North Dakota Oral Health Surveillance Plan

2007 – 2013

NORTH DAKOTA
DEPARTMENT *of* HEALTH

North Dakota Oral Health Surveillance Plan 2007 – 2013

March 2008

John Hoeven, Governor
Dr. Terry Dwelle, State Health Officer

Kim Senn, Director, Division of Family Health
Kimberlie Yineman, Director, Oral Health Program
Cheryle Masset-Martz, Oral Health Program Manager
Kathy Moum, Oral Health Program Epidemiologist

Thank you to the following people for their guidance and expertise on the development of this report, the North Dakota Oral Health Surveillance Plan.

Kathy Moum, North Dakota Department of Health Epidemiologist
Henry Lebak, Consultant
Kathy Mangskau, Consultant
North Dakota Oral Health Data Advisory Committee

NORTH DAKOTA
DEPARTMENT *of* HEALTH

Questions regarding the content of this report can be directed to the North Dakota Department of Health, Oral Health Program at 701.328.2493 or 800.472.2286 – press 1 (toll-free in North Dakota).

This publication was supported with funding from the U.S. Centers for Disease Control and Prevention, Cooperative Agreement U58/CCU822794-05.

Table of Contents

North Dakota Oral Health Surveillance Plan 2007-2013

I. Historical Perspective

The North Dakota Oral Health Program (NDOHP) is administered by the North Dakota Department of Health (NDDoH), Division of Family Health. Program staff began building the North Dakota Oral Health Surveillance System (NDOHSS) in 1993, prior to the development of the National Oral Health Surveillance System (NOHSS). At that time, the Oral Health Program had no staff or program funding dedicated specifically to surveillance activities. Incremental steps were taken to gather and build oral health data for surveillance by identifying existing primary and secondary sources.

From the mid 1980s to the early 1990s, many of the national and state surveillance tools and surveys (e.g., Behavioral Risk Factor Surveillance System [BRFSS] and Youth Risk Behavior Survey [YRBS]) did not include oral health questions. Initially, there was resistance to adding oral health questions to national surveillance systems.

The North Dakota state dental director negotiated the inclusion of the optional oral health module in the BRFSS in 1995 and 1998 by justifying the need for the data and cost-effective methods of collecting it. In 1999, the oral health module became part of the U.S. Centers for Disease Control and Prevention (CDC) emerging core BRFSS survey. Starting in 2002, the oral health module has been included in the rotating core BRFSS survey in every even year.

Oral health questions were included in the YRBS in 1995 and have been a part of that survey every time it has been conducted in North Dakota since then due to continued involvement of the state dental director in the planning of the survey.

At the same time, the state dental director, together with key partners, identified gaps in data needs and methods of collecting the data. Initially, data was gathered for program planning purposes. As the NDOHSS matured, the data collection focus expanded to include policy development, surveillance and evaluation.

By 2000, the surveillance system included 27 indicators and nine key data sources. In 2004, the Basic Screening Survey (BSS) was implemented statewide in a sample

of third-grade students and at the local level in the state Health Tracks Program (EPSDT) and in Head Start Programs.

There are several reasons for enhancing the NDOHSS and aligning the indicators with the National Oral Health Surveillance System.

- First, one of the priorities of the North Dakota Oral Health Plan is to maintain and improve efforts of the Oral Health Program's surveillance system.

- Second, Healthy People 2010 (HP2010) Oral Health Objective 21-16 seeks to increase the number of states that have an oral and craniofacial health surveillance system. Since North Dakota already has a surveillance system, efforts will focus on enhancing the system.

- Third, the 2000 report, *Oral Health in America: A Report of the Surgeon General,* stated that having state-specific and local data augmenting national data is critical in identifying high-risk populations and in addressing oral health disparities.

- Finally, the *National Call to Action to Promote Oral Health*, a report released by the Office of the Surgeon General in 2003, proposed that implementation strategies to overcome barriers in oral health disparities should include building and supporting epidemiologic and surveillance databases at national, state and local levels to identify patterns of disease and populations at risk.

Definition of Surveillance

The NDOHP utilizes the CDC definition of public health surveillance. CDC defines public health surveillance as:

> The ongoing systematic collection, analysis, and interpretation of health data essential to the planning, implementation and evaluation of public health practice, closely integrated with the timely dissemination of these data to those who need to know.

II. Objective/Rationale of the NDOHSS

The NDOHSS has a clear purpose: to monitor oral health status and trends and use the information to guide program actions to improve the oral health of North Dakota's citizens. NDOHSS data will be used for program planning, implementation and evaluation; policy planning and advocacy; and improvement of program accountability.

North Dakota has successfully used oral health surveillance data in program planning and policy development. Successes in the state of North Dakota include:

- Integration of oral health components in local maternal and child health (MCH) grant applications.

- Development and implementation of a one-time school-linked sealant program that used private sector providers to place the dental sealants in third graders residing in geographic areas with high rates of tooth decay. A new sealant program currently is being investigated.

- Establishment of a dental loan repayment program to increase the dental workforce.

- Development of oral health assessment questions and education of pregnant women and mothers in the Women Infants and Children (WIC), Home Visiting and Optimal Pregnancy Outcome programs.

- Expansion of the scope of practice to allow medical professionals to apply fluoride varnish to at-risk children.

The NDOHSS has identified four focus areas for the development and implementation of activities needed to enhance program efforts to fully utilize data collected and to develop a comprehensive oral health surveillance system:

- **Leadership** – Leadership is a process by which a person influences others to accomplish objectives and directs the activities in a way that makes the process cohesive and effective. Strong leadership within the NDOHP is necessary to provide direction for effective utilization of the NDOHSS to achieve program goals.

- **Analytic Capacity** – Trained and experienced staff who are skilled in data analysis, interpretation and presentation are important to the success of the NDOHSS.

- **Infrastructure** – Infrastructure refers to the set of interconnected structural elements that provide the framework supporting an entire structure. Structural elements essential to the success of the NDOHSS include establishment of clear roles and responsibilities, a comprehensive plan for achieving the objectives, and sustained funding.

- **Partnerships** – Partners are essential to the success of the NDOHSS. The Oral Health Data Advisory Committee is the key vehicle for involving partners in the enhancement of the NDOHSS and the utilization of the data collected.

Target Populations

The NDOHP promotes education and access to oral health services for all North Dakota residents throughout the life span. In addition, disparate populations in North Dakota have been identified as being especially vulnerable and underserved. Disparate populations targeted include:

- Racial and ethnic groups.
- Pregnant women.
- People with disabilities.
- People of lower socioeconomic status.

III. Structure of the NDOHSS

The NDOHSS is based on four pillars:

- Data collection (the data that will be collected)
- Data analysis (how data will be interpreted)
- Data dissemination (how data will be used and shared)
- Data evaluation (how useable is the data)

Goal

Based upon the definition of public health surveillance utilized by the NDOHSS, as well as the philosophy of the NDOHP, the goal of the NDOHSS is to monitor the burden of oral disease in North Dakota, to monitor progress on the HP 2010 Oral Health Objectives and to track trends. The information will be used to guide program decision making, evaluate program outcomes and evaluate progress in oral disease prevention.

Major Objectives

Successful achievement of the NDOHSS goal will be evaluated via three major objectives:

1) Monitor North Dakota-specific, population-based oral disease burden and trends
2) Measure changes in oral health capacity
3) Monitor and report community water fluoridation quality

Activities

In order to meet the objectives, the NDOHSS will be utilized to undertake the following activities:

- Serve as a central repository for oral health data
- Ensure the quality of the data
- Complete both primary and secondary data collection
- Identify gaps in the data
- Analyze/interpret the data including trends

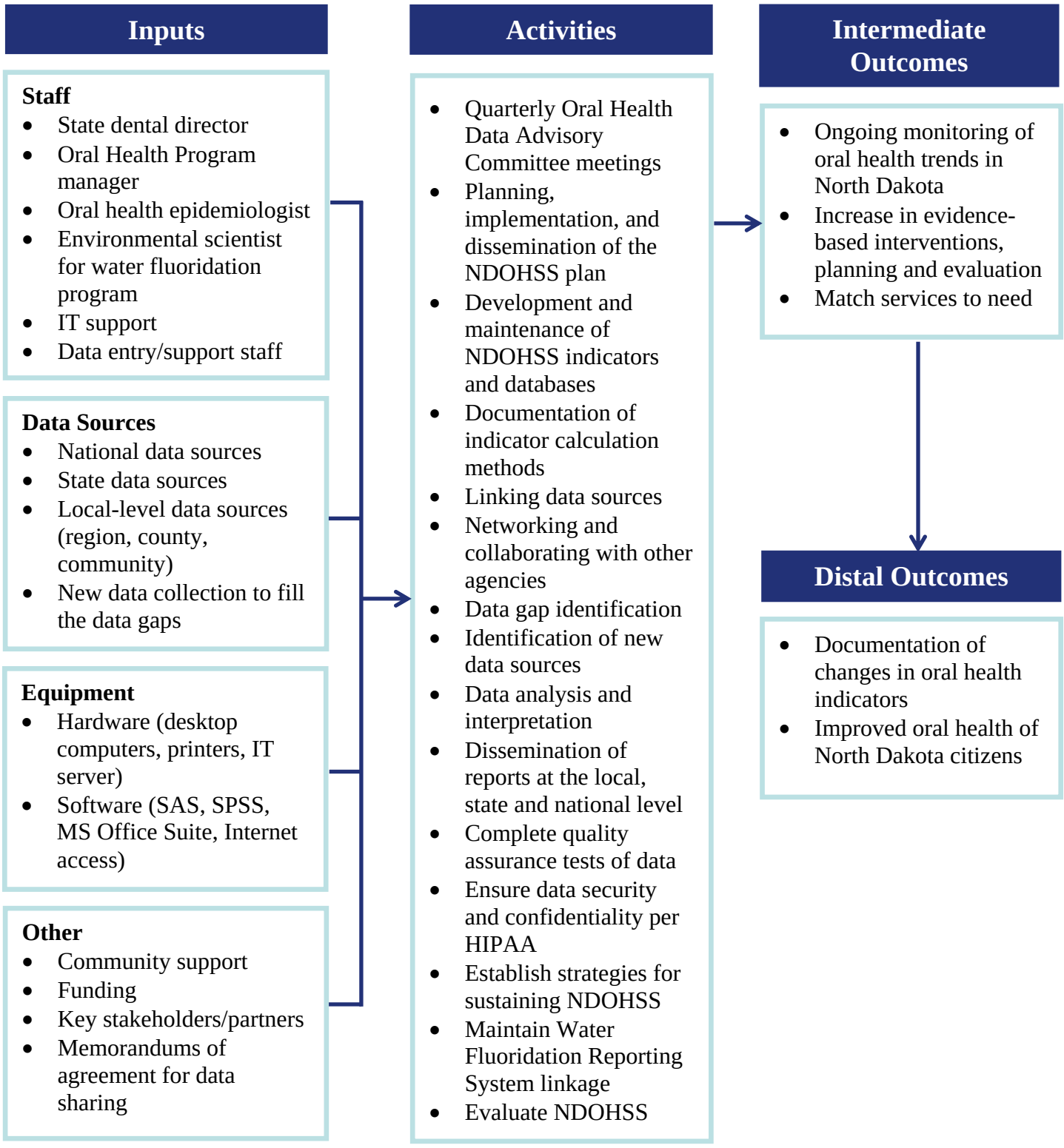
- Complete and regularly update surveillance reports, fact sheets and the burden document
- Share the reports, fact sheets and burden document
- Report data to national surveillance systems

Surveillance Logic Model

Monitoring the status of oral disease in North Dakota's population is essential for setting achievable objectives, as well as for planning, implementing and evaluating the NDOHSS. It also is important for illustrating the burden of oral disease and for gaining support and securing resources for the NDOHP.

The logic model on the following page illustrates surveillance inputs, activities, intermediate outcomes and distal outcomes.

NDOHSS Logic Model



Selection of Indicators/Measures

A state-based oral health surveillance system contains a core set of measures that describe the status of important oral health conditions and behaviors. These measures serve as benchmarks for assessing progress in achieving good oral health.

To develop a manageable oral health surveillance system, it is critical to assess the currently available assets, such as data sources that already include an oral health component, as well as other state resources and capacities that can be used to augment those of the oral health program.

Although North Dakota first began the development of its oral health surveillance system prior to the creation of the National Oral Health Surveillance System (NOHSS), NDOHSS has modeled its recent activities after the NOHSS.

The NOHSS is a collaborative effort between CDC's Division of Oral Health and the Association of State and Territorial Dental Directors (ASTDD). NOHSS is designed to monitor the burden of oral disease, the use of the oral health-care delivery system, and the status of community water fluoridation on both a national and a state level.

The Council of State and Territorial Epidemiologists (CSTE) and the National Association of Chronic Disease Directors (NACDD) were instrumental in developing a framework for chronic disease surveillance indicators and the nine oral health indicators listed below.

- **Dental Visit.** Percentage of adults 18 and older who have visited a dentist or dental clinic in the past year.
- **Teeth Cleaning.** Percentage of adults 18 and older who have had their teeth cleaned in the past year (among adults with natural teeth who have ever visited a dentist or dental clinic).
- **Complete Tooth Loss.** Percentage of adults 65 and older who have lost all of their natural teeth due to tooth decay or gum disease.
- **Lost Six or More Teeth.** Percentage of adults 65 and older who have lost six or more teeth due to tooth decay or gum disease.
- **Fluoridation Status.** Percentage of people served by public water systems who receive fluoridated water.

- **Dental Sealants.** Percentage of third-grade students with dental sealants on at least one permanent molar tooth.
- **Caries Experience.** Percentage of third-grade students with caries experience, including treated and untreated tooth decay.
- **Untreated Tooth Decay.** Percentage of third-grade students with untreated tooth decay.
- **Cancer of the Oral Cavity and Pharynx.** Incidence and mortality rate. Oral and pharyngeal cancer comprises a diverse group of malignant tumors that affect the oral cavity and pharynx (mouth and throat).

This list of nine oral health indicators served as a foundation for the enhancement of the NDOHSS oral health indicators. The NDOHSS has expanded the nine indicators to 44 indicators. The following list presents the indicators by age group and source of the data.

North Dakota Oral Health Surveillance System
List of Oral Health Indicators – by Age Group and Data Source

Children and Youth
Head Start Program Information Report (PIR)
Percentage of Head Start children who had a dental examination in the past year
Percentage of Head Start children examined who need dental treatment
Percentage of Head Start children examined and needing dental treatment who received treatment
Percentage of Head Start children examined who received preventive care
Basic Screening Survey (BSS)
***** Percentage of third-grade students with dental sealants on at least one permanent molar
***** Percentage of third-grade students with caries experience (treated or untreated)
***** Percentage of third-grade students with untreated tooth decay
Percentage of third-grade students in need of urgent care
Percentage of third-grade students who have had a previous dental visit
Medicaid Claims
Percentage of Medicaid-enrolled children who had a dental visit during the year
Vital Records
Number of babies born with cleft lip/cleft palate
Rate of babies born with cleft lip/cleft palate per 1,000 live births

***** National Oral Health Surveillance System Indicators

Youth Risk Behavior Survey (YRBS)
Grades 9-12
Percentage of youth reporting a dental visit in the last year
Percentage of youth reporting no cavities
Percentage of youth reporting one or more cavities
Percentage of youth reporting use of chewing tobacco, snuff or dip in the past 30 days
Grades 7-8
Percentage of youth reporting a dental visit in the last year
Percentage of youth reporting use of chewing tobacco, snuff or dip in the past 30 days
Youth Tobacco Survey (YTS)
Grades 9-12
Percentage of youth who have ever used chewing tobacco, snuff or dip
Percentage of youth who have used chewing tobacco, snuff or dip in the past 30 days
Grades 7-8
Percentage of youth who have ever used chewing tobacco, snuff or dip
Percentage of youth who have used chewing tobacco, snuff or dip in the past 30 days

Adults and Elderly
Medicaid Claims
Percentage of Medicaid-enrolled adults who had a dental visit during the year
Behavioral Risk Factor Surveillance System (BRFSS)
* Percentage of adults 18 and older who have visited a dentist or dental clinic in the past year
* Percentage of adults 18 and older who have had their teeth cleaned in the past year (among adults with natural teeth who have ever visited a dentist or dental clinic)
* Percentage of adults 65 and older who have lost all of their natural teeth due to tooth decay or gum disease
* Percentage of adults 65 and older who have lost six or more teeth due to tooth decay or gum disease
Percentage of dentate adults 18 and older with diabetes who have visited a dentist or dental clinic in the past year
Percentage of adults 18 and older who currently use spit tobacco
New Mother's Survey/ Pregnancy Risk Assessment Monitoring system (PRAMS)
Percentage of women who had a dental visit during their pregnancy
Percentage of pregnant women who received information from a health-care provider on the importance of dental care during and after pregnancy
Percentage of pregnant women (new mothers) who had their teeth cleaned within the last year

* National Oral Health Surveillance System Indicators

All Ages – State Level
Cancer Registry
* Age-adjusted incidence rate per 100,000 population of new cases of oral and pharyngeal cancer
Vital Records
Number of oral and pharyngeal cancer deaths
* Age-adjusted mortality rate per 100,000 population caused by oral and pharyngeal cancers
Licensure Workforce Survey
Number of full-time-equivalent (FTE) licensed practicing dentists
Rate of practicing dentists per 100,000 population
Number of FTE licensed dental hygienists
Number of FTE certified dental assistants
Dental Workforce Survey
Percentage of practicing dentists who work part-time
Percentage of practicing dentists who plan to retire in one to five years
Percentage of practicing dentists who accept any and all Medicaid patients
Water Fluoridation Reporting System (WFRS)
* Percentage of people served by public water systems who receive fluoridated water
Percentage of public water systems that maintain optimal fluoride levels

* National Oral Health Surveillance System Indicators

Data Collection

The NDOHSS utilizes data from multiple sources. Some of these sources are maintained within the North Dakota Department of Health (NDDoH) and others reside in other agencies. The following table provides information about the data sources, the agency in which they are housed, and the data collection time frame.

Data Source	Agency/Division	Time Frame
Head Start Program Information Report (PIR)	North Dakota Department of Human Services (NDDHS)/Children and Family Services	Annual
Basic Screening Survey (BSS)	NDDoH/Family Health	Every 3-5 years
North Dakota Department of Human Services' (DHS) Medicaid Program	NDDHS/Medical Services	Annual
North Dakota Vital Records	NDDoH/Vital Records Division	Annual
Youth Risk Behavior Surveillance System (YRBS)	Department of Public Instruction	Every 2 years
Youth Tobacco Survey (YTS)	NDDoH/Tobacco	Every 2 years
Behavioral Risk Factor Surveillance System (BRFSS)	NDDoH/Community Health Section	Annual (oral health rotating core every 2 years)
New Mother's Survey	NDDoH/Family Health	1996 & 1999
Pregnancy Risk Assessment Monitoring system (PRAMS)	NDDoH/Family Health	2002
North Dakota Cancer Registry	NDDoH/Cancer Prevention and Control	Annual
Licensure Workforce Survey	NDDoH/Family Health	Every 2 years
Dental Workforce Survey	NDDoH/Family Health	Every 2 years
North Dakota Water Fluoridation Reporting System (WFRS)	NDDoH/Division of Municipal Facilities	Annual
North Dakota State Data Center and the U. S. Bureau of the Census	Available to all agencies	Annual

IV. Sustainability of NDOHSS

A mature surveillance system shows several years of data and analyzes trends. In order to sustain the NDOHSS, data collection must be consistent and maintained in the NDDoH offices.

In addition, partnerships with other agencies and divisions are essential to sustaining the access to data, proper interpretation of data and development of new data collection tools.

The Licensure Workforce Survey is designed and analyzed by the Oral Health Program. However, the State Board of Dental Examiners helps with the mailing by including the surveys with the license renewal. The Dental Workforce Survey is conducted by the University of North Dakota Center for Rural Health in partnership with the NDDoH Oral Health Program. Without working partnerships like this, the NDOHSS could not be sustained.

Sustainability also relies on consistency in the collection of data. Several data points measuring the same indicators are necessary to produce trends. These trends are used to identify areas where problems may be growing and where attention is needed to address the problem. In addition, trends are critical in demonstrating progress that the program and partners are making in improving the status of oral health in North Dakota.

Following is a time schedule for data collection through the year 2013. Data collection from 1992 through 2002 represents historical data collection that will be used to set baselines and to begin analyzing trends. Data collection from 2003 through 2007 represents the current NDOHP grant period. Future data collection plans for 2008 through 2013 represent the next grant cycle.

NDOHSS Data Collection Timetable

	Historical										
Data Source	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**
Head Start PIR											
Basic Screening Survey (BSS)											
Medicaid										x	x
Vital Records	x	x	x	x	x	x	x	x	x	x	x
YRBS				x		x		x		x	
YTS											
BRFSS				x			x	x			x
New Mothers' Survey/PRAMS *					x (NMS)			x (NMS)			x (P)
State Cancer Registry						x	x	x	x	x	x
Licensure Workforce Survey							x		x		x
Dental Workforce Survey											
Fluoridation Data (WFRS)									x	x	x
N.D. State Data Center & U.S. Bureau of the Census	x	x	x	x	x	x	x	x	x	x	x

	Current Grant Project Cycle July 2003 – June 2008					Future Grant Project Cycle July 2008 – June 2013					
Data Source	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Head Start PIR	x	x	x	x	x	x	x	x	x	x	x
Basic Screening Survey (BSS)			x				x				x
Medicaid	x	x	x	x	x	x	x	x	x	x	x
Vital Records	x	x	x	x	x	x	x	x	x	x	x
YRBS	x		x		x		x		x		x
YTS	x		x		x		x		x		x
BRFSS		x		x		x		x		x	
New Mothers' Survey/PRAMS *											
State Cancer Registry	x	x	x	x	x	x	x	x	x	x	x
Licensure Workforce Survey		x	x		x		x		x		x
Dental Workforce Survey			x		x		x		x		x
Fluoridation Data (WFRS)	x	x	x	x	x	x	x	x	x	x	x
N.D. State Data Center & U.S. Bureau of the Census	x	x	x	x	x	x	x	x	x	x	x

*PRAMS is not funded at the NDDoH as of 2007. Funding opportunities may be available in the future.

NDOHSS Data Collaboration/Integration Efforts

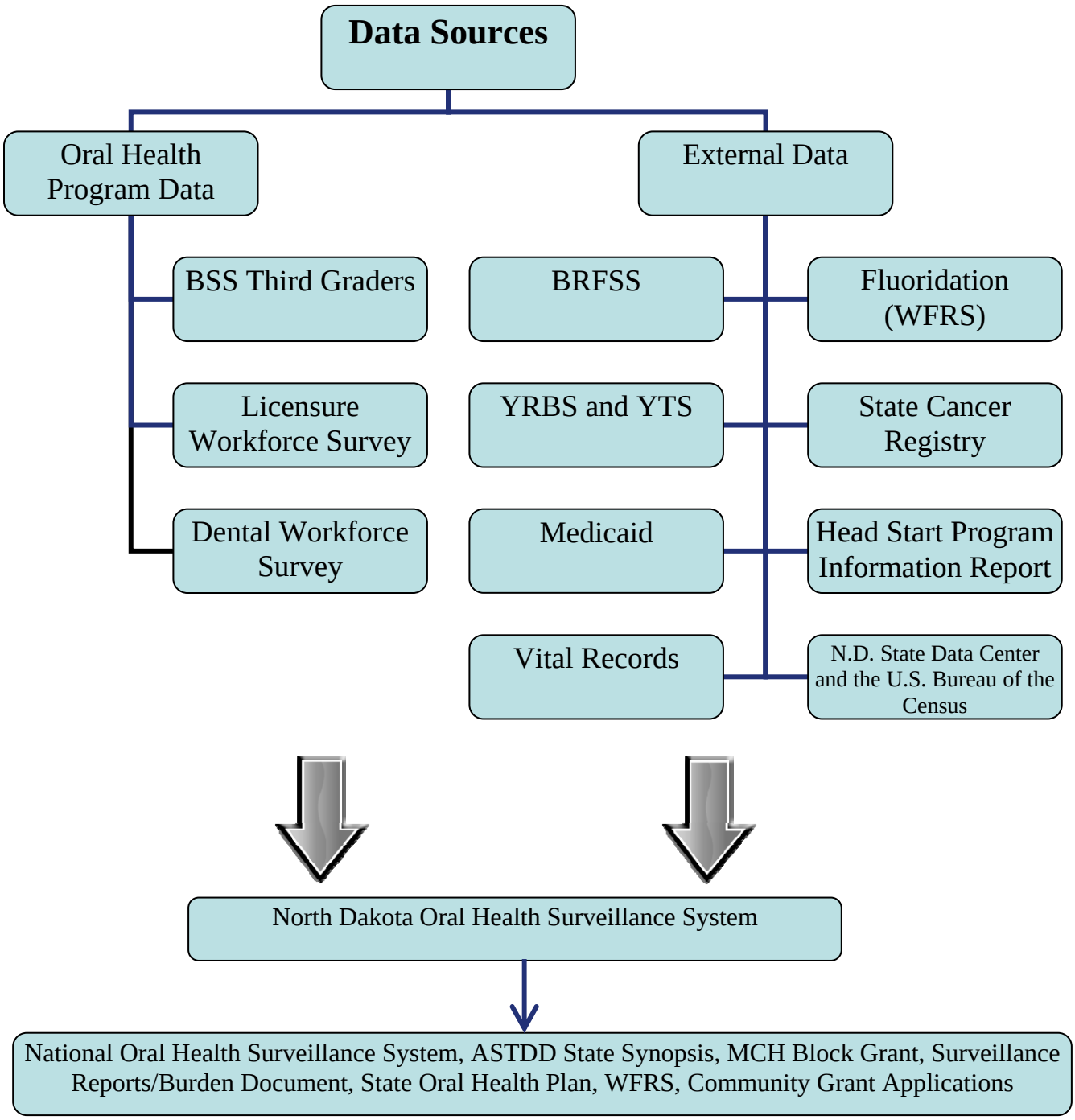
The NDOHP seeks, collaborates and coordinates opportunities to collect oral health data through the integration of existing surveys already conducted by state agencies and other organizations (BRFSS, YRBS, Head Start, Workforce, Medicaid, etc.).

Many partnerships have been established to leverage resources in data collection for the NDOHSS, including with the:

- Coordinated School Health Interagency Workgroup (YRBS data)
- North Dakota Department of Health, BRFSS coordinator
- North Dakota Department of Public Instruction, YRBS coordinator
- North Dakota Department of Human Services (Medicaid and SCHIP data)
- North Dakota Department of Health, Division of Vital Records (cleft lip/cleft palate data, oral cancer mortality)
- Head Start Programs (PIR data)
- Schools (BSS data)
- North Dakota Dental Association (state survey data)
- North Dakota Department of Health, Division of Family Health (New Mothers'/PRAMS data)
- North Dakota State Board of Dental Examiners (licensure workforce data)
- University of North Dakota Center for Rural Health (Dental Workforce Survey)
- North Dakota Department of Health, Division of Municipal Facilities (community fluoridation data)
- North Dakota Department of Health, Cancer Registry (oral cancer incidence)
- North Dakota Department of Health, Division of Tobacco Prevention and Control (YTS and adult tobacco use and cessation data)
- North Dakota Department of Health, Data Advisory Group
- North Dakota State Data Center (demographic data)

The NDOHSS Data Flow Chart that follows further elaborates the amount of collaboration undertaken by the NDOHP.

NDOHSS Data Flow Chart
2007 – 2008



Oral Health Data Advisory Committee

The NDOHP convened an Oral Health Data Advisory Committee (OHDAC) in 2007 to strengthen the Oral Health Program's surveillance system. The committee is comprised of state agency representatives, tribal representatives, public and private dental practitioners, and epidemiologists. (See Appendix A)

The committee has been assigned six activities by the Oral Health Program:

- Review data reports and make recommendations for any data gaps
- Provide data to assist in maintaining the data surveillance grid
- Continue reviewing existing indicators
- Periodically review where, when and how oral health data is collected
- Periodically review data grid and interpret trends
- Make recommendations for data communication activities

Reports generated by the OHDAC are distributed to interested parties including the NDOHP and the North Dakota Oral Health Coalition. Data and findings from the NDOHSS are then used to integrate oral health into other health programs.

Formed in 2005, the North Dakota Oral Health Coalition is a chartered, collaborative, statewide coalition comprised of a variety of disciplines and stakeholders focused on the oral health of all North Dakotans. The work of the coalition is focused around its mission to develop and promote innovative strategies to achieve optimal oral health for all the state's citizenry.

The OHDAC functions as an arm of the North Dakota Oral Health Coalition and supports the work of the coalition by providing input on data sources and the measurement of coalition objectives and by providing data as needed.

NDOHSS Resource Utilization/Efficiency

As can be seen from the previous time schedule, data collection is managed on a periodic but regular schedule. NDOHP staff frequently meet with managers of data collection instruments such as the BRFSS, YRBS and BSS to advocate for the inclusion of pertinent oral health questions.

Strategies to collect data for surveillance include paying for primary data collection, integrating oral health into existing surveillance tools and surveys, and enlisting the support of stakeholders to collect the data.

The NDOHP administers the NDOHSS. The Oral Health Program epidemiologist is responsible for gathering, analyzing and reporting the findings under the direction of the state dental director. A network of regional oral health consultants assists in gathering the data for the BSS.

Several of the oral health indicators for the NDOHSS require screening children via the BSS to directly observe untreated tooth decay, filled teeth, missing teeth, and the presence of sealants in their mouths. Resources needed to implement such screening surveys (such as funding to train screeners, purchase equipment and supplies, and direct data entry) are shared between the state and local health agencies.

The NDOHSS accesses and uses secondary oral health data, including national and state data sources such as BRFSS, YRBS, YTS, WFRS, Medicaid, North Dakota Cancer Registry, Vital Records, New Mothers' Survey/PRAMS, Workforce Surveys, and Head Start Surveys. In addition, data is accessed from the North Dakota State Data Center (demographics), the State Board of Dental Examiners and the State Dental Association.

Cost-effective strategies are used in the collection, analyses and communication of surveillance data. The cost of the workforce surveys (collected every other year) average $2,000. Statewide Basic Screening Surveys average $20,000 each year the screenings are conducted. BRFSS, YRBS, YTS, Medicaid, Vital Records, Cancer Registry, New Mothers' Survey/PRAMS, fluoridation data and demographic data reporting costs are absorbed by the partnering programs and agencies.

Costs for the surveillance system range from $0 to $22,000 per year, depending on the rotation pattern of the surveys. In order for a small state with limited resources like North Dakota to accommodate these surveys, the surveys are conducted on a

periodic rotating basis. The rotation pattern and related costs for 2007-2008 are shown below.

- Annually: Medicaid, Vital Records, Cancer Registry, Head Start PIR and Fluoridation data – no cost to Oral Health Program

- Every Other Year: BRFSS (2008), YRBS (2007) and YTS (2007) – no cost to Oral Health Program

- Point-in-Time: New Mothers' Survey/PRAMS – costs paid by NDDoH Division of Family Health; however, this survey was not conducted in 2007 and will not be conducted in 2008

- 2007: Dental Workforce Survey $ 2,000

- 2008: No additional data collection $ 0

V. Dissemination of NDOHSS Information

The NDOHP disseminates timely oral health data so that responsible parties, policymakers, the professional community, and the public can readily understand the implications of the information. The audiences for these data include public health practitioners, health-care providers, members of affected communities and populations, professional and voluntary organizations, policymakers, potential funding partners, the media, and the public.

Options for disseminating NDOHSS data and/or information include electronic data interchange; public-use data files; the Internet; press releases; newsletters; bulletins; annual and other types of reports such as fact sheets; publication of articles in scientific, peer-reviewed journals; and poster and oral presentations at state and national conferences as well as community and professional meetings. The NDOHP contributes data at the national level to the NOHSS and the ASTDD Synopses. The oral health data communication plan can be found in Appendix D.

A Microsoft Access database will be maintained to track all requests for information from the NDOHP, including who received what type of NDOHSS information, when they received it, and the purpose for requesting the information. Memorandums of agreement (MOA) may be needed in the sharing of databases.

Evolution of the NDOHSS will allow further refinement of the indicators and continued improvement in the ability to communicate data, including trend analysis and predictions. Future plans include expansion of indicators to include surveillance data for regions and counties and for subpopulations based on pertinent demographics such as age and race, the development of a data dissemination plan, posting surveillance reports to the program website, and the development of a surveillance evaluation plan.

Confidentiality of NDOHSS Data

Management of all health-related data, primary and secondary, meets HIPAA standards for patient privacy, data confidentiality and data integration. Neither the Division of Vital Records nor the State Cancer Registry will report on aggregated number of events if the total is fewer than five. Protected health information (PHI) is maintained in a secure locked location. Access to PHI is limited to the surveillance staff for analysis purposes only. Program staff will view PHI only when necessary. No PHI is released to partners or the public.

Glossary of Terms

Association of State and Territorial Dental Directors (ASTDD) – The ASTDD membership consists of the chief dental public health officers (state dental directors) of the state health departments or equivalent agencies and the U. S. territories.

ASTDD Synopses – In 1994, the Association of State and Territorial Dental Directors (ASTDD) originated the annual *Synopses of Dental Programs* as a way to share information among dental directors and partners. The *Synopses* describe program activities and successes and the challenges that programs faced during the previous year. States and territories respond to an annual questionnaire to provide data for the *Synopses*.

Basic Screening Survey (BSS) – A standardized set of surveys designed to collect information about the observed oral health of participants; self-reported or observed information on age, gender, race and Hispanic ethnicity; and self-reported information on access to care for preschool, school-age and adult populations. In the observed oral health survey, gross dental or oral lesions are recorded by dentists, dental hygienists, or other appropriate health-care workers in accordance with state law. The examiner records presence of untreated cavities and urgency of need for treatment for all age groups. In addition, for preschool and school-age children, caries experience (treated and untreated decay) also is recorded. School-age children also are examined for presence of sealants on permanent molars.

Behavioral Risk Factor Surveillance System (BRFSS) – A state-based, ongoing data collection program designed to measure behavioral risk factors in the adult, non-institutionalized population 18 or older. States select a random sample of adults for a telephone interview. This selection process results in a representative sample for each state so that statistical inferences can be made from the information collected.

Caries – Tooth decay or "cavities."

Dental Workforce Survey – The University of North Dakota's Center for Rural Health maintains dentistry profiles. Profiles are mailed to dentists annually, and dentists are asked to return the survey with updated profile information.

Early Periodic Screening, Diagnosis, and Treatment (EPSDT) Program – The child-health component of Medicaid required in every state and designed to improve the health of low-income children by financing appropriate and necessary pediatric services.

Edentulous – Having no teeth

Fluoride – A mineral that helps strengthen tooth enamel making teeth less susceptible to decay. Fluoride is ingested through food or water, is available in most toothpaste, or can be applied as a gel or liquid to the surface of teeth by a health professional.

Head Start Program Information Report (PIR) – An annual data report sent to the federal level (U.S. Department of Health and Human Services) from all local Head Start programs. This report contains a health component. Programs submit data in July and states receive data back in December.

Health Insurance Portability and Accountability Act (HIPAA) – A federal law passed in 1996 to promote standardization and efficiency in the health-care industry and to enforce privacy and security of protected health information.

Healthy People 2010 – Healthy People 2010 provides a framework for prevention for the nation. It is a statement of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats.

Hygienist – A licensed, auxiliary dental professional who is both an oral health educator and clinician who uses preventive, therapeutic and educational methods to control oral disease.

Licensure Workforce Survey – Surveys are mailed to dentists, dental hygienists and dental assistants at time of license renewal. The NDOHP works with the State Board of Dental Examiners to collect these surveys.

Maternal and Child Health (MCH) – A term that encompasses the broad range of health issues affecting women during pregnancy and infants and children.

Medicaid Program – Medicaid is a state-administered program intended to provide health care and health-related services to low-income or disabled individuals.

New Mothers' Survey – A survey of new mothers whose infants were about 3 months old at the time of the survey. The mothers were questioned about pre-pregnancy behaviors, access to prenatal care, educational content of prenatal visits, pregnancy and stress, infant health care, and infant care.

North Dakota Cancer Registry – A registry of all reportable cancers occurring in North Dakota. All medical diagnostic laboratories, physicians, and other health-care providers who administer screening, diagnostic or therapeutic services are required to report. Hospitals and other health-care facilities that provide inpatient and/or outpatient services and mobile units that provide screening, diagnostic or therapeutic services also are required to report.

North Dakota Division of Vital Records – A division within the North Dakota Department of Health that provides registration and certification of the vital events that occur in North Dakota. These events include births, deaths and fetal deaths. The division also provides statistical information on a wide range of categories relating to these events.

North Dakota State Data Center (NDSDC) – The NDSDC was established in 1981 by executive order of the governor to serve as North Dakota's official source of population and socio-economic statistics. The NDSDC also serves as the state's liaison to the U.S. Census Bureau and as the representative to the Federal State Cooperative Programs for Population Estimates and Projections.

Pregnancy Risk Assessment Monitoring System (PRAMS) – A surveillance project of the U.S. Centers for Disease Control and Prevention (CDC) and state health departments. PRAMS collects state-specific, population-based data about maternal attitudes and experiences before, during and shortly after pregnancy.

Protected Health Information (PHI) – Protected health information (PHI) under HIPAA includes any individually identifiable health information. Identifiable refers not only to data that is explicitly linked to a particular individual, but also to health information with data items that reasonably could be expected to allow individual identification.

Sealants – A thin resin that is applied to the biting surfaces of teeth to prevent decay.

U. S. Bureau of the Census – A federal agency under the U.S. Department of Commerce that is the leading source of quality data about the nation's people and economy. This agency conducts the decennial census of the United States.

Water Fluoridation Reporting System (WFRS) - WFRS provides state oral health program staff a tool for monitoring the quality of the water fluoridation program in their state. Data provided by water systems is used by state oral health program staff to recognize excellent work in water fluoridation and to identify opportunities for continuous improvement in the water fluoridation program.

Youth Risk Behavior Surveillance System (YRBS) – The Youth Risk Behavior Survey was developed in 1990 by the U.S. Centers for Disease Control and Prevention (CDC) to monitor priority health risk behaviors that contribute markedly to the leading causes of death, disability and social problems among youth and adults in the United States. North Dakota began participating in the YRBS survey in 1995. Students in grades seven and eight and nine through 12 are surveyed in the spring of odd-numbered years.

Youth Tobacco Survey (YTS) – The Youth Tobacco Survey is conducted in North Dakota in conjunction with the YRBS. Students in grades seven and eight and nine through 12 are surveyed in the spring of odd-numbered years. Questions on this survey are specific to the use of tobacco products, thoughts about tobacco, tobacco use portrayed through the media and exposure to tobacco smoke.

Appendix A – Oral Health Data Advisory Committee

Kimberlie Yineman, State Dental Director Division of Family Health North Dakota Department of Health	Cheryle Masset-Martz, Oral Health Program Manager Division of Family Health North Dakota Department of Health
Kathy Moum, Epidemiologist Division of Chronic Disease North Dakota Department of Health	Melissa Parsons, Senior Epidemiologist, BRFSS Coordinator Community Health Section North Dakota Department of Health
Katie Luther, Environmental Scientist Division of Municipal Facilities North Dakota Department of Health	Gary Garland, Director Office of Community Assistance North Dakota Department of Health
Marlys Knell, Director ND Cancer Registry Division of Cancer Prevention and Control North Dakota Department of Health	Andrea Pena, YRBS Manager Coordinated School Health North Dakota Department of Public Instruction
Jodi Hulm Medical Services Division North Dakota Department of Human Services	Maggie Anderson, Director Medical Services Division North Dakota Department of Human Services
Linda Rorman, Head Start State Collaboration Administrator Children and Family Services North Dakota Department of Human Services	Dr. John Baird, Field Medical Officer and Chief of Special Populations Section North Dakota Department of Health
Dr. Lana Schlecht, President-Elect North Dakota Dental Association	Joe Cichy, Executive Director North Dakota Dental Association
Marty Jones, Director Dental Support Center Aberdeen Area Tribal Chairmen's Health Board	Pat Conway Evaluation Consultant Center for Rural Health UND School of Medicine and Health Sciences
Henry Lebak Evaluation Consultant Lebak Consultants	Kathy Mangskau Communications Consultant KM Consulting
Marcia Olsen Bridging the Dental Gap Inc.	Dr. Mike Goebel Oral Health Program Consultant
Dr. Adeola O. Jaiyeola, Director Northern Plains Tribal Epidemiology Center	

September 2007

Appendix B – National Oral Health Indicators

- **Dental Visit**. Percentage of adults 18 and older who have visited a dentist or dental clinic in the past year.

- **Teeth Cleaning**. Percentage of adults 18 and older who have had their teeth cleaned in the past year (among adults with natural teeth who have ever visited a dentist or dental clinic).

- **Complete Tooth Loss**. Percentage of adults 65 and older who have lost all of their natural teeth due to tooth decay or gum disease.

- **Lost Six or More Teeth.** Percentage of adults 65 and older who have lost six or more teeth due to tooth decay or gum disease.

- **Fluoridation Status**. Percentage of people served by public water systems who receive fluoridated water.

- **Dental Sealants**. Percentage of third-grade students with dental sealants on at least one permanent molar tooth.

- **Caries Experience**. Percentage of third-grade students with caries experience, including treated and untreated tooth decay.

- **Untreated Tooth Decay**. Percentage of third-grade students with untreated tooth decay.

- **Cancer of the Oral Cavity and Pharynx**. Incidence and death rate.

Appendix C – Healthy People 2010 Oral Health Objectives
U.S. Department of Health and Human Services

Number	Objective
21-1 *	Reduce the proportion of children and adolescents who have dental caries experience in their primary or permanent teeth.
21-2 *	Reduce the proportion of children, adolescents, and adults with untreated dental decay.
21-3	Increase the proportion of adults who have never had a permanent tooth extracted because of dental caries or periodontal disease.
21-4 *	Reduce the proportion of older adults who have had all their natural teeth extracted.
21-5	Reduce periodontal disease.
21-6	Increase the proportion of oral and pharyngeal cancers detected at the earliest stage.
21-7	Increase the proportion of adults who, in the past 12 months, report having had an examination to detect oral and pharyngeal cancers.
21-8 *	Increase the proportion of children who have received dental sealants on their molar teeth.
21-9 *	Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water.
21-10 *	Increase the proportion of children and adults who use the oral health care system each year.
21-11	Increase the proportion of long-term care residents who use the oral health care system each year.
21-12	Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year.
21-13	(Developmental) Increase the proportion of school-based health centers with an oral health component.
21-14	Increase the proportion of local health departments and community-based health centers, including community, migrant, and homeless health centers, that have an oral health component.
21-15	Increase the number of States and the District of Columbia that have a system for recording and referring infants and children with cleft lips, cleft palates, and other craniofacial anomalies to craniofacial anomaly rehabilitative teams.
21-16	Increase the number of States and the District of Columbia that have an oral and craniofacial health surveillance system.
21-17	(Developmental) Increase the number of Tribal, State (including the District of Columbia), and local health agencies that serve jurisdictions of 250,000 or more persons that have in place an effective public dental health program directed by a dental professional with public health training.

* HP2010 objectives included in the NDOHSS

Appendix D – Oral Health Data Communication Plan 2008-2013

Content Area	Media Channel	Periodicity	Data Source(s)
Adolescent Oral Health	Web Fact Sheet Press Release	2008, 2010, 2012	Youth Risk Behavior Survey (YRBS), Youth Tobacco Survey (YTS), Medicaid
Adult Oral Health	Web Fact Sheet Press Release	2009, 2011, 2013	Behavioral Risk Factor Surveillance System (BRFSS), Medicaid
Biennial Report of Oral Health Leading Indicators	Web Report Hard Copy Report Press Release	2008, 2010, 2012	BRFSS, YRBS, YTS, Cancer Registry, Vital Records, Basic Screening Survey (BSS), Medicaid, Workforce Surveys, Water Fluoridation Reporting System (WFRS), Program Reports
Burden Document	Web Report Press Releases and Meeting/Conference Presentations as appropriate	Annually or as new data becomes available	BRFSS, YRBS, YTS, Cancer Registry, Vital Records, BSS, Medicaid, Workforce Surveys, WRFS, Program Reports
Children With Special Health Care Needs	Web Fact Sheet	Annually	Vital Records, Children's Special Health Services
Community Water Fluoridation	Web Fact Sheet	Annually	WFRS
Fluoride Varnish Program Report	Web Report	Annually	Local Agency Oral Health Screening and Varnish Report Forms
Healthy People 2010/2020 Status Report	Web Report	Annually	State and national surveys and databases, North Dakota Healthy People 2010 Committee
Key Program Accomplishments	Web Report	Annually	All data sources and Program Reports
Oral Cancer	Web Fact Sheet	Annually	Cancer Registry Vital Records
Pregnant Women's Oral Health	Web Fact Sheet	As available	Pregnancy Risk Assessment Monitoring System (PRAMS)
Pre-school Children's Oral Health	Web Fact Sheet Press Release	Annually	Head Start BSS, Fluoride Varnish Reports, Medicaid
Sealants	Web Fact Sheet Press Release	2011	BSS
School-Age Children's Oral Health	Web Fact Sheet Press Release	2011	BSS, Medicaid
School Fluoride Mouthrinse Program	Report	Annually	School Fluoride Mouthrinse Annual Report Forms
State Plan Progress	Report	Annually	Coalition Progress Reports
Workforce	Web Report Press release	2008, 2010, 2012	Workforce Surveys

Press releases linked to monthly observances and state and national events as appropriate.

North Dakota Department of Health
Division of Family Health
Oral Health Program
600 E. Boulevard Ave., Dept. 301
Bismarck, N.D. 58505-0200
www.ndhealth.gov/familyhealth
701.328.2493
800.472.2286 – press 1 (toll-free in North Dakota)

NORTH DAKOTA
DEPARTMENT *of* HEALTH