, correct problems created by leaks and spills, prevent future leaks and spills, and make sure owners and operators of underground storage tanks can pay to correct problems created by leaking tanks.

Accomplishments

- The UST program regulates 1,005 active tank facilities which include 3,151 tanks. Compliance is monitored by a mail-in, self-certification process, as well as onsite visits. During the biennium, 160 tank closures were observed, 96 onsite compliance inspections were conducted, 83 leaking underground storage tank sites were investigated and 66 sites were cleaned up.
- The state, through a cooperative agreement with EPA, uses Leaking Underground Storage Tank (LUST) Trust Fund money to investigate suspected underground storage tank releases and to conduct corrective actions when a release has occurred, but the responsible party is recalcitrant, unable to pay or cannot be identified. During the biennium, the program managed 29 site investigations; 10 project sites have progressed to cleanups, and two LUST Trust cleanup sites have been completed.

- The UST Program has emphasized public outreach to inform tank owners about operating and replacement requirements. A pamphlet and a flyer about compliance deadline requirements were produced and distributed.

Goals

- About 50 percent of the underground storage tanks in North Dakota have been removed since rules were promulgated in 1989; it is anticipated that the remaining 50 percent will be removed or replaced during the first year of the 1997-1999 biennium. The program will encourage tank owners/operators to upgrade existing tanks to meet state and federal standards by December 1998.
- Considerable program effort will be directed toward assisting tank owners with contamination assessment/cleanup activities as they upgrade facilities in anticipation of the 1998 deadline. During the second half of the biennium, program emphasis will shift toward compliance monitoring and inspections.



During the 1995-1997 biennium, UST program staff members investigated 83 leaking UST sites, and 66 leaking UST sites were cleaned up.

Division of Environmental Engineering

Responsibilities of the Division of Environmental Engineering include air pollution control, radiation control and occupational safety and health onsite consultation. Staff members also provide technical assistance during emergency responses.

Air Pollution Control Program

The Air Pollution Control Program is responsible for protecting the state's air quality resources. Staff members promote clean air activities and initiate enforcement actions to correct air pollution problems.

Major activities include issuing conditional permits for the construction and operation of sources that emit air pollution, registering oil and gas wells, investigating air pollution complaints and operating a statewide ambient air quality monitoring network, as well as an asbestos certification and inspection program.

Accomplishments

- The Air Pollution Control Program's Small Business Assistance Program provided assistance to small businesses which operate sources in the following categories: dry cleaners, degreasers, chrome platers, halogenated solvent cleaners and wood furniture manufacturers.
- The program began processing Title V permit applications submitted by agricultural processing facilities and power plants.

- It initiated rule revisions and program development for several state and federal programs.
- The Air Pollution Control Program conducted system and/or performance audits on three of the five industries which report ambient air quality data to the department.
- The program updated the ambient air quality data acquisition system to collect five-minute data averages along with hourly averages.
- It audited and performed source tests at more than 120 sources.
- The Air Pollution Control Program responded to more than 100 air pollution complaints.
- The program completed all inspections required by state/EPA agreements.
- It initiated Notices of Violation (NOV) against five sources.

Goals

- The Air Pollution Control Program will:
- Process the remaining Title V permits for sugar beet processing plants, ethanol plants, power plants, oil refineries, coal gasification plants, landfills and manufacturing plants, and acid rain permits for power plants;
 - Implement Maximum Achievable Control Technology standards at applicable sources;
 - Assess the need for a regional haze reduction program; and



The department responds to more than 100 air pollution complaints a year.

- Implement an accidental release and spill prevention program.

Radiation Control Program

The Radiation Control Program monitors development and use of ionizing and nonionizing radiation sources to protect the health and safety of North Dakotans and the environment.

The program also licenses radioactive material users and registers X-ray facilities. Staff members track about 75 radioactive material licensees and more than 750 X-ray registrants. The Radiation Control Program also has a radon education outreach program.

Accomplishments

- The nonoccupational indoor air quality program was strengthened by the purchase of equipment and by conducting several training sessions for building owners about how to implement indoor air quality programs.
- All mammography facilities were inspected each year for compliance with the Mammography Quality Standards Act, and 25 new X-ray installations were inspected each year for compliance with federal standards. These inspections were carried out in accordance with FDA contracts.
- The Radiation Control Program initiated revisions to the state radiation control rules to make them compatible with the United States Nuclear Regulatory Commission.
- Radon partnerships were carried out with 12 local public health departments, the American Lung Association of North Dakota, and two

home builder and realtor organizations. The purpose was to extend radon education to the public and various trade groups.

Goals

The Radiation Control Program will:

- Direct efforts regarding radon in schools toward mitigation;
- Help schools improve indoor air quality by implementing the *Tools for Schools* program; and
- Promote radon-resistant new construction by educating contractors and working with local building inspectors.

Occupational Safety and Health Program

At the request of employers, the Occupational Safety and Health Program provides onsite safety and health consultation surveys which focus on physical and chemical hazards found in workplace environments.

The program has provided information and training to small businesses about topics given special emphasis by the federal Occupational Safety and Health Administration including silica, confined space entry, and safety and health program assessment. Staff members also provide interpretation of federal standards for workplace safety.

Accomplishments

- The Occupational Safety and Health Program:
- Performed about 150 health and worker safety surveys at the request of employers and



The Occupational Safety and Health Program performed about 150 health and worker safety surveys during the biennium and identified nearly 500 serious or life-threatening hazards.

About 485,000 North Dakotans benefit from adjusted fluoride levels in their drinking water.

- Devoted more than 700 employee hours to construction safety and health in the aftermath of the Grand Forks, N.D., flood.

Goals

- The Occupational Safety and Health Program will promote onsite consultations with employers targeted by new OSHA rules and policies.

Division of Municipal Facilities

The division consists of three programs which help municipalities and other political subdivisions maintain public health and safety, including the Public Water Supply Supervision (PWSS) Program, the Operator Training and Certification and Facility Inspections Program and the Clean Water State Revolving Fund (CWSRF) Program.

Public Water Supply Supervision Program

The PWSS Program works with the 600 or more public water systems in North Dakota to ensure that they provide safe drinking water which meets all standards established under the Safe Drinking Water Act (SDWA). This is accomplished by monitoring contaminants, providing operator training and certification, conducting sanitary surveys, reviewing plans and specifications and providing technical assistance. In addition, the program administers the state's fluoridation and Lead Contamination Control Act programs and provides technical assistance to private water systems.

Plans and specifications reviews ensure that all new or modified public water system facilities meet established state design criteria prior to

construction. About 150 projects are reviewed each year. These reviews help ensure that facilities can achieve desired public health objectives and can be operated and maintained properly.

Under the PWSS Program, fluoridation is monitored to ensure that optimum fluoride levels for dental benefits are provided. Presently, about 485,000 people in the state receive the benefits of fluoridated water.

The PWSS Program also operates the Drinking Water State Revolving Fund (DWSRF), a low-interest loan program designed to help public water systems finance the cost of the infrastructure needed to comply with the SDWA. Funding is expected through federal fiscal year 2003, and, to date, about \$20 million has been set aside for public water systems in North Dakota.

Operator Training and Certification and Facility Inspections Program

The Operator Training and Certification and Facility Inspections Program trains and certifies people in charge of the day-to-day operation of water treatment and distribution facilities, as well as wastewater collection and treatment plants. There are 750 certified operators in the state.

Staff members also conduct inspections. Four inspectors/trainers annually inspect about 750 public water and wastewater systems and inert landfills to ensure that facilities comply with state and federal public health standards. Program activities contribute to the proper operation and maintenance of these facilities.

Clean Water State Revolving Fund

The CWSRF Program provides low-interest loans to fund conventional wastewater and nonpoint source pollution control needs.

Funding for the CWSRF program is expected to continue at least through fiscal year 2003 and will provide about \$90 million to maintain the revolving loan fund. Eligible borrowers can obtain financing to build wastewater treatment works at below market interest rates. In addition, staff members review plans for new and modified wastewater systems. About 125 plans are reviewed each year.

Accomplishments

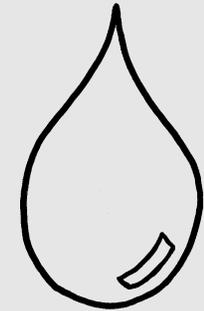
- The division complies with all major federal program requirements and maintains federal delegation responsibilities for EPA programs.

Goals

- The 1997-1999 biennium goal of the Division of Municipal Facilities is to maintain responsibility for the federally mandated programs.

CWSRF Projects Funded Between July 1, 1995, and June 30, 1997

| | | |
|-------------------------|----------------------|---------------------|
| Argusville | Wastewater Treatment | \$ 315,000 |
| Arthur | Wastewater Treatment | \$ 140,000 |
| Beach | Sewer Rehabilitation | \$ 226,241 |
| Bottineau | Sewer Rehabilitation | \$ 100,000 |
| Buffalo | Wastewater Treatment | \$ 70,000 |
| Cando | Wastewater Treatment | \$ 270,000 |
| Cando | Landfill | \$ 130,000 |
| Carrington | Wastewater Treatment | \$ 850,000 |
| Casselton | Wastewater Treatment | \$ 1,600,000 |
| Cooperstown | Sewer Rehabilitation | \$ 1,475,000 |
| Davenport | Wastewater Treatment | \$ 200,000 |
| Ellendale | Sewer Rehabilitation | \$ 240,000 |
| Harvey | Sewer Rehabilitation | \$ 490,000 |
| Hettinger | Wastewater Treatment | \$ 260,000 |
| Jamestown | Wastewater Treatment | \$16,300,000 |
| Kindred | Wastewater Treatment | \$ 135,000 |
| Manvel | Wastewater Treatment | \$ 515,000 |
| Mayville | Wastewater Treatment | \$ 145,000 |
| Medina | Wastewater Treatment | \$ 70,000 |
| Mott | Sewer Rehabilitation | \$ 240,000 |
| Napoleon | Wastewater Treatment | \$ 150,000 |
| Oriska | Interceptor Sewer | \$ 32,000 |
| Page | Wastewater Treatment | \$ 65,000 |
| Park River | Interceptor Sewer | \$ 75,000 |
| Park River (Consol. LF) | Landfill | \$ 500,000 |
| Portland | Sewer Rehabilitation | \$ 85,000 |
| Williston | Sewer Rehabilitation | \$ 520,000 |
| Total | | \$25,198,241 |



The Division of Municipal Facilities monitors about 600 public water systems to ensure safe drinking water for North Dakota citizens.

**State Health Council
June 30, 1997**

**The State Health
Council governs the
North Dakota
Department of Health
and serves as its
official policymaking
body.**

CHAIR

David H. Rasmussen, M.D.
Provider
Fargo

VICE CHAIR

Howard C. Anderson
Public
Turtle Lake

SECRETARY

Gary Riffe
Provider
Jamestown

Ronald A. Anderson

Public
Keene

Lowell Herfindahl

Provider
Tioga

Linda Nelson

Public
Casselton

Betty Rambur, DNSc

Provider
Bismarck

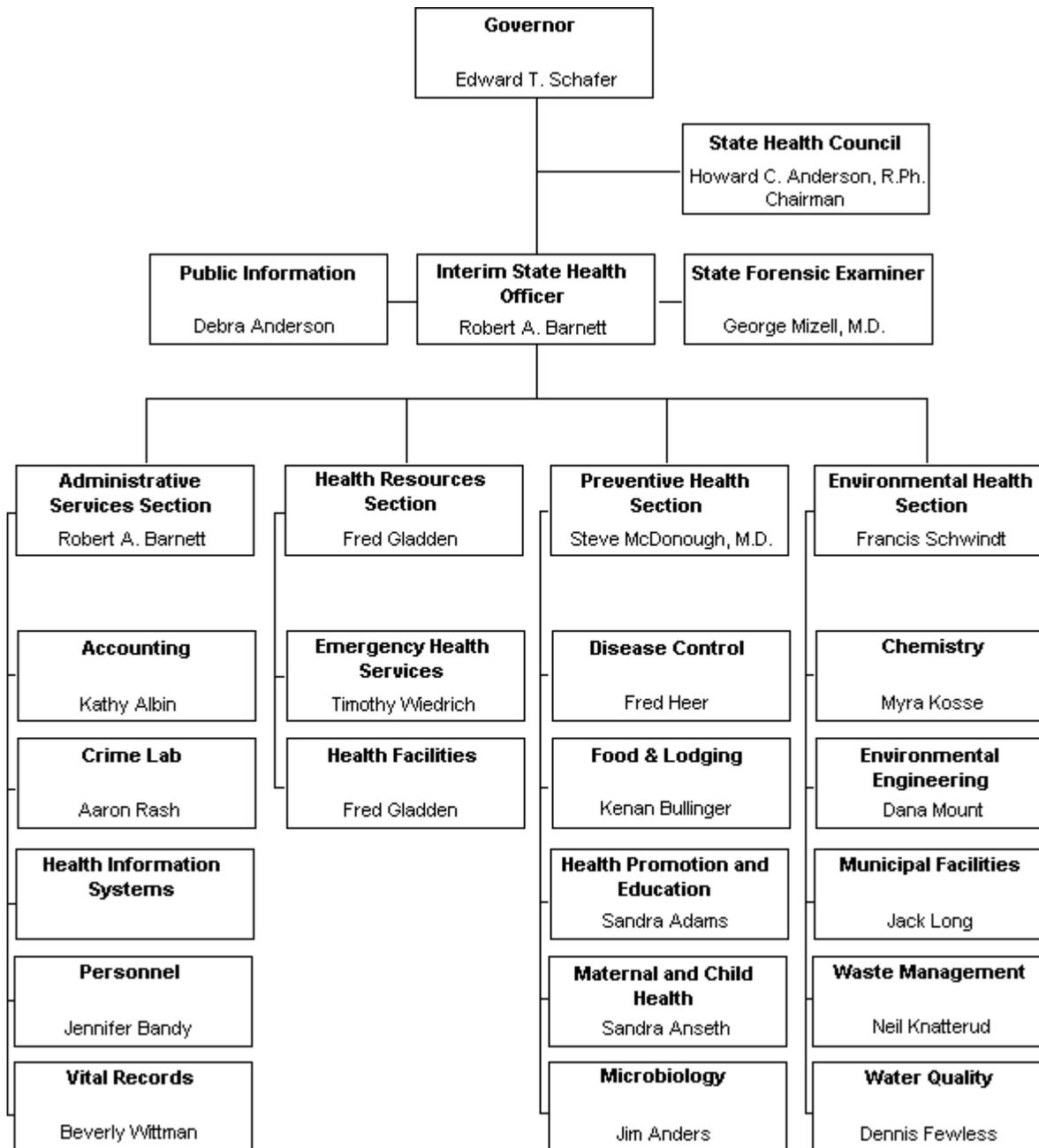
Darlene Rinn

Public
Minot

Carmen Toman

Public
Grand Forks

**North Dakota Department of Health
November, 1997**



The department's diverse programs require people with a wide variety of education and experience. Department employees include nurses, doctors, engineers, meteorologists, chemists, social workers, biologists, geologists, hydrologists, environmental scientists, nutritionists, secretaries, data input operators, accountants, medical technologists, epidemiologists, health educators and many more professionals.

**North Dakota Department of Health
Comparative Statement of Appropriations and Expenditures**

For the Period July 1, 1995 through June 30, 1997

| <u>Use of Funds</u> | <u>Original Appropriation</u> | <u>Risk Management Paid 95 Bien.</u> | <u>Emergency Commission Jun-96</u> | <u>Adjusted Appropriation</u> | <u>Expenditures</u> | <u>Unexpended Appropriation</u> |
|-------------------------|-----------------------------------|--|--|-----------------------------------|----------------------|-------------------------------------|
| Salaries & Wages | \$ 23,298,664 | \$ - | \$ - | \$ 23,298,664 | \$ 22,314,623 | \$ 984,041 |
| Operating Expenses | 31,384,002 | | (60,000) | 31,324,002 | 27,090,136 | 4,233,866 |
| Equipment | 847,000 | | 403,580 | 1,250,580 | 1,229,010 | 21,570 |
| Capital Improvements | 28,143 | | | 28,143 | 27,726 | 417 |
| Grants | 15,489,722 | | 2,071,048 | 17,560,770 | 14,577,876 | 2,982,894 |
| Abandoned Motor Vehicle | 175,000 | | | 175,000 | 169,086 | 5,914 |
| Comprehensive Trauma | 100,000 | | | 100,000 | 79,120 | 20,880 |
| Physician Loan Program | 100,000 | | | 100,000 | 72,999 | 27,001 |
| Risk Management Prem. | 171,558 | (171,558) | | | | |
| Total | <u>\$ 71,594,089</u> | <u>\$ (171,558)</u> | <u>\$ 2,414,628</u> | <u>\$ 73,837,159</u> | <u>\$ 65,560,576</u> | <u>\$ 8,276,583</u> |
| General Funds | \$ 15,115,612 | \$ (85,779) | | \$ 15,029,833 | \$ 14,366,078 | 663,755 |
| Federal Funds | 50,658,728 | | 2,414,628 | 53,073,356 | 46,258,590 | 6,814,766 |
| Special Funds | 5,819,749 | (85,779) | | 5,733,970 | 4,935,908 | 798,062 |
| Total | <u>\$ 71,594,089</u> | <u>\$ (171,558)</u> | <u>\$ 2,414,628</u> | <u>\$ 73,837,159</u> | <u>\$ 65,560,576</u> | <u>\$ 8,276,583</u> |

**North Dakota Department of Health
Expenditure Report by Section**

For the Period July 1, 1995 through June 30, 1997

| <u>Use of Funds</u> | <u>Administrative Services Section</u> | <u>Health Resources Section</u> | <u>Preventive Health Section</u> | <u>Environmental Health Section</u> | <u>Total Expenditures</u> |
|-------------------------|--|---|--|---|-------------------------------|
| Salaries & Wages | \$ 3,651,272 | \$ 3,212,654 | \$ 5,306,262 | \$ 10,144,435 | \$ 22,314,623 |
| Operating Expenses | 1,484,559 | 752,767 | 21,100,836 | 3,751,974 | 27,090,136 |
| Equipment | 296,212 | 51,338 | 207,460 | 674,000 | 1,229,010 |
| Capital Improvements | 23,540 | | | 4,186 | 27,726 |
| Grants | | 470,000 | 12,002,688 | 2,105,188 | 14,577,876 |
| Abandoned Motor Vehicle | | | | 169,086 | 169,086 |
| Comprehensive Trauma | | 79,120 | | | 79,120 |
| Physician Loan Program | 72,999 | | | | 72,999 |
| Total | <u>\$ 5,528,582</u> | <u>\$ 4,565,879</u> | <u>\$ 38,617,246</u> | <u>\$ 16,848,869</u> | <u>\$ 65,560,576</u> |
| Total FTE's | 47.0 | 46.0 | 77.5 | 135.5 | 306.0 |

For more information about the
North Dakota Department of Health,
call 701.328.2372.

This publication is available in
other formats.

An Equal Opportunity Employer